20.2.72 NMAC
NEW NSR AIR QUALITY PERMIT APPLICATION

For

MOUNTAIN STATES CONSTRUCTORS, INC.

MSCI DAVIS PIT PLANT
Moriarty, NM

PREPARED BY
ONTERRIS USA, INC.
ALBUQUERQUE, NM
AUGUST 2026

Mail Application To:		**For Department use only:**
New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		

Universal Air Quality Permit Application

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

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

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 ☐ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility
Minor Source: ☐ NOI 20.2.73 NMAC ☒ 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:

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

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

☒ Check No.: 176103 in the amount of 500

☒ 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.

☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.

☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full $500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: www.env.nm.gov/air-quality/small-biz-eap-2/.)

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

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known: New	Updating Permit/NOI #: New
1	Facility Name: MSCI Davis Pit Plant	Plant primary SIC Code (4 digits): 1442	
		Plant NAIC code (6 digits): 212321	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 152 Stagecoach Road, Moriarty, NM 87035		
2	Plant Operator Company Name: Mountain States Constructors, Inc	Phone/Fax: (505) 292-0108 / (505) 292-5311	
a	Plant Operator Address: 3601 Pan American Freeway NE #111, Albuquerque, NM 87107		

b	Plant Operator's New Mexico Corporate ID or Tax ID: 85-0276974	
3	Plant Owner(s) name(s): Neil Jackson	Phone/Fax: (505) 238-1537 / (505) 292-5311
a	Plant Owner(s) Mailing Address(s): 3601 Pan American Freeway NE #111, Albuquerque, NM 87107	
4	Bill To (Company): Mountain States Constructors, Inc.	Phone/Fax: (505) 238-1537 / (505) 292-5311
a	Mailing Address: 3601 Pan American Freeway NE #111, Albuquerque, NM 87107	E-mail: Neil@msconstructors.com
5	☐ Preparer: ☒ Consultant: Paul Wade	Phone/Fax: (505) 830-9680 x 6
a	Mailing Address: 9100 2nd St NW Suite 200, Albuquerque, NM 87114	E-mail: Pwade@onterris.com
6	Plant Operator Contact: Neil Jackson	Phone/Fax: (505) 238-1537 / (505) 292-5311
a	Address: 3601 Pan American Freeway NE #111, Albuquerque, NM 87107	E-mail: Neil@msconstructors.com
7	Air Permit Contact: Chris Lopez	Title: Safety/Air Quality Technician
a	E-mail: clopez@msconstructors.com	Phone/Fax: (505) 604-9291 / (505) 292-5311
b	Mailing Address: 3601 Pan American Freeway NE #111, Albuquerque, NM 87107	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☐ Yes ☒ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☐ Yes ☒ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes ☒ 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? ☐ Yes ☒ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☒ No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? ☐ Yes ☐ No ☒ N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes ☒ No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☐ Yes ☒ No	If yes, the permit No. is:
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☒ 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	Hourly:	Daily:	Annually:
b	Proposed	Combined Pit Plants 1 and 2 Hourly: 1200 tph	Combined Pit Plants 1 and 2 Daily: 9600 tpd	Combined Pit Plants 1 and 2 Annual: 2400000 tpy
		RAP Plant Hourly: 200 tph	RAP Plant Daily: 1600 tpd	RAP Plant Annual: 400000 tpy
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	Combined Pit Plants 1 and 2 Hourly: 1200 tph	Combined Pit Plants 1 and 2 Daily: 9600 tpd	Combined Pit Plants 1 and 2 Annual: 2400000 tpy
		RAP Plant Hourly: 200 tph	RAP Plant Daily: 1600 tpd	RAP Plant Annual: 400000 tpy

Section 1-D: Facility Location Information

1	Latitude (decimal degrees): 34.968768	Longitude (decimal degrees): -105.959603	County: Torrance	Elevation (ft): 6330
2	UTM Zone: ☐ 12 or ☒ 13	Datum: ☒ NAD 83 ☐ WGS 84		
a	UTM E (in meters, to nearest 10 meters): 412400	UTM N (in meters, to nearest 10 meters): 3870000		
3	Name and zip code of nearest New Mexico town: Moriarty 87035			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From the intersection of State Highway 41 and I-40 go south on State Highway 41. Turn east on Martinez Rd for 4 miles. Turn south on Stagecoach Rd. Travel 2 miles to entrance of Davis Pit.			
5	The facility is 5.7 miles east-southeast of Moriarty, NM in Torrence County.			
6	Land Status of facility (check one): ☒ Private ☐ Indian/Pueblo ☒ Government ☐ BLM ☐ Forest Service ☐ Military			
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Moriarty, Torrance County, Santa Fe County			
8	**20.2.72** NMAC applications **only**: 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 www.env.nm.gov/air-quality/modeling-publications/)? ☒ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Bernalillo County - 17.2 km			
9	Name nearest Class I area: Pecos Wilderness Area			
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 83 km			
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 0.33 m			
12	Method(s) used to delineate the Restricted Area: Fence surrounding mine boundary and signed gates at all entrances "**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	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☒ Yes ☐ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.			
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☐ No ☒ Yes If yes, what is the name and permit number (if known) of the other facility? NSR Permits 3171-M1, 4453, or 9720, and GCP3s and GCP5s			

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

1	Facility **maximum** operating ($\frac{hours}{day}$): 14.5	($\frac{days}{week}$): 7	($\frac{weeks}{year}$): 52	($\frac{hours}{year}$): 4000		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{hours}{day}$)? Start: 5:00	☒AM ☐PM	End: 7:30	☐AM ☒PM		
3	Month and year of anticipated start of construction: Upon permit issuance					
4	Month and year of anticipated construction completion: Upon permit issuance					
5	Month and year of anticipated startup of new or modified facility: Upon permit issuance					
6	Will this facility operate at this site for more than one year? ☒ 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? ☐ Yes ☒ No If yes, specify:		
a	If yes, NOV date or description of issue: N/A		NOV Tracking No: N/A
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☒ No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit: NA		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☒ Yes ☐ No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☐ **Major** (☐ ≥10 tpy of any single HAP **OR** ☐ ≥25 tpy of any combination of HAPS) **OR** ☒ **Minor** (☒ <10 tpy of any single HAP **AND** ☒ <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☒ No		
a	If yes, include the name of company providing commercial electric power to the facility: _____ Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only)

1	☐ I have filled out Section 18, "Addendum for Streamline Applications."	☒ 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:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	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 name of the organization that owns the company to be permitted wholly or in part.):		
a	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 contacts familiar with plant operations:		
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:		

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

1) One hard copy **original signed and notarized application package** **printed double sided** **'head-to-toe'** **2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.

2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This copy should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-to 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

☒ Secure electronic transfer. Air Permit Contact Name_Paul Wade Onterris USA, Inc., Email: pwade@onterris.com

Phone number 505-830-9680 x11703.

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 ***summary report only*** 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.

Table of Contents

Section 1: **General Facility Information**
Section 2: **Tables**
Section 3: **Application Summary**
Section 4: **Process Flow Sheet**
Section 5: **Plot Plan Drawn to Scale**
Section 6: **All Calculations**
Section 7: **Information Used to Determine Emissions**
Section 8: **Map(s)**
Section 9: **Proof of Public Notice**
Section 10: **Written Description of the Routine Operations of the Facility**
Section 11: **Source Determination**
Section 12: **PSD Applicability Determination for All Sources & Special Requirements for a PSD Application**
Section 13: **Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation**
Section 14: **Operational Plan to Mitigate Emissions**
Section 15: **Alternative Operating Scenarios**
Section 16: **Air Dispersion Modeling**
Section 17: **Compliance Test History**
Section 18: **Addendum for Streamline Applications (streamline applications only)**
Section 19: **Requirements for the Title V (20.2.70 NMAC) Program (Title V applications only)**
Section 20: **Other Relevant Information**
Section 21: **Addendum for Landfill Applications**
Section 22: **Certification Page**

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[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
Pit Plant #1												
1	Quarry Material - Pit Plant 1	NA	NA	NA	600 tph	Combined with Pit Plants 1 and 2 - 1200 tph	NA Jan-27	NA NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
2	Quarry Truck Loading - Pit Plant 1	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
3	Quarry Truck Unloading - Pit Plant 1	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
4	Pit Plant 1 Feeder	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
5	Pit Plant 1 Jaw Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
6	Pit Plant 1 Surge Bin	TBD	TBD	TBD	600 tph		TBD Jan-27	C1 NA	30500147	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
7	Pit Plant 1 Prescreen	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30502015	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
8	Pit Plant 1 Line 1 Cone Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
9	Pit Plant 1 Line 1 Screen	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
10	Pit Plant 1 Air Separator	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30500626	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
11	Pit Plant 1 Line 2 Cone Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
12	Pit Plant 1 Line 2 Screen	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
13-41	Pit Plant 1 Transfer Conveyors 29 total	Various	Various	Various	See Section 6		Various Jan-27	C1 NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
42-49	Pit Plant 1 Stacker Conveyors 8 total	Various	Various	Various	See Section 6		Various Jan-27	C6 NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
50	Pit Plant 1 Finish Product Storage Pile	NA	NA	NA	600 tph		NA Jan-27	NA NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
51	Pit Plant 1 Product Truck Loading - Finish Pile	NA	NA	NA	600 tph		NA Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
52E	Pit Plant 1 Generator/Engine MSCI 31-0005 or	CAT	3516 DITA	25Z06704	2288 hp	2288 hp	12/21/1999 Jan-27	NA S1	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
	Pit Plant 1 Alt. Generator/Engine MSCI 31-0002 or	CAT	3512	24Z09726	1604 hp	1604 hp	6/1/2000 Jan-27	NA S1	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
	Pit Plant 1 Alt. Generator/Engine MSCI 31-9701	CAT	3512	3MS00159	1818 hp	1818 hp	9/8/1997 Jan-27	NA S1	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
Pit Plant #2												
53	Quarry Material - Pit Plant 2	NA	NA	NA	600 tph		NA Jan-27	NA NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
54	Quarry Truck Loading - Pit Plant 2	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
55	Quarry Truck Unloading - Pit Plant 2	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
56	Pit Plant 2 Feeder	TBD	TBD	TBD	600 tph		TBD Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
57	Pit Plant 2 Jaw Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
58	Pit Plant 2 Surge Bin	TBD	TBD	TBD	600 tph		TBD Jan-27	C1 NA	30500147	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
59	Pit Plant 2 PreScreen	TBD	TBD	TBD	600 tph	Combined with Pit Plants 1 and 2 - 1200 tph	TBD Jan-27	C2 NA	30502015	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
60	Pit Plant 2 Line 1 Cone Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
61	Pit Plant 2 Line 1 Screen	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30502015	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
62	Pit Plant 2 Air Separator	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30500626	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
63	Pit Plant 2 Line 2 Cone Crusher	TBD	TBD	TBD	600 tph		TBD Jan-27	C3 NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
64	Pit Plant 2 Line 2 Screen	TBD	TBD	TBD	600 tph		TBD Jan-27	C2 NA	30502015	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
65-93	Pit Plant 2 Transfer Conveyors 29 total	Various	Various	Various	See Section 6		Various Jan-27	C1 NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
94-101	Pit Plant 2 Stacker Conveyors 8 total	Various	Various	Various	See Section 6		Various Jan-27	C6 NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
102	Pit Plant 2 Finish Product Storage Pile	NA	NA	NA	600 tph		NA Jan-27	NA NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
103	Pit Plant 2 Product Truck Loading - Finish Pile	NA	NA	NA	600 tph		NA Jan-27	NA NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
104E	Pit Plant 2 Generator/Engine MSCI 31-0004 or	CAT	3512B DITA	6WN00526	2153 hp	2153 hp	3/20/2000 Jan-27	NA S2	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
	Pit Plant 2 Alt. Generator/Engine MSCI 31-0002	CAT	3512	24Z09726	1604 hp	1604 hp	6/1/2000 Jan-27	NA S2	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
	Pit Plant 2 Alt. Generator/Engine MSCI 31-9701	CAT	3512	3MS00159	1818 hp	1818 hp	9/8/1997 Jan-27	NA S2	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
105	Waste Truck Loading to Waste Pile (Pit1+Pit2)	NA	NA	NA	680 tph	680 tph	NA / Jan-27	NA / NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
106	Waste Storage Pile (Pit1+Pit2)	NA	NA	NA	680 tph	680 tph	NA / Jan-27	NA / NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
Colored Rock Quarry												
107	Colored Rock Quarry	NA	NA	NA	600 tph	600 tph	NA / Jan-27	NA / NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
108	Colored Rock Quarry - Truck Loading	NA	NA	NA	600 tph	600 tph	NA / Jan-27	NA / NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
109	Colored Rock Quarry - Truck Unloading at Pit Plant	NA	NA	NA	680 tph	680 tph	NA / Jan-27	NA / NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
Recycled Asphalt Plant												
110	RAP Plant Raw Material Source	NA	NA	NA	200 tph	200 tph	NA / Jan-27	NA / NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
111	RAP Plant Feeder/Hopper	TBD	TBD	TBD	200 tph	200 tph	TBD / Jan-27	NA / NA	30502031	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
112	RAP Plant Vertical Impact Crusher	TBD	TBD	TBD	200 tph	200 tph	TBD / Jan-27	NA / NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
113	RAP Plant Surge Bin	TBD	TBD	TBD	200 tph	200 tph	TBD / Jan-27	NA / NA	30500147	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
114	RAP Plant 2-Deck Screen	TBD	TBD	TBD	200 tph	200 tph	TBD / Jan-27	NA / NA	30502015	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
115	RAP Plant Cone Crusher	TBD	TBD	TBD	200 tph	200 tph	TBD / Jan-27	NA / NA	30502010	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
116-123	RAP Plant Transfer Conveyors Total 8	Various	Various	Various	See Section 6	See Section 6	Various / Jan-27	NA / NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
124	RAP Plant Stacker Conveyor to Pile	TBD	TBD	TBD	200 tph	200 tph	Various / Jan-27	NA / NA	30502006	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
125	RAP Plant Finish Product Storage Pile at HMA Plant	NA	NA	NA	200 tph	200 tph	NA Jan-27	NA NA	30502007	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
126E	RAP Plant Generator/Engine MSCI 31-0607	Cummins	QSX15-G9	79165584	755 bhp	755 bhp	2006 Jan-27	NA S3	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	
Haul Road Traffic												
127a	Haul Road Traffic Pit Plant #1 Into Site to Scale House (P1SH)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127b	Haul Road Traffic Pit Plant #1 Scale House to Pit Entrance (P1TP)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C5 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127c	Haul Road Traffic Pit Plant #1 In Pit (P1P_)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C6 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127d	Haul Road Traffic Pit Plant #1 & #2 Into Site to Scale House (P2SH)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127e	Haul Road Traffic Pit Plant #1 & #2 Scale House to Pit Entrance (P2TP)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C5 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127f	Haul Road Traffic Pit Plant #1 & #2 In Pit (P2P_)	NA	NA	NA	255 Trucks/ Day	255 Trucks/ Day	NA Jan-27	C6 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127g	Haul Road Colored Rock Pit Road Out - Quarry Truck (CRO_)	NA	NA	NA	153 Trucks/ Day	153 Trucks/ Day	NA Jan-27	C6 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127h	Haul Road Colored Rock Road Between Quarrys - Quarry Truck (CRI_)	NA	NA	NA	153 Trucks/ Day	153 Trucks/ Day	NA Jan-27	C5 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127i	Haul Road Colored Rock Road to Pit Plant - Quarry Truck (CRP_)	NA	NA	NA	153 Trucks/ Day	153 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
127j	Haul Road Traffic Quarry Trucks from Pit Plants 1 or 2 to Piles (QRP_)	NA	NA	NA	153 Trucks/ Day	153 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127k	Haul Road Traffic Waste Quarry Trucks for Pit Plant 1 (QWP_1)	NA	NA	NA	145 Trucks/ Day	145 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127l	Haul Road Traffic Waste Quarry Trucks for Pit Plant 1 or 2 (QWP_2)	NA	NA	NA	207 Trucks/ Day	207 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127m	RAP Delivery to Scale House (RAPSH)	NA	NA	NA	145 Trucks/ Day	145 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127n	RAP Delivery to RAP Plant (RAPTP)	NA	NA	NA	93 Trucks/ Day	93 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127o	RAP Processed to Pit Entrance from RAP Plant (RAPTQ)	NA	NA	NA	93 Trucks/ Day	93 Trucks/ Day	NA Jan-27	C4 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
127p	RAP Processed Pit Entrance to HMA (RAPTH)	NA	NA	NA	73 Trucks/ Day	73 Trucks/ Day	NA Jan-27	C5 NA	30502011	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
128	Unleaded Gasoline Tank T4	Senergy Tank	NA	NA	500 Gallon	500 Gallon	NA Jan-27	NA NA	30502099	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

[1] 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.

[2] Specify dates required to determine regulatory applicability.

[3] 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.

[4] "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[1] (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	Source Description	Manufacturer	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[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
T1	Diesel-Fuel Tank	NA	26-0903 NA	10,000 Gallons	20.2.72.202.B.2	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T2	Diesel-Fuel Tank	NA	26-1404 NA	10,000 Gallons	20.2.72.202.B.2	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T3	Diesel-Fuel Tank	NA	NA NA	10,000 Gallons	20.2.72.202.B.2	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T6	Water Tank	NA	NA NA	10,000 Gallons	NA	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T7	Water Tank	NA	NA NA	10,000 Gallons	NA	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T8	Water Tank	NA	NA NA	10,000 Gallons	NA	NA Jan-27	☐ Existing (unchanged) ☐ To be Removed x 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
							☐ 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
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

[1] 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.

[2] Specify date(s) required to determine regulatory applicability.

Table 2-C: Emissions Control Equipment

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
C1	Conveyor Transfer Points - Wet Dust Suppression System	Jan-27	PM, PM10 and PM2.5	6, 13-41, 58, 65-93	95.9%	AP-42 11.19.2 Emission Factors
C2	Screen - Wet Dust Suppression System	Jan-27	PM, PM10 and PM2.5	7, 9, 10, 12, 59, 61, 62, 64	91.6%	AP-42 11.19.2 Emission Factors
C3	Crusher - Wet Dust Suppression System	Jan-27	PM, PM10 and PM2.5	5, 8, 11, 57, 60, 63	77.7%	AP-42 11.19.2 Emission Factors
C4	Unpaved Roads - Water and Surfactants (Unit 127)	Jan-27	PM, PM10 and PM2.5	127a, 127d, 127m	90%	NMED Pollicy
C5	Unpaved Roads - Base Course and Watering (Unit 127)	Jan-27	PM, PM10 and PM2.5	127b, 127e, 127h, 127n, 127o	80%	NMED Pollicy
C6	Unpaved Roads - Base Course or Watering (Unit 127)	Jan-27	PM, PM10 and PM2.5	127c, 127f, 127g, 127i, 127j, 127k, 127l, 127p	60%	NMED Pollicy
C7	Stacker Conveyor Drop to Pile - Wet Dust Suppression System	Jan-27	PM, PM10 and PM2.5	42-49, 94-101	60%	AP-42 13.2.4 Emission Factors Moisture Content = 2.88%

[1] List each control device on a separate line. For each control device, list all emission units controlled by the control device.

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
2	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
3	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
4	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
5	-	-	-	-	-	-	-	-	3.24	7.10	1.44	3.15	0.22	0.48	-	-	-	-
6	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
7	-	-	-	-	-	-	-	-	15.00	32.85	5.22	11.43	0.79	1.73	-	-	-	-
8	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17	-	-	-	-
9	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61	-	-	-	-
10	-	-	-	-	-	-	-	-	2.25	4.93	0.78	1.71	0.12	0.26	-	-	-	-
11	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17	-	-	-	-
12	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61	-	-	-	-
13	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
14	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
15	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
16	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-
17	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-
18	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-
19	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
20	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
21	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
22	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
23	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
24	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
25	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
26	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
27	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
28	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
29	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
30	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
31	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
32	-	-	-	-	-	-	-	-	0.14	0.32	0.053	0.12	0.008	0.018	-	-	-	-
33	-	-	-	-	-	-	-	-	0.13	0.28	0.046	0.10	0.007	0.015	-	-	-	-
34	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
35	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
36	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
37	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
38	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
39	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
40	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
41	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
42	-	-	-	-	-	-	-	-	1.19	2.12	0.56	1.00	0.085	0.15	-	-	-	-
43	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
44	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
45	-	-	-	-	-	-	-	-	0.32	0.57	0.15	0.27	0.023	0.041	-	-	-	-
46	-	-	-	-	-	-	-	-	0.28	0.49	0.13	0.23	0.020	0.035	-	-	-	-
47	-	-	-	-	-	-	-	-	0.59	1.06	0.28	0.50	0.043	0.076	-	-	-	-
48	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
49	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
50	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35	-	-	-	-
51	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35	-	-	-	-
52E	10.61	23.24	2.85	6.24	1.60	3.50	0.80	1.76	1.11	2.43	1.11	2.43	1.11	2.43	-	-	1.33E-04	2.91E-04
53	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
54	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
55	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
56	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
57	-	-	-	-	-	-	-	-	3.24	7.10	1.44	3.15	0.22	0.48	-	-	-	-
58	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
59	-	-	-	-	-	-	-	-	15.00	32.85	5.22	11.43	0.79	1.73	-	-	-	-
60	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17	-	-	-	-
61	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61	-	-	-	-
62	-	-	-	-	-	-	-	-	2.25	4.93	0.78	1.71	0.12	0.26	-	-	-	-
63	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17	-	-	-	-
64	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61	-	-	-	-
65	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
66	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
67	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22	-	-	-	-
68	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-
69	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
70	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066	-	-	-	-
71	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
72	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
73	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15	-	-	-	-
74	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
75	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
76	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
77	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
78	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
79	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
80	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
81	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
82	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
83	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
84	-	-	-	-	-	-	-	-	0.14	0.32	0.053	0.12	0.008	0.018	-	-	-	-
85	-	-	-	-	-	-	-	-	0.13	0.28	0.046	0.10	0.007	0.015	-	-	-	-
86	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
87	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
88	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077	-	-	-	-
89	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
90	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
91	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033	-	-	-	-
92	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
93	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
94	-	-	-	-	-	-	-	-	1.19	2.12	0.56	1.00	0.085	0.15	-	-	-	-
95	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
96	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
97	-	-	-	-	-	-	-	-	0.32	0.57	0.15	0.27	0.023	0.041	-	-	-	-
98	-	-	-	-	-	-	-	-	0.28	0.49	0.13	0.23	0.020	0.035	-	-	-	-
99	-	-	-	-	-	-	-	-	0.59	1.06	0.28	0.50	0.043	0.076	-	-	-	-
100	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
101	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
102	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35	-	-	-	-
103	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35	-	-	-	-
104E	33.88	74.19	5.38	11.77	1.82	3.99	0.76	1.65	0.58	1.27	0.58	1.27	0.58	1.27	-	-	1.25E-04	2.74E-04
105	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14	-	-	-	-
106	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14	-	-	-	-
107	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
108	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
109	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51	-	-	-	-
110	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
111	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
112	-	-	-	-	-	-	-	-	0.32	0.71	0.14	0.32	0.022	0.048	-	-	-	-
113	-	-	-	-	-	-	-	-	0.18	0.39	0.07	0.14	0.010	0.022	-	-	-	-
114	-	-	-	-	-	-	-	-	1.50	3.29	0.52	1.14	0.079	0.17	-	-	-	-
115	-	-	-	-	-	-	-	-	0.32	0.71	0.14	0.32	0.022	0.048	-	-	-	-
116	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
117	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
118	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
119	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022	-	-	-	-
120	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022	-	-	-	-
121	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022	-	-	-	-
122	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
123	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022	-	-	-	-
124	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
125	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051	-	-	-	-
126	7.59	16.62	4.33	9.48	0.40	0.87	0.25	0.54	0.25	0.55	0.25	0.55	0.25	0.55	-	-	4.06E-05	8.90E-05
127a	-	-	-	-	-	-	-	-	56.70	100.35	14.45	25.58	1.44	2.56	-	-	-	-
127b	-	-	-	-	-	-	-	-	49.97	88.45	12.74	22.54	1.27	2.25	-	-	-	-
127c	-	-	-	-	-	-	-	-	51.60	91.34	13.15	23.28	1.32	2.33	-	-	-	-
127d	-	-	-	-	-	-	-	-	56.70	100.35	14.45	25.58	1.44	2.56	-	-	-	-
127e	-	-	-	-	-	-	-	-	65.15	115.31	16.60	29.39	1.66	2.94	-	-	-	-
127f	-	-	-	-	-	-	-	-	316.43	560.08	80.65	142.74	8.06	14.27	-	-	-	-
127g	-	-	-	-	-	-	-	-	24.35	43.10	6.21	10.98	0.62	1.10	-	-	-	-
127h	-	-	-	-	-	-	-	-	40.72	72.08	10.38	18.37	1.04	1.84	-	-	-	-
127i	-	-	-	-	-	-	-	-	203.58	360.34	51.89	91.84	5.19	9.18	-	-	-	-
127j	-	-	-	-	-	-	-	-	115.49	93.34	29.43	23.79	2.94	2.38	-	-	-	-
127k	-	-	-	-	-	-	-	-	11.14	19.72	2.84	5.03	0.28	0.50	-	-	-	-
127l	-	-	-	-	-	-	-	-	49.68	87.93	12.66	22.41	1.27	2.24	-	-	-	-
127m	-	-	-	-	-	-	-	-	27.00	47.79	6.88	12.18	0.69	1.22	-	-	-	-
127n	-	-	-	-	-	-	-	-	40.13	71.04	10.23	18.10	1.02	1.81	-	-	-	-
127o	-	-	-	-	-	-	-	-	20.12	35.61	5.13	9.08	0.51	0.91	-	-	-	-
127p	-	-	-	-	-	-	-	-	45.32	80.22	11.55	20.45	1.16	2.04	-	-	-	-
128	-	-	-	-	0.045	0.20	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**52.07**	**114.0**	**12.55**	**27.49**	**3.86**	**8.56**	**1.80**	**3.95**	**1353.3**	**2327.6**	**373.4**	**648.5**	**42.79**	**76.02**	**-**	**-**	**2.99E-04**	**6.54E-04**

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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]**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 $1.41E^{-4}$).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
2	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
3	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
4	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
5	-	-	-	-	-	-	-	-	0.72	0.72	0.32	0.32	0.060	0.060	-	-	-	-
6	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
7	-	-	-	-	-	-	-	-	1.32	1.32	0.44	0.44	0.030	0.030	-	-	-	-
8	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021	-	-	-	-
9	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011	-	-	-	-
10	-	-	-	-	-	-	-	-	0.20	0.20	0.067	0.067	0.005	0.005	-	-	-	-
11	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021	-	-	-	-
12	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011	-	-	-	-
13	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
14	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
15	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
16	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023	-	-	-	-
17	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023	-	-	-	-
18	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023	-	-	-	-
19	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-
20	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-
21	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-
22	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
23	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
24	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
25	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
26	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
27	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
28	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
29	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
30	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
31	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
32	-	-	-	-	-	-	-	-	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062	-	-	-	-
33	-	-	-	-	-	-	-	-	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
34	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
35	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
36	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
37	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
38	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
39	-	-	-	-	-	-	-	-	0.013	0.013	0.004	0.004	0.0012	0.0012	-	-	-	-
40	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
41	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
42	-	-	-	-	-	-	-	-	0.71	0.58	0.34	0.27	0.051	0.042	-	-	-	-
43	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
44	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
45	-	-	-	-	-	-	-	-	0.19	0.15	0.090	0.073	0.014	0.011	-	-	-	-
46	-	-	-	-	-	-	-	-	0.17	0.14	0.079	0.064	0.012	0.010	-	-	-	-
47	-	-	-	-	-	-	-	-	0.36	0.29	0.17	0.14	0.026	0.021	-	-	-	-
48	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
49	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
50	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16	-	-	-	-
51	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16	-	-	-	-
52E	10.61	21.22	2.85	5.70	1.60	3.20	0.80	1.60	1.11	2.22	1.11	2.22	1.11	2.22	-	-	1.33E-04	2.66E-04
53	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
54	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
55	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
56	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23	-	-	-	-
57	-	-	-	-	-	-	-	-	0.72	0.72	0.32	0.32	0.060	0.060	-	-	-	-
58	-	-	-	-	-	-	-	-	0.084	0.08	0.028	0.028	0.0078	0.008	-	-	-	-
59	-	-	-	-	-	-	-	-	1.32	1.32	0.44	0.44	0.030	0.030	-	-	-	-
60	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021	-	-	-	-
61	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011	-	-	-	-
62	-	-	-	-	-	-	-	-	0.20	0.20	0.067	0.067	0.0045	0.0045	-	-	-	-
63	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021	-	-	-	-
64	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011	-	-	-	-
65	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
66	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
67	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078	-	-	-	-
68	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023	-	-	-	-
69	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023	-	-	-	-
70	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023	-	-	-	-
71	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
72	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-
73	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055	-	-	-	-
74	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
75	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
76	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
77	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
78	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
79	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
80	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
81	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
82	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
83	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
84	-	-	-	-	-	-	-	-	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062	-	-	-	-
85	-	-	-	-	-	-	-	-	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055	-	-	-	-
86	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
87	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
88	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027	-	-	-	-
89	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
90	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
91	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012	-	-	-	-
92	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
93	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078	-	-	-	-
94	-	-	-	-	-	-	-	-	0.71	0.58	0.34	0.27	0.051	0.042	-	-	-	-
95	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
96	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
97	-	-	-	-	-	-	-	-	0.19	0.15	0.090	0.073	0.014	0.011	-	-	-	-
98	-	-	-	-	-	-	-	-	0.17	0.14	0.079	0.064	0.012	0.010	-	-	-	-
99	-	-	-	-	-	-	-	-	0.36	0.29	0.17	0.14	0.026	0.021	-	-	-	-
100	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
101	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014	-	-	-	-
102	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16	-	-	-	-
103	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16	-	-	-	-
104E	33.88	67.75	5.38	10.75	1.82	3.64	0.76	1.51	0.58	1.16	0.58	1.16	0.58	1.16	-	-	1.25E-04	2.51E-04
105	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14	-	-	-	-
106	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14	-	-	-	-
107	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10	-	-	-	-
108	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10	-	-	-	-
109	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	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
110	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023	-	-	-	-
111	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023	-	-	-	-
112	-	-	-	-	-	-	-	-	0.32	0.32	0.14	0.14	0.022	0.022	-	-	-	-
113	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
114	-	-	-	-	-	-	-	-	1.50	1.50	0.52	0.52	0.079	0.079	-	-	-	-
115	-	-	-	-	-	-	-	-	0.32	0.32	0.14	0.14	0.022	0.022	-	-	-	-
116	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
117	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
118	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
119	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010	-	-	-	-
120	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010	-	-	-	-
121	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010	-	-	-	-
122	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
123	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010	-	-	-	-
124	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023	-	-	-	-
125	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023	-	-	-	-
126E	7.59	10.63	4.33	6.06	0.40	0.56	0.25	0.34	0.25	0.35	0.25	0.35	0.25	0.35	-	-	4.06E-05	5.69E-05
127a	-	-	-	-	-	-	-	-	5.67	4.58	1.44	1.17	0.14	0.12	-	-	-	-
127b	-	-	-	-	-	-	-	-	9.99	8.08	2.55	2.06	0.25	0.21	-	-	-	-
127c	-	-	-	-	-	-	-	-	20.64	16.68	5.26	4.25	0.53	0.43	-	-	-	-
127d	-	-	-	-	-	-	-	-	5.67	4.58	1.44	1.17	0.14	0.12	-	-	-	-
127e	-	-	-	-	-	-	-	-	13.03	10.53	3.32	2.68	0.33	0.27	-	-	-	-
127f	-	-	-	-	-	-	-	-	126.57	102.30	32.26	26.07	3.23	2.61	-	-	-	-
127g	-	-	-	-	-	-	-	-	9.74	3.28	2.48	0.84	0.25	0.084	-	-	-	-
127h	-	-	-	-	-	-	-	-	8.14	2.74	2.08	0.70	0.21	0.070	-	-	-	-
127i	-	-	-	-	-	-	-	-	81.43	27.42	20.75	6.99	2.08	0.70	-	-	-	-
127j	-	-	-	-	-	-	-	-	46.20	37.34	11.77	9.52	1.18	0.95	-	-	-	-
127k	-	-	-	-	-	-	-	-	4.46	3.60	1.14	0.92	0.11	0.092	-	-	-	-
127l	-	-	-	-	-	-	-	-	19.87	16.06	5.06	4.09	0.51	0.41	-	-	-	-
127m	-	-	-	-	-	-	-	-	2.70	2.18	0.69	0.56	0.069	0.056	-	-	-	-
127n	-	-	-	-	-	-	-	-	8.03	6.49	2.05	1.65	0.20	0.17	-	-	-	-
127o	-	-	-	-	-	-	-	-	4.02	3.25	1.03	0.83	0.10	0.083	-	-	-	-
127p	-	-	-	-	-	-	-	-	18.13	14.65	4.62	3.73	0.46	0.37	-	-	-	-
128	-	-	-	-	0.045	0.20	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**52.07**	**99.60**	**12.55**	**22.51**	**3.86**	**7.60**	**1.80**	**3.46**	**464.6**	**328.3**	**135.6**	**98.4**	**17.12**	**14.58**	**-**	**-**	**2.99E-04**	**5.73E-04**

[1] **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 scehduled 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)[1], 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.	NOx		CO		VOC		SOx		PM^2		$PM10^2$		$PM2.5^2$		H_2S		Lead	
	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
NA																		
Totals																		

[1] **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.

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

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

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

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

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		☐ H_2S or ☐ Lead	
		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
NA																	
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 Number	Serving Unit Number(s) from Table 2-A	Orientation (H-Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
S1	52E	V	No	12	939.9	238.55	N/A	Neg	303.73	1.00
S2	104E	V	No	12	943.5	203.19	N/A	Neg	372.55	0.83
S3	126E	H	No	10	854.7	41.99	N/A	Neg	307.98	0.42

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.

Stack No.	Unit No.(s)	Total HAPs		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ TAP		Provide Pollutant Name Here ☐HAP or☐ 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
S1	52E	0.10277	0.20554																
S2	104E	0.09683	0.19366																
S3	126E	0.03141	0.06282																
Totals:		0.231	0.462																

Table 2-J: Fuel

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

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, …)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
54E	Low sulfur diesel	Purchased Commercial	128,000 BTU/Gallon	114.52 gal/hr	458080 Gallons	0.0005	Neg.
104E	Low sulfur diesel	Purchased Commercial	128,000 BTU/Gallon	107.90 gal/hr	431600 Gallons	0.0005	Neg.
126E	Low sulfur diesel	Purchased Commercial	128,000 BTU/Gallon	35.00 gal/hr	140000 Gallons	0.0005	Neg.

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.

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
T4 (Unit 128)	30500298	Unleaded Gasoline	Unleaded Gasoline	6.01	92	58.54	6.7593	65.66	7.7134

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-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M^3)			Roof	Shell			
T4 (Unit 128)	2027	Gasoline	FX	FX	11.9	120.9	1.22	0.05	NA	WH	Good	10,000	20.00

Table 2-L2: Liquid Storage Tank Data Codes Reference Table

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted 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	
					BL: Black	
					OT: Other (specify)	

Note: 1.00 bbl = 0.159 M^3 = 42.0 gal

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

Material Processed				Material Produced			
Description	**Chemical Composition**	**Phase (Gas, Liquid, or Solid)**	**Quantity (specify units)**	**Description**	**Chemical Composition**	**Phase**	**Quantity (specify units)**
Pit Plant 1	Aggregate	Solid	Combined - 1200 tph	Product	Aggregate	Solid	Combined - 840 tph
Pit Plant 2	Aggregate	Solid		Waste	Aggregate	Solid	Combined - 360 tph
RAP	Recycled Asphalt	Solid	200 tph	Product	Recycled Asphalt	Solid	200 tph

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.

☑ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									Total GHG Mass Basis ton/yr[4]	Total CO_2e ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
52E	**mass GHG**	5155.5	0.0404	0.207	-	-									5155.8	
	CO_2e	5155.5	12.04	5.18	-	-										5172.7
104E	**mass GHG**	4857.5	0.0381	0.1951	-	-									4857.7	
	CO_2e	4857.5	11.34	4.88	-	-										4873.7
126E	**mass GHG**	1102.9	0.0086	0.0443	-	-									1103.0	
	CO_2e	1102.9	2.58	1.11	-	-										1106.6
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO2e															
Total	**mass GHG**	11115.9	0.0871	0.4464	-	-									11116.5	
	CO_2e	11115.9	25.96	11.17	-	-										11153.0

[1] **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.

[2] For **HFCs** or **PFCs** describe the specific HFC or PFC compound and use a separate column for each individual compound.

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

[4] Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

[5] **CO_2e** means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

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

The **Process Summary** shall include a brief description of the facility and its processes.

Startup, Shutdown, and Maintenance (SSM) 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.

Mountain States Contractors, Inc. (MSCI) is applying for a new 20.2.72 NMAC air quality permit for an aggregate crushing and screening facility operated 5.7 miles east-southeast of Moriarty, county of Torrance, state of New Mexico. The site is an existing quarry (Davis Pit) that over the years has operated aggregate crushing and screening plants under the authority of 20.2.72 NMAC New Source Review (NSR) Permits and General Construction Permit (GCP2). Regulation governing this permit application is 20.2.72.200.A(1) NMAC.

MSCI has retained Onterris USA, Inc. (Onterris) to assist with the permit application. The address for the plant known as MSCI Davis Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Davis Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959603. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrence County.

The facility will consist of a pit plant #1 (crushing and screening plant); and pit plant #2 (crushing and screening plant) with a combined throughput of 1200 tons per hour (tph) and 2,400,000 tons per year (tpy); and 200 tph and 400,000 tpy recycled asphalt products (RAP crushing and screening) plant. Daily production rates are presented in Table 3-3.

Pit Plant #1

The 600-1200 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) diesel-fired engine. Alternative engines for Pit Plants #1 include a 1604 hp (1196 kW) diesel-fired engine or 1818 hp (1250 kW) diesel-fired engine. Material from the raw material quarry will be loaded into a surge pile, then to the plant feeder. This material is processed first through a jaw crusher, surge bin and pre-screen to separate product from waste material. Waste material is hauled to the waste pile by rock trucks. Product material is transported by conveyor to a splitter conveyor which will send the material to one of two lines. For each line material is sized in the cone crusher. From the cone crusher, material is sent to the 3-deck screen. Oversized material from the 3-deck screen is recycled back to the cone crusher. Part of the finished material from one of the 3-deck screens is sent to the air separator for further size separation. Finish material is loaded into finish piles located along the pit plant road located in the facility quarry. From the finish storage piles, product is transported by commercial road haul trucks from the facility to off-site sales.

Figure 4-1 in Section 4 presents an equipment layout for pit plant #1. The engine hours of operation are presented below in Table 3-1. The material processing hours of operation are presented below in Table 3-2.

Pit Plant #2

The 600-1200 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2143 hp (1500 kW) diesel-fired engine. Alternative engines for Pit Plants #2 include a 1604 hp (1196 kW) diesel-fired engine or 1818 hp (1250 kW) diesel-fired engine. Material from the raw material quarry will be loaded into a surge pile, then to the plant feeder. This material is processed first through a jaw crusher, surge bin and pre-screen to separate product from waste material. Waste material is hauled to the waste pile by rock trucks. Product material is transported by conveyor to a splitter conveyor which will send the material to one of two lines. For each line material is sized in the cone crusher. From the cone crusher, material is sent to the 3-deck screen. Oversized material from the 3-deck screen is recycled back to the cone crusher. Part of the finished material from one of the 3-deck screens is sent to the air separator for further size separation. Finish material is loaded into finish piles located along the pit plant road located in the facility quarry. From the finish storage piles, product is transported by commercial road haul trucks from the facility to off-site sales. Figure 4-2 in Section 4 presents an equipment layout for pit plant #2. The engine hours of operation are presented below in Table 3-1. The material processing hours of operation are presented below in Table 3-2.

The two alternative engines/generators that can power either pit plant #1 or #2 have been evaluated and the highest emissions for the three potential engines were used in the application forms and dispersion modeling analysis.

RAP Crushing and Screening Plant

The 200 tph recycled asphalt crushing and screening operation will include a raw material surge pile, one (1) feeder, one (1) primary crusher, one (1) surge bin, one (1) cone crusher, one (1) 2-deck screen, eight (8) transfer conveyors, and one (1) stacker conveyor. The RAP crushing plant will be powered by a 755 hp (563 kW) diesel-fired engine. RAP material is brought into the facility in road haul trucks and stored in a RAP material storage pile until loaded into the RAP plant feeder. This material is processed first through a primary crusher, surge bin and 2-deck screen to produce sized RAP to be used in the co-located HMA. Oversized material from the 2-deck screen sent to the cone crusher then recycled back to the 2-deck screen. Recycled RAP material hauled and loaded into a finish pile until needed for the co-located HMA. Figure 4-3 in Section 4 presents an equipment layout for RAP crushing and screening plant. The engine hours of operation are presented below in Table 3-1. The RAP crushing and screening plant processing hours of operation are presented below in Table 3-2.

The first hour of each day is permitted to allow starting and warming up of the engines outlined in Table 3-1. Material processing will follow the schedule outlined in Table 3-2.

TABLE 3-1: MSCI Davis Pit Plant Engine Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
6:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	10.5	11.5	12	14	14	14.5	14.5	14	13.5	12	11	10.5

TABLE 3-2: MSCI Davis Pit Plant Processing Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
7:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	9.5	10.5	11	13	13	13.5	13.5	13	12.5	11	10	9.5

TABLE 3-3: MSCI Davis Pit Plant Daily Processing Rate

Month	Pit Plant 1 Tons Per Day	Pit Plant 2 Tons Per Day	RAP Plant Tons Per Day
January	3300	3300	1100
February	3300	3300	1100
March	4800	4800	1600
April	4800	4800	1600
May	4800	4800	1600
June	4800	4800	1600
July	4800	4800	1600
August	4800	4800	1600
September	4800	4800	1600
October	4500	4500	1600
November	4800	4800	1600
December	3300	3300	1100

As seen in Figure 5-1, there are multiply truck routes and two types of material haul trucks, commercial haul (road) trucks and quarry (rock) trucks. Commercial haul trucks are used to transport product from the site, haul RAP material in; and rock (quarry) trucks are used onsite to haul material from the quarry wall to the pit plants, product from the pit plants to the finish piles, and waste material in the pit to the waste storage pile.

The entrance road to the site is unpaved and controlled with surfactants until the branch in the road leading to pit plant 1 or pit plant 2. The rest of the haul roads outside the pit are unpaved and controlled with base course and watering. All haul roads within the pit areas are unpaved and controlled with watering. See Figure 5-1 for location of all haul roads and the unpaved road control method for each section.

The following table describes the haul roads at the site and if they are operating in the quarry and are included in the open pit modeled source (QUARRY) emission rate input into the model. The total emissions from all truck traffic are included in Emission Unit 127a-p "Plant Haul Roads". Total number of commercial (road) trucks per day that will enter the site to either get product or deliver RAP is 378.

TABLE 3-4: MSCI Davis Pit Haul Road Descriptions

Emission Source ID	Model ID	Description	Truck Type	Max Trucks per Day
127a	P1SH	Haul Road Traffic Pit Plant #1 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	Commercial	153
127b	P1TP	Haul Road Traffic Pit Plant #1 from Intersection of Pit Plant #1 and Pit Plant #2 to Pit Entrance	Commercial	153
127c	P1P_	Haul Road Traffic Pit Plant #1 From Pit Entrance to Finish Piles	Commercial	153
127d	P2SH	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	Commercial	153
127e	P2TP	Haul Road Traffic Pit Plant #1 & #2 from Intersection of Pit Plant #1 and Pit Plant #2 to Pit Entrance	Commercial	305
127f	P2P_	Haul Road Traffic Pit Plant #1 & #2 From Pit Entrance to Finish Piles	Commercial	305
127g	CRO_	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	Rock	124
127h	CRI_	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	Rock	124
127i	CRP_	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	Rock	124
127j	QRP_	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	Rock	174
127k	QWP_1	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	Rock	37
127l	QWP_2	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	Rock	75
127m	RAPSH	RAP Delivery from Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	Delivery	73
127n	RAPTP	RAP Delivery to RAP Plant from Intersection	Delivery	73
127o	RAPTQ	RAP Processed at the RAP Plant to Pit Entrance from RAP Plant	Delivery	73
127p	RAPTH	RAP Processed at the RAP Plant from the Pit Entrance to HMA	Delivery	73

The MSCI Davis Pit Plant will be permitted to allow co-location with one of the three MSCI HMA plants presently operating under NSR Permits 3171-M1, 4453, or 9720. To show compliance with NAAQS for operating any of the plants, an analysis of the worst-case operating parameters was used in the model. The maximum operating schedule for any one of the 3 permits is 24 hours per day operation for 365 days per year. Additionally, any of the MSCI HMA plants can also co-locate under their existing GCP3 registrations. Any co-located HMA plant will operate under the terms and conditions of their individual NSR permit or GCP registration. Haul truck traffic for the co-located HMA plant is identified in Figure 5-1, with an unpaved road controlled with surfactants at the entrance, water and base course after the intersection to pit plants #1 or #2, and watering or base course in the pit and around the HMA site itself. Location of the HMA site is shown on Figure 5-1 in Section 5.

Emission sources for the co-located HMA plant include HMA drum and baghouse; plant main and standby generators; asphalt cement heater; mineral filler silo; asphalt storage silo; cold aggregate and RAP storage piles; cold aggregate delivery system (feeder scalping screen pugmill and conveyors); RAP delivery system (feeder, scalping screen, and conveyors).

If you have any questions regarding this NSR permit application, please call Paul Wade of Onterris at (505) 830-9680 ext 6 or Chris Lopez at Mountain States Constructors, Inc. at (505) 292-0108 / (505) 489-9120.

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM)

No SSM emissions are proposed or submitted for this facility. For material processing equipment at the MSCI Davis Pit Plant, Mountain States Contractors, Inc. will follow normal industry practices in minimizing emissions during startup, shutdown, and maintenance to not exceed the maximum hourly or annual emission rates submitted in Table 2-E. All control equipment and methods will be functioning correctly prior to aggregate processing.

Section 4

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.

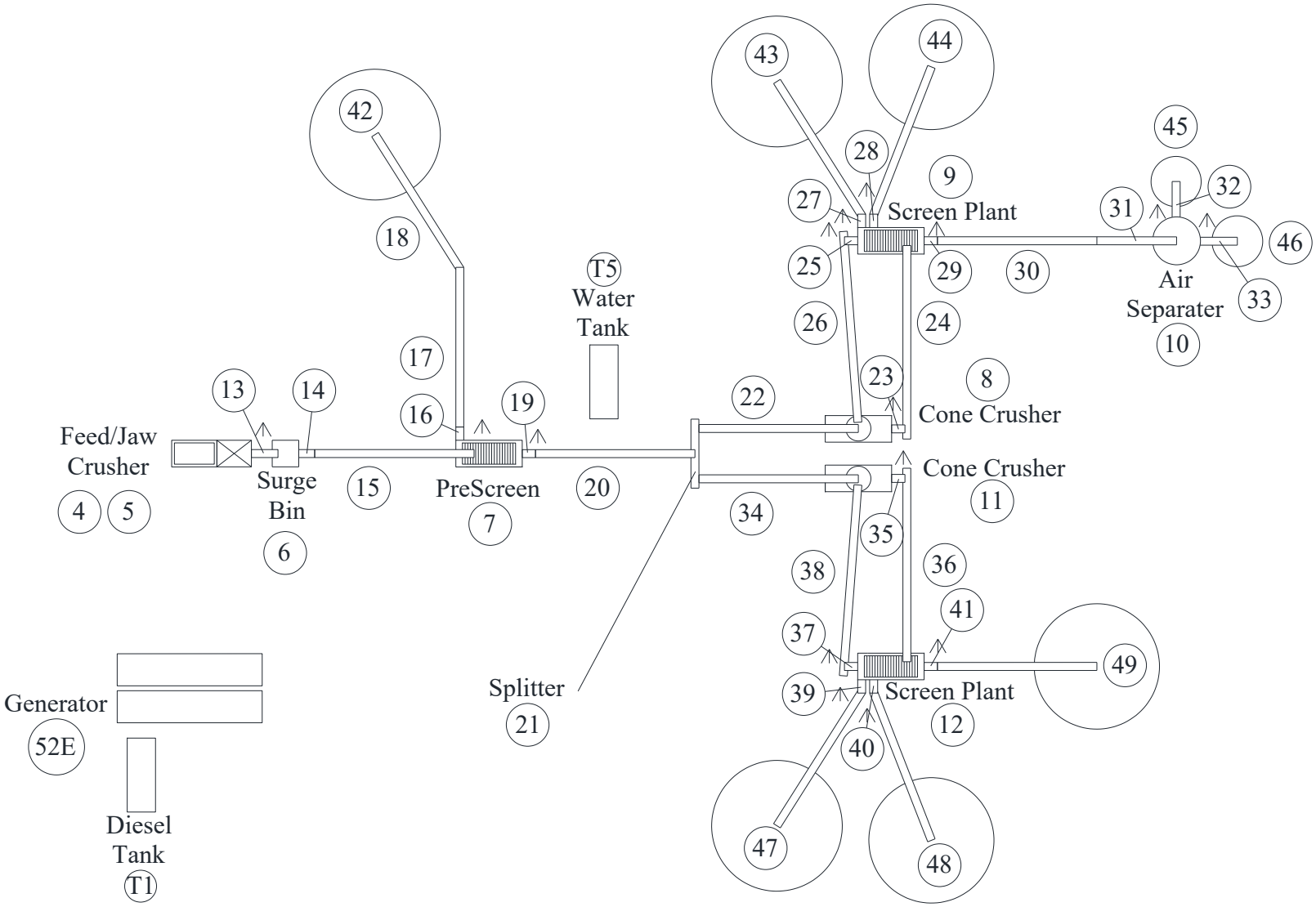


Figure 4-1: Pit Plant #1 Equipment Process Flow Diagram

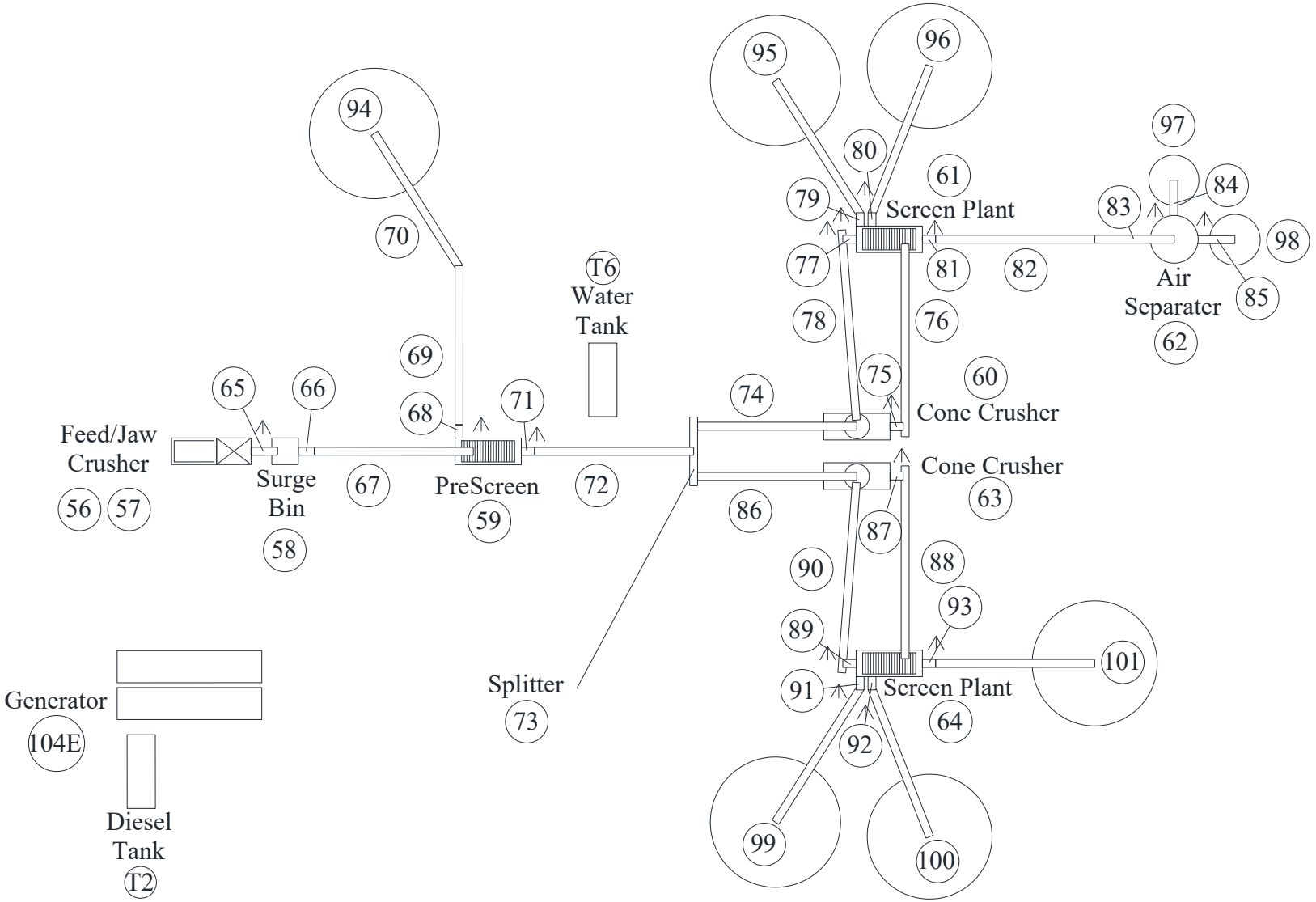


Figure 4-2: Pit Plant #2 Equipment Process Flow Diagram

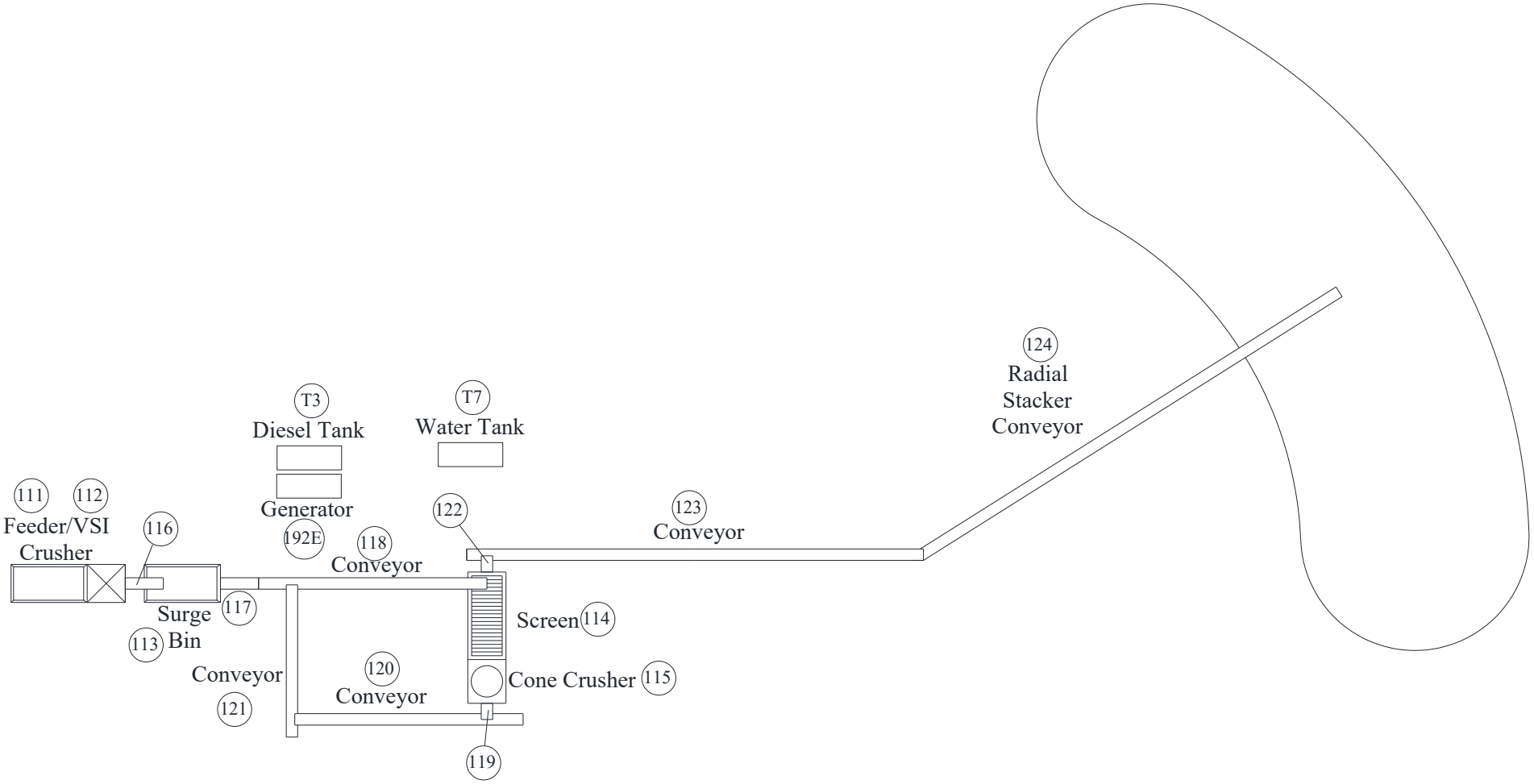


Figure 4-3: RAP Plant Equipment Process Flow Diagram

Section 5

Plot Plan Drawn to Scale

A **plot plan drawn to scale** 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.

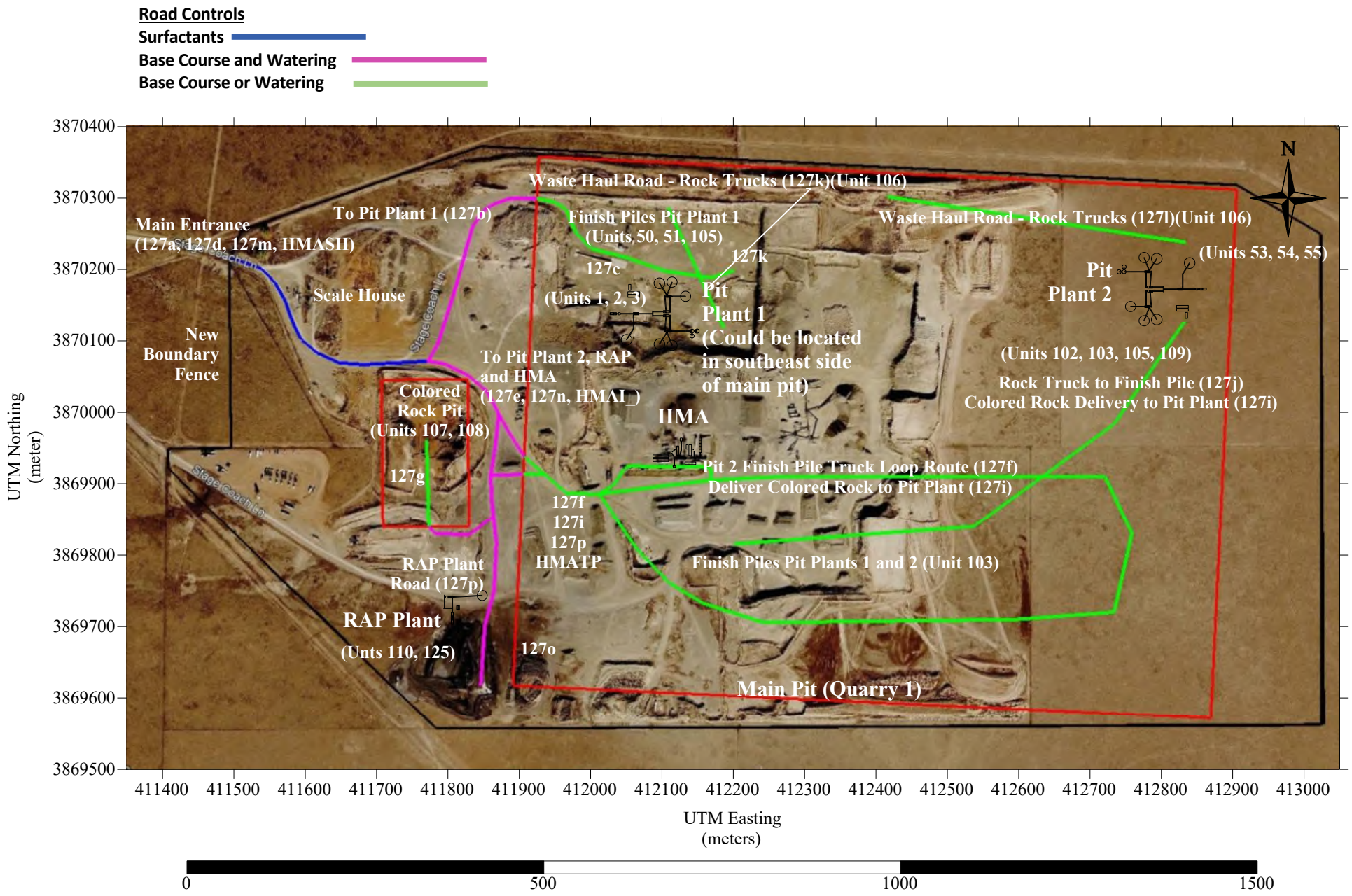


Figure 5-1: MSCI's Davis Pit Plant Aerial View with Equipment Location

Section 6

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 and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation 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.

Pit Plant #1, Pit Plant #2

Pre-Control Particulate Emission Rates Pit Plant #1, Pit Plant #2, Colored Rock Quarry, and Waste

Material Handling ($PM_{2.5}$, PM_{10}, and PM)

To estimate material handling pre-control particulate emission rates for crushing, screening, and conveyor transfer operations, emission factors were obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Aug. 2004, Section 11.19.2, Table 11.19.2-2. To determine missing $PM_{2.5}$ emission factors the ratio of 0.35/0.053 from $PM_{10}/PM_{2.5}$ *k* factors found in AP-42 Section 13.2.4 (11/2006) were used.

To estimate material handling particulate emission rates for aggregate handling operations (aggregate storage piles/stacker drop to storage pile/loading feed bins), an emission equation was obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition, Section 13.2.4 (11/2004), where the k (TSP = 0.74, PM_{10} = 0.35, $PM_{2.5}$ = 0.053), wind speed for determining the maximum hourly emission rate is the NMED default of 11 MPH and for determining the annual emission rate is based on the average wind speed for Moriarty (Internet Historical) of 9.4 mph (see Section 7) and the NMED default moisture content of 2 percent.

Pre-controlled annual emissions for tons per year (tpy) for each Pit Plant (2,628,000 tpy) were calculated assuming daylight operation for 4380 hours per year. This limit is based on the natural limitation of daylight hours for the safety of personnel operating the facility.

Aggregate Material Handling – Storage Piles, Stacker drop to Storage Piles, and Feed Bin and Truck Loading Emission Equation:

Maximum Hour Emission Factor

E (lbs/ton) = $k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$

E_{PM} (lbs/ton) = $0.74 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

E_{PM10} (lbs/ton) = $0.35 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = $0.053 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00660 lbs/ton;

E_{PM10} (lbs/ton) = 0.00312 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00047 lbs/ton

Annual Emission Factor

E (lbs/ton) = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

E_{PM} (lbs/ton) = 0.74 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM10} (lbs/ton) = 0.35 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = 0.053 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00538 lbs/ton;

E_{PM10} (lbs/ton) = 0.00254 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00039 lbs/ton

AP-42 Section 11.19.2 Table 11.19.2-2 Emission Factors:

All Bin Unloading and Conveyor Transfers = Uncontrolled Conveyor Transfer Point Emission Factor
Crushing = Uncontrolled Tertiary Crushing Emission Factor
Screening = Uncontrolled Screening Emission Factor

Material Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Uncontrolled Tertiary Crushing	0.00540	0.00240	0.00036
Uncontrolled Screening	0.02500	0.00870	0.00130
Feed Bin Unloading, and Conveyor Transfers	0.00300	0.00110	0.00017
Uncontrolled Max Hourly Aggregate Storage Piles, Aggregate Drop to Piles, Feeder and Truck Loading	0.00660	0.00312	0.00047
Uncontrolled Annual Aggregate Storage Piles, Aggregate Drop to Piles, Feeder and Truck Loading	0.00538	0.00254	0.00039

The following equation was used to calculate the hourly emission rate for each process unit:

Emission Rate (lbs/hour) = Process Rate (tons/hour) * Emission Factor (lbs/ton)

The following equation was used to calculate the annual emission rate for each process unit:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{\text{2000 lbs/ton}}$$

Table 6-1 Pre-Controlled Regulated Process Equipment Emission Rates

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
Pit Plant #1								
1	Pit Plant 1 Quarry Material	600	3.96	7.07	1.87	3.34	0.28	0.51
2	Pit Plant 1 Quarry Truck Loading	600	3.96	7.07	1.87	3.34	0.28	0.51
3	Pit Plant 1 Quarry Truck Unload	600	3.96	7.07	1.87	3.34	0.28	0.51
4	Pit Plant 1 Feeder	600	3.96	7.07	1.87	3.34	0.28	0.51
5	Pit Plant 1 Jaw Crusher	600	3.24	7.10	1.44	3.15	0.22	0.48
6	Pit Plant 1 Surge Bin	600	1.80	3.94	0.66	1.45	0.10	0.22
7	Pit Plant 1 Prescreen	600	15.00	32.85	5.22	11.43	0.79	1.73
8	Pit Plant 1 Line 1 Cone Crusher	210	1.13	2.48	0.50	1.10	0.076	0.17
9	Pit Plant 1 Line 1 Screen	210	5.25	11.50	1.83	4.00	0.28	0.61
10	Pit Plant 1 Air Separator	90	2.25	4.93	0.78	1.71	0.12	0.26
11	Pit Plant 1 Line 2 Cone Crusher	210	1.13	2.48	0.50	1.10	0.076	0.17
12	Pit Plant 1 Line 2 Screen	210	5.25	11.50	1.83	4.00	0.28	0.61
13	Pit Plant 1 Jaw Crusher Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
14	Pit Plant 1 Surge Bin Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
15	Pit Plant 1 Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
16	Pit Plant 1 PreScreen Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
17	Pit Plant 1 Waste Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
18	Pit Plant 1 Waste Stacker Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
19	Pit Plant 1 PreScreen Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15
20	Pit Plant 1 Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15
21	Pit Plant 1 Splitter Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15
22	Pit Plant 1 Line 1 Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
23	Pit Plant 1 Line 1 Cone Crusher Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
24	Pit Plant 1 Line 1 Conveyor to Screen	210	0.63	1.38	0.23	0.51	0.035	0.077
25	Pit Plant 1 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
26	Pit Plant 1 Return Conveyor to Line 1 Cone	60	0.18	0.39	0.066	0.14	0.010	0.022
27	Pit Plant 1 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
28	Pit Plant 1 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
29	Pit Plant 1 Line 1 Screen Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
30	Pit Plant 1 Line 1 Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
31	Pit Plant 1 Line 1 Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
32	Pit Plant 1 Air Separator Conveyor	48	0.14	0.32	0.053	0.12	0.008	0.018
33	Pit Plant 1 Air Separator Conveyor	42	0.13	0.28	0.046	0.10	0.007	0.015
34	Pit Plant 1 Line 2 Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
35	Pit Plant 1 Line 2 Cone Crusher Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
36	Pit Plant 1 Line 2 Conveyor to Screen	210	0.63	1.38	0.23	0.51	0.035	0.077
37	Pit Plant 1 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
38	Pit Plant 1 Return Conveyor to Line 2 Cone	60	0.18	0.39	0.066	0.14	0.010	0.022
39	Pit Plant 1 Line 2 Screen Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
40	Pit Plant 1 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
41	Pit Plant 1 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
42	Waste Stacker Conveyor Drop to Pile	180	1.19	2.12	0.56	1.00	0.085	0.15
43	Pit Plant 1 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
44	Pit Plant 1 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
45	Pit Plant 1 Stacker Conveyor to Pile	48	0.32	0.57	0.15	0.27	0.023	0.041
46	Pit Plant 1 Stacker Conveyor to Pile	42	0.28	0.49	0.13	0.23	0.020	0.035

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
47	Pit Plant 1 Stacker Conveyor to Pile	90	0.59	1.06	0.28	0.50	0.043	0.076
48	Pit Plant 1 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
49	Pit Plant 1 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
50	Pit Plant 1 Finish Product Storage Pile	420	2.77	4.95	1.31	2.34	0.20	0.35
51	Pit Plant 1 Product Truck Loading - Finish Pile	420	2.77	4.95	1.31	2.34	0.20	0.35
Pit Plant #2								
53	Pit Plant 2 Quarry Material	600	3.96	7.07	1.87	3.34	0.28	0.51
54	Pit Plant 2 Quarry Truck Loading	600	3.96	7.07	1.87	3.34	0.28	0.51
55	Pit Plant 2 Quarry Truck Unload	600	3.96	7.07	1.87	3.34	0.28	0.51
56	Pit Plant 2 Feeder	600	3.96	7.07	1.87	3.34	0.28	0.51
57	Pit Plant 2 Jaw Crusher	600	3.24	7.10	1.44	3.15	0.22	0.48
58	Pit Plant 2 Surge Bin	600	1.80	3.94	0.66	1.45	0.10	0.22
59	Pit Plant 2 PreScreen	600	15.00	32.85	5.22	11.43	0.79	1.73
60	Pit Plant 2 Line 1 Cone Crusher	210	1.13	2.48	0.50	1.10	0.076	0.17
61	Pit Plant 2 Line 1 Screen	210	5.25	11.50	1.83	4.00	0.28	0.61
62	Pit Plant 2 Air Separator	90	2.25	4.93	0.78	1.71	0.12	0.26
63	Pit Plant 2 Line 2 Cone Crusher	210	1.13	2.48	0.50	1.10	0.076	0.17
64	Pit Plant 2 Line 2 Screen	210	5.25	11.50	1.83	4.00	0.28	0.61
65	Pit Plant 2 Jaw Crusher Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
66	Pit Plant 2 Surge Bin Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
67	Pit Plant 2 Conveyor	600	1.80	3.94	0.66	1.45	0.10	0.22
68	Pit Plant 2 PreScreen Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
69	Pit Plant 2 Waste Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
70	Pit Plant 2 Waste Stacker Conveyor	180	0.54	1.18	0.20	0.43	0.030	0.066
71	Pit Plant 2 PreScreen Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
72	Pit Plant 2 Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15
73	Pit Plant 2 Splitter Conveyor	420	1.26	2.76	0.46	1.01	0.070	0.15
74	Pit Plant 2 Line 1 Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
75	Pit Plant 2 Line 1 Cone Crusher Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
76	Pit Plant 2 Line 1 Conveyor to Screen	210	0.63	1.38	0.23	0.51	0.035	0.077
77	Pit Plant 2 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
78	Pit Plant 2 Return Conveyor to Line 1 Cone	60	0.18	0.39	0.066	0.14	0.010	0.022
79	Pit Plant 2 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
80	Pit Plant 2 Line 1 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
81	Pit Plant 2 Line 1 Screen Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
82	Pit Plant 2 Line 1 Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
83	Pit Plant 2 Line 1 Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
84	Pit Plant 2 Air Separator Conveyor	48	0.14	0.32	0.053	0.12	0.008	0.018
85	Pit Plant 2 Air Separator Conveyor	42	0.13	0.28	0.046	0.10	0.007	0.015
86	Pit Plant 2 Line 2 Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
87	Pit Plant 2 Line 2 Cone Crusher Conveyor	210	0.63	1.38	0.23	0.51	0.035	0.077
88	Pit Plant 2 Line 2 Conveyor to Screen	210	0.63	1.38	0.23	0.51	0.035	0.077
89	Pit Plant 2 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
90	Pit Plant 2 Return Conveyor to Line 2 Cone	60	0.18	0.39	0.066	0.14	0.010	0.022
91	Pit Plant 2 Line 2 Screen Conveyor	90	0.27	0.59	0.10	0.22	0.015	0.033
92	Pit Plant 2 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
93	Pit Plant 2 Line 2 Screen Conveyor	60	0.18	0.39	0.066	0.14	0.010	0.022
94	Waste Stacker Conveyor Drop to Pile	180	1.19	2.12	0.56	1.00	0.085	0.15

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
95	Pit Plant 2 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
96	Pit Plant 2 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
97	Pit Plant 2 Stacker Conveyor to Pile	48	0.32	0.57	0.15	0.27	0.023	0.041
98	Pit Plant 2 Stacker Conveyor to Pile	42	0.28	0.49	0.13	0.23	0.020	0.035
99	Pit Plant 2 Stacker Conveyor to Pile	90	0.59	1.06	0.28	0.50	0.043	0.076
100	Pit Plant 2 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
101	Pit Plant 2 Stacker Conveyor to Pile	60	0.40	0.71	0.19	0.33	0.028	0.051
102	Pit Plant 2 Finish Product Storage Pile	420	2.77	4.95	1.31	2.34	0.20	0.35
103	Pit Plant 2 Product Truck Loading - Finish Pile	420	2.77	4.95	1.31	2.34	0.20	0.35
Waste Handling								
105	Waste Truck Loading to Waste Pile	360	2.38	1.94	1.12	0.92	0.17	0.14
106	Waste Storage Pile (Pit1+Pit2)	360	2.38	1.94	1.12	0.92	0.17	0.14
Colored Rock Quarry Material Handling								
107	Colored Rock Quarry	600	3.96	7.07	1.87	3.34	0.28	0.51
108	Colored Rock Truck Loading Quarry	600	3.96	7.07	1.87	3.34	0.28	0.51
109	Colored Rock Storage Pile at Pit Plant	600	3.96	7.07	1.87	3.34	0.28	0.51
		TOTALS	**172.17**	**345.20**	**70.11**	**138.47**	**10.62**	**20.97**

Pre-Control Particulate Emission Rates Recycled Asphalt Plant (RAP)

Material Handling ($PM_{2.5}$, PM_{10}, and PM)

To estimate material handling pre-control particulate emission rates for crushing, screening, and conveyor transfer operations, emission factors were obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Aug. 2004, Section 11.19.2, Table 11.19.2-2. To determine missing $PM_{2.5}$ emission factors the ratio of 0.35/0.053 from $PM_{10}/PM_{2.5}$ *k* factors found in AP-42 Section 13.2.4 (11/2006) were used.

To estimate material handling particulate emission rates for aggregate handling operations (aggregate and RAP storage piles/ loading feed bins), an emission equation was obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition, Section 13.2.4 (11/2004), where the k (TSP = 0.74, PM_{10} = 0.35, $PM_{2.5}$ = 0.053), wind speed for determining the maximum hourly emission rate is the NMED default of 11 MPH and for determining the annual emission rate is based on the average wind speed for Moriarty (Internet Historical) of 9.4 mph (see Section 7) and the NMED default moisture content of 2 percent.

Pre-controlled annual emissions for tons per year (tpy) were calculated assuming daylight operation for 4380 hours per year (876,000 tpy). This limit is based on the natural limitation of daylight hours for the safety of MSCI personnel operating the RAP plants.

Aggregate Material Handling – Storage Piles, Stacker drop to Piles, and Feed Bin Loading Emission Equation:

Maximum Hour Emission Factor

E (lbs/ton) = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

E_{PM} (lbs/ton) = 0.74 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM10} (lbs/ton) = 0.35 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = 0.053 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00660 lbs/ton;

E_{PM10} (lbs/ton) = 0.00312 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00047 lbs/ton

Annual Emission Factor

E (lbs/ton) = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

E_{PM} (lbs/ton) = 0.74 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM10} (lbs/ton) = 0.35 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = 0.053 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00538 lbs/ton;

E_{PM10} (lbs/ton) = 0.00254 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00039 lbs/ton

AP-42 Section 11.19.2 Table 11.19.2-2 Emission Factors:

All Bin Unloading and Conveyor Transfers = Uncontrolled Conveyor Transfer Point Emission Factor
Crushing = Uncontrolled Tertiary Crushing Emission Factor
Screening = Uncontrolled Screening Emission Factor

Material Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Uncontrolled Tertiary Crushing	0.00540	0.00240	0.00036
Uncontrolled Screening	0.02500	0.00870	0.00130
Feed Bin Unloading, and Conveyor Transfers	0.00300	0.00110	0.00017
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading, Stacker to Pile	0.00660	0.00312	0.00047
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading, Stacker to Pile	0.00538	0.00254	0.00039

These emission factors are reduced further to account for the inherent properties of RAP with a coating of asphalt which captures small particles within the material. Based on EPA documents "EIIP – Preferred and Alternative Methods for Estimating Air Emissions from Hot-Mix-Asphalt Plants, Final Report, July 1996, Table 3.2-1 Fugitive Dust – Crushed RAP material" the inherent typical efficiency of the material is 70% (see Section 7). The above emission factors are multiplied by 0.3 and are summarized below.

RAP Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Uncontrolled Tertiary Crushing	0.00162	0.00072	0.00011
Uncontrolled Screening	0.00750	0.00261	0.00040
Feed Bin Unloading, and Conveyor Transfers	0.00090	0.00033	0.00005
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading, Stacker to Pile	0.00198	0.00094	0.00014
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading, Stacker to Pile	0.00161	0.00076	0.00012

The following equation was used to calculate the hourly emission rate for each process unit:

Emission Rate (lbs/hour) = Process Rate (tons/hour) * Emission Factor (lbs/ton)

The following equation was used to calculate the annual emission rate for each process unit:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{\text{2000 lbs/ton}}$$

Table 6-2 Pre-Controlled RAP Plant Regulated Process Equipment Emission Rates

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
110	RAP Plant Raw Material Source	200	0.40	0.71	0.19	0.33	0.028	0.051
111	RAP Plant Feeder/Hopper	200	0.40	0.71	0.19	0.33	0.028	0.051
112	RAP Plant Vertical Impact Crusher	200	0.32	0.71	0.14	0.32	0.022	0.048
113	RAP Plant Surge Bin	200	0.18	0.39	0.066	0.14	0.010	0.022
114	RAP Plant 2-Deck Screen	200	1.50	3.29	0.52	1.14	0.079	0.17
115	RAP Plant Cone Crusher	200	0.32	0.71	0.14	0.32	0.022	0.048
116	RAP Plant Crusher Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
117	RAP Plant Surge Bin Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
118	RAP Plant Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
119	RAP Plant Cone Crusher Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
120	RAP Plant Return 1 Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
121	RAP Plant Return 2 Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
122	RAP Plant Screen Under Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
123	RAP Plant Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
124	RAP Plant Stacker Conveyor to Pile	200	0.40	0.71	0.19	0.33	0.028	0.051
125	RAP Plant Finish Product Storage Pile	200	0.40	0.71	0.19	0.33	0.028	0.051
		TOTALS	**5.14**	**11.08**	**2.07**	**4.41**	**0.31**	**0.67**

Allowable Particulate Emission Rates Pit Plant #1, and Pit Plant #2

Material Handling ($PM_{2.5}$, PM_{10}, and PM)

No fugitive dust controls or emission reductions are proposed for the quarry materials, quarry truck loading, loading of the aggregate feed bin, waste storage pile, quarry truck loading – product, finish product storage pile and product truck loading with the exception of limiting annual production rates. Hourly production used in all calculations is 600 tons per hour for each pit plant or limited to a combined 1,200 tons per hour for the site. Annual production used in all calculations is 1,200,000 tons per year for each pit plant or limited to combined 2,400,000 tons per year for the site. Colored Rock throughput will be limited to 600 tons per hour and 500,000 tons per year.

A "Wet Suppression" system will control emissions of particulate matter during crushing, screening, conveyor transfers, and stacker conveyor drop to storage piles. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group found in AP-42 Section 11.19.2. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. No fugitive dust controls are proposed for loading the feeders (4, and 56), and material handling at the quarry material source (1, 53, and 107), storage piles (3, 50, 55, 102, 106, and 109) or truck loading (2, 51, 54, 103, 105, and 108). Water sprays and moisture carryover will control fugitive dust for Units 5-49, and 57-101.

Fugitive dust control for the transfer conveyors (Units 6, 13-41, 58, and 65-93) will be controlled with material moisture content and/or enclosure. It is estimated that these methods will control to a PM10 efficiency of 95.9 percent per AP42 Section 11.19.2, Table 11.19.2-2. Additional emission reductions include limiting annual production rates.

Fugitive dust control for the plant crushers (Units 5, 8, 11, 57, 60, and 63) will be controlled, as needed, with enclosures and/or water sprays. It is estimated that these methods will control to a PM10 efficiency of 77.7 percent for crushing operations per AP42 Section 11.19.2, Table 11.19.2-2. Additional emission reductions include limiting annual production rates.

Fugitive dust control for the plant screens (Units 7, 9, 10, 12, 59, 61, and 64) will be controlled, as needed, with enclosures and/or water sprays. It is estimated that these methods will control to a PM10 efficiency of 91.6 percent for screening operations per AP42 Section 11.19.2, Table 11.19.2-2. Additional emission reductions include limiting annual production rates.

Fugitive dust control for the stacker conveyor transfer to storage piles (Units 42-49, and 94-101) will be controlled with material moisture content and/or enclosure. It is estimated that the additional moisture during processing will increase the moisture content from the default of 2% to the high moisture content value found in footnote b of AP-42 Table 11.19.2-2, 2.88%. This will control fugitive emissions to an efficiency of 60 percent. Additional emission reductions include limiting annual production rates.

To estimate material handling control particulate emission rates for crushing, screening, and conveyor transfer operations, emission factors were obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Aug. 2004, Section 11.19.2, Table 11.19.2-2.

To estimate material handling particulate emission rates for aggregate handling operations (mining/aggregate storage piles/loading feed bins/stacker drop to piles), an emission equation was obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition, Section 13.2.4 (11/2004), where the k (PM = 0.74, PM_{10} = 0.35, $PM_{2.5}$ = 0.053), wind speed for determining the maximum hourly emission rate is the NMED default of 11 MPH and for determining annual emission rate is based on the average wind speed for Moriarty (Internet Historical) of 9.4 mph, and the NMED default moisture content of 2 percent.

Quarry, Raw Ore Pile, Feeder and Truck Loading, Finish Pile Emission Equation:

Maximum Hour Emission Factor

E (lbs/ton) = $k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$

E_{PM} (lbs/ton) = $0.74 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

E_{PM10} (lbs/ton) = $0.35 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = $0.053 \times 0.0032 \times (11/5)^{1.3} / (2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00660 lbs/ton;

E_{PM10} (lbs/ton) = 0.00312 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00047 lbs/ton

Stacker to Storage Pile Loading Emission Equation:

Maximum Hour Emission Factor

E (lbs/ton) = $k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$

E_{PM} (lbs/ton) = $0.74 \times 0.0032 \times (11/5)^{1.3} / (2.88/2)^{1.4}$

E_{PM10} (lbs/ton) = $0.35 \times 0.0032 \times (11/5)^{1.3} / (2.88/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = $0.053 \times 0.0032 \times (11/5)^{1.3} / (2.88/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00396 lbs/ton;

E_{PM10} (lbs/ton) = 0.00187 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00028 lbs/ton

Quarry, Raw Ore Pile, Feeder and Truck Loading, Finish Pile Emission Equation:

Annual Emission Factor

E (lbs/ton) = $k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$

E_{PM} (lbs/ton) = $0.74 \times 0.0032 \times (9.4/5)^{1.3} / (2/2)^{1.4}$

E_{PM10} (lbs/ton) = $0.35 \times 0.0032 \times (9.4/5)^{1.3} / (2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = $0.053 \times 0.0032 \times (9.4/5)^{1.3} / (2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00538 lbs/ton;

E_{PM10} (lbs/ton) = 0.00254 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00039 lbs/ton

Stacker to Storage Pile Loading Emission Equation:

Annual Emission Factor

E (lbs/ton) = $k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$

E_{PM} (lbs/ton) = $0.74 \times 0.0032 \times (9.4/5)^{1.3} / (2.88/2)^{1.4}$

E_{PM10} (lbs/ton) = $0.35 \times 0.0032 \times (9.4/5)^{1.3} / (2.88/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = $0.053 \times 0.0032 \times (9.4/5)^{1.3} / (2.88/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00323 lbs/ton;

E_{PM10} (lbs/ton) = 0.00153 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00023 lbs/ton

AP-42 Emission Factors:

Feed Bin Unloading = Controlled Conveyor Transfer Point Emission Factor
Crusher = Controlled Tertiary Crusher Emission Factor
Screen = Controlled Screening Emission Factor
Transfer Conveyor = Controlled Conveyor Transfer Point Emission Factor

Material Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Controlled Crushing	0.00120	0.00054	0.00010
Controlled Screening	0.00220	0.00074	0.00005
Controlled Feeder Unloading and Conveyor Transfers	0.00014	0.000046	0.000013
Mining, Aggregate Storage Piles, Feeder and Truck Loading Maximum Hourly	0.00660	0.00312	0.00047
Mining, Aggregate Storage Piles, Feeder and Truck Loading Annual Hourly	0.00538	0.00254	0.00039
Stacker Conveyor to Pile Maximum Hourly	0.00396	0.00187	0.00028
Stacker Conveyor to Pile Annual Hourly	0.00323	0.00153	0.00023

The following equation was used to calculate the hourly emission rate for each process unit:

Emission Rate (lbs/hour) = Process Rate (tons/hour) * Emission Factor (lbs/ton)

The following equation was used to calculate the annual emission rate for each process unit:

$$\text{Emission Rate (tons/year)} = \frac{\text{Hourly Emission Rate (lbs/ton)} * \text{Annual Throughput (tons/year)}}{\text{2000 lbs/ton}}$$

Table 6-3 Allowable Regulated Process Equipment Emission Rates

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
Pit Plant #1								
1	Pit Plant 1 Quarry Material	600	3.96	3.23	1.87	1.53	0.28	0.23
2	Pit Plant 1 Quarry Truck Loading	600	3.96	3.23	1.87	1.53	0.28	0.23
3	Pit Plant 1 Quarry Truck Unload	600	3.96	3.23	1.87	1.53	0.28	0.23
4	Pit Plant 1 Feeder	600	3.96	3.23	1.87	1.53	0.28	0.23
5	Pit Plant 1 Jaw Crusher	600	0.72	0.72	0.32	0.32	0.060	0.060
6	Pit Plant 1 Surge Bin	600	0.084	0.084	0.028	0.028	0.0078	0.0078
7	Pit Plant 1 Prescreen	600	1.32	1.32	0.44	0.44	0.030	0.030
8	Pit Plant 1 Line 1 Cone Crusher	210	0.25	0.25	0.11	0.11	0.021	0.021
9	Pit Plant 1 Line 1 Screen	210	0.46	0.46	0.16	0.16	0.011	0.011
10	Pit Plant 1 Air Separator	90	0.20	0.20	0.067	0.067	0.005	0.005
11	Pit Plant 1 Line 2 Cone Crusher	210	0.25	0.25	0.11	0.11	0.021	0.021
12	Pit Plant 1 Line 2 Screen	210	0.46	0.46	0.16	0.16	0.011	0.011
13	Pit Plant 1 Jaw Crusher Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
14	Pit Plant 1 Surge Bin Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
15	Pit Plant 1 Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
16	Pit Plant 1 PreScreen Conveyor	180	0.025	0.025	0.008	0.008	0.0023	0.0023
17	Pit Plant 1 Waste Conveyor	180	0.025	0.025	0.008	0.008	0.0023	0.0023
18	Pit Plant 1 Waste Stacker Conveyor	180	0.025	0.025	0.008	0.008	0.0023	0.0023
19	Pit Plant 1 PreScreen Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055
20	Pit Plant 1 Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055
21	Pit Plant 1 Splitter Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055
22	Pit Plant 1 Line 1 Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
23	Pit Plant 1 Line 1 Cone Crusher Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
24	Pit Plant 1 Line 1 Conveyor to Screen	210	0.029	0.029	0.010	0.010	0.0027	0.0027
25	Pit Plant 1 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
26	Pit Plant 1 Return Conveyor to Line 1 Cone	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
27	Pit Plant 1 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
28	Pit Plant 1 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
29	Pit Plant 1 Line 1 Screen Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
30	Pit Plant 1 Line 1 Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
31	Pit Plant 1 Line 1 Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
32	Pit Plant 1 Air Separator Conveyor	48	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062
33	Pit Plant 1 Air Separator Conveyor	42	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055
34	Pit Plant 1 Line 2 Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
35	Pit Plant 1 Line 2 Cone Crusher Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
36	Pit Plant 1 Line 2 Conveyor to Screen	210	0.029	0.029	0.010	0.010	0.0027	0.0027
37	Pit Plant 1 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
38	Pit Plant 1 Return Conveyor to Line 2 Cone	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
39	Pit Plant 1 Line 2 Screen Conveyor	90	0.013	0.013	0.004	0.004	0.0012	0.0012
40	Pit Plant 1 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
41	Pit Plant 1 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
42	Waste Stacker Conveyor Drop to Pile	180	0.71	0.58	0.34	0.27	0.051	0.042
43	Pit Plant 1 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
44	Pit Plant 1 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
45	Pit Plant 1 Stacker Conveyor to Pile	48	0.19	0.15	0.090	0.073	0.014	0.011
46	Pit Plant 1 Stacker Conveyor to Pile	42	0.17	0.14	0.079	0.064	0.012	0.010

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
47	Pit Plant 1 Stacker Conveyor to Pile	90	0.36	0.29	0.17	0.14	0.026	0.021
48	Pit Plant 1 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
49	Pit Plant 1 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
50	Pit Plant 1 Finish Product Storage Pile	420	2.77	2.26	1.31	1.07	0.20	0.16
51	Pit Plant 1 Product Truck Loading - Finish Pile	420	2.77	2.26	1.31	1.07	0.20	0.16
Pit Plant #2								
53	Pit Plant 2 Quarry Material	600	3.96	3.23	1.87	1.53	0.28	0.23
54	Pit Plant 2 Quarry Truck Loading	600	3.96	3.23	1.87	1.53	0.28	0.23
55	Pit Plant 2 Quarry Truck Unload	600	3.96	3.23	1.87	1.53	0.28	0.23
56	Pit Plant 2 Feeder	600	3.96	3.23	1.87	1.53	0.28	0.23
57	Pit Plant 2 Jaw Crusher	600	0.72	0.72	0.32	0.32	0.060	0.060
58	Pit Plant 2 Surge Bin	600	0.084	0.08	0.028	0.028	0.0078	0.008
59	Pit Plant 2 PreScreen	600	1.32	1.32	0.44	0.44	0.030	0.030
60	Pit Plant 2 Line 1 Cone Crusher	210	0.25	0.25	0.11	0.11	0.021	0.021
61	Pit Plant 2 Line 1 Screen	210	0.46	0.46	0.16	0.16	0.011	0.011
62	Pit Plant 2 Air Separator	90	0.20	0.20	0.067	0.067	0.0045	0.0045
63	Pit Plant 2 Line 2 Cone Crusher	210	0.25	0.25	0.11	0.11	0.021	0.021
64	Pit Plant 2 Line 2 Screen	210	0.46	0.46	0.16	0.16	0.011	0.011
65	Pit Plant 2 Jaw Crusher Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
66	Pit Plant 2 Surge Bin Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
67	Pit Plant 2 Conveyor	600	0.084	0.084	0.028	0.028	0.0078	0.0078
68	Pit Plant 2 PreScreen Conveyor	180	0.025	0.025	0.0083	0.0083	0.0023	0.0023
69	Pit Plant 2 Waste Conveyor	180	0.025	0.025	0.0083	0.0083	0.0023	0.0023
70	Pit Plant 2 Waste Stacker Conveyor	180	0.025	0.025	0.0083	0.0083	0.0023	0.0023
71	Pit Plant 2 PreScreen Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055
72	Pit Plant 2 Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
73	Pit Plant 2 Splitter Conveyor	420	0.059	0.059	0.019	0.019	0.0055	0.0055
74	Pit Plant 2 Line 1 Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
75	Pit Plant 2 Line 1 Cone Crusher Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
76	Pit Plant 2 Line 1 Conveyor to Screen	210	0.029	0.029	0.010	0.010	0.0027	0.0027
77	Pit Plant 2 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
78	Pit Plant 2 Return Conveyor to Line 1 Cone	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
79	Pit Plant 2 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
80	Pit Plant 2 Line 1 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
81	Pit Plant 2 Line 1 Screen Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
82	Pit Plant 2 Line 1 Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
83	Pit Plant 2 Line 1 Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
84	Pit Plant 2 Air Separator Conveyor	48	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062
85	Pit Plant 2 Air Separator Conveyor	42	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055
86	Pit Plant 2 Line 2 Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
87	Pit Plant 2 Line 2 Cone Crusher Conveyor	210	0.029	0.029	0.010	0.010	0.0027	0.0027
88	Pit Plant 2 Line 2 Conveyor to Screen	210	0.029	0.029	0.010	0.010	0.0027	0.0027
89	Pit Plant 2 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
90	Pit Plant 2 Return Conveyor to Line 2 Cone	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
91	Pit Plant 2 Line 2 Screen Conveyor	90	0.013	0.013	0.0041	0.0041	0.0012	0.0012
92	Pit Plant 2 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
93	Pit Plant 2 Line 2 Screen Conveyor	60	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
94	Waste Stacker Conveyor Drop to Pile	180	0.71	0.58	0.34	0.27	0.051	0.042
95	Pit Plant 2 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
96	Pit Plant 2 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
97	Pit Plant 2 Stacker Conveyor to Pile	48	0.19	0.15	0.090	0.073	0.014	0.011
98	Pit Plant 2 Stacker Conveyor to Pile	42	0.17	0.14	0.079	0.064	0.012	0.010
99	Pit Plant 2 Stacker Conveyor to Pile	90	0.36	0.29	0.17	0.14	0.026	0.021
100	Pit Plant 2 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
101	Pit Plant 2 Stacker Conveyor to Pile	60	0.24	0.19	0.11	0.092	0.017	0.014
102	Pit Plant 2 Finish Product Storage Pile	420	2.77	2.26	1.31	1.07	0.20	0.16
103	Pit Plant 2 Product Truck Loading - Finish Pile	420	2.77	2.26	1.31	1.07	0.20	0.16
Waste Handling								
105	Waste Truck Loading to Waste Pile	360	2.38	1.94	1.12	0.92	0.17	0.14
106	Waste Storage Pile (Pit1+Pit2)	360	2.38	1.94	1.12	0.92	0.17	0.14
Colored Rock Quarry Material Handling								
107	Colored Rock Quarry	600	3.96	1.35	1.87	0.64	0.28	0.10
108	Colored Rock Truck Loading Quarry	600	3.96	1.35	1.87	0.64	0.28	0.10
109	Colored Rock Storage Pile at Pit Plant	600	3.96	1.35	1.87	0.64	0.28	0.10
		TOTALS	**73.27**	**55.77**	**33.67**	**25.39**	**5.08**	**3.82**

Allowable Particulate Emission Rates Recycled Asphalt Plant

Material Handling ($PM_{2.5}$, PM_{10}, and PM)

To estimate material handling pre-control particulate emission rates for crushing, screening, and conveyor transfer operations, emission factors were obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Aug. 2004, Section 11.19.2, Table 11.19.2-2. To determine missing $PM_{2.5}$ emission factors the ratio of 0.35/0.053 from $PM_{10}/PM_{2.5}$ *k* factors found in AP-42 Section 13.2.4 (11/2006) were used.

To estimate material handling particulate emission rates for aggregate handling operations (aggregate and RAP storage piles/ loading feed bins), an emission equation was obtained from EPA's Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition, Section 13.2.4 (11/2004), where the k (TSP = 0.74, PM_{10} = 0.35, $PM_{2.5}$ = 0.053), wind speed for determining the maximum hourly emission rate is the NMED default of 11 MPH and for determining the annual emission rate is based on the average wind speed for Moriarty (Internet Historical) of 9.4 mph (see Section 7) and the NMED default moisture content of 2 percent.

Allowable annual emissions for tons per year (tpy) were calculated based on annual proposed throughput limit of 400,000 tons per year instead of 876,000 tons per year used in the Pre-controlled emission equations.

Aggregate Material Handling – Storage Piles, and Feed Bin Loading Emission Equation:

Maximum Hour Emission Factor

E (lbs/ton) = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

E_{PM} (lbs/ton) = 0.74 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM10} (lbs/ton) = 0.35 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = 0.053 x 0.0032 x $(11/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00660 lbs/ton;

E_{PM10} (lbs/ton) = 0.00312 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00047 lbs/ton

Annual Emission Factor

E (lbs/ton) = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

E_{PM} (lbs/ton) = 0.74 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM10} (lbs/ton) = 0.35 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

$E_{PM2.5}$ (lbs/ton) = 0.053 x 0.0032 x $(9.4/5)^{1.3}$ / $(2/2)^{1.4}$

E_{PM} (lbs/ton) = 0.00538 lbs/ton;

E_{PM10} (lbs/ton) = 0.00254 lbs/ton

$E_{PM2.5}$ (lbs/ton) = 0.00039 lbs/ton

AP-42 Section 11.19.2 Table 11.19.2-2 Emission Factors:

All Bin Unloading and Conveyor Transfers = Uncontrolled Conveyor Transfer Point Emission Factor
Crushing = Uncontrolled Tertiary Crushing Emission Factor
Screening = Uncontrolled Screening Emission Factor

Material Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Uncontrolled Tertiary Crushing	0.00540	0.00240	0.00036
Uncontrolled Screening	0.02500	0.00870	0.00130
Feed Bin Unloading, and Conveyor Transfers	0.00300	0.00110	0.00017
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading	0.00660	0.00312	0.00047
Uncontrolled Annual RAP Storage Piles, RAP Feeder Loading	0.00538	0.00254	0.00039

These emission factors are reduced further to account for the inherent properties of RAP with a coating of asphalt which captures small particles within the material. Based on EPA documents "EIIP – Preferred and Alternative Methods for Estimating Air Emissions from Hot-Mix-Asphalt Plants, Final Report, July 1996, Table 3.2-1 Fugitive Dust – Crushed RAP material" the inherent typical efficiency of the material is 70% (see Section 7). The above emission factors are multiplied by 0.3 and are summarized below.

RAP Handling Emission Factors:

Process Unit	PM Emission Factor (lbs/ton)	PM_{10} Emission Factor (lbs/ton)	$PM_{2.5}$ Emission Factor (lbs/ton)
Uncontrolled Tertiary Crushing	0.00162	0.00072	0.00011
Uncontrolled Screening	0.00750	0.00261	0.00040
Feed Bin Unloading, and Conveyor Transfers	0.00090	0.00033	0.00005
Uncontrolled Hourly RAP Storage Piles, RAP Feeder Loading	0.00198	0.00094	0.00014
Uncontrolled Annual RAP Storage Piles, RAP Feeder Loading	0.00161	0.00076	0.00012

The following equation was used to calculate the hourly emission rate for each process unit:

Emission Rate (lbs/hour) = Process Rate (tons/hour) * Emission Factor (lbs/ton)

The following equation was used to calculate the annual emission rate for each process unit:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{\text{2000 lbs/ton}}$$

Table 6-4 RAP Plant Allowable Regulated Process Equipment Emission Rates

Unit #	Process Unit Description	Process Rate (tph)	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
110	RAP Plant Raw Material Source	200	0.40	0.71	0.19	0.33	0.028	0.051
111	RAP Plant Feeder/Hopper	200	0.40	0.71	0.19	0.33	0.028	0.051
112	RAP Plant Vertical Impact Crusher	200	0.32	0.71	0.14	0.32	0.022	0.048
113	RAP Plant Surge Bin	200	0.18	0.39	0.066	0.14	0.010	0.022
114	RAP Plant 2-Deck Screen	200	1.50	3.29	0.52	1.14	0.079	0.17
115	RAP Plant Cone Crusher	200	0.32	0.71	0.14	0.32	0.022	0.048
116	RAP Plant Crusher Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
117	RAP Plant Surge Bin Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
118	RAP Plant Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
119	RAP Plant Cone Crusher Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
120	RAP Plant Return 1 Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
121	RAP Plant Return 2 Conveyor	120	0.11	0.39	0.040	0.14	0.0060	0.022
122	RAP Plant Screen Under Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
123	RAP Plant Conveyor	200	0.18	0.39	0.066	0.14	0.010	0.022
124	RAP Plant Stacker Conveyor to Pile	200	0.40	0.71	0.19	0.33	0.028	0.051
125	RAP Plant Finish Product Storage Pile	200	0.40	0.71	0.19	0.33	0.028	0.051
110	RAP Plant Raw Material Source	200	0.40	0.71	0.19	0.33	0.028	0.051
		TOTALS	**5.14**	**5.06**	**2.07**	**2.01**	**0.31**	**0.31**

Estimates for 2288 hp Pit Plant #1 Diesel-Fired Engine (52E) (NO_X, CO, SO_2, VOC, PM, and CO_2)

A 2288 horsepower (hp), 1600 kilowatt (kW) engine (52E) provides power to Pit Plant #1. Emission rates for NO_X and CO are based on stack test plus 25% safety factor (See Section 7). PM and VOC's emission rates are based on manufacturer specifications (See Section 7). Sulfur dioxide (SO_2) emissions are estimated based on sulfur content of diesel fuel, not to exceed 500 ppm fuel content and a fuel usage rate of 114.5 gal/hr. CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (See Section 7). Pre-controlled annual emissions in tons per year (tpy) were calculated assuming daylight operation of 4380 hours per year. Allowable annual emissions in tons per year (tpy) were calculated assuming proposed operation of 4000 hours per year.

Unit 52E Emission Rates:

Pollutant	Emission Factor (lbs/hr)
Nitrogen Oxide (NOx)	10.61
Carbon Monoxides (CO)	1.65
Particulate (PM)	1.27
Hydrocarbons (VOC)	1.11

Sulfur dioxide emission rate was calculated using the fuel consumption rate for this engine of 114.5 gallons per hour, a fuel density of 7.0 pounds per gallon, a fuel sulfur content of 500 PPM, and a sulfur to sulfur dioxide conversion factor of two (2). The following equation calculates the emission rate for sulfur dioxide (SO_2).

Emission Rate (lbs/hr) = Fuel (gal/hr) * Density lbs/gal * % Sulfur Content * Factor

$$\text{Emission Rate (lbs/hr)} = \frac{114.5 \text{ gallons}}{\text{hr}} \left| \frac{7.0 \text{ lbs}}{\text{gallon}} \right| \frac{0.0005 \text{ lbs Sulfur}}{\text{lbs of fuel}} \left| \frac{2 \text{ lbs Sulfur Dioxide}}{1 \text{ lb Sulfur}} \right.$$

Emission Rate (lbs/hr) = 0.80 lbs/hr

CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (February 13, 2024).

CO2 = 10.21 kg/gal (GWP = 1)
CH4 = 0.41 g/gal (GWP = 25)
N2O = 0.08 g/gal (GWP = 298)

The following equation was used to calculate the annual emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{2000 \text{ lbs/ton}}$$

Table 6-9: Pre-controlled Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E	NO_X	2288/1600	10.61	23.24
	CO	2288/1600	1.65	3.61
	SO_2	2288/1600	0.80	1.76
	VOC	2288/1600	1.27	2.78
	PM	2288/1600	1.11	2.43

Table 6-10: Allowable Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E	NO_X	2288/1600	10.61	21.22
	CO	2288/1600	1.65	3.30
	SO_2	2288/1600	0.80	1.60
	VOC	2288/1600	1.27	2.54
	PM	2288/1600	1.11	2.22

GHG emission rate hourly (lbs/hr) = Emission Factor * gallon/hour * GWP * 2.20462 lbs/kg or 0.0020462 lbs/g
GHG emission rate annual (tons/yr) = lbs/hr * annual hours/2000 lbs/ton

Table 6-11: Pre-controlled GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E	CO_2	10.21 kg/gal	114.50	1	2577.3	5644.3
	CH_4	0.41 g/gal	114.50	25	2.59	5.67
	N_2O	0.08 g/gal	114.50	298	6.02	13.18
	GHG				2585.9	5663.1

Table 6-12: Allowable GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E	CO_2	10.21 kg/gal	114.50	1	2577.8	5155.5
	CH_4	0.41 g/gal	114.50	25	2.59	5.18
	N_2O	0.08 g/gal	114.50	298	6.02	12.04
	GHG				2586.4	5172.7

Estimates for 2153 hp Pit Plant #2 Diesel-Fired Engine (104E) (NO_X, CO, SO_2, VOC, PM, and CO_2)

A 2153 horsepower (hp), 1500 kilowatt (kW) engine (104E) provides power to Pit Plant #2. Emission rates for NO_X and CO are based on stack test plus 25% safety factor (See Section 7). PM and VOC's emission rates are based on manufacturer specifications (See Section 7). Sulfur dioxide (SO_2) emissions are estimated based on sulfur content of diesel fuel, not to exceed 500 ppm fuel content and a fuel usage rate of 107.9 gal/hr. CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (See Section 7). Pre-controlled annual emissions in tons per year (tpy) were calculated assuming daylight operation of 4380 hours per year. Allowable annual emissions in tons per year (tpy) were calculated assuming proposed operation of 4000 hours per year.

Unit 104E Emission Rates:

Pollutant	Emission Factor (lbs/hr)
Nitrogen Oxide (NOx)	33.88
Carbon Monoxides (CO)	5.38
Particulate (PM)	0.58
Hydrocarbons (VOC)	1.82

Sulfur dioxide emission rate was calculated using the fuel consumption rate for this engine of 107.9 gallons per hour, a fuel density of 7.0 pounds per gallon, a fuel sulfur content of 500 PPM, and a sulfur to sulfur dioxide conversion factor of two (2). The following equation calculates the emission rate for sulfur dioxide (SO_2).

Emission Rate (lbs/hr) = Fuel (gal/hr) * Density lbs/gal * % Sulfur Content * Factor

$$\text{Emission Rate (lbs/hr)} = \frac{107.9 \text{ gallons}}{\text{hr}} \left| \frac{7.0 \text{ lbs}}{\text{gallon}} \right| \frac{0.0005 \text{ lbs Sulfur}}{\text{lbs of fuel}} \left| \frac{2 \text{ lbs Sulfur Dioxide}}{1 \text{ lb Sulfur}} \right.$$

Emission Rate (lbs/hr) = 0.76 lbs/hr

CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (February 13, 2024).
CO2 = 10.21 kg/gal (GWP = 1)
CH4 = 0.41 g/gal (GWP = 25)
N2O = 0.08 g/gal (GWP = 298)

The following equation was used to calculate the annual emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{\text{2000 lbs/ton}}$$

Table 6-13: Pre-controlled Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
104E	NO_X	2153/1500	33.88	74.19
	CO	2153/1500	5.38	11.77
	SO_2	2153/1500	0.76	1.65
	VOC	2153/1500	1.82	3.99
	PM	2153/1500	0.58	1.27

Table 6-14: Allowable Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
104E	NO_X	2153/1500	33.88	54.20
	CO	2153/1500	5.38	8.60
	SO_2	2153/1500	0.76	1.21
	VOC	2153/1500	1.82	2.91
	PM	2153/1500	0.58	0.93

GHG emission rate hourly (lbs/hr) = Emission Factor * gallon/hour * GWP * 2.20462 lbs/kg or 0.0020462 lbs/g
GHG emission rate annual (tons/yr) = lbs/hr * annual hours/2000 lbs/ton

Table 6-15: Pre-controlled GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
104E	CO_2	10.21 kg/gal	107.9	1	2428.7	5318.9
	CH_4	0.41 g/gal	107.9	25	2.44	5.34
	N_2O	0.08 g/gal	107.9	298	5.67	12.42
	GHG				2436.8	5336.7

Table 6-16: Allowable GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
104E	CO_2	10.21 kg/gal	107.9	1	2428.7	3886.0
	CH_4	0.41 g/gal	107.9	25	2.44	3.90
	N_2O	0.08 g/gal	107.9	298	5.67	9.07
	GHG				2436.8	3899.0

Estimates for Alternative 1604 hp Pit Plant #1 or #2 Diesel-Fired Engine (52E or 104E) (NO_X, CO, SO_2, VOC, PM, and CO_2)

An alternative 1604 hp, 1196 kW engine (52E or 104E) can provide power to either Pit Plant #1 or #2. Emission rates for NO_X and CO are based on stack test plus 25% safety factor (See Section 7). PM and VOC's emission rates are based on manufacturer specifications (See Section 7). Sulfur dioxide (SO_2) emissions are estimated based on sulfur content of diesel fuel, not to exceed 500 ppm fuel content and a fuel usage rate of 70.6 gal/hr. CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (See Section 7). Pre-controlled annual emissions in tons per year (tpy) were calculated assuming daylight operation of 4380 hours per year. Allowable annual emissions in tons per year (tpy) were calculated assuming proposed operation of 4000 hours per year.

Alternative Unit 52E or 104E Emission Rates:

Pollutant	Emission Factor (lbs/hr)
Nitrogen Oxide (NOx)	7.96
Carbon Monoxides (CO)	2.78
Particulate (PM)	0.62
Hydrocarbons (VOC)	1.21

Sulfur dioxide emission rate was calculated using the fuel consumption rate for this engine of 107.9 gallons per hour, a fuel density of 7.0 pounds per gallon, a fuel sulfur content of 500 PPM, and a sulfur to sulfur dioxide conversion factor of two (2). The following equation calculates the emission rate for sulfur dioxide (SO_2).

Emission Rate (lbs/hr) = Fuel (gal/hr) * Density lbs/gal * % Sulfur Content * Factor

$$\text{Emission Rate (lbs/hr)} = \frac{\text{70.6 gallons}}{\text{hr}} \mid \frac{\text{7.0 lbs}}{\text{gallon}} \mid \frac{\text{0.0005 lbs Sulfur}}{\text{lbs of fuel}} \mid \frac{\text{2 lbs Sulfur Dioxide}}{\text{1 lb Sulfur}}$$

Emission Rate (lbs/hr) = 0.49 lbs/hr

CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (February 13, 2024).

CO2 = 10.21 kg/gal (GWP = 1)
CH4 = 0.41 g/gal (GWP = 25)
N2O = 0.08 g/gal (GWP = 298)

The following equation was used to calculate the annual emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{\text{2000 lbs/ton}}$$

Table 6-13: Pre-controlled Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E or 104E	NO_X	1604/1196	7.96	17.44
	CO	1604/1196	2.78	6.08
	SO_2	1604/1196	0.49	1.08
	VOC	1604/1196	1.21	2.65
	PM	1604/1196	0.62	1.36

Table 6-14: Allowable Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E or 104E	NO_X	1604/1196	7.96	15.93
	CO	1604/1196	2.78	5.55
	SO_2	1604/1196	0.49	0.99
	VOC	1604/1196	1.21	2.42
	PM	1604/1196	0.62	1.24

GHG emission rate hourly (lbs/hr) = Emission Factor * gallon/hour * GWP * 2.20462 lbs/kg or 0.0020462 lbs/g
GHG emission rate annual (tons/yr) = lbs/hr * annual hours/2000 lbs/ton

Table 6-15: Pre-controlled GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E or 104E	CO_2	10.21 kg/gal	70.6	1	1589.1	3480.2
	CH_4	0.41 g/gal	70.6	25	1.60	3.49
	N_2O	0.08 g/gal	70.6	298	3.71	8.13
	GHG				1594.5	3491.9

Table 6-16: Allowable GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E or 104E	CO_2	10.21 kg/gal	70.6	1	1589.1	3178.3
	CH_4	0.41 g/gal	70.6	25	1.60	3.19
	N_2O	0.08 g/gal	70.6	298	3.71	7.42
	GHG				1594.5	3188.9

Estimates for Alternative 1818 hp Pit Plant #1 or #2 Diesel-Fired Engine (52E or 104E) (NO_X, CO, SO_2, VOC, PM, and CO_2)

An alternative 1818 hp, 1250 kW engine (52E or 104E) can provide power to either Pit Plant #1 or #2. Emission rates for NO_X and CO are based on stack test plus 25% safety factor (See Section 7). PM and VOC's emission rates are based on manufacturer specifications (See Section 7). Sulfur dioxide (SO_2) emissions are estimated based on sulfur content of diesel fuel, not to exceed 500 ppm fuel content and a fuel usage rate of 85.2 gal/hr. CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (See Section 7). Pre-controlled annual emissions in tons per year (tpy) were calculated assuming daylight operation of 4380 hours per year. Allowable annual emissions in tons per year (tpy) were calculated assuming proposed operation of 4000 hours per year.

Alternative Unit 52E or 104E Emission Rates:

Pollutant	Emission Factor (lbs/hr)
Nitrogen Oxide (NOx)	10.03
Carbon Monoxides (CO)	2.85
Particulate (PM)	0.27
Hydrocarbons (VOC)	1.60

Sulfur dioxide emission rate was calculated using the fuel consumption rate for this engine of 107.9 gallons per hour, a fuel density of 7.0 pounds per gallon, a fuel sulfur content of 500 PPM, and a sulfur to sulfur dioxide conversion factor of two (2). The following equation calculates the emission rate for sulfur dioxide (SO_2).

Emission Rate (lbs/hr) = Fuel (gal/hr) * Density lbs/gal * % Sulfur Content * Factor

$$\text{Emission Rate (lbs/hr)} = \frac{85.2 \text{ gallons}}{\text{hr}} \mid \frac{7.0 \text{ lbs}}{\text{gallon}} \mid \frac{0.0005 \text{ lbs Sulfur}}{\text{lbs of fuel}} \mid \frac{2 \text{ lbs Sulfur Dioxide}}{1 \text{ lb Sulfur}}$$

Emission Rate (lbs/hr) = 0.60 lbs/hr

CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (February 13, 2024).

CO2 = 10.21 kg/gal (GWP = 1)
CH4 = 0.41 g/gal (GWP = 25)
N2O = 0.08 g/gal (GWP = 298)

The following equation was used to calculate the annual emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{2000 \text{ lbs/ton}}$$

Table 6-13: Pre-controlled Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E or 104E	NO_X	1818/1250	10.03	21.97
	CO	1818/1250	2.85	6.24
	SO_2	1818/1250	0.60	1.31
	VOC	1818/1250	1.60	3.50
	PM	1818/1250	0.27	0.59

Table 6-14: Allowable Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
52E or 104E	NO_X	1818/1250	10.03	20.06
	CO	1818/1250	2.85	5.70
	SO_2	1818/1250	0.60	1.19
	VOC	1818/1250	1.60	3.20
	PM	1818/1250	0.27	0.54

Emission rates for both CO and VOC are greater than the emission rates calculated for the main engine (2288 hp, 1600 kW engine (52E)) that will power Pit Plant #1. Emission rates calculated for CO and VOC from the alternative 1818 hp engine above was used in the application forms and dispersion modeling for Unit 52E.

GHG emission rate hourly (lbs/hr) = Emission Factor * gallon/hour * GWP * 2.20462 lbs/kg or 0.0020462 lbs/g
GHG emission rate annual (tons/yr) = lbs/hr * annual hours/2000 lbs/ton

Table 6-15: Pre-controlled GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E or 104E	CO_2	10.21 kg/gal	80.2	1	1917.8	4199.9
	CH_4	0.41 g/gal	80.2	25	1.93	4.22
	N_2O	0.08 g/gal	80.2	298	4.48	9.81
	GHG				1924.2	4214.0

Table 6-16: Allowable GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
52E or 104E	CO_2	10.21 kg/gal	80.2	1	1917.8	3835.6
	CH_4	0.41 g/gal	80.2	25	1.93	3.85
	N_2O	0.08 g/gal	80.2	298	4.48	8.96
	GHG				1924.2	3848.4

Estimates for 755 hp Recycled Asphalt Plant Diesel-Fired Engine (126E) (NO_X, CO, SO_2, VOC, PM, and CO_2)

A 755 horsepower (hp), 563 kilowatt (kW) engine (126E) provides power to the Recycled Asphalt Plant. Emission rates for NO_X, CO, PM and VOC's are based on Manufacturer Specifications (See Section 7). Sulfur dioxide (SO_2) emissions are estimated based on sulfur content of diesel fuel, not to exceed 500 ppm fuel content and a fuel usage rate of 35.00 gal/hr. CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (See Section 7). Pre-controlled annual emissions in tons per year (tpy) were calculated assuming daylight operation of 4380 hours per year. Allowable annual emissions in tons per year (tpy) were calculated assuming proposed operation of 2800 hours per year.

Unit 126E Emission Rates:

NOx = 95% of NOx+NMHC; VOC = 5% of NOx+NMHC

Pollutant	Emission Factor (Grams/BHP-hr)
NOx+NMHC	4.80
Nitrogen Oxide (NOx)	4.56
Carbon Monoxides (CO)	2.60
Particulate (PM)	0.15
Hydrocarbons (VOC)	0.24

Sulfur dioxide emission rate was calculated using the fuel consumption rate for this engine of 35.00 gallons per hour, a fuel density of 7.0 pounds per gallon, a fuel sulfur content of 500 PPM, and a sulfur to sulfur dioxide conversion factor of two (2). The following equation calculates the emission rate for sulfur dioxide (SO_2).

Emission Rate (lbs/hr) = Fuel (gal/hr) * Density lbs/gal * % Sulfur Content * Factor

$$\text{Emission Rate (lbs/hr)} = \frac{35.00 \text{ gallons}}{\text{hr}} \left| \frac{7.0 \text{ lbs}}{\text{gallon}} \right| \frac{0.0005 \text{ lbs Sulfur}}{\text{lbs of fuel}} \left| \frac{2 \text{ lbs Sulfur Dioxide}}{1 \text{ lb Sulfur}} \right.$$

Emission Rate (lbs/hr) = 0.25 lbs/hr

CO_2 emission rates are found in EPA's "Emission Factors for Greenhouse Gas Inventories" (February 13, 2024).

CO2 = 10.21 kg/gal (GWP = 1)
CH4 = 0.41 g/gal (GWP = 25)
N2O = 0.08 g/gal (GWP = 298)

The following equation was used to calculate the hourly emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Factor (Grams/BHP-hr)} * \text{Operating Rate (BHP-hr)}}{453.6 \text{ grams/lb}}$$

The following equation was used to calculate the annual emission rate for each engine pollutant:

$$\text{Emission Rate (tons/year)} = \frac{\text{Emission Rate (lbs/hour)} * \text{Operating Hour (hrs/year)}}{2000 \text{ lbs/ton}}$$

Table 6-21: Pre-controlled Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
126E	NO_X	755/563	7.59	16.62
	CO	755/563	4.33	9.48
	SO_2	755/563	0.25	0.54
	VOC	755/563	0.40	0.87
	PM	755/563	0.25	0.55

Table 6-22: Allowable Combustion Emission Rates

Process Unit Number	Pollutant	Engine Rating (hp/kW)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)
126E	NO_X	755/563	7.59	10.63
	CO	755/563	4.33	6.06
	SO_2	755/563	0.25	0.34
	VOC	755/563	0.40	0.56
	PM	755/563	0.25	0.35

GHG emission rate hourly (lbs/hr) = Emission Factor * gallon/hour * GWP * 2.20462 lbs/kg or 0.0020462 lbs/g
GHG emission rate annual (tons/yr) = lbs/hr * annual hours/2000 lbs/ton

Table 6-23: Pre-controlled GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
126E	CO_2	10.21 kg/gal	35.00	1	787.8	1725.3
	CH_4	0.41 g/gal	35.00	28	0.79	1.73
	N_2O	0.08 g/gal	35.00	265	1.84	4.03
	GHG				790.5	1731.1

Table 6-24: Allowable GHG Combustion Emission Rates

Process Unit Number	Pollutant	Emission Factor	Gallons/Hour	GWP (lbs/hr)	GHG Emission Rate (lbs/hr)	GHG Emission Rate (tons/yr)
126E	CO_2	10.21 kg/gal	35.00	1	787.8	1102.9
	CH_4	0.41 g/gal	35.00	28	0.79	1.11
	N_2O	0.08 g/gal	35.00	265	1.84	2.58
	GHG				790.5	1106.6

Pre-controlled estimates for Haul Truck Traffic ($PM_{2.5}$, PM_{10} and PM) (Units 126)

Road descriptions: Commercial Trucks (P1SH, P1TP, P1P_, P2SH, P2TP, P2P_, RAPSH, RAPTP, RAPTQ, RAPTH) and Quarry Truck (CRO_, CRI_, CRP_, QRP_, QWP_1, QWP_2)

Haul truck travel emissions were estimated using AP-42, Section 13.2.2 (ver.11/06) "Unpaved Roads" emission equation. Pre-controlled emissions for unpaved roads are based on no controls. The unpaved roads include commercial trucks to the pit plant storage piles, RAP plant delivery, and quarry truck.

$$E = k * (s/12)^{a} * (W/3)^{b} * [(365 - p)/365] * VMT$$

Where k = constant PM2.5 = 0.15
PM10 = 1.5
PM = 4.9
s = % silt content (Table 13.2.2-1, "Sand and Gravel" 4.8%)
W = mean vehicle weight
p = number of days with at least 0.01 in of precip. (NMED Policy = 70 days)
a = Constant PM2.5 = 0.9
PM10 = 0.9
PM = 0.7
b = Constant PM2.5 = 0.45
PM10 = 0.45
PM = 0.45

Table 6-25 shows the pre-controlled haul road fugitive dust emission factors (lb/VMT) per road description.
Table 6-26 shows the pre-controlled haul road fugitive dust emission rate variables used to calculate the emission rates per road description.
Table 6-27 shows the pre-controlled haul road fugitive dust emission rates (lb/hr and tons/yr).

Table 6-25: Pre-Controlled Haul Road Fugitive Dust Emission Factors

Unit ID	Road Model ID	Description	Average Vehicle Weight (W) (Tons)	% CE	Hourly Emission Factor (E) lb/VMT		Annual Emission Factor (E) lb/VMT	
127a	P1SH	Haul Road Traffic Pit Plant #1 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127b	P1TP	Haul Road Traffic Pit Plant #1 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127c	P1P_	Haul Road Traffic Pit Plant #1 In Pit to Finish Piles	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127d	P2SH	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127e	P2TP	Haul Road Traffic Pit Plant #1 & #2 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127f	P2P_	Haul Road Traffic Pit Plant #1 & #2 In Pit to Finish Piles	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127g	CRO_	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127h	CRI_	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127i	CRP_	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127j	QRP_	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127k	QWP_1	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127l	QWP_2	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	63.3	0	PM PM10 PM2.5	10.17 2.59 0.26	PM PM10 PM2.5	8.22 2.10 0.21
127m	RAPSH	RAP Delivery to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127n	RAPTP	RAP Delivery to RAP Plant	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127o	RAPTQ	RAP Processed at the RAP Plant to Pit Entrance from RAP Plant	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14
127p	RAPTH	RAP Processed at the RAP Plant from the Pit Entrance to HMA	26	0	PM PM10 PM2.5	6.82 1.74 0.17	PM PM10 PM2.5	5.51 1.40 0.14

Table 6-26: Pre-Controlled Haul Road Fugitive Dust Emission Rate Variables

Unit ID	Road Model ID	Road Length (Miles)	Miles / Vehicle	Trucks / Hour	Trucks / Year	VMT / Hour	VMT / Year
127a	P1SH[1]	0.21778	0.43557	19.1	83618.2	8.32	36421.27
127b	P1TP[1]	0.19196	0.38392	19.1	83618.2	7.33	32102.49
127c	P1P_[1]	0.19822	0.39644	19.1	83618.2	7.57	33150.39
127d	P2SH[1]	0.21778	0.43556	19.1	83618.2	8.32	36421.27
127e	P2TP[1]	0.12512	0.25024	38.2	167236.4	9.55	41849.12
127f	P2P_[2]	1.21547	1.21547	38.2	167236.4	46.41	203271.29
127g	CRO_[1]	0.07708	0.15415	15.5	68009.8	2.39	10483.92
127h	CRI_[1]	0.12890	0.25781	15.5	68009.8	4.00	17533.28
127i	CRP_[1]	0.64442	1.28884	15.5	68009.8	20.01	87653.52
127j	QRP_[1]	0.26112	0.52225	21.7	43476.6	11.35	22705.84
127k	QWP_1[1]	0.11757	0.23514	4.7	20402.9	1.10	4797.60
127l	QWP_2[1]	0.26208	0.52416	9.3	40805.9	4.88	21388.64
127m	RAPSH[1]	0.21778	0.43557	9.1	39818.2	3.96	17343.46
127n	RAPTP[1]	0.32374	0.64749	9.1	39818.2	5.86	25781.72
127o	RAPTQ[1]	0.16229	0.32458	9.1	39818.2	2.95	12924.37
127p	RAPTH[1]	0.36562	0.73123	9.1	39818.2	6.65	29116.33

[1]Roads distances are based on one way traffic.
[2]Roads distances are round trip traffic.

Table 6-27: Pre-controlled Haul Road Fugitive Dust Emission Rates (Unit 127a-p)

Unit ID	Road Model ID	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
127a	P1SH	56.70	100.35	14.45	25.58	1.44	2.56
127b	P1TP	49.97	88.45	12.74	22.54	1.27	2.25
127c	P1P_	51.60	91.34	13.15	23.28	1.32	2.33
127d	P2SH	56.70	100.35	14.45	25.58	1.44	2.56
127e	P2TP	65.15	115.31	16.60	29.39	1.66	2.94
127f	P2P_	316.43	560.08	80.65	142.74	8.06	14.27
127g	CRO_	24.35	43.10	6.21	10.98	0.62	1.10
127h	CRI_	40.72	72.08	10.38	18.37	1.04	1.84
127i	CRP_	203.58	360.34	51.89	91.84	5.19	9.18
127j	QRP_	115.49	93.34	29.43	23.79	2.94	2.38
127k	QWP_1	11.14	19.72	2.84	5.03	0.28	0.50
127l	QWP_2	49.68	87.93	12.66	22.41	1.27	2.24
127m	RAPSH	27.00	47.79	6.88	12.18	0.69	1.22
127n	RAPTP	40.13	71.04	10.23	18.10	1.02	1.81
127o	RAPTQ	20.12	35.61	5.13	9.08	0.51	0.91
127p	RAPTH	45.32	80.22	11.55	20.45	1.16	2.04
	Total	**1174.08**	**1967.05**	**299.23**	**501.33**	**29.92**	**50.13**

Allowable estimates for Haul Truck Traffic ($PM_{2.5}$, PM_{10} and PM) (Units 193)

Road descriptions: Commercial Trucks (MPPI_, MPPO_, MPUP_, PTIn_, PTOt_, PTUP_, PTUP_2, RAP_) and Quarry Truck (QRTP_, QRTP_2, QRTP_3, QRTP_4, WUPO_)

Haul truck travel emissions were estimated using AP-42, Section 13.2.2 (ver.11/06) "Unpaved Roads" emission equation. Paved haul roads are controlled by 95% efficiency per NMED policy. Allowable emissions for unpaved roads are controlled by surfactants at a 90% control efficiency per NMED policy. Haul roads leading into and out of the RAP Plant and Main Plant storage piles area from the main entrance are paved and swept as the control method. The unpaved roads include commercial trucks to the pit plant storage piles, main plant storage piles, and quarry truck.

Table 6-28 shows the Allowable haul road fugitive dust emission factors (lb/VMT) per road description.
Table 6-29 shows the Allowable haul road fugitive dust emission rate variables used to calculate the emission rates per road description.
Table 6-30 shows the Allowable haul road fugitive dust emission rates (lb/hr and tons/yr).

Table 6-28: Allowable Haul Road Fugitive Dust Emission Factors

Unit ID	Road Model ID	Description	Average Vehicle Weight (W) (Tons)	% CE	Hourly Emission Factor (E) lb/VMT		Annual Emission Factor (E) lb/VMT	
127a	P1SH	Haul Road Traffic Pit Plant #1 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	26	90	PM PM10 PM2.5	0.68 0.17 0.017	PM PM10 PM2.5	0.55 0.14 0.014
127b	P1TP	Haul Road Traffic Pit Plant #1 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	26	80	PM PM10 PM2.5	1.36 0.35 0.035	PM PM10 PM2.5	1.10 0.28 0.028
127c	P1P_	Haul Road Traffic Pit Plant #1 In Pit to Finish Piles	26	60	PM PM10 PM2.5	2.73 0.70 0.070	PM PM10 PM2.5	2.20 0.56 0.056
127d	P2SH	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	26	90	PM PM10 PM2.5	0.68 0.17 0.017	PM PM10 PM2.5	0.55 0.14 0.014
127e	P2TP	Haul Road Traffic Pit Plant #1 & #2 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	26	80	PM PM10 PM2.5	1.36 0.35 0.035	PM PM10 PM2.5	1.10 0.28 0.028
127f	P2P_	Haul Road Traffic Pit Plant #1 & #2 In Pit to Finish Piles	26	60	PM PM10 PM2.5	2.73 0.70 0.070	PM PM10 PM2.5	2.20 0.56 0.056
127g	CRO_	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	63.3	60	PM PM10 PM2.5	4.07 1.04 0.104	PM PM10 PM2.5	3.29 0.84 0.084
127h	CRI_	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	63.3	80	PM PM10 PM2.5	2.03 0.52 0.052	PM PM10 PM2.5	1.64 0.42 0.042
127i	CRP_	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	63.3	60	PM PM10 PM2.5	4.07 1.04 0.104	PM PM10 PM2.5	3.29 0.84 0.084
127j	QRP_	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	63.3	60	PM PM10 PM2.5	4.07 1.04 0.104	PM PM10 PM2.5	3.29 0.84 0.084
127k	QWP_1	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	63.3	60	PM PM10 PM2.5	4.07 1.04 0.104	PM PM10 PM2.5	3.29 0.84 0.084
127l	QWP_2	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	63.3	60	PM PM10 PM2.5	4.07 1.04 0.104	PM PM10 PM2.5	3.29 0.84 0.084
127m	RAPSH	RAP Delivery to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	26	90	PM PM10 PM2.5	0.68 0.17 0.017	PM PM10 PM2.5	0.55 0.14 0.014
127n	RAPTP	RAP Delivery to RAP Plant	26	80	PM PM10 PM2.5	1.36 0.35 0.035	PM PM10 PM2.5	1.10 0.28 0.028
127o	RAPTQ	RAP Processed at the RAP Plant to Pit Entrance from RAP Plant	26	80	PM PM10 PM2.5	1.36 0.35 0.035	PM PM10 PM2.5	1.10 0.28 0.028
127p	RAPTH	RAP Processed at the RAP Plant from the Pit Entrance to HMA	26	60	PM PM10 PM2.5	2.73 0.70 0.070	PM PM10 PM2.5	2.20 0.56 0.056

Table 6-29: Allowable Haul Road Fugitive Dust Emission Rate Variables

Unit ID	Road Model ID	Road Length (Miles)	Miles / Vehicle	Trucks / Hour	Trucks / Year	VMT / Hour	VMT / Year
127a	P1SH[1]	0.21778	0.43557	19.1	38181.8	8.32	16630.72
127b	P1TP[1]	0.19196	0.38392	19.1	38181.8	7.33	14658.67
127c	P1P_[1]	0.19822	0.39644	19.1	38181.8	7.57	15137.16
127d	P2SH[1]	0.21778	0.43556	19.1	38181.8	8.32	16630.72
127e	P2TP[1]	0.12512	0.25024	38.2	76363.6	9.55	19109.19
127f	P2P_[2]	1.21547	1.21547	38.2	76363.6	46.41	92817.94
127g	CRO_[1]	0.07708	0.15415	15.5	12939.5	2.39	1994.66
127h	CRI_[1]	0.12890	0.25781	15.5	12939.5	4.00	3335.86
127i	CRP_[1]	0.64442	1.28884	15.5	12939.5	20.01	16676.85
127j	QRP_[1]	0.26112	0.52225	21.7	43476.6	11.35	22705.84
127k	QWP_1[1]	0.11757	0.23514	4.7	9316.4	1.10	2190.69
127l	QWP_2[1]	0.26208	0.52416	9.3	18632.8	4.88	9766.50
127m	RAPSH[1]	0.21778	0.43557	9.1	18181.8	3.96	7919.39
127n	RAPTP[1]	0.32374	0.64749	9.1	18181.8	5.86	11772.47
127o	RAPTQ[1]	0.16229	0.32458	9.1	18181.8	2.95	5901.54
127p	RAPTH[1]	0.36562	0.73123	9.1	18181.8	6.65	13295.13

[1]Roads distances are based on one way traffic.
[2]Roads distances are round trip traffic.

Table 6-30: Allowable Haul Road Fugitive Dust Emission Rates (Unit 127a-p)

Unit ID	Road ID	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM_{10} Emission Rate (lbs/hr)	PM_{10} Emission Rate (tons/yr)	$PM_{2.5}$ Emission Rate (lbs/hr)	$PM_{2.5}$ Emission Rate (tons/yr)
127a	P1SH	5.67	4.58	1.44	1.17	0.14	0.12
127b	P1TP	9.99	8.08	2.55	2.06	0.25	0.21
127c	P1P_	20.64	16.68	5.26	4.25	0.53	0.43
127d	P2SH	5.67	4.58	1.44	1.17	0.14	0.12
127e	P2TP	13.03	10.53	3.32	2.68	0.33	0.27
127f	P2P_	126.57	102.30	32.26	26.07	3.23	2.61
127g	CRO_	9.74	3.28	2.48	0.84	0.25	0.084
127h	CRI_	8.14	2.74	2.08	0.70	0.21	0.070
127i	CRP_	81.43	27.42	20.75	6.99	2.08	0.70
127j	QRP_	46.20	37.34	11.77	9.52	1.18	0.95
127k	QWP_1	4.46	3.60	1.14	0.92	0.11	0.092
127l	QWP_2	19.87	16.06	5.06	4.09	0.51	0.41
127m	RAPSH	2.70	2.18	0.69	0.56	0.069	0.056
127n	RAPTP	8.03	6.49	2.05	1.65	0.20	0.17
127o	RAPTQ	4.02	3.25	1.03	0.83	0.10	0.083
127p	RAPTH	18.13	14.65	4.62	3.73	0.46	0.37
	Total	**384.3**	**263.8**	**97.94**	**67.23**	**9.79**	**6.72**

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Pit Plant #1															
1	Pit Plant 1 Quarry Material	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
2	Pit Plant 1 Quarry Truck Loading	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
3	Pit Plant 1 Quarry Truck Unload	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
4	Pit Plant 1 Feeder	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
5	Pit Plant 1 Jaw Crusher	-	-	-	-	-	-	-	-	3.24	7.10	1.44	3.15	0.22	0.48
6	Pit Plant 1 Surge Bin	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
7	Pit Plant 1 Prescreen	-	-	-	-	-	-	-	-	15.00	32.85	5.22	11.43	0.79	1.73
8	Pit Plant 1 Line 1 Cone Crusher	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17
9	Pit Plant 1 Line 1 Screen	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61
10	Pit Plant 1 Air Separator	-	-	-	-	-	-	-	-	2.25	4.93	0.78	1.71	0.12	0.26
11	Pit Plant 1 Line 2 Cone Crusher	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17
12	Pit Plant 1 Line 2 Screen	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61
13	Pit Plant 1 Jaw Crusher Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
14	Pit Plant 1 Surge Bin Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
15	Pit Plant 1 Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
16	Pit Plant 1 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066
17	Pit Plant 1 Waste Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
18	Pit Plant 1 Waste Stacker Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066
19	Pit Plant 1 PreScreen Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
20	Pit Plant 1 Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
21	Pit Plant 1 Splitter Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
22	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
23	Pit Plant 1 Line 1 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
24	Pit Plant 1 Line 1 Conveyor to Screen	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
25	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
26	Pit Plant 1 Return Conveyor to Line 1 Cone	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
27	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
28	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
29	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
30	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
31	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
32	Pit Plant 1 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.14	0.32	0.053	0.12	0.008	0.018
33	Pit Plant 1 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.13	0.28	0.046	0.10	0.007	0.015
34	Pit Plant 1 Line 2 Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
35	Pit Plant 1 Line 2 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
36	Pit Plant 1 Line 2 Conveyor to Screen	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
37	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
38	Pit Plant 1 Return Conveyor to Line 2 Cone	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
39	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
40	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
41	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
42	Waste Stacker Conveyor Drop to Pile	-	-	-	-	-	-	-	-	1.19	2.12	0.56	1.00	0.085	0.15
43	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
44	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
45	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.32	0.57	0.15	0.27	0.023	0.041
46	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.28	0.49	0.13	0.23	0.020	0.035
47	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.59	1.06	0.28	0.50	0.043	0.076
48	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
49	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
50	Pit Plant 1 Finish Product Storage Pile	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35
51	Pit Plant 1 Product Truck Loading - Finish Pile	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35
52E	Pit Plant 1 Generator/Engine	10.61	23.24	2.85	6.24	1.60	3.50	0.80	1.76	1.11	2.43	1.11	2.43	1.11	2.43
Pit Plant #2															

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
53	Pit Plant 2 Quarry Material	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
54	Pit Plant 2 Quarry Truck Loading	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
55	Pit Plant 2 Quarry Truck Unload	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
56	Pit Plant 2 Feeder	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
57	Pit Plant 2 Jaw Crusher	-	-	-	-	-	-	-	-	3.24	7.10	1.44	3.15	0.22	0.48
58	Pit Plant 2 Surge Bin	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
59	Pit Plant 2 PreScreen	-	-	-	-	-	-	-	-	15.00	32.85	5.22	11.43	0.79	1.73
60	Pit Plant 2 Line 1 Cone Crusher	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17
61	Pit Plant 2 Line 1 Screen	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61
62	Pit Plant 2 Air Separator	-	-	-	-	-	-	-	-	2.25	4.93	0.78	1.71	0.12	0.26
63	Pit Plant 2 Line 2 Cone Crusher	-	-	-	-	-	-	-	-	1.13	2.48	0.50	1.10	0.076	0.17
64	Pit Plant 2 Line 2 Screen	-	-	-	-	-	-	-	-	5.25	11.50	1.83	4.00	0.28	0.61
65	Pit Plant 2 Jaw Crusher Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
66	Pit Plant 2 Surge Bin Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
67	Pit Plant 2 Conveyor	-	-	-	-	-	-	-	-	1.80	3.94	0.66	1.45	0.10	0.22
68	Pit Plant 2 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066
69	Pit Plant 2 Waste Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066
70	Pit Plant 2 Waste Stacker Conveyor	-	-	-	-	-	-	-	-	0.54	1.18	0.20	0.43	0.030	0.066

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
71	Pit Plant 2 PreScreen Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
72	Pit Plant 2 Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
73	Pit Plant 2 Splitter Conveyor	-	-	-	-	-	-	-	-	1.26	2.76	0.46	1.01	0.070	0.15
74	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
75	Pit Plant 2 Line 1 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
76	Pit Plant 2 Line 1 Conveyor to Screen	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
77	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
78	Pit Plant 2 Return Conveyor to Line 1 Cone	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
79	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
80	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
81	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
82	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
83	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
84	Pit Plant 2 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.14	0.32	0.053	0.12	0.008	0.018
85	Pit Plant 2 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.13	0.28	0.046	0.10	0.007	0.015
86	Pit Plant 2 Line 2 Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
87	Pit Plant 2 Line 2 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077
88	Pit Plant 2 Line 2 Conveyor to Screen	-	-	-	-	-	-	-	-	0.63	1.38	0.23	0.51	0.035	0.077

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
89	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
90	Pit Plant 2 Return Conveyor to Line 2 Cone	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
91	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.27	0.59	0.10	0.22	0.015	0.033
92	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
93	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
94	Waste Stacker Conveyor Drop to Pile	-	-	-	-	-	-	-	-	1.19	2.12	0.56	1.00	0.085	0.15
95	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
96	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
97	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.32	0.57	0.15	0.27	0.023	0.041
98	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.28	0.49	0.13	0.23	0.020	0.035
99	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.59	1.06	0.28	0.50	0.043	0.076
100	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
101	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
102	Pit Plant 2 Finish Product Storage Pile	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35
103	Pit Plant 2 Product Truck Loading - Finish Pile	-	-	-	-	-	-	-	-	2.77	4.95	1.31	2.34	0.20	0.35
104E	Pit Plant 2 Generator/Engine	33.88	74.19	5.38	11.77	1.82	3.99	0.76	1.65	0.58	1.27	0.58	1.27	0.58	1.27
Waste Material Handling															
105	Waste Truck Loading to Waste Pile	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
106	Waste Storage Pile (Pit1+Pit2)	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14
Colored Rock Processing															
107	Colored Rock Quarry	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
108	Colored Rock Truck Loading Quarry	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
109	Colored Rock Storage Pile at Pit Plant	-	-	-	-	-	-	-	-	3.96	7.07	1.87	3.34	0.28	0.51
Recycle Asphalt Plant															
110	RAP Plant Raw Material Source	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
111	RAP Plant Feeder/Hopper	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
112	RAP Plant Vertical Impact Crusher	-	-	-	-	-	-	-	-	0.32	0.71	0.14	0.32	0.022	0.048
113	RAP Plant Surge Bin	-	-	-	-	-	-	-	-	0.18	0.39	0.07	0.14	0.010	0.022
114	RAP Plant 2-Deck Screen	-	-	-	-	-	-	-	-	1.50	3.29	0.52	1.14	0.079	0.17
115	RAP Plant Cone Crusher	-	-	-	-	-	-	-	-	0.32	0.71	0.14	0.32	0.022	0.048
116	RAP Plant Crusher Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
117	RAP Plant Surge Bin Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
118	RAP Plant Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
119	RAP Plant Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022
120	RAP Plant Return 1 Conveyor	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022
121	RAP Plant Return 2 Conveyor	-	-	-	-	-	-	-	-	0.11	0.39	0.040	0.14	0.0060	0.022

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
122	RAP Plant Screen Under Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
123	RAP Plant Conveyor	-	-	-	-	-	-	-	-	0.18	0.39	0.066	0.14	0.010	0.022
124	RAP Plant Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
125	RAP Plant Finish Product Storage Pile	-	-	-	-	-	-	-	-	0.40	0.71	0.19	0.33	0.028	0.051
126E	RAP Plant Generator/Engine	7.59	16.62	4.33	9.48	0.40	0.87	0.25	0.54	0.25	0.55	0.25	0.55	0.25	0.55
Roads															
127a	Haul Road Traffic Pit Plant #1 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	56.70	100.35	14.45	25.58	1.44	2.56
127b	Haul Road Traffic Pit Plant #1 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	-	-	-	-	-	-	-	-	49.97	88.45	12.74	22.54	1.27	2.25
127c	Haul Road Traffic Pit Plant #1 In Pit to Finish Piles	-	-	-	-	-	-	-	-	51.60	91.34	13.15	23.28	1.32	2.33
127d	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	56.70	100.35	14.45	25.58	1.44	2.56
127e	Haul Road Traffic Pit Plant #1 & #2 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	-	-	-	-	-	-	-	-	65.15	115.31	16.60	29.39	1.66	2.94

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
127f	Haul Road Traffic Pit Plant #1 & #2 In Pit to Finish Piles	-	-	-	-	-	-	-	-	316.43	560.08	80.65	142.74	8.06	14.27
127g	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	-	-	-	-	-	-	-	-	24.35	43.10	6.21	10.98	0.62	1.10
127h	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	-	-	-	-	-	-	-	-	40.72	72.08	10.38	18.37	1.04	1.84
127i	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	-	-	-	-	-	-	-	-	203.58	360.34	51.89	91.84	5.19	9.18
127j	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	-	-	-	-	-	-	-	-	115.49	93.34	29.43	23.79	2.94	2.38
127k	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	-	-	-	-	-	-	-	-	11.14	19.72	2.84	5.03	0.28	0.50
127l	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	-	-	-	-	-	-	-	-	49.68	87.93	12.66	22.41	1.27	2.24
127m	RAP Delivery to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	27.00	47.79	6.88	12.18	0.69	1.22
127n	RAP Delivery to RAP Plant	-	-	-	-	-	-	-	-	40.13	71.04	10.23	18.10	1.02	1.81
127o	RAP Processed at the RAP Plant to Pit Entrance from RAP Plant	-	-	-	-	-	-	-	-	20.12	35.61	5.13	9.08	0.51	0.91

Table 6-31 Summary of Pre-controlled NOx, CO, SO2, VOC, and PM Emission Rates

Pre-controlled Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
127p	RAP Processed at the RAP Plant from the Pit Entrance to HMA	-	-	-	-	-	-	-	-	45.32	80.22	11.55	20.45	1.16	2.04
128	Unleaded Gasoline Fuel Tank (T4)	-	-	-	-	0.045	0.20	-	-	-	-	-	-	-	-
	Total	**52.07**	**114.04**	**12.55**	**27.49**	**3.86**	**8.56**	**1.80**	**3.95**	**1353.3**	**2327.6**	**373.4**	**648.5**	**42.79**	**76.02**

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Pit Plant #1															
1	Pit Plant 1 Quarry Material	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
2	Pit Plant 1 Quarry Truck Loading	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
3	Pit Plant 1 Quarry Truck Unload	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
4	Pit Plant 1 Feeder	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
5	Pit Plant 1 Jaw Crusher	-	-	-	-	-	-	-	-	0.72	0.72	0.32	0.32	0.060	0.060
6	Pit Plant 1 Surge Bin	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
7	Pit Plant 1 Prescreen	-	-	-	-	-	-	-	-	1.32	1.32	0.44	0.44	0.030	0.030
8	Pit Plant 1 Line 1 Cone Crusher	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021
9	Pit Plant 1 Line 1 Screen	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011
10	Pit Plant 1 Air Separator	-	-	-	-	-	-	-	-	0.20	0.20	0.067	0.067	0.005	0.005
11	Pit Plant 1 Line 2 Cone Crusher	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021
12	Pit Plant 1 Line 2 Screen	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011
13	Pit Plant 1 Jaw Crusher Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
14	Pit Plant 1 Surge Bin Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
15	Pit Plant 1 Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
16	Pit Plant 1 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023
17	Pit Plant 1 Waste Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
18	Pit Plant 1 Waste Stacker Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.008	0.008	0.0023	0.0023
19	Pit Plant 1 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
20	Pit Plant 1 Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
21	Pit Plant 1 Splitter Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
22	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
23	Pit Plant 1 Line 1 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
24	Pit Plant 1 Line 1 Conveyor to Screen	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
25	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
26	Pit Plant 1 Return Conveyor to Line 1 Cone	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
27	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
28	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
29	Pit Plant 1 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
30	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
31	Pit Plant 1 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
32	Pit Plant 1 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062
33	Pit Plant 1 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055
34	Pit Plant 1 Line 2 Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
35	Pit Plant 1 Line 2 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
36	Pit Plant 1 Line 2 Conveyor to Screen	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
37	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
38	Pit Plant 1 Return Conveyor to Line 2 Cone	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
39	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.004	0.004	0.0012	0.0012
40	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
41	Pit Plant 1 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
42	Waste Stacker Conveyor Drop to Pile	-	-	-	-	-	-	-	-	0.71	0.58	0.34	0.27	0.051	0.042
43	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
44	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
45	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.19	0.15	0.090	0.073	0.014	0.011
46	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.17	0.14	0.079	0.064	0.012	0.010
47	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.36	0.29	0.17	0.14	0.026	0.021
48	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
49	Pit Plant 1 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
50	Pit Plant 1 Finish Product Storage Pile	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16
51	Pit Plant 1 Product Truck Loading - Finish Pile	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
52E	Pit Plant 1 Generator/Engine	10.61	21.22	2.85	5.70	1.60	3.20	0.80	1.60	1.11	2.22	1.11	2.22	1.11	2.22
Pit Plant #2															
53	Pit Plant 2 Quarry Material	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
54	Pit Plant 2 Quarry Truck Loading	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
55	Pit Plant 2 Quarry Truck Unload	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
56	Pit Plant 2 Feeder	-	-	-	-	-	-	-	-	3.96	3.23	1.87	1.53	0.28	0.23
57	Pit Plant 2 Jaw Crusher	-	-	-	-	-	-	-	-	0.72	0.72	0.32	0.32	0.060	0.060
58	Pit Plant 2 Surge Bin	-	-	-	-	-	-	-	-	0.084	0.08	0.028	0.028	0.0078	0.008
59	Pit Plant 2 PreScreen	-	-	-	-	-	-	-	-	1.32	1.32	0.44	0.44	0.030	0.030
60	Pit Plant 2 Line 1 Cone Crusher	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021
61	Pit Plant 2 Line 1 Screen	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011
62	Pit Plant 2 Air Separator	-	-	-	-	-	-	-	-	0.20	0.20	0.067	0.067	0.0045	0.0045
63	Pit Plant 2 Line 2 Cone Crusher	-	-	-	-	-	-	-	-	0.25	0.25	0.11	0.11	0.021	0.021
64	Pit Plant 2 Line 2 Screen	-	-	-	-	-	-	-	-	0.46	0.46	0.16	0.16	0.011	0.011
65	Pit Plant 2 Jaw Crusher Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
66	Pit Plant 2 Surge Bin Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
67	Pit Plant 2 Conveyor	-	-	-	-	-	-	-	-	0.084	0.084	0.028	0.028	0.0078	0.0078
68	Pit Plant 2 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
69	Pit Plant 2 Waste Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023
70	Pit Plant 2 Waste Stacker Conveyor	-	-	-	-	-	-	-	-	0.025	0.025	0.0083	0.0083	0.0023	0.0023
71	Pit Plant 2 PreScreen Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
72	Pit Plant 2 Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
73	Pit Plant 2 Splitter Conveyor	-	-	-	-	-	-	-	-	0.059	0.059	0.019	0.019	0.0055	0.0055
74	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
75	Pit Plant 2 Line 1 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
76	Pit Plant 2 Line 1 Conveyor to Screen	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
77	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
78	Pit Plant 2 Return Conveyor to Line 1 Cone	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
79	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
80	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
81	Pit Plant 2 Line 1 Screen Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
82	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
83	Pit Plant 2 Line 1 Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
84	Pit Plant 2 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.0067	0.0067	0.0022	0.0022	0.00062	0.00062
85	Pit Plant 2 Air Separator Conveyor	-	-	-	-	-	-	-	-	0.0059	0.0059	0.0019	0.0019	0.00055	0.00055

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
86	Pit Plant 2 Line 2 Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
87	Pit Plant 2 Line 2 Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
88	Pit Plant 2 Line 2 Conveyor to Screen	-	-	-	-	-	-	-	-	0.029	0.029	0.010	0.010	0.0027	0.0027
89	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
90	Pit Plant 2 Return Conveyor to Line 2 Cone	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
91	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.013	0.013	0.0041	0.0041	0.0012	0.0012
92	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
93	Pit Plant 2 Line 2 Screen Conveyor	-	-	-	-	-	-	-	-	0.0084	0.0084	0.0028	0.0028	0.00078	0.00078
94	Waste Stacker Conveyor Drop to Pile	-	-	-	-	-	-	-	-	0.71	0.58	0.34	0.27	0.051	0.042
95	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
96	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
97	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.19	0.15	0.090	0.073	0.014	0.011
98	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.17	0.14	0.079	0.064	0.012	0.010
99	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.36	0.29	0.17	0.14	0.026	0.021
100	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
101	Pit Plant 2 Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.24	0.19	0.11	0.092	0.017	0.014
102	Pit Plant 2 Finish Product Storage Pile	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
103	Pit Plant 2 Product Truck Loading - Finish Pile	-	-	-	-	-	-	-	-	2.77	2.26	1.31	1.07	0.20	0.16
104E	Pit Plant 2 Generator/Engine	33.88	67.75	5.38	10.75	1.82	3.64	0.76	1.51	0.58	1.16	0.58	1.16	0.58	1.16
Waste Material Handling															
105	Waste Truck Loading to Waste Pile	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14
106	Waste Storage Pile (Pit1+Pit2)	-	-	-	-	-	-	-	-	2.38	1.94	1.12	0.92	0.17	0.14
Colored Rock Material Handling															
107	Colored Rock Quarry	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10
108	Colored Rock Truck Loading Quarry	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10
109	Colored Rock Storage Pile at Pit Plant	-	-	-	-	-	-	-	-	3.96	1.35	1.87	0.64	0.28	0.10
Recycle Asphalt Plant															
110	RAP Plant Raw Material Source	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023
111	RAP Plant Feeder/Hopper	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023
112	RAP Plant Vertical Impact Crusher	-	-	-	-	-	-	-	-	0.32	0.32	0.14	0.14	0.022	0.022
113	RAP Plant Surge Bin	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010
114	RAP Plant 2-Deck Screen	-	-	-	-	-	-	-	-	1.50	1.50	0.52	0.52	0.079	0.079
115	RAP Plant Cone Crusher	-	-	-	-	-	-	-	-	0.32	0.32	0.14	0.14	0.022	0.022
116	RAP Plant Crusher Conveyor	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010
117	RAP Plant Surge Bin Conveyor	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
118	RAP Plant Conveyor	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010
119	RAP Plant Cone Crusher Conveyor	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010
120	RAP Plant Return 1 Conveyor	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010
121	RAP Plant Return 2 Conveyor	-	-	-	-	-	-	-	-	0.11	0.18	0.040	0.066	0.0060	0.010
122	RAP Plant Screen Under Conveyor	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010
123	RAP Plant Conveyor	-	-	-	-	-	-	-	-	0.18	0.18	0.066	0.066	0.010	0.010
124	RAP Plant Stacker Conveyor to Pile	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023
125	RAP Plant Finish Product Storage Pile	-	-	-	-	-	-	-	-	0.40	0.32	0.19	0.15	0.028	0.023
126E	RAP Plant Generator/Engine	7.59	10.63	4.33	6.06	0.40	0.56	0.25	0.34	0.25	0.35	0.25	0.35	0.25	0.35
Roads															
127a	Haul Road Traffic Pit Plant #1 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	5.67	4.58	1.44	1.17	0.14	0.12
127b	Haul Road Traffic Pit Plant #1 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	-	-	-	-	-	-	-	-	9.99	8.08	2.55	2.06	0.25	0.21
127c	Haul Road Traffic Pit Plant #1 In Pit to Finish Piles	-	-	-	-	-	-	-	-	20.64	16.68	5.26	4.25	0.53	0.43

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
127d	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	5.67	4.58	1.44	1.17	0.14	0.12
127e	Haul Road Traffic Pit Plant #1 & #2 to Intersection of Pit Plant #1 and Pit Plant #2 to Pit Plant #1 Entrance	-	-	-	-	-	-	-	-	13.03	10.53	3.32	2.68	0.33	0.27
127f	Haul Road Traffic Pit Plant #1 & #2 In Pit to Finish Piles	-	-	-	-	-	-	-	-	126.57	102.30	32.26	26.07	3.23	2.61
127g	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	-	-	-	-	-	-	-	-	9.74	3.28	2.48	0.84	0.25	0.084
127h	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	-	-	-	-	-	-	-	-	8.14	2.74	2.08	0.70	0.21	0.070
127i	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	-	-	-	-	-	-	-	-	81.43	27.42	20.75	6.99	2.08	0.699
127j	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	-	-	-	-	-	-	-	-	46.20	37.34	11.77	9.52	1.18	0.95
127k	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	-	-	-	-	-	-	-	-	4.46	3.60	1.14	0.92	0.11	0.092

Table 6-32 Summary of Allowable NOx, CO, SO2, VOC, and PM Emission Rates

Allowable Emission Totals															
Unit #	Description	NOx		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
127l	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	-	-	-	-	-	-	-	-	19.87	16.06	5.06	4.09	0.51	0.41
127m	RAP Delivery to Intersection of Pit Plant #1 and Pit Plant #2 Haul Road	-	-	-	-	-	-	-	-	2.70	2.18	0.69	0.56	0.069	0.056
127n	RAP Delivery to RAP Plant	-	-	-	-	-	-	-	-	8.03	6.49	2.05	1.65	0.20	0.17
127o	RAP Processed at the RAP Plant to Pit Entrance from RAP Plant	-	-	-	-	-	-	-	-	4.02	3.25	1.03	0.83	0.10	0.083
127p	RAP Processed at the RAP Plant from the Pit Entrance to HMA	-	-	-	-	-	-	-	-	18.13	14.65	4.62	3.73	0.46	0.37
128	Unleaded Gasoline Fuel Tank (T4)	-	-	-	-	0.045	0.20	-	-	-	-	-	-	-	-
	Total	**52.07**	**99.60**	**12.55**	**22.51**	**3.86**	**7.60**	**1.80**	**3.46**	**464.6**	**328.3**	**135.6**	**98.4**	**17.12**	**14.58**

Estimates for Federal HAPs Air Pollutants

The Pit Plant engines (Unit 52E, and 104E), and the RAP Plant Engine (126E) are sources of HAPs as it appears in Section 112 (b) of the 1990 CAAA. Emissions of HAPs were determined for Units 52E, 104E, and 126E engines using AP-42 Section 3.3 and Section 1.3.

The following tables summarize the HAPs emission rates from the Pit Plant engines (Unit 52E, and 104E), and the RAP Plant Engine (126E). Combined totals for HAPs for the whole facility are 0.23 pounds per hour and 0.46 tons per year.

Mountain States Constructors, Inc. – Pit Plant #1 – Unit 52E

2288 HP Pit Plant #1 Engine

EPA HAPS Emissions Diesel Fired Engines

Horsepower Rating:	2288	horsepower	
Fuel Usage:	114.52	gallons/hr	
MMBtu/hr:	15.80376	Btu	(based on 138000 Btu/gallon)
Btu x 10^-12/hr:	1.58038E-05	Btu x10^-12	(based on 138000 Btu/gallon)
Yearly Operating Hours:	4000	hours per year	

Type of Fuel: Diesel
Emission Factors AP-42 Section 3.3 and Section 1.3

Non-PAH HAPS	CAS#	Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acetalehyde	75-07-0	7.67E-04	0.012121	0.024243
Acrolein	107-02-8	9.25E-05	0.001462	0.002924
Benzene	71-43-2	9.33E-04	0.014745	0.029490
1,3-Butadiene	106-99-0	3.91E-05	0.000618	0.001236
Formaldehyde	50-00-0	1.18E-03	0.018648	0.037297
Propylene	115-07-1	2.58E-03	0.040774	0.081547
Toluene	108-88-3	4.09E-04	0.006464	0.012927
Xylene	1330-20-7	2.85E-04	0.004504	0.009008
	Total Non-PAH HAPS	6.29E-03	0.099336	0.198672

PAH HAPS	CAS#	Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acenaphthene	83-32-9	1.42E-06	0.000022	0.000045
Acenaphthylene	208-96-8	5.06E-06	0.000080	0.000160
Anthracene	120-12-7	1.87E-06	0.000030	0.000059
Benzo(a)anthracene	56-55-3	1.68E-06	0.000027	0.000053
Benzo(a)pyrene	50-32-8	1.88E-07	0.000003	0.000006
Benzo(b)fluoranthene	205-99-2	9.91E-08	0.000002	0.000003
Benzo(a)pyrene	192-97-2	1.55E-07	0.000002	0.000005
Benzo(g,h,I)perylene	191-24-2	4.89E-07	0.000008	0.000015
Benzo(k)fluoranthene	207-08-9	1.55E-07	0.000002	0.000005
Dibenz(a,h)anthracene		5.83E-07	0.000009	0.000018
Chrysene	218-01-9	3.53E-07	0.000006	0.000011

Fluoranthene	206-44-0		7.61E-06	0.000120	0.000241
Fluorene	86-73-7		2.92E-05	0.000461	0.000923
Indeno(1,2,3-cd)pyrene	193-39-5		3.75E-07	0.000006	0.000012
Naphthalene	91-20-3		8.48E-05	0.001340	0.002680
Phenanthrene	85-01-8		2.94E-05	0.000465	0.000929
Pyrene	129-00-0		4.78E-06	0.000076	0.000151
		Total PAH HAPS	1.68E-04	0.002658	0.005317

HAPS Metals		**Emission Factor (lbs/Btu^12)**	**Emission Rate (lbs/hr)**	**Emission Rate (ton/yr)**
Arsenic		4	0.000063	0.000126
Beryllium		3	0.000047	0.000095
Cadmium		3	0.000047	0.000095
Chromium		3	0.000047	0.000095
Lead		9	0.000142	0.000284
Manganese		6	0.000095	0.000190
Mercury		3	0.000047	0.000095
Nickel		3	0.000047	0.000095
Selenium		15	0.000237	0.000474
	Total Metals HAPS	49	0.000774	0.001549
	Total HAPS		**0.10277**	**0.20554**

Mountain States Constructors, Inc. – Pit Plant #2 – Unit 104E

2153 HP Pit Plant #2 Engine

EPA HAPS Emissions Diesel Fired Engines

Horsepower Rating:	2153	horsepower	
Fuel Usage:	107.9	gallons/hr	
MMBtu/hr:	14.8902	Btu	(based on 138000 Btu/gallon)
Btu x 10^-12/hr:	1.48902E-05	Btu x10^-12	(based on 138000 Btu/gallon)
Yearly Operating Hours:	4000	hours per year	

Type of Fuel: Diesel
Emission Factors AP-42 Section 3.3 and Section 1.3

Non-PAH HAPS	CAS#		Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acetalehyde	75-07-0		7.67E-04	0.011421	0.022842
Acrolein	107-02-8		9.25E-05	0.001377	0.002755
Benzene	71-43-2		9.33E-04	0.013893	0.027785
1,3-Butadiene	106-99-0		3.91E-05	0.000582	0.001164
Formaldehyde	50-00-0		1.18E-03	0.017570	0.035141
Propylene	115-07-1		2.58E-03	0.038417	0.076833
Toluene	108-88-3		4.09E-04	0.006090	0.012180
Xylene	1330-20-7		2.85E-04	0.004244	0.008487
		Total Non-PAH HAPS	6.29E-03	0.093594	0.187188

PAH HAPS	CAS#		Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acenaphthene	83-32-9		1.42E-06	0.000021	0.000042
Acenaphthylene	208-96-8		5.06E-06	0.000075	0.000151
Anthracene	120-12-7		1.87E-06	0.000028	0.000056
Benzo(a)anthracene	56-55-3		1.68E-06	0.000025	0.000050
Benzo(a)pyrene	50-32-8		1.88E-07	0.000003	0.000006
Benzo(b)fluoranthene	205-99-2		9.91E-08	0.000001	0.000003
Benzo(a)pyrene	192-97-2		1.55E-07	0.000002	0.000005
Benzo(g,h,I)perylene	191-24-2		4.89E-07	0.000007	0.000015
Benzo(k)fluoranthene	207-08-9		1.55E-07	0.000002	0.000005
Dibenz(a,h)anthracene			5.83E-07	0.000009	0.000017
Chrysene	218-01-9		3.53E-07	0.000005	0.000011
Fluoranthene	206-44-0		7.61E-06	0.000113	0.000227
Fluorene	86-73-7		2.92E-05	0.000435	0.000870
Indeno(1,2,3-cd)pyrene	193-39-5		3.75E-07	0.000006	0.000011
Naphthalene	91-20-3		8.48E-05	0.001263	0.002525
Phenanthrene	85-01-8		2.94E-05	0.000438	0.000876
Pyrene	129-00-0		4.78E-06	0.000071	0.000142
		Total PAH HAPS	1.68E-04	0.002505	0.005010

HAPS Metals		Emission Factor (lbs/Btu^12)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Arsenic		4	0.000060	0.000119
Beryllium		3	0.000045	0.000089
Cadmium		3	0.000045	0.000089
Chromium		3	0.000045	0.000089
Lead		9	0.000134	0.000268
Manganese		6	0.000089	0.000179
Mercury		3	0.000045	0.000089
Nickel		3	0.000045	0.000089
Selenium		15	0.000223	0.000447
	Total Metals HAPS	49	0.000730	0.001459
	Total HAPS		**0.09683**	**0.19366**

Mountain States Constructors, Inc. – RAP – Unit 126E
755 HP RAP Plant Engine
EPA HAPS Emissions Diesel Fired Engines

Horsepower Rating:	415	horsepower	
Fuel Usage:	20.7	gallons/hr	
MMBtu/hr:	2.6496	Btu	(based on 138000 Btu/gallon)
Btu x 10^-12/hr:	2.6496E-06	Btu x10^-12	(based on 138000 Btu/gallon)
Yearly Operating Hours:	3016	hours per year	

Type of Fuel: Diesel
Emission Factors AP-42 Section 3.3 and Section 1.3

Non-PAH HAPS	CAS#		Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acetalehyde	75-07-0		7.67E-04	0.003705	0.007409
Acrolein	107-02-8		9.25E-05	0.000447	0.000894
Benzene	71-43-2		9.33E-04	0.004506	0.009013
1,3-Butadiene	106-99-0		3.91E-05	0.000189	0.000378
Formaldehyde	50-00-0		1.18E-03	0.005699	0.011399
Propylene	115-07-1		2.58E-03	0.012461	0.024923
Toluene	108-88-3		4.09E-04	0.001975	0.003951
Xylene	1330-20-7		2.85E-04	0.001377	0.002753
		Total Non-PAH HAPS	6.29E-03	0.030359	0.060719

PAH HAPS	CAS#		Emission Factor (lbs/mmBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Acenaphthene	83-32-9		1.42E-06	0.000007	0.000014
Acenaphthylene	208-96-8		5.06E-06	0.000024	0.000049
Anthracene	120-12-7		1.87E-06	0.000009	0.000018
Benzo(a)anthracene	56-55-3		1.68E-06	0.000008	0.000016
Benzo(a)pyrene	50-32-8		1.88E-07	0.000001	0.000002
Benzo(b)fluoranthene	205-99-2		9.91E-08	0.000000	0.000001
Benzo(a)pyrene	192-97-2		1.55E-07	0.000001	0.000001
Benzo(g,h,I)perylene	191-24-2		4.89E-07	0.000002	0.000005
Benzo(k)fluoranthene	207-08-9		1.55E-07	0.000001	0.000001
Dibenz(a,h)anthracene			5.83E-07	0.000003	0.000006
Chrysene	218-01-9		3.53E-07	0.000002	0.000003
Fluoranthene	206-44-0		7.61E-06	0.000037	0.000074
Fluorene	86-73-7		2.92E-05	0.000141	0.000282
Indeno(1,2,3-cd)pyrene	193-39-5		3.75E-07	0.000002	0.000004
Naphthalene	91-20-3		8.48E-05	0.000410	0.000819
Phenanthrene	85-01-8		2.94E-05	0.000142	0.000284
Pyrene	129-00-0		4.78E-06	0.000023	0.000046
		Total PAH HAPS	1.68E-04	0.000812	0.001625

HAPS Metals		Emission Factor (lbs/Btu^12)	Emission Rate (lbs/hr)	Emission Rate (ton/yr)
Arsenic		4	0.000019	0.000039
Beryllium		3	0.000014	0.000029
Cadmium		3	0.000014	0.000029
Chromium		3	0.000014	0.000029
Lead		9	0.000043	0.000087
Manganese		6	0.000029	0.000058
Mercury		3	0.000014	0.000029
Nickel		3	0.000014	0.000029
Selenium		15	0.000072	0.000145
	Total Metals HAPS	49	0.000237	0.000473
	Total HAPS		**0.03141**	**0.06282**

Unit 128: Unleaded Gasoline Tank – 500 Gallon

The Shop 500 gallon unleaded fuel tank is applicable to 40 CFR Part 63 Subpart CCCCCC. The fuel usage is less than 10,000 gallons per month and will follow the requirements below found in 40 CFR Part 63.11116.

> Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
> (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
> (1) Minimize gasoline spills;
> (2) Clean up spills as expeditiously as practicable;
> (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
> (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
> (b) You are not required to submit notifications or reports as specified in § 63.11125, § 63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
> (c) You must comply with the requirements of this subpart by the applicable dates specified in § 63.11113.
> (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

Tank VOC emissions were determined using EPAs TANKs 4.0.9.d program.

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification	
User Identification:	MSCI Davis Pit Plant Tank 4
City:	Albuquerque
State:	New Mexico
Company:	Mountain States Constructors, Inc.
Type of Tank:	Horizontal Tank
Description:	500 Gallon Unleaded Gasoline
Tank Dimensions	
Shell Length (ft):	6.00
Diameter (ft):	4.00
Volume (gallons):	500.00
Turnovers:	20.00
Net Throughput(gal/yr):	10,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition	Good
Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Albuquerque, New Mexico (Avg Atmospheric Pressure = 12.15 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MSCI Davis Pit Plant Tank 4 - Horizontal Tank

Albuquerque, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 13)	All	58.54	51.41	65.66	56.17	6.7593	5.9014	7.7134	62.0000			92.00	Option 4: RVP=13, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MSCI Davis Pit Plant Tank 4 - Horizontal Tank

Albuquerque, New Mexico

Annual Emission Calcaulations

Standing Losses (lb):	292.4181
Vapor Space Volume (cu ft):	48.0243
Vapor Density (lb/cu ft):	0.0754
Vapor Space Expansion Factor:	0.3800
Vented Vapor Saturation Factor:	0.5826
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	48.0243
Tank Diameter (ft):	4.0000
Effective Diameter (ft):	5.5293
Vapor Space Outage (ft):	2.0000
Tank Shell Length (ft):	6.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0754
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	6.7593
Daily Avg. Liquid Surface Temp. (deg. R):	518.2062
Daily Average Ambient Temp. (deg. F):	56.1542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	515.8442
Tank Paint Solar Absorptance (Shell):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,765.3167
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.3800
Daily Vapor Temperature Range (deg. R):	28.5089
Daily Vapor Pressure Range (psia):	1.8120
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	6.7593
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	5.9014
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	7.7134
Daily Avg. Liquid Surface Temp. (deg R):	518.2062
Daily Min. Liquid Surface Temp. (deg R):	511.0790
Daily Max. Liquid Surface Temp. (deg R):	525.3334
Daily Ambient Temp. Range (deg. R):	27.9250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.5826
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	6.7593
Vapor Space Outage (ft):	2.0000

Working Losses (lb):	99.7799
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	6.7593
Annual Net Throughput (gal/yr.):	10,000.0000
Annual Turnovers:	20.0000
Turnover Factor:	1.0000
Tank Diameter (ft):	4.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	392.1980

TANKS 4.0.9d

Emissions Report - Detail Format

Individual Tank Emission Totals

Emissions Report for: Annual

MSCI Davis Pit Plant Tank 4 - Horizontal Tank

Albuquerque, New Mexico

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 13)	99.78	292.42	392.20

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_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e 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_2e 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 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** 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 Mandatory Green House Gas Reporting 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 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used to Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☐ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- ☒ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- ☐ If an older version of AP-42 is used, include a complete copy of the section.
- ☒ If an EPA document or other material is referenced, include a complete copy.
- ☐ Fuel specifications sheet.
- ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

A-XXXX-7-AP42S1-3	Diesel-Fired Engine HAPs Emission Factors
A-XXXX-7-AP42S3-3	Diesel-Fired Engine HAPs Emission Factors
A-XXXX-7-AP42S11-19-2	Crusher, Screen and Transfer Point Emission Factors
A-XXXX-7-AP42S13-2-2	Unpaved Road Emission Factors
A-XXXX-7-AP42S13-2-4	Material Handling Emission Factors
A-XXXX-7-WindspeedMoriarty	Moriarty Historic Internet Wind Speed Average
A-XXXX-7-Unit52E	Unit 52E: Pit #1 Plant Engine
A-XXXX-7-Unit104E	Unit 104E: Pit #2 Plant Engine
A-XXXX-7-AltEngine1	Units 52E or 104E: Alternative Pit #1 or Pit #2 Plant Engine
A-XXXX-7-AltEngine2	Units 52E or 104E: Alternative Pit #1 or Pit #2 Plant Engine
A-XXXX-7-Unit126E	Unit 126E: RAP Plant Engine
A-XXXX-7-EPAii03	EPA documents “EIIP – Preferred and Alternative Methods for Estimating Air Emissions from Hot-Mix-Asphalt Plants, Final Report, July 1996, Table 3.2-1 Fugitive Dust – Crushed RAP material”
A-XXXX-7-EPA_GHG	EPA’s “Emission Factors for Greenhouse Gas Inventories” (February 13, 2024)
A-XXXX-7-CrusherEI.xls	MSCI Davis Pit Plant Emissions Spreadsheet (Electronic File)

1.3 Fuel Oil Combustion

1.3.1 General[1-3]

Two major categories of fuel oil are burned by combustion sources: distillate oils and residual oils. These oils are further distinguished by grade numbers, with Nos. 1 and 2 being distillate oils; Nos. 5 and 6 being residual oils; and No. 4 being either distillate oil or a mixture of distillate and residual oils. No. 6 fuel oil is sometimes referred to as Bunker C. Distillate oils are more volatile and less viscous than residual oils. They have negligible nitrogen and ash contents and usually contain less than 0.3 percent sulfur (by weight). Distillate oils are used mainly in domestic and small commercial applications, and include kerosene and diesel fuels. Being more viscous and less volatile than distillate oils, the heavier residual oils (Nos. 5 and 6) may need to be heated for ease of handling and to facilitate proper atomization. Because residual oils are produced from the residue remaining after the lighter fractions (gasoline, kerosene, and distillate oils) have been removed from the crude oil, they contain significant quantities of ash, nitrogen, and sulfur. Residual oils are used mainly in utility, industrial, and large commercial applications.

1.3.2 Firing Practices[4]

The major boiler configurations for fuel oil-fired combustors are watertube, firetube, cast iron, and tubeless design. Boilers are classified according to design and orientation of heat transfer surfaces, burner configuration, and size. These factors can all strongly influence emissions as well as the potential for controlling emissions.

Watertube boilers are used in a variety of applications ranging from supplying large amounts of process steam to providing space heat for industrial facilities. In a watertube boiler, combustion heat is transferred to water flowing through tubes which line the furnace walls and boiler passes. The tube surfaces in the furnace (which houses the burner flame) absorb heat primarily by radiation from the flames. The tube surfaces in the boiler passes (adjacent to the primary furnace) absorb heat primarily by convective heat transfer.

Firetube boilers are used primarily for heating systems, industrial process steam generators, and portable power boilers. In firetube boilers, the hot combustion gases flow through the tubes while the water being heated circulates outside of the tubes. At high pressures and when subjected to large variations in steam demand, firetube units are more susceptible to structural failure than watertube boilers. This is because the high-pressure steam in firetube units is contained by the boiler walls rather than by multiple small-diameter watertubes, which are inherently stronger. As a consequence, firetube boilers are typically small and are used primarily where boiler loads are relatively constant. Nearly all firetube boilers are sold as packaged units because of their relatively small size.

A cast iron boiler is one in which combustion gases rise through a vertical heat exchanger and out through an exhaust duct. Water in the heat exchanger tubes is heated as it moves upward through the tubes. Cast iron boilers produce low pressure steam or hot water, and generally burn oil or natural gas. They are used primarily in the residential and commercial sectors.

Another type of heat transfer configuration used on smaller boilers is the tubeless design. This design incorporates nested pressure vessels with water in between the shells. Combustion gases are fired into the inner pressure vessel and are then sometimes recirculated outside the second vessel.

Table 1.3-9. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM FUEL OIL COMBUSTION[a]

Organic Compound	Average Emission Factor[b] ($lb/10^3$ Gal)	EMISSION FACTOR RATING
Benzene	2.14E-04	C
Ethylbenzene	6.36E-05[c]	E
Formaldehyde[d]	3.30E-02	C
Naphthalene	1.13E-03	C
1,1,1-Trichloroethane	2.36E-04[c]	E
Toluene	6.20E-03	D
o-Xylene	1.09E-04[c]	E
Acenaphthene	2.11E-05	C
Acenaphthylene	2.53E-07	D
Anthracene	1.22E-06	C
Benz(a)anthracene	4.01E-06	C
Benzo(b,k)fluoranthene	1.48E-06	C
Benzo(g,h,i)perylene	2.26E-06	C
Chrysene	2.38E-06	C
Dibenzo(a,h) anthracene	1.67E-06	D
Fluoranthene	4.84E-06	C
Fluorene	4.47E-06	C
Indo(1,2,3-cd)pyrene	2.14E-06	C
Phenanthrene	1.05E-05	C
Pyrene	4.25E-06	C
OCDD	3.10E-09[c]	E

[a] Data are for residual oil fired boilers, Source Classification Codes (SCCs) 1-01-004-01/04.
[b] References 64-72. To convert from $lb/10^3$ gal to $kg/10^3$ L, multiply by 0.12.
[c] Based on data from one source test (Reference 67).
[d] The formaldehyde number presented here is based only on data from utilities using No. 6 oil. The number presented in Table 1.3-7 is based on utility, commercial, and industrial boilers.

Table 1.3-10. EMISSION FACTORS FOR TRACE ELEMENTS FROM DISTILLATE FUEL OIL COMBUSTION SOURCES[a]

EMISSION FACTOR RATING: E

Firing Configuration (SCC)	Emission Factor (lb/10^{12} Btu)										
	As	Be	Cd	Cr	Cu	Pb	Hg	Mn	Ni	Se	Zn
Distillate oil fired (1-01-005-01, 1-02-005-01, 1-03-005-01)	4	3	3	3	6	9	3	6	3	15	4

[a] Data are for distillate oil fired boilers, SCC codes 1-01-005-01, 1-02-005-01, and 1-03-005-01. References 29-32, 40-44 and 83. To convert from lb/10^{12} Btu to pg/J, multiply by 0.43.

Table 1.3-11. EMISSION FACTORS FOR METALS FROM UNCONTROLLED NO. 6 FUEL OIL COMBUSTION[a]

Metal	Average Emission Factor[b, d] ($lb/10^3$ Gal)	EMISSION FACTOR RATING
Antimony	5.25E-03[c]	E
Arsenic	1.32E-03	C
Barium	2.57E-03	D
Beryllium	2.78E-05	C
Cadmium	3.98E-04	C
Chloride	3.47E-01	D
Chromium	8.45E-04	C
Chromium VI	2.48E-04	C
Cobalt	6.02E-03	D
Copper	1.76E-03	C
Fluoride	3.73E-02	D
Lead	1.51E-03	C
Manganese	3.00E-03	C
Mercury	1.13E-04	C
Molybdenum	7.87E-04	D
Nickel	8.45E-02	C
Phosphorous	9.46E-03	D
Selenium	6.83E-04	C
Vanadium	3.18E-02	D
Zinc	2.91E-02	D

[a] Data are for residual oil fired boilers, Source Classification Codes (SCCs) 1-01-004-01/04.

[b] References 64-72. 18 of 19 sources were uncontrolled and 1 source was controlled with low efficiency ESP. To convert from $lb/10^3$ gal to $kg/10^3$ L, multiply by 0.12.

[c] References 29-32,40-44.

[d] For oil/water mixture, reduce factors in proportion to water content of the fuel (due to dilution). To adjust the listed values for water content, multiply the listed value by 1-decimal fraction of water (ex: For fuel with 9 percent water by volume, multiply by 1-0.9=.91).

Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES[a]

Pollutant	Gasoline Fuel (SCC 2-02-003-01, 2-03-003-01)		Diesel Fuel (SCC 2-02-001-02, 2-03-001-01)		EMISSION FACTOR RATING
	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	
NO_x	0.011	1.63	0.031	4.41	D
CO	0.439	62.7	6.68 E-03	0.95	D
SO_x	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10[b]	7.21 E-04	0.10	2.20 E-03	0.31	D
CO_2[c]	1.08	154	1.15	164	B
Aldehydes	4.85 E-04	0.07	4.63 E-04	0.07	D
TOC					
Exhaust	0.015	2.10	2.47 E-03	0.35	D
Evaporative	6.61 E-04	0.09	0.00	0.00	E
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	E
Refueling	1.08 E-03	0.15	0.00	0.00	E

[a] References 2,5-6,9-14. When necessary, an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code. TOC = total organic compounds.

[b] PM-10 = particulate matter less than or equal to 10 μm aerodynamic diameter. All particulate is assumed to be ≤ 1 μm in size.

[c] Assumes 99% conversion of carbon in fuel to CO_2 with 87 weight % carbon in diesel, 86 weight % carbon in gasoline, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and gasoline heating value of 20,300 Btu/lb.

11.19.2 Crushed Stone Processing and Pulverized Mineral Processing

11.19.2.1 Process Description [24, 25]

Crushed Stone Processing

Major rock types processed by the crushed stone industry include limestone, granite, dolomite, traprock, sandstone, quartz, and quartzite. Minor types include calcareous marl, marble, shell, and slate. Major mineral types processed by the pulverized minerals industry, a subset of the crushed stone processing industry, include calcium carbonate, talc, and barite. Industry classifications vary considerably and, in many cases, do not reflect actual geological definitions.

Rock and crushed stone products generally are loosened by drilling and blasting and then are loaded by power shovel or front-end loader into large haul trucks that transport the material to the processing operations. Techniques used for extraction vary with the nature and location of the deposit. Processing operations may include crushing, screening, size classification, material handling and storage operations. All of these processes can be significant sources of PM and PM-10 emissions if uncontrolled.

Quarried stone normally is delivered to the processing plant by truck and is dumped into a bin. A feeder is used as illustrated in Figure 11.19.2-1. The feeder or screens separate large boulders from finer rocks that do not require primary crushing, thus reducing the load to the primary crusher. Jaw, impactor, or gyratory crushers are usually used for initial reduction. The crusher product, normally 7.5 to 30 centimeters (3 to 12 inches) in diameter, and the grizzly throughs (undersize material) are discharged onto a belt conveyor and usually are conveyed to a surge pile for temporary storage or are sold as coarse aggregates.

The stone from the surge pile is conveyed to a vibrating inclined screen called the scalping screen. This unit separates oversized rock from the smaller stone. The undersized material from the scalping screen is considered to be a product stream and is transported to a storage pile and sold as base material. The stone that is too large to pass through the top deck of the scalping screen is processed in the secondary crusher. Cone crushers are commonly used for secondary crushing (although impact crushers are sometimes used), which typically reduces material to about 2.5 to 10 centimeters (1 to 4 inches). The material (throughs) from the second level of the screen bypasses the secondary crusher because it is sufficiently small for the last crushing step. The output from the secondary crusher and the throughs from the secondary screen are transported by conveyor to the tertiary circuit, which includes a sizing screen and a tertiary crusher.

Tertiary crushing is usually performed using cone crushers or other types of impactor crushers. Oversize material from the top deck of the sizing screen is fed to the tertiary crusher. The tertiary crusher output, which is typically about 0.50 to 2.5 centimeters (3/16th to 1 inch), is returned to the sizing screen. Various product streams with different size gradations are separated in the screening operation. The products are conveyed or trucked directly to finished product bins, to open area stock piles, or to other processing systems such as washing, air separators, and screens and classifiers (for the production of manufactured sand).

Some stone crushing plants produce manufactured sand. This is a small-sized rock product with a maximum size of 0.50 centimeters (3/16 th inch). Crushed stone from the tertiary sizing screen is sized in a vibrating inclined screen (fines screen) with relatively small mesh sizes.

Oversized material is processed in a cone crusher or a hammermill (fines crusher) adjusted to produce small diameter material. The output is returned to the fines screen for resizing.

In certain cases, stone washing is required to meet particulate end product specifications or demands.

Pulverized Mineral Processing

Pulverized minerals are produced at specialized processing plants. These plants supply mineral products ranging from sizes of approximately 1 micrometer to more than 75 micrometers aerodynamic diameter. Pharmaceutical, paint, plastics, pigment, rubber, and chemical industries use these products. Due to the specialized characteristics of the mineral products and the markets for these products, pulverized mineral processing plants have production rates that are less than 5% of the production capacities of conventional crushed stone plants. Two alternative processing systems for pulverized minerals are summarized in Figure 11-19.2-2.

In dry processing systems, the mineral aggregate material from conventional crushing and screening operations is subject to coarse and fine grinding primarily in roller mills and/or ball mills to reduce the material to the necessary product size range. A classifier is used to size the ground material and return oversized material that can be pulverized using either wet or dry processes. The classifier can either be associated with the grinding operation, or it can be a stand-alone process unit. Fabric filters control particulate matter emissions from the grinding operation and the classifier. The products are stored in silos and are shipped by truck or in bags.

In wet processing systems, the mineral aggregate material is processed in wet mode coarse and fine grinding operations. Beneficiation processes use flotation to separate mineral impurities. Finely ground material is concentrated and flash dried. Fabric filters are used to control particulate matter emissions from the flash dryer. The product is then stored in silos, bagged, and shipped.

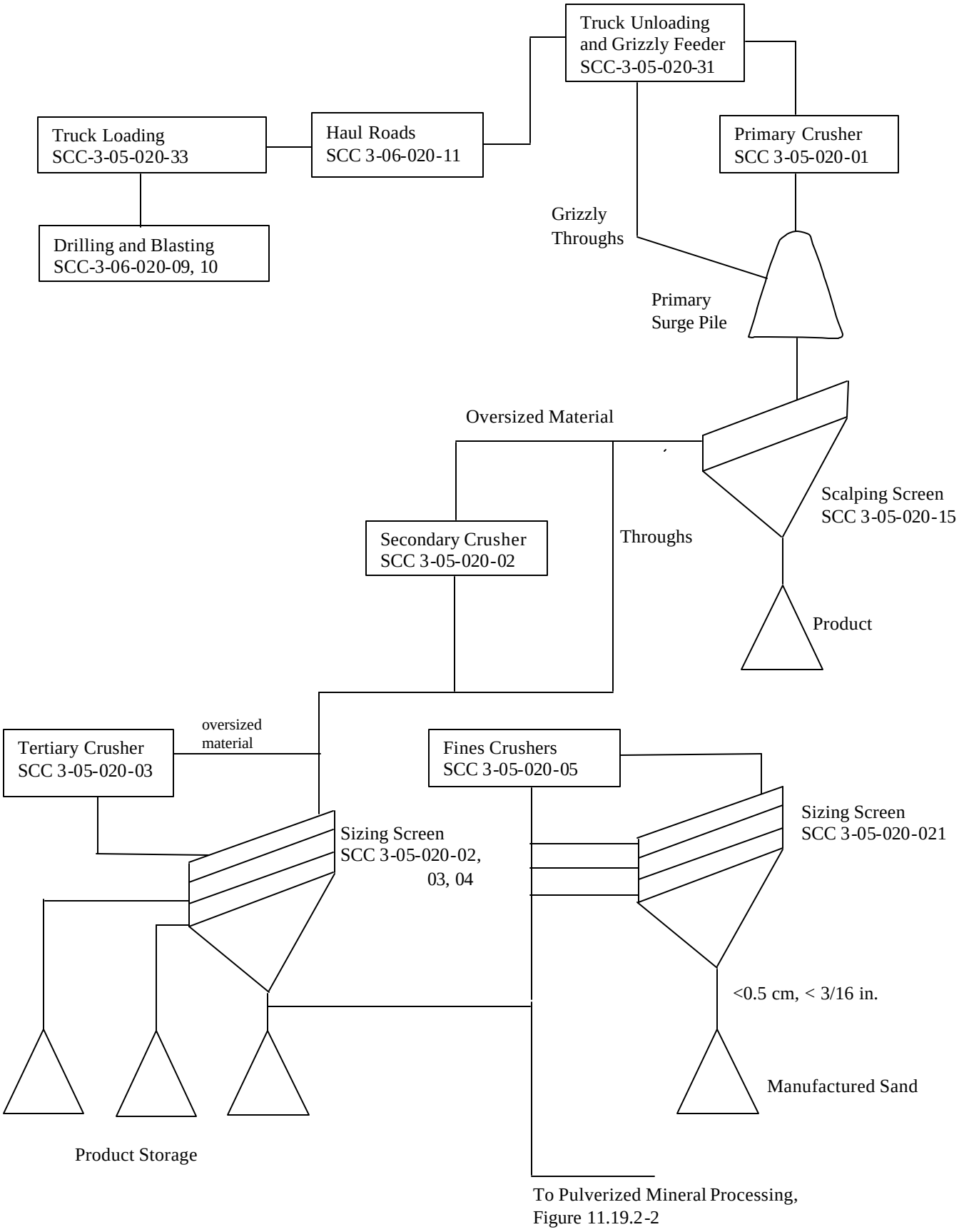


Figure 11.19.2-1. Typical stone processing plant

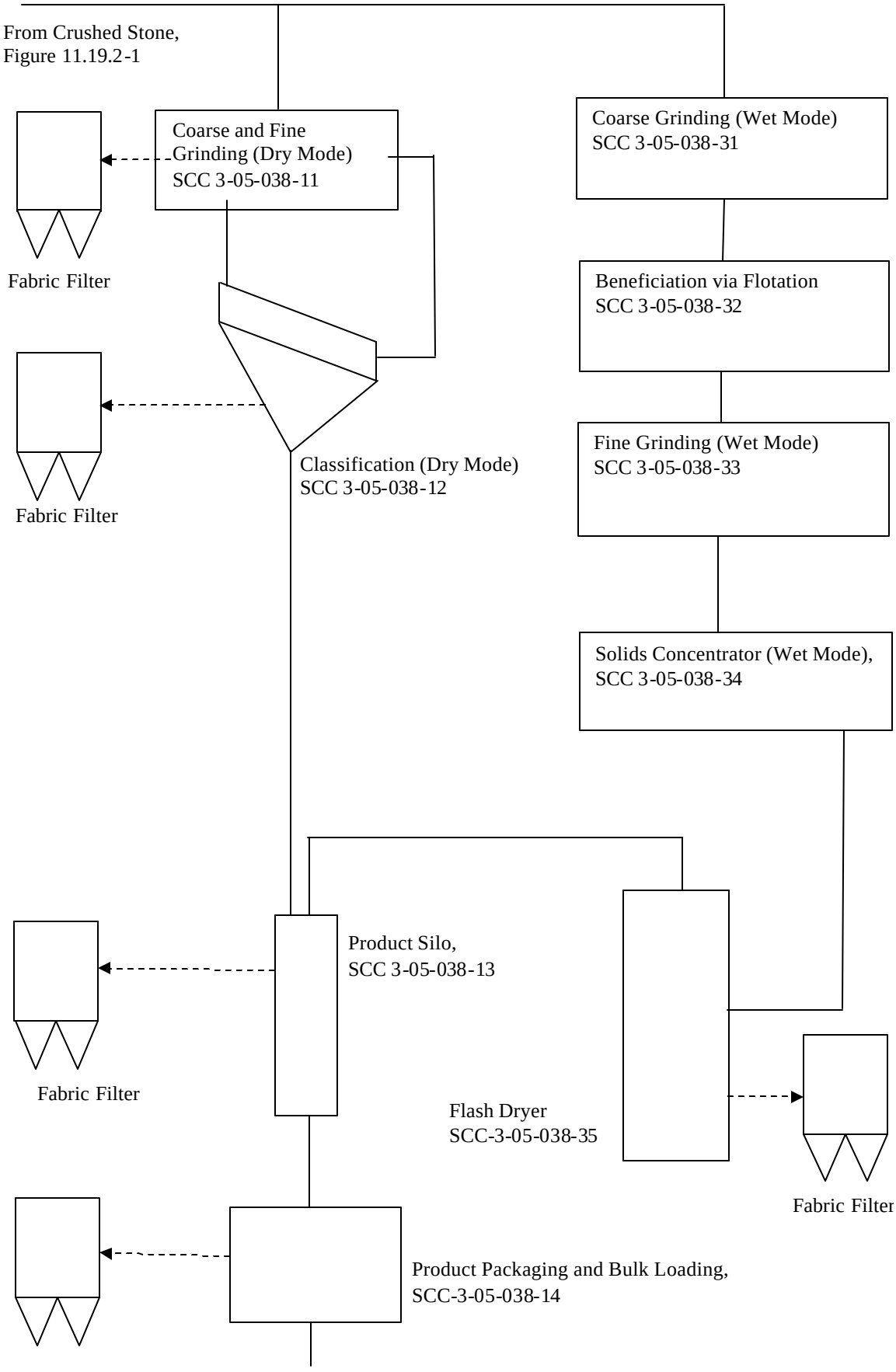


Figure 11.19.2-2 Flowchart for Pulverized Mineral Processing

11.19.2.2 Emissions and Controls [10, 11, 12, 13, 14, and 26]

Crushed Stone Processing

Emissions of PM, PM-10, and PM-2.5 occur from a number of operations in stone quarrying and processing. A substantial portion of these emissions consists of heavy particles that may settle out within the plant. As in other operations, crushed stone emission sources may be categorized as either process sources or fugitive dust sources. Process sources include those for which emissions are amenable to capture and subsequent control. Fugitive dust sources generally involve the reentrainment of settled dust by wind or machine movement. Emissions from process sources should be considered fugitive unless the sources are vented to a baghouse or are contained in an enclosure with a forced-air vent or stack. Factors affecting emissions from either source category include the stone size distribution and the surface moisture content of the stone processed, the process throughput rate, the type of equipment and operating practices used, and topographical and climatic factors.

Of graphical and seasonal factors, the primary variables affecting uncontrolled PM emissions are wind and material moisture content. Wind parameters vary with geographical location, season, and weather. It can be expected that the level of emissions from unenclosed sources (principally fugitive dust sources) will be greater during periods of high winds. The material moisture content also varies with geographical location, season, and weather. Therefore, the levels of uncontrolled emissions from both process emission sources and fugitive dust sources generally will be greater in arid regions of the country than in temperate ones and greater during the summer months because of a higher evaporation rate.

The moisture content of the material processed can have a substantial effect on emissions. This effect is evident throughout the processing operations. Surface wetness causes fine particles to agglomerate on or to adhere to the faces of larger stones, with a resulting dust suppression effect. However, as new fine particles are created by crushing and attrition and as the moisture content is reduced by evaporation, this suppressive effect diminishes and may disappear. Plants that use wet suppression systems (spray nozzles) to maintain relatively high material moisture contents can effectively control PM emissions throughout the process. Depending on the geographical and climatic conditions, the moisture content of mined rock can range from nearly zero to several percent. Because moisture content is usually expressed on a basis of overall weight percent, the actual moisture amount per unit area will vary with the size of the rock being handled. On a constant mass-fraction basis, the per-unit area moisture content varies inversely with the diameter of the rock. The suppressive effect of the moisture depends on both the absolute mass water content and the size of the rock product. Typically, wet material contains >1.5 percent water.

A variety of material, equipment, and operating factors can influence emissions from crushing. These factors include (1) stone type, (2) feed size and distribution, (3) moisture content, (4) throughput rate, (5) crusher type, (6) size reduction ratio, and (7) fines content. Insufficient data are available to present a matrix of rock crushing emission factors detailing the above classifications and variables. Available data indicate that PM-10 and PM-2.5 emissions from limestone and granite processing operations are similar. Therefore, the emission factors developed from the emissions data gathered at limestone and granite processing facilities are considered to be representative of typical crushed stone processing operations. Emission factors for filterable PM, PM-10, and PM-2.5 emissions from crushed stone processing operations are presented in Tables 11.19.2-1 (Metric units) and 11.19.2-2 (English units.)

Table 11.19.2-1 (Metric Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (kg/Mg)[a]

Source [b]	Total Particulate Matter [r,s]	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Primary Crushing (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Secondary Crushing (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Tertiary Crushing (SCC 3-050030-03)	0.0027[d]	E	0.0012[o]	C	ND[n]	
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0006[d]	E	0.00027[p]	C	0.00005[q]	E
Fines Crushing (SCC 3-05-020-05)	0.0195[e]	E	0.0075[e]	E	ND	
Fines Crushing (controlled) (SCC 3-05-020-05)	0.0015[f]	E	0.0006[f]	E	0.000035[q]	E
Screening (SCC 3-05-020-02, 03)	0.0125[c]	E	0.0043[l]	C	ND	
Screening (controlled) (SCC 3-05-020-02, 03)	0.0011[d]	E	0.00037[m]	C	0.000025[q]	E
Fines Screening (SCC 3-05-020-21	0.15[g]	E	0.036[g]	E	ND	
Fines Screening (controlled) (SCC 3-05-020-21)	0.0018[g]	E	0.0011[g]	E	ND	
Conveyor Transfer Point (SCC 3-05-020-06)	0.0015[h]	E	0.00055[h]	D	ND	
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00007[i]	E	2.3×10^{-5}[i]	D	6.5×10^{-6}[q]	E
Wet Drilling - Unfragmented Stone (SCC 3-05-020-10)	ND		4.0×10^{-5}[j]	E	ND	
Truck Unloading - Fragmented Stone (SCC 3-05-020-31)	ND		8.0×10^{-6}[j]	E	ND	
Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		5.0×10^{-5}[k]	E	ND	

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

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

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

e. Reference 4

f. References 4 and 15

g. Reference 4

h. References 5 and 6

i. References 5, 6, and 15

j. Reference 11

k. Reference 12

l. References 1, 3, 7, and 8

m. References 1, 3, 7, 8, and 15

n. No data available, but emission factors for PM-10 for tertiary crushers can be used as an upper limit for primary or secondary crushing

o. References 2, 3, 7, 8

p. References 2, 3, 7, 8, and 15

q. Reference 15

r. PM emission factors are presented based on PM-100 data in the Background Support Document for Section 11.19.2

s. Emission factors for PM-30 and PM-50 are available in Figures 11.19.2-3 through 11.19.2-6.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)[a]

Source [b]	Total Particulate Matter [r,s]	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Primary Crushing (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Secondary Crushing (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Tertiary Crushing (SCC 3-050030-03)	0.0054[d]	E	0.0024[o]	C	ND[n]	
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0012[d]	E	0.00054[p]	C	0.00010[q]	E
Fines Crushing (SCC 3-05-020-05)	0.0390[e]	E	0.0150[e]	E	ND	
Fines Crushing (controlled) (SCC 3-05-020-05)	0.0030[f]	E	0.0012[f]	E	0.000070[q]	E
Screening (SCC 3-05-020-02, 03)	0.025[c]	E	0.0087[l]	C	ND	
Screening (controlled) (SCC 3-05-020-02, 03)	0.0022[d]	E	0.00074[m]	C	0.000050[q]	E
Fines Screening (SCC 3-05-020-21)	0.30[g]	E	0.072[g]	E	ND	
Fines Screening (controlled) (SCC 3-05-020-21)	0.0036[g]	E	0.0022[g]	E	ND	
Conveyor Transfer Point (SCC 3-05-020-06)	0.0030[h]	E	0.00110[h]	D	ND	
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00014[t]	E	4.6×10^{-5}[t]	D	1.3×10^{-5}[q]	E
Wet Drilling - Unfragmented Stone (SCC 3-05-020-10)	ND		8.0×10^{-5}[j]	E	ND	
Truck Unloading -Fragmented Stone (SCC 3-05-020-31)	ND		1.6×10^{-5}[j]	E	ND	
Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		0.00010[k]	E	ND	

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

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

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

e. Reference 4

f. References 4 and 15

g. Reference 4

h. References 5 and 6

i. References 5, 6, and 15

j. Reference 11

k. Reference 12

l. References 1, 3, 7, and 8

m. References 1, 3, 7, 8, and 15

n. No data available, but emission factors for PM-10 for tertiary crushers can be used as an upper limit for primary or secondary crushing

o. References 2, 3, 7, 8

p. References 2, 3, 7, 8, and 15

q. Reference 15

r. PM emission factors are presented based on PM-100 data in the Background Support Document for Section 11.19.2

s. Emission factors for PM-30 and PM-50 are available in Figures 11.19.2-3 through 11.19.2-6.

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Emission factor estimates for stone quarry blasting operations are not presented because of the sparsity and unreliability of available tests. While a procedure for estimating blasting emissions is presented in Section 11.9, Western Surface Coal Mining, that procedure should not be applied to stone quarries because of dissimilarities in blasting techniques, material blasted, and size of blast areas. Emission factors for fugitive dust sources, including paved and unpaved roads, materials handling and transfer, and wind erosion of storage piles, can be determined using the predictive emission factor equations presented in AP-42 Section 13.2.

The data used in the preparation of the controlled PM calculations was derived from the individual A-rated tests for PM-2.5 and PM-10 summarized in the Background Support Document. For conveyor transfer points, the controlled PM value was derived from A-rated PM-2.5, PM-10, and PM data summarized in the Background Support Document.

The extrapolation line was drawn through the PM-2.5 value and the mean of the PM-10 values. PM emission factors were calculated for PM-30, PM-50, and PM-100. Each of these particle size limits is used by one or more regulatory agencies as the definition of total particulate matter. The graphical extrapolations used in calculating the emission factors are presented in Figures 11.19.2-3, -4, -5, and -6.

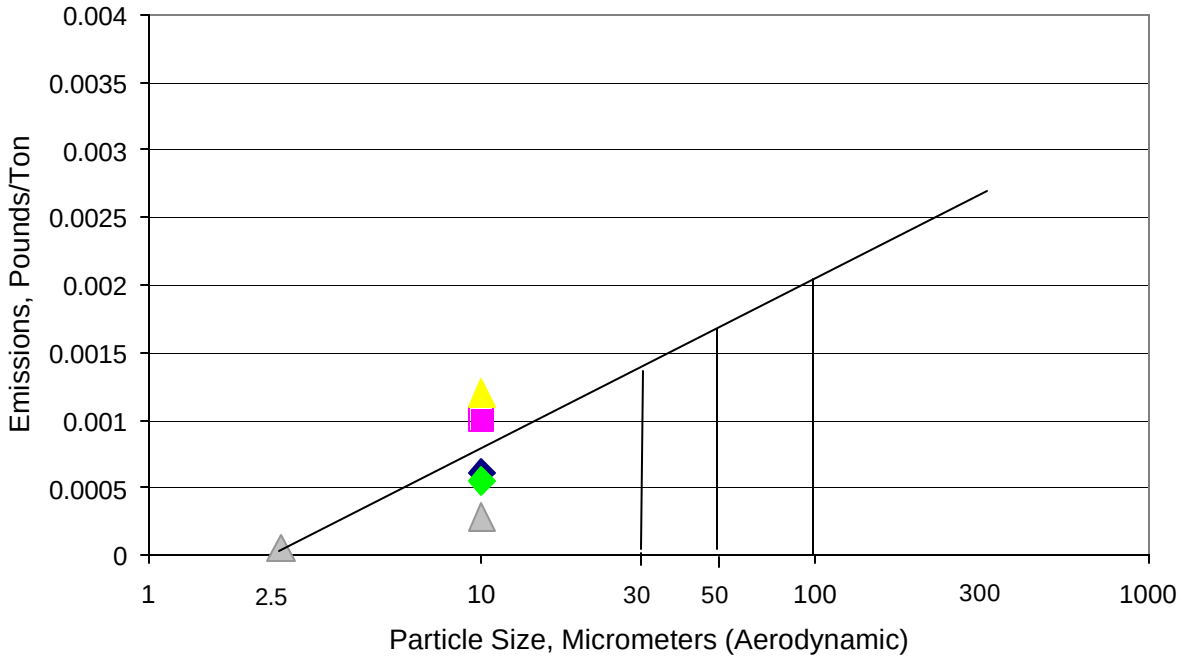


Figure 11-19-3. PM Emission Factor Calculation, Screening (Controlled)

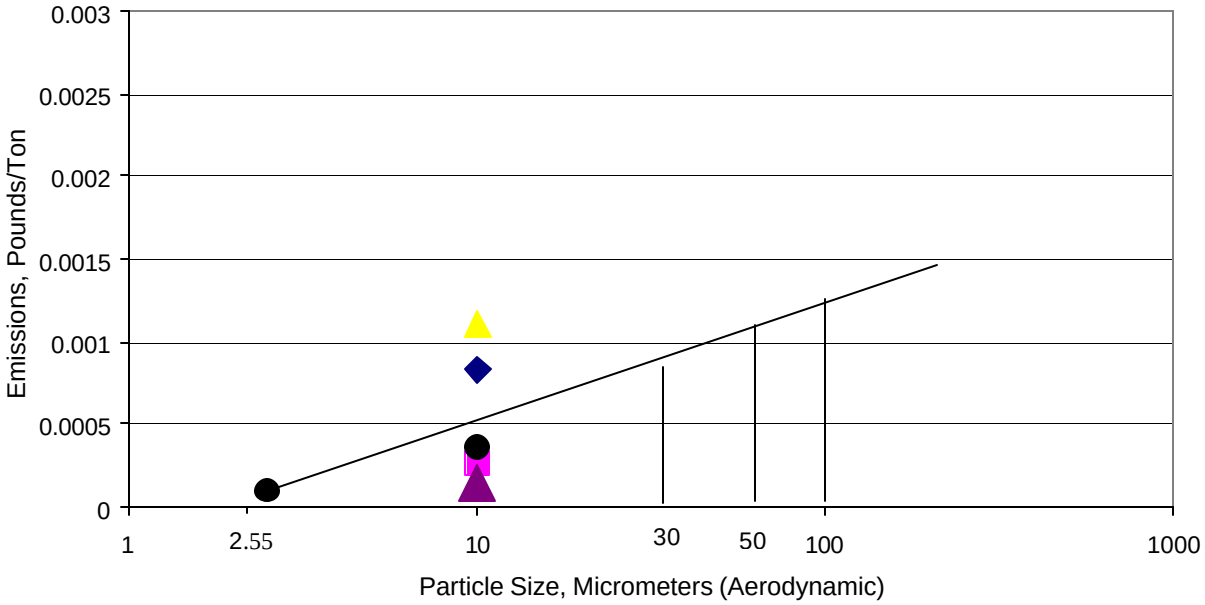


Figure 11.19-4. PM Emission Factor Calculation, Tertiary Crushing (Controlled)

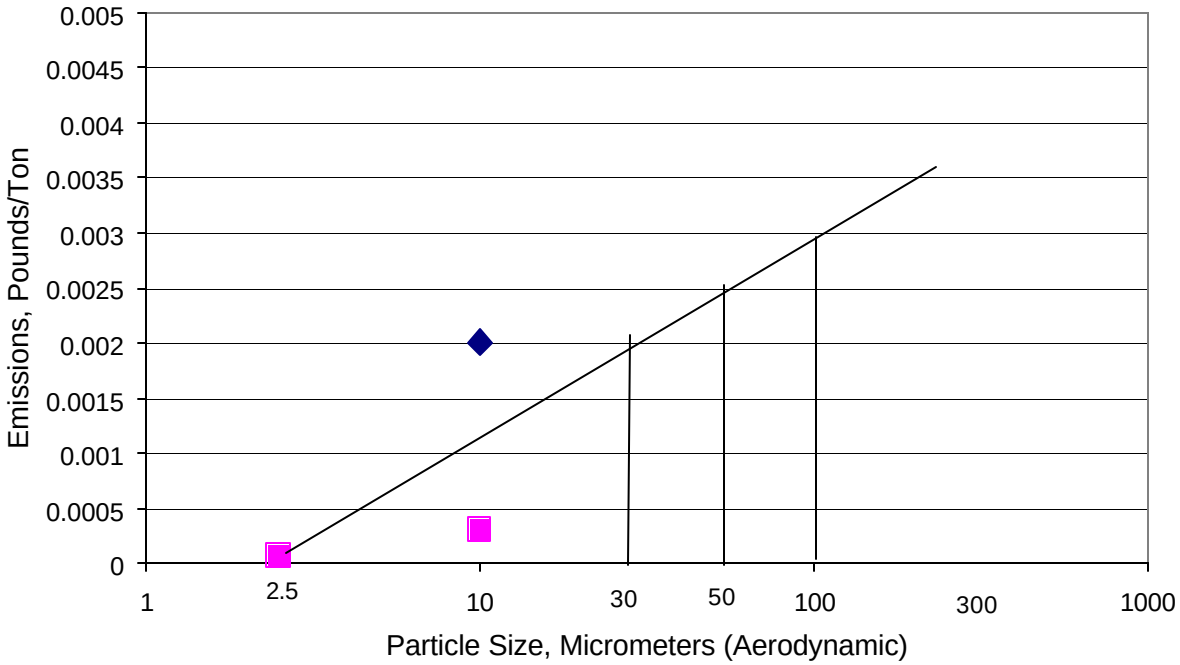


Figure 11-19.5. PM Emission Factor Calculation, Fines Crushing (Controlled)

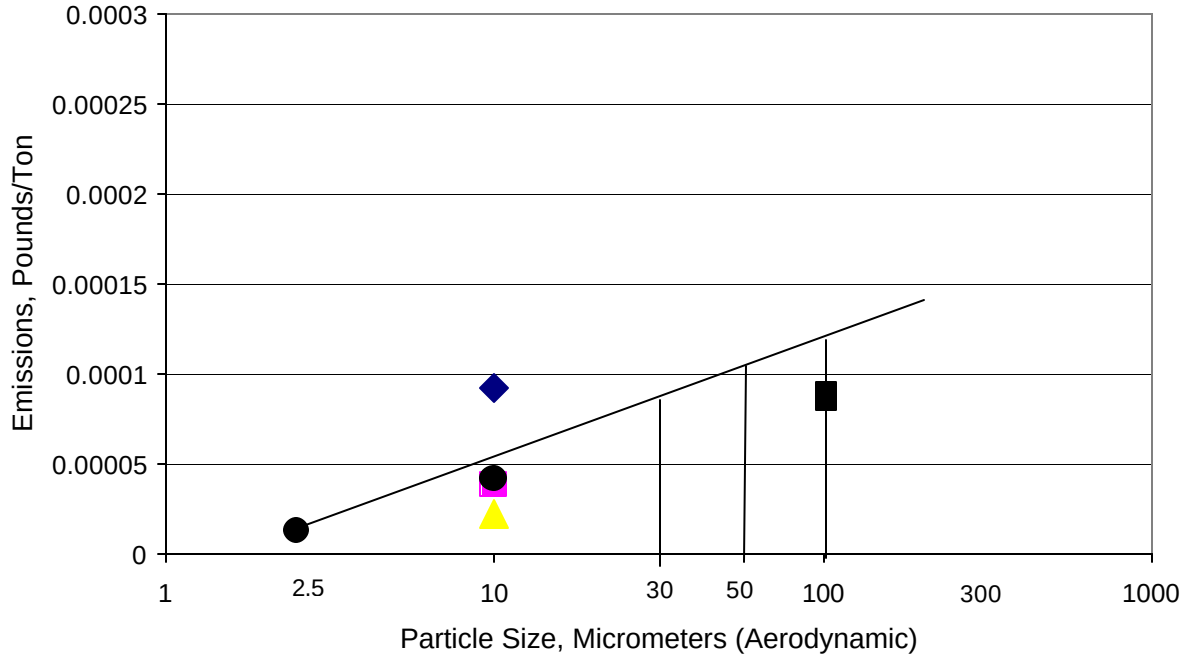


Figure 11.19-6. PM Emission Factor Calculation, Conveyor Transfer Points (Controlled)

The uncontrolled PM emission factors have been calculated from the controlled PM emission factors calculated in accordance with Figures 11.19.2-3 through 11.19.2-6. The PM-10 control efficiencies have been applied to the PM controlled emission factor data to calculate the uncontrolled PM emission rates.

Screening PM-10

Controlled = 0.00073 Lbs./Ton.

Uncontrolled = 0.00865 Lbs./Ton.

Efficiency = 91.6%

Tertiary Crushing PM-10

Controlled = 0.00054

Uncontrolled = 0.00243

Efficiency = 77.7%

Fines Crushing PM-10:

Controlled = 0.0012

Uncontrolled = 0.015

Efficiency = 92.0%

Conveyor Transfer Points PM-10

Controlled = 0.000045

Uncontrolled = 0.0011

Efficiency = 95.9%

The uncontrolled total particulate matter emission factor was calculated from the controlled total particulate matter using Equation 1:

$$\text{Uncontrolled emission factor} = \frac{\text{Controlled total particulate emission factor}}{(100\% - \text{PM-10 Efficiency }\%)/100\%}$$

Equation 1

The Total PM emission factors calculated using Figures 11.19.2-3 through 11.19.2-6 were developed because (1) there are more A-rated test data supporting the calculated values and (2) the extrapolated values provide the flexibility for agencies and source operators to select the most appropriate definition for Total PM. All of the Total PM emission factors have been rated as E due to the limited test data and the need to estimate emission factors using extrapolations of the PM-2.5 and PM-10 data.

13.2.2 Unpaved Roads

13.2.2.1 General

When a vehicle travels an unpaved road, the force of the wheels on the road surface causes pulverization of surface material. Particles are lifted and dropped from the rolling wheels, and the road surface is exposed to strong air currents in turbulent shear with the surface. The turbulent wake behind the vehicle continues to act on the road surface after the vehicle has passed.

The particulate emission factors presented in the previous draft version of this section of AP-42, dated October 2001, implicitly included the emissions from vehicles in the form of exhaust, brake wear, and tire wear as well as resuspended road surface material[25]. EPA included these sources in the emission factor equation for unpaved public roads (equation 1b in this section) 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 unpaved public road emission factor equation only estimates particulate emissions from resuspended road surface material [23, 26]. The particulate emissions from vehicle exhaust, brake wear, and tire wear are now estimated separately using EPA's MOBILE6.2 [24]. 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 MOBILE6.2 to estimate particulate emissions from vehicle traffic on unpaved public roads. It also incorporates the decrease in exhaust emissions that has occurred since the unpaved public road emission factor equation was developed. The previous version of the unpaved public 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.

13.2.2.2 Emissions Calculation And Correction Parameters[1-6]

The quantity of dust emissions from a given segment of unpaved road varies linearly with the volume of traffic. Field investigations also have shown that emissions depend on source parameters that characterize the condition of a particular road and the associated vehicle traffic. Characterization of these source parameters allow for "correction" of emission estimates to specific road and traffic conditions present on public and industrial roadways.

Dust emissions from unpaved roads have been found to vary directly with the fraction of silt (particles smaller than 75 micrometers [μm] in diameter) in the road surface materials.[1] The silt fraction is determined by measuring the proportion of loose dry surface dust that passes a 200-mesh screen, using the ASTM-C-136 method. A summary of this method is contained in Appendix C of AP-42. Table 13.2.2-1 summarizes measured silt values for industrial unpaved roads. Table 13.2.2-2 summarizes measured silt values for public unpaved roads. It should be noted that the ranges of silt content vary over two orders of magnitude. Therefore, the use of data from this table can potentially introduce considerable error. Use of this data is strongly discouraged when it is feasible to obtain locally gathered data.

Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions. As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles.

Other variables are important in addition to the silt content of the road surface material. For example, at industrial sites, where haul trucks and other heavy equipment are common, emissions are highly correlated with vehicle weight. On the other hand, there is far less variability in the weights of cars and pickup trucks that commonly travel publicly accessible unpaved roads throughout the United States. For those roads, the moisture content of the road surface material may be more dominant in determining differences in emission levels between, for example a hot, desert environment and a cool, moist location.

The PM-10 and TSP emission factors presented below are the outcomes from stepwise linear regressions of field emission test results of vehicles traveling over unpaved surfaces. Due to a limited amount of information available for PM-2.5, the expression for that particle size range has been scaled against the result for PM-10. Consequently, the quality rating for the PM-2.5 factor is lower than that for the PM-10 expression.

Table 13.2.2-1. TYPICAL SILT CONTENT VALUES OF SURFACE MATERIAL ON INDUSTRIAL UNPAVED ROADS[a]

Industry	Road Use Or Surface Material	Plant Sites	No. Of Samples	Silt Content (%)	
				Range	Mean
Copper smelting	Plant road	1	3	16 - 19	17
Iron and steel production	Plant road	19	135	0.2 - 19	6.0
Sand and gravel processing	Plant road	1	3	4.1 - 6.0	4.8
	Material storage area	1	1	-	7.1
Stone quarrying and processing	Plant road	2	10	2.4 - 16	10
	Haul road to/from pit	4	20	5.0-15	8.3
Taconite mining and processing	Service road	1	8	2.4 - 7.1	4.3
	Haul road to/from pit	1	12	3.9 - 9.7	5.8
Western surface coal mining	Haul road to/from pit	3	21	2.8 - 18	8.4
	Plant road	2	2	4.9 - 5.3	5.1
	Scraper route	3	10	7.2 - 25	17
	Haul road (freshly graded)	2	5	18 - 29	24
Construction sites	Scraper routes	7	20	0.56-23	8.5
Lumber sawmills	Log yards	2	2	4.8-12	8.4
Municipal solid waste landfills	Disposal routes	4	20	2.2 - 21	6.4

[a]References 1,5-15.

The following empirical expressions may be used to estimate the quantity in pounds (lb) of size-specific particulate emissions from an unpaved road, per vehicle mile traveled (VMT):

For vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

$$E = k\,(s/12)^a (W/3)^b \qquad (1a)$$

and, for vehicles traveling on publicly accessible roads, dominated by light duty vehicles, emissions may be estimated from the following:

$$E = \frac{k\,(s/12)^a (S/30)^d}{(M/0.5)^c} - C \qquad (1b)$$

where k, a, b, c and d are empirical constants (Reference 6) given below and

E = size-specific emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)
M = surface material moisture content (%)
S = mean vehicle speed (mph)
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

The source characteristics s, W and M are referred to as correction parameters for adjusting the emission estimates to local conditions. The metric conversion from lb/VMT to grams (g) per vehicle kilometer traveled (VKT) is as follows:

1 lb/VMT = 281.9 g/VKT

The constants for Equations 1a and 1b based on the stated aerodynamic particle sizes are shown in Tables 13.2.2-2 and 13.2.2-4. The PM-2.5 particle size multipliers (k-factors) are taken from Reference 27.

Table 13.2.2-2. CONSTANTS FOR EQUATIONS 1a AND 1b

Constant	Industrial Roads (Equation 1a)			Public Roads (Equation 1b)		
	PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9	0.18	1.8	6.0
a	0.9	0.9	0.7	1	1	1
b	0.45	0.45	0.45	-	-	-
c	-	-	-	0.2	0.2	0.3
d	-	-	-	0.5	0.5	0.3
Quality Rating	B	B	B	B	B	B

*Assumed equivalent to total suspended particulate matter (TSP)
"-" = not used in the emission factor equation

Table 13.2.2-2 also contains the quality ratings for the various size-specific versions of Equation 1a and 1b. The equation retains the assigned quality rating, if applied within the ranges of source conditions, shown in Table 13.2.2-3, that were tested in developing the equation:

Table 13.2.2-3. RANGE OF SOURCE CONDITIONS USED IN DEVELOPING EQUATION 1a AND 1b

Emission Factor	Surface Silt Content, %	Mean Vehicle Weight		Mean Vehicle Speed		Mean No. of Wheels	Surface Moisture Content, %
		Mg	ton	km/hr	mph		
Industrial Roads (Equation 1a)	1.8-25.2	1.8-260	2-290	8-69	5-43	4-17[a]	0.03-13
Public Roads (Equation 1b)	1.8-35	1.4-2.7	1.5-3	16-88	10-55	4-4.8	0.03-13

[a] See discussion in text.

As noted earlier, the models presented as Equations 1a and 1b were developed from tests of traffic on unpaved surfaces. Unpaved roads have a hard, generally nonporous surface that usually dries quickly after a rainfall or watering, because of traffic-enhanced natural evaporation. (Factors influencing how fast a road dries are discussed in Section 13.2.2.3, below.) The quality ratings given above pertain to the mid-range of the measured source conditions for the equation. A higher mean vehicle weight and a higher than normal traffic rate may be justified when performing a worst-case analysis of emissions from unpaved roads.

The emission factors for the exhaust, brake wear and tire wear of a 1980's vehicle fleet (*C*) was obtained from EPA's MOBILE6.2 model [23]. The emission factor also varies with aerodynamic size range

13.2.4 Aggregate Handling And Storage Piles

13.2.4.1 General

Inherent in operations that use minerals in aggregate form is the maintenance of outdoor storage piles. Storage piles are usually left uncovered, partially because of the need for frequent material transfer into or out of storage.

Dust emissions occur at several points in the storage cycle, such as material loading onto the pile, disturbances by strong wind currents, and loadout from the pile. The movement of trucks and loading equipment in the storage pile area is also a substantial source of dust.

13.2.4.2 Emissions And Correction Parameters

The quantity of dust emissions from aggregate storage operations varies with the volume of aggregate passing through the storage cycle. Emissions also depend on 3 parameters of the condition of a particular storage pile: age of the pile, moisture content, and proportion of aggregate fines.

When freshly processed aggregate is loaded onto a storage pile, the potential for dust emissions is at a maximum. Fines are easily disaggregated and released to the atmosphere upon exposure to air currents, either from aggregate transfer itself or from high winds. As the aggregate pile weathers, however, potential for dust emissions is greatly reduced. Moisture causes aggregation and cementation of fines to the surfaces of larger particles. Any significant rainfall soaks the interior of the pile, and then the drying process is very slow.

Silt (particles equal to or less than 75 micrometers [μm] in diameter) content is determined by measuring the portion of dry aggregate material that passes through a 200-mesh screen, using ASTM-C-136 method.[1] Table 13.2.4-1 summarizes measured silt and moisture values for industrial aggregate materials.

Table 13.2.4-1. TYPICAL SILT AND MOISTURE CONTENTS OF MATERIALS AT VARIOUS INDUSTRIES[a]

Industry	No. Of Facilities	Material	Silt Content (%)			Moisture Content (%)		
			No. Of Samples	Range	Mean	No. Of Samples	Range	Mean
Iron and steel production	9	Pellet ore	13	1.3 - 13	4.3	11	0.64 - 4.0	2.2
		Lump ore	9	2.8 - 19	9.5	6	1.6 - 8.0	5.4
		Coal	12	2.0 - 7.7	4.6	11	2.8 - 11	4.8
		Slag	3	3.0 - 7.3	5.3	3	0.25 - 2.0	0.92
		Flue dust	3	2.7 - 23	13	1	—	7
		Coke breeze	2	4.4 - 5.4	4.9	2	6.4 - 9.2	7.8
		Blended ore	1	—	15	1	—	6.6
		Sinter	1	—	0.7	0	—	—
		Limestone	3	0.4 - 2.3	1.0	2	ND	0.2
Stone quarrying and processing	2	Crushed limestone	2	1.3 - 1.9	1.6	2	0.3 - 1.1	0.7
		Various limestone products	8	0.8 - 14	3.9	8	0.46 - 5.0	2.1
Taconite mining and processing	1	Pellets	9	2.2 - 5.4	3.4	7	0.05 - 2.0	0.9
		Tailings	2	ND	11	1	—	0.4
Western surface coal mining	4	Coal	15	3.4 - 16	6.2	7	2.8 - 20	6.9
		Overburden	15	3.8 - 15	7.5	0	—	—
		Exposed ground	3	5.1 - 21	15	3	0.8 - 6.4	3.4
Coal-fired power plant	1	Coal (as received)	60	0.6 - 4.8	2.2	59	2.7 - 7.4	4.5
Municipal solid waste landfills	4	Sand	1	—	2.6	1	—	7.4
		Slag	2	3.0 - 4.7	3.8	2	2.3 - 4.9	3.6
		Cover	5	5.0 - 16	9.0	5	8.9 - 16	12
		Clay/dirt mix	1	—	9.2	1	—	14
		Clay	2	4.5 - 7.4	6.0	2	8.9 - 11	10
		Fly ash	4	78 - 81	80	4	26 - 29	27
		Misc. fill materials	1	—	12	1	—	11

[a] References 1-10. ND = no data.

13.2.4.3 Predictive Emission Factor Equations

Total dust emissions from aggregate storage piles result from several distinct source activities within the storage cycle:

1. Loading of aggregate onto storage piles (batch or continuous drop operations).
2. Equipment traffic in storage area.
3. Wind erosion of pile surfaces and ground areas around piles.
4. Loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operations).

Either adding aggregate material to a storage pile or removing it usually involves dropping the material onto a receiving surface. Truck dumping on the pile or loading out from the pile to a truck with a front-end loader are examples of batch drop operations. Adding material to the pile by a conveyor stacker is an example of a continuous drop operation.

The quantity of particulate emissions generated by either type of drop operation, per kilogram (kg) (ton) of material transferred, may be estimated, with a rating of A, using the following empirical expression:[11]

$$E = k(0.0016) \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (kg/megagram [Mg])} \quad (1)$$

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

The particle size multiplier in the equation, k, varies with aerodynamic particle size range, as follows:

Aerodynamic Particle Size Multiplier (k) For Equation 1				
< 30 µm	< 15 µm	< 10 µm	< 5 µm	< 2.5 µm
0.74	0.48	0.35	0.20	0.053[a]

[a] Multiplier for < 2.5 µm taken from Reference 14.

The equation retains the assigned quality rating if applied within the ranges of source conditions that were tested in developing the equation, as follows. Note that silt content is included, even though silt content does not appear as a correction parameter in the equation. While it is reasonable to expect that silt content and emission factors are interrelated, no significant correlation between the 2 was found during the derivation of the equation, probably because most tests with high silt contents were conducted under lower winds, and vice versa. It is recommended that estimates from the equation be reduced 1 quality rating level if the silt content used in a particular application falls outside the range given:

Ranges Of Source Conditions For Equation 1			
Silt Content (%)	Moisture Content (%)	Wind Speed	
		m/s	mph
0.44 - 19	0.25 - 4.8	0.6 - 6.7	1.3 - 15

To retain the quality rating of the equation when it is applied to a specific facility, reliable correction parameters must be determined for specific sources of interest. The field and laboratory procedures for aggregate sampling are given in Reference 3. In the event that site-specific values for

correction parameters cannot be obtained, the appropriate mean from Table 13.2.4-1 may be used, but the quality rating of the equation is reduced by 1 letter.

For emissions from equipment traffic (trucks, front-end loaders, dozers, etc.) traveling between or on piles, it is recommended that the equations for vehicle traffic on unpaved surfaces be used (see Section 13.2.2). For vehicle travel between storage piles, the silt value(s) for the areas among the piles (which may differ from the silt values for the stored materials) should be used.

Worst-case emissions from storage pile areas occur under dry, windy conditions. Worst-case emissions from materials-handling operations may be calculated by substituting into the equation appropriate values for aggregate material moisture content and for anticipated wind speeds during the worst case averaging period, usually 24 hours. The treatment of dry conditions for Section 13.2.2, vehicle traffic, "Unpaved Roads", follows the methodology described in that section centering on parameter p. A separate set of nonclimatic correction parameters and source extent values corresponding to higher than normal storage pile activity also may be justified for the worst-case averaging period.

13.2.4.4 Controls[12-13]

Watering and the use of chemical wetting agents are the principal means for control of aggregate storage pile emissions. Enclosure or covering of inactive piles to reduce wind erosion can also reduce emissions. Watering is useful mainly to reduce emissions from vehicle traffic in the storage pile area. Watering of the storage piles themselves typically has only a very temporary slight effect on total emissions. A much more effective technique is to apply chemical agents (such as surfactants) that permit more extensive wetting. Continuous chemical treating of material loaded onto piles, coupled with watering or treatment of roadways, can reduce total particulate emissions from aggregate storage operations by up to 90 percent.[12]

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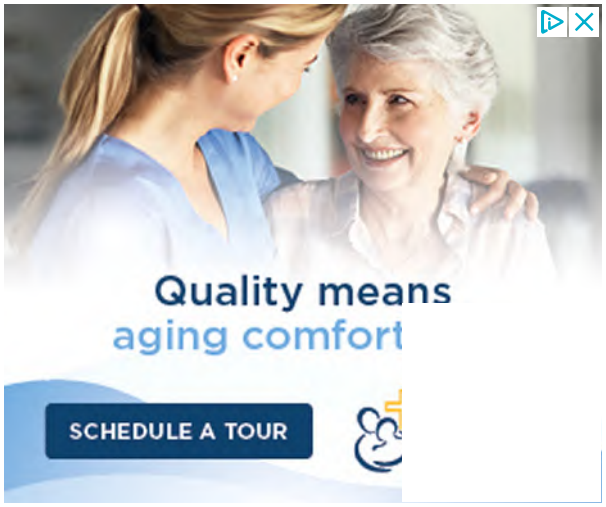
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Climate and Average Weather Year Round in Moriarty New Mexico, United States

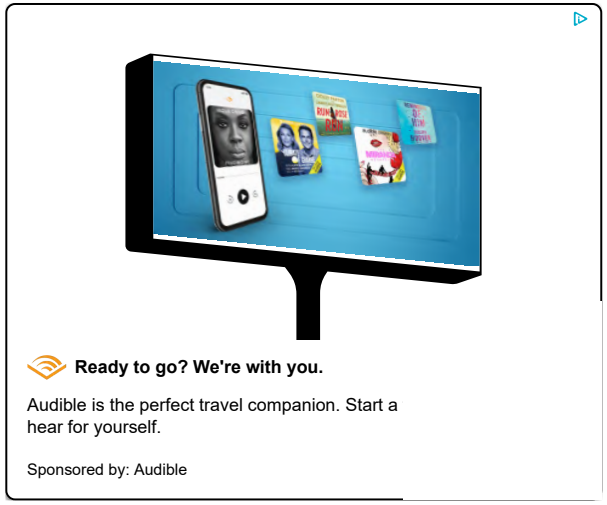
In Moriarty, the summers are warm; the winters are short, very cold, snowy, and windy; and it is mostly clear year round. Over the course of the year, the temperature typically varies from 24°F to 87°F and is rarely below 14°F or above 93°F.

Based on the tourism score, the best time of year to visit Moriarty for warm-weather activities is from early June to mid September.

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Climate in Moriarty

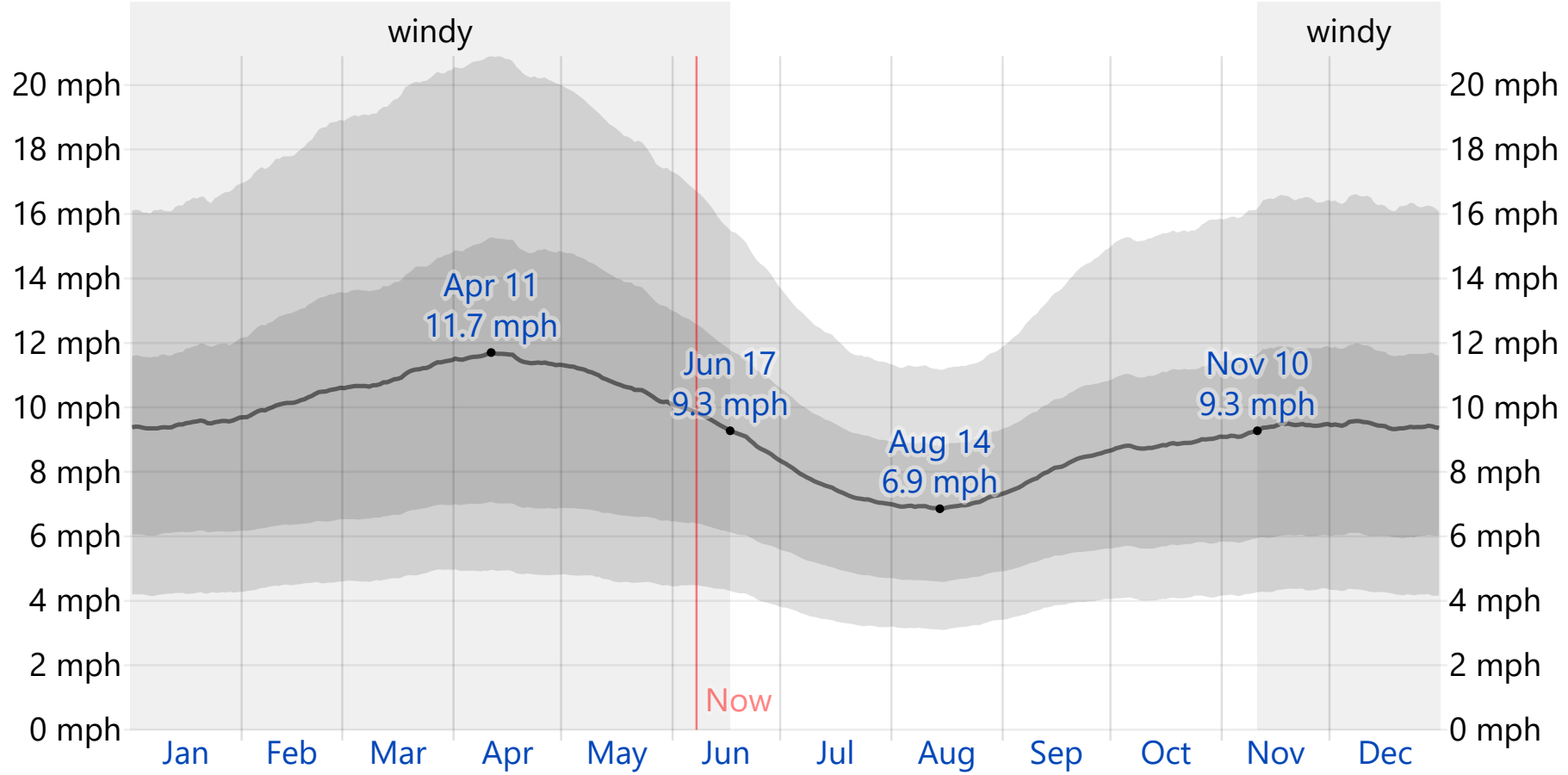
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Average Wind Speed in Moriarty

Compare (/compare/y/3307/Comparison-of-the-Average-Weather-in-Moriarty)

History: 2022 (/h/y/145620/2022/Historical-Weather-during-2022-at-Albuquerque-International-Airport-New-Mexico-United-States#Figures-WindSpeed) 2021 (/h/



The average of mean hourly wind speeds (dark gray line), with 25th to 75th and 10th to 90th percentile bands.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wind Speed (mph)	9.5	10.2	11.0	11.5	10.7	9.3	7.5	7.0	8.1	8.9	9.4	9.4

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Pit #1 Plant Engine

CAT 3512

31-0002

EMISSIONS DATA [24Z09726] ***JANUARY 15, 2019***

For Help Desk Phone Numbers Click here (/tmi/tmihome/TMIContactInfo.htm)

TMI Emissions Data Survey (https://www.caterpillarsurveys.com/se.aspx?s=4F5AA3C87FC94347)

Emissions Certificates Search (https://dealer.cat.com/en/products/standards-regulations/emissions-certificates.html)

Engine Emissions Data

For Emissions / Certification feedback and questions, please submit a ticket via our ERC Request Portal (https://ercrequestspilotprogram.atlassian.net/servicedesk/customer/portal/2)

This emission data is Caterpillar's best estimate for this rating. If actual emissions are required then an emission test needs to be run on your engine.

Serial Number (Machine)	
Serial Number (Engine)	**24Z09726**
Sales Model	3512
Regulatory Build Date	01-JUN-2000
As Shipped Data	
Engine Arrangement Number	2W8405
Certification Arrangement	
Test Spec Number	0T6411

Regulatory Status	Please Contact Engine Certification using Request portal (https://ercrequestspilotprogram.atlassian.net/servicedesk/customer/portal/2/create/25)
Current Flash file	No Flash File Found
CORR FL Power at RPM	1,604 HP (1,196.0 KW)1800 RPM
Advertised Power	1,447 HP 1,800RPM

Disclaimer: The information provided has been compiled from third party sources and is accurate to the best of Caterpillar's knowledge. However, Caterpillar cannot guarantee the accuracy, completeness, or validity of the information and is not liable for any errors or omissions contained therein. All information provided should be independently verified and confirmed, including by examining the emissions label located on the engine.

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INITIAL COMPLIANCE TEST REPORT

FROM ONE

CATERPILLAR 3512

RECIPROCATING INTERNAL COMBUSTION ENGINE

IN SERVICE AT THE

MSCI HMA #3

PREPARED FOR

MOUNTAIN STATES CONSTRUCTORS

NEW MEXICO ENVIRONMENT DEPARTMENT
AIR QUALITY BUREAU PERMIT NUMBERS
GCP-3-8180

TEST DATE: FEBRUARY 25, 2019

PREPARED BY

COMPLIANCE SERVICES AND TESTING, LLC

PROJECT NUMBER: 1899

COMPLIANCE SERVICES & TESTING
P.O. Box 94191-87199
7108 Washington St. NE
Suite A
Albuquerque, NM 87109
(505) 681-4909 Phone
www.comptesting.com

March 1, 2019

Mr. Henry Smith
Mountain States Constructors
3601 Pan American Frwy NE #111
Albuquerque, NM 87107

Re: Emissions testing at MSCI HMA #3

Mr. Smith,

On February 25, 2019, exhaust emissions testing was performed on a Caterpillar 3512 engine in service at the MSCI HMA #3. The engine is used to power the plant. The testing was conducted to determine its compliance status NMED-AQB GCP-3-8180 permit. The generator engine is identified as follows:

Engine Information	
Manufacturer	Caterpillar
Model Number	3512
Unit Number	31-0002
Serial Number	24Z09726
Rated Kilowatt	1000
Rated Speed	1800

The testing followed procedures found the in NMED "ASTM D6522-00 Performance Testing." The mass emission rates were calculated using the exhaust concentrations and the exhaust flow rate determined by EPA Method 2 (velocity head pressures). The theoretical moisture content at the observed oxygen concentration was stoichiometrically calculated using Method 19.
The exhaust flow rates are in terms of pounds per hour and tons per year. Three 10-minute Method 9 opacity readings were performed on the engine.

The test matrix consisted of three 20-minute test runs on engine exhaust in accordance with 40CFR60.8 requirements. Stack gas entered the system through a stainless-steel probe with an in-line filter. The sample was delivered

Summary of Results
Unit #: 31-0002

Company: Mountain States Constructors
Location: MSCI HMA #3
Source: Caterpillar 3512 SN: 24Z09726
Engine Site Rating: 1341 Hp @ 1800 RPM
Generator Rating: 1000 KW @ 1800 RPM
Technician: JC

Test Run Number	***1***	***2***	***3***	
Unit Number	**31-0002**	**31-0002**	**31-0002**	
Date	2/25/19	2/25/19	2/25/19	
Start Time	12:10	12:35	13:00	
Stop Time	12:30	12:55	13:20	
Engine/Compressor Operation				***Average***
Engine Speed (rpm)	1800	1800	1800	**1800**
Load (%)	93	93	93	**93**
Engine Horsepower (Hp)	1247	1247	1247	**1247**
Generator Wattage (kW)	930	930	930	**930**
Voltage (V)	480.0	480.0	480.0	**480.0**
Amperage (A) (3 phase)	1120	1120	1120	**1120.0**
Frequency (Hz)	60	60	60	**60.0**
Fuel Data				
Calculated Fuel Consumption (Gal/Hr)	77.9	77.9	77.9	**77.9**
O2 F-Factor (DSCF/MMBtu, HHV basis)	9190	9190	9190	**9190**
Fuel Heating Value (Btu/gal, HHV)	136000	136000	136000	**136000**
BHp Specific Fuel Rate (Btu/Hp-hr, HHV basis)	8500	8500	8500	**8500**
Ambient Conditions				
Pressure Altitude (MSL)	5220	5220	5220	**5220**
Atmospheric Pressure ("Hg)	24.72	24.72	24.72	**24.72**
Dry Bulb Temperature (°F)	49.0	52.0	53.0	**51.3**
Wet Bulb Temperature (°F)	39.3	41.3	41.6	**40.7**
Humidity (lb/lb air)	0.0039	0.0041	0.0040	**0.0040**
Measured Exhaust Emissions (Corrected)				***Average***
NOx (ppmv)	1129.00	962.96	973.99	**1021.98**
CO (ppmv)	600.13	572.16	584.82	**585.71**
O2 (vol %)	8.23	8.15	8.16	**8.18**
CO2 (vol %)	9.34	9.35	9.38	**9.36**
Fo (Distillate #2 Fuel Oil)	1.36	1.36	1.36	**1.36**
Opacity (%) **{Limit = 7%}**	5.0	5.0	5.0	**5.0**
Exhaust Flow Rates (EPA Method 2)				
SCF/Min (dry basis, calc. from meas. stack velocity)	863.9	869.4	878.1	**870.5**
SCF/Hr (dry basis, calc. from meas. stack velocity)	51,834	52,165	52,685	**52,228**
Calculated Mass Emission Rates (Pitot Tube: EPA Method 2)				
NOx (lbs/hr)	6.99	6.00	6.13	**6.37**
CO (lbs/hr)	2.26	2.17	2.24	**2.22**
*NOx (tons/yr) **{Facility Wide Limit = 95}**	30.61	26.28	26.84	**27.91**
*CO (tons/yr) **{Facility Wide Limit = 95}**	9.91	9.50	9.81	**9.74**

***Based upon 8760 hours/year.**

GEN SET PERFORMANCE DATA [24Z09726]

JANUARY 15, 2019

For Help Desk Phone Numbers Click here

Performance Number: TM8946 **Change Level:** 12

Sales Model: 3512 DITA **Combustion:** DI **Aspr:** TA
Engine Power:
1010 W/O F EKW 1,447 HP **Speed:** 1,800 RPM **After Cooler:** JWAC
Manifold Type: DRY **Governor Type:** WDWRD **After Cooler Temp(F):** 180
Turbo Quantity: **Engine App:** GS **Turbo Arrangement:**
Hertz: 60 **Application Type:** GEN SET-DIE **Engine Rating:** GS **Strategy:**
Rating Type: PRIME **Certification:**

General Performance Data

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	ENGINE BMEP PSI	FUEL BSFC LB/BHP-HR	FUEL RATE GPH	INTAKE MFLD TEMP DEG F	INTAKE MFLD P IN-HG	INTAKE AIR FLOW CFM	EXH MFLD TEMP DEG F	EXH STACK TEMP DEG F	EXH GAS FLOW CFM
1,010	100	1430	199.28	0.35	70.59	190.4	52.47	3,238.36	1,114.34	854.78	8,267.17
909	90	1285	179.12	0.35	63.93	187.52	45.31	2,984.09	1,074.02	844.88	7,557.35
808	80	1142	159.11	0.35	57.43	185.36	38.5	2,743.95	1,037.3	832.1	6,875.77
757.5	75	1070	149.1	0.35	54.21	184.28	35.15	2,623.88	1,019.66	825.26	6,540.28
707	70	999	139.24	0.36	51.01	183.38	31.89	2,507.34	1,002.2	817.7	6,208.32
606	60	857	119.51	0.36	44.7	181.58	25.56	2,277.8	967.46	800.42	5,555
505	50	717	99.79	0.38	38.41	179.06	19.4	2,044.72	923	780.62	4,905.21
404	40	579	80.79	0.39	32.33	176.72	13.77	1,825.77	867.2	754.52	4,280.14
303	30	439	61.21	0.42	26.15	174.2	8.44	1,606.82	798.26	720.32	3,655.07
252.5	25	368	51.34	0.44	23.04	172.94	6.19	1,515	755.06	691.16	3,358.43
202	20	296	41.19	0.47	19.89	171.86	4.26	1,437.31	705.2	652.46	3,079.44
101	10	150	20.89	0.63	13.58	170.06	1.15	1,306.64	588.74	555.26	2,539.13

Engine Heat Rejection Data

GEN PWR EKW	PERCENT LOAD	REJ TO JW BTU/MN	REJ TO ATMOS BTU/MN	REJ TO EXHAUST BTU/MN	EXH RCOV TO 350F BTU/MN	FROM OIL CLR BTU/MN	FROM AFT CLR BTU/MN	WORK ENERGY BTU/MN	LHV ENERGY BTU/MN	HHV ENERGY BTU/MN
1,010	100	36,226.1	6,653.8	58,121.0	30,596.0	8,075.5	7,620.6	60,680.2	151,501.4	161,396.7
909	90	32,700.2	6,426.3	52,604.6	27,581.9	7,336.2	5,743.9	54,481.3	137,227.0	146,155.6
808	80	29,288.0	6,198.8	47,315.7	24,624.7	6,540.0	4,094.6	48,396.3	123,237.0	131,312.5
757.5	75	27,581.9	6,085.1	44,756.6	23,202.9	6,198.8	3,412.2	45,382.2	116,355.8	123,976.3
707	70	25,932.7	6,028.2	42,197.4	21,781.2	5,800.7	2,729.8	42,368.1	109,474.5	116,640.1
606	60	22,634.2	5,800.7	37,192.9	18,994.5	5,118.3	1,592.4	36,339.9	95,882.6	102,138.3
505	50	19,449.5	5,573.2	32,245.2	16,264.8	4,379.0	625.6	30,368.5	82,404.5	87,807.1
404	40	16,321.7	5,402.6	27,581.9	13,535.0	3,696.5	-170.6	24,567.8	69,381.3	73,930.8
303	30	13,193.8	5,175.2	22,804.8	10,862.2	3,014.1	-739.3	18,653.3	56,130.6	59,770.2
252.5	25	11,601.5	5,061.4	20,416.3	9,383.5	2,616.0	-966.8	15,582.3	49,419.9	52,661.5
202	20	10,009.1	4,947.7	18,027.8	7,791.2	2,274.8	-1,137.4	12,568.2	42,709.3	45,495.9
101	10	6,767.5	4,720.2	13,193.8	4,720.2	1,535.5	-1,364.9	6,369.4	29,117.4	31,051.0

REFERENCE EXHAUST STACK DIAMETER	10 IN
WET EXHAUST MASS	14,762.1 LB/HR
WET EXHAUST FLOW (854.60 F STACK TEMP)	8,274.23 CFM
WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	3,091.00 STD CFM
DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	2,831.53 STD CFM
FUEL FLOW RATE	70 GAL/HR

RATED SPEED "Potential site variation"

EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,010	100	1430	35.5200	5.1800	1.2100	.6200	11.6000	2.8000	1.2800
757.5	75	1285	26.8200	3.3100	1.3000	.5200	12.3000	2.9000	1.2900
505	50	1142	17.6900	2.6400	1.1300	.7100	13.0000	3.3000	1.3000
252.5	25	1070	9.1300	2.7500	1.1500	.7300	14.2000	4.8000	1.4200
101	10	999	4.6200	3.1100	1.3200	.5400	15.4000	5.9000	1.5300

RATED SPEED "Nominal Data"

EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	TOTAL CO2 LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,010	100	1430	29.6000	2.8800	.9100	1,609.4	.4400	11.6000	2.8000	1.2800
757.5	75	1070	22.3500	1.8400	.9800	1,220.4	.3700	12.3000	2.9000	1.2900
505	50	717	14.7400	1.4700	.8500	863.5	.5100	13.0000	3.3000	1.3000
252.5	25	368	7.6100	1.5300	.8600	512.9	.5200	14.2000	4.8000	1.4200
101	10	150	3.8500	1.7300	.9900	296.4	.3800	15.4000	5.9000	1.5300

Altitude Capability Data(Corrected Power Altitude Capability)

Ambient Operating Temp. / Altitude	50 F	68 F	86 F	104 F	122 F	NORMAL
0 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
984.25 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
1,640.42 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
3,280.84 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
4,921.26 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
6,561.68 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,404.05 hp	1,446.96 hp
8,202.1 FT	1,446.96 hp	1,446.96 hp	1,406.73 hp	1,361.14 hp	1,319.56 hp	1,446.96 hp
9,842.52 FT	1,413.44 hp	1,365.16 hp	1,320.9 hp	1,277.99 hp	1,239.1 hp	1,409.41 hp
10,498.69 FT	1,378.57 hp	1,331.63 hp	1,287.38 hp	1,245.81 hp	1,206.92 hp	1,379.91 hp

Pit #2 Plant Engine

CAT 3512

31-0004

ENGINE TEST [6WN00526]

SEPTEMBER 24, 2025

For Help Desk Phone Numbers Click here

Notice: TMI is moving location November 2025. If you link to TMI your link may break.Notify Shane Gilles with your current URL so we can advise of a new URL.

Sales Model: 3512B
TMI Load Date: 22Mar2000
Built Date: 20Mar2000
Shipped Date: 28Mar2000
Plant: Lafayette

Tested Date: 22Mar2000
Tested: B
Cell Number: 510

Show 50 **entries** **Search:**

Test Element	Eng Updates	Test Value	Test Spec Value	Measure
Spec Number		2T8373	2T8373	
Arrangement Number		1282846	1282846	
Corr Fl Power		2,233	2,215	HP
Speed		1,800	1,800	RPM
COR FL FUEL RATE		109.5	108.7	GAL/HR
CSFC		0.347	0.349	LB/HP-HR
Adj Boost		83.6	83.2	IN HG
Fuel Pressure		65	66	PSI
Oil Pressure		57	55	PSI
TQ COR FUEL RATE		107.9	108.4	GAL/HR
TQ CK CSFC		0.344	0.345	LB/HP-HR
TQ CK ADJ BST		83.5	82.9	IN HG
Torq Ck Speed		1,700	1,700	RPM
TQ CK COR TQ		6,857	6,780	LB.FT
Low Idle Speed		900	900	RPM
Low Idle Oil Pressure		55	52	PSI
High Idle Speed		1,818	1,818	RPM
FL Static Fuel Setting		1.024	1.024	IN
FT Static Fuel Setting		1.039	1.039	IN
Full Load Setting(FLS) Intercept		0	0	
Full Torque Setting(FTS) Slope		0	0	

Showing 1 to 21 of 21 entries Previous 1 Next

	Value	Unit
Advertised Power	2,172	HP
Advertised Speed	1,800	RPM

Caterpillar Confidential: **Green**
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SOURCE TEST REPORT
2021 PERFORMANCE EMISSIONS TESTING
MOUNTAIN STATES CONSTRUCTORS, INC.
ONE CATERPILLAR 3512B GENERATOR
ALBUQUERQUE, NEW MEXICO

Prepared For:

Mountain States Constructors, Inc.
3601 Pan American Freeway, Suite 111
Albuquerque, NM 87107

For Submittal To:

New Mexico Air Quality Bureau
525 Camino De Los Marquez, Suite 1
Santa Fe, NM 87505

Prepared By:

Montrose Air Quality Services, LLC
3001 South 35th Street, Suite C-2
Phoenix, AZ 85034

Document Number:	**W007AS-009878-RT-2652**
Test Date:	**July 8, 2021**
Submittal Date:	**August 2, 2021**

STAC STACK TESTING ACCREDITATION COUNCIL

A2LA ACCREDITED TO ASTM D7036 ONLY CERT #3925.01

MONTROSE AIR QUALITY SERVICES

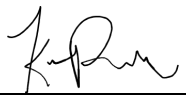
REVIEW AND CERTIFICATION

All work, calculations, and other activities and tasks performed and presented in this document were carried out by me or under my direction and supervision. I hereby certify that, to the best of my knowledge, Montrose operated in conformance with the requirements of the Montrose Quality Management System and ASTM D7036-04 during this test project.

Signature: Jeff Hogan Date: 08 / 02 / 2021

Name: Jeff Hogan Title: District Manager

I have reviewed, technically and editorially, details, calculations, results, conclusions, and other appropriate written materials contained herein. I hereby certify that, to the best of my knowledge, the presented material is authentic, accurate, and conforms to the requirements of the Montrose Quality Management System and ASTM D7036-04.

Signature:  Date: 08 / 02 / 2021

Name: Katie Resch Title: Reporting Hub Manager

1.0 INTRODUCTION

1.1 SUMMARY OF TEST PROGRAM

Mountain States Constructors, Inc (MSC) contracted Montrose Air Quality Services, LLC (Montrose) to perform an emissions test program on the sources listed in Table 1-1 at the facility located in Albuquerque, NM. The tests were conducted to determine compliance with the emission limits/source testing requirements of the New Mexico Environmental Department Air Quality Bureau (NMED) NSR Permit No. GCP-2-Rev.3.

The specific objectives were to measure the following parameters:

- Emission Compliance:
  - o CO, NO_x, (ppm volume dry, ton/yr)
  - o Opacity
- O_2 and CO_2 (% volume dry) – for molecular weight & dilution calculations
- Volumetric Flow Rate (dscfm) & Moisture Content (%)

Montrose performed the tests according to the schedule presented in Table 1-1.

TABLE 1-1
SUMMARY OF TEST PROGRAM

Test Date	Unit ID/ Source Name	Activity/ Parameters	Test Methods	No. of Runs	Duration (Minutes)
7/8/2021	31-004	O_2, CO_2	EPA 3A	3	60
		Volumetric Flow Rate	EPA 1 & 2		
		Moisture	EPA 4		
		NO_x	EPA 7E		
		CO	EPA 10		
		Opacity	EPA 9	3	10

To simplify this report, a list of Units and Abbreviations is included in Appendix C.1. Throughout this report, chemical nomenclature, acronyms, and reporting units are not defined. Please refer to the list for specific details.

This report presents the test results and supporting data, descriptions of the testing procedures, descriptions of the facility and sampling locations, and a summary of the quality assurance procedures used by Montrose. The average emission test results are summarized and compared to their respective permit limits in Table 1-2. Detailed results for individual test runs can be found in Section 4.0. All supporting data can be found in the appendices.

The testing was conducted by the Montrose personnel listed in Table 1-3. The tests were conducted according to the Universal Stack Test Protocol Form dated June 8, 2021 that was submitted via email to the NMED (Stacktest.aqb@state.nm.us).

TABLE 1-2
SUMMARY OF AVERAGE COMPLIANCE RESULTS
UNIT 31-004
JULY 8, 2021

Parameter/Units	31-004	Emission Limits
Carbon Monoxide (CO)		
ppmvd	287.1	--
lb/hr	4.3	--
tons/yr	6.41	95.0
Nitrogen Oxides (NO_x as NO_2)		
ppmvd	1,108	--
lb/hr	27.1	--
tons/yr	40.6	95.0
Opacity		
%	5.5	20

Note: Tons/year calculations are based on generator operating for no more than 3,000 hours a year.

CATERPILLAR®

GEN SET PACKAGE PERFORMANCE DATA [6WN00526]

SEPTEMBER 17, 2020

For Help Desk Phone Numbers Click here

Performance Number: DM2053

Change Level: 09

Sales Model: 3512BDITA **Combustion:** DI **Aspr:** TA

Engine Power:
1500 W/F EKW 1545 W/O F EKW
2,172 HP

Speed: 1,800 RPM **After Cooler:** JWAC

Manifold Type: DRY **Governor Type:** ADEM **After Cooler Temp(F):** 194

Turbo Quantity: 4 **Engine App:** GP **Turbo Arrangement:** Parallel

Hertz: 60 **Application Type:** PACKAGE-DIE **Engine Rating:** PGS **Strategy:** Low BSFC Strategy

Rating Type: **Certification:** N-C 1970 - 2100

General Performance Data

GEN W/F EKW	PERCENT LOAD	ENGINE POWER BHP	ENGINE BMEP PSI	FUEL BSFC LB/BHP-HR	FUEL RATE GPH	INTAKE MFLD TEMP DEG F	INTAKE MFLD P IN-HG	INTAKE AIR FLOW CFM	EXH MFLD TEMP DEG F	EXH STACK TEMP DEG F	EXH GAS FLOW CFM
1,500	100	2153	299.94	0.35	107.86	224.24	79.54	4,428.46	1,293.98	943.52	12,183.57
1,350	90	1940	270.21	0.35	96.85	221.72	73.62	4,230.7	1,231.34	887.72	11,152.38
1,200	80	1728	240.77	0.35	85.27	218.3	66.13	3,955.25	1,166.9	826.52	9,930.49
1,125	75	1623	226.12	0.34	79.57	217.04	61.95	3,789.27	1,143.14	796.28	9,287.77
1,050	70	1517	211.32	0.34	73.41	214.52	55.14	3,559.72	1,109.48	765.32	8,503.78
900	60	1307	182.17	0.34	63.8	211.1	43.95	3,107.69	1,056.02	740.66	7,257.17
750	50	1099	153.02	0.35	54.71	208.04	34.35	2,705.11	1,004.72	721.4	6,190.67
600	40	895	124.59	0.36	46.02	205.16	26.24	2,351.96	954.68	702.5	5,283.08
450	30	688	95.87	0.38	37.35	202.1	19.31	2,034.13	903.74	683.42	4,495.56
375	25	584	81.37	0.4	33.05	200.66	16.29	1,892.87	878.18	673.7	4,149.48
300	20	479	66.72	0.42	28.72	199.04	13.5	1,762.2	846.14	659.84	3,824.58
150	10	266	37.13	0.52	19.94	195.62	8.05	1,567.97	715.1	586.04	3,178.32

MECHANICAL Sound Data: 49.21 FEET

GEN W/F EKW	PERCENT LOAD	OVERALL SOUND DB(A)	OBCF 63HZ DB	OBCF 125HZ DB	OBCF 250HZ DB	OBCF 500HZ DB	OBCF 1000HZ DB	OBCF 2000HZ DB	OBCF 4000HZ DB	OBCF 8000HZ DB
1,500	100	92	94	103	94	86	82	83	80	84
1,350	90	92	94	103	94	86	82	83	80	84
1,200	80	92	94	103	94	86	82	83	80	84
1,125	75	92	94	103	94	86	82	83	80	84
1,050	70	92	94	103	94	86	82	83	80	84
900	60	92	94	103	94	86	82	83	80	84
750	50	92	94	103	94	86	82	83	80	84
600	40	92	94	103	94	86	82	83	80	84
450	30	92	94	103	94	86	82	83	80	84
375	25	92	94	103	94	86	82	83	80	84
300	20	92	94	103	94	86	82	83	80	84
150	10	92	94	103	94	86	82	83	80	84

EMISSIONS DATA

N-C 1970 - 2100 ********** N1

Non-Certified: This engine rating is not emission certified by any domestic or foreign agency.

REFERENCE EXHAUST STACK DIAMETER	10 IN
WET EXHAUST MASS	20,339.8 LB/HR
WET EXHAUST FLOW (942.80 F STACK TEMP)	12,190.63 CFM
WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	4,198.00 STD CFM
DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	3,845.77 STD CFM
FUEL FLOW RATE	107 GAL/HR

RATED SPEED "Potential site variation"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,500	100	2153	54.9400	13.8200	1.8200	.5800	9.5000	2.0000	1.2800
1,125	75	1623	41.9800	9.0000	1.5700	.4000	11.1000	1.3000	1.2800
750	50	1099	22.0100	8.9300	.8700	.3800	12.0000	2.1000	1.3100
375	25	584	12.0400	7.5000	.6500	.4400	13.0000	3.7000	1.3500
150	10	266	8.2500	5.0600	.5900	.3700	15.1000	3.6000	1.3300

RATED SPEED "Nominal Data"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	TOTAL CO2 LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,500	100	2153	45.7800	7.6800	1.3700	2,179.7	.4100	9.5000	2.0000	1.2800
1,125	75	1623	34.9800	5.0000	1.1800	1,586	.2900	11.1000	1.3000	1.2800
750	50	1099	18.3400	4.9600	.6500	1,085.7	.2700	12.0000	2.1000	1.3100
375	25	584	10.0300	4.1700	.4900	649.6	.3200	13.0000	3.7000	1.3500
150	10	266	6.8700	2.8100	.4500	386.9	.2600	15.1000	3.6000	1.3300

Altitude Capability Data(Corrected Power Altitude Capability)

Ambient Operating Temp. / Altitude	50 F	68 F	86 F	104 F	122 F	NORMAL
0 FT	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,172.45 hp
984.25 FT	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,109.42 hp	2,172.45 hp
1,640.42 FT	2,172.45 hp	2,172.45 hp	2,172.45 hp	2,125.52 hp	2,059.81 hp	2,172.45 hp
3,280.84 FT	2,172.45 hp	2,137.59 hp	2,066.51 hp	2,000.8 hp	1,939.11 hp	2,109.42 hp
4,921.26 FT	2,081.26 hp	2,010.19 hp	1,944.48 hp	1,882.79 hp	1,823.79 hp	2,006.17 hp
6,561.68 FT	1,956.55 hp	1,890.84 hp	1,827.81 hp	1,770.15 hp	1,715.16 hp	1,906.93 hp
8,202.1 FT	1,838.54 hp	1,775.51 hp	1,717.85 hp	1,662.86 hp	1,610.57 hp	1,811.72 hp
9,842.52 FT	1,725.89 hp	1,666.89 hp	1,611.91 hp	1,560.95 hp	1,512.67 hp	1,720.53 hp
10,498.69 FT	1,682.98 hp	1,625.32 hp	1,571.68 hp	1,522.06 hp	1,475.12 hp	1,685.66 hp

The powers listed above and all the Powers displayed are Corrected Powers

Identification Reference and Notes

Engine Arrangement:	1282846	**Lube Oil Press @ Rated Spd(PSI):**	55.8
Effective Serial No:	6WN00803	**Piston Speed @ Rated Eng SPD(FT/Min):**	2,173.2
Primary Engine Test Spec:	2T8373	**Max Operating Altitude(FT):**	2,296.6
Performance Parm Ref:	TM5739	**PEEC Elect Control Module Ref**	
Performance Data Ref:	DM2053	**PEEC Personality Cont Mod Ref**	
Aux Coolant Pump Perf Ref:			
Cooling System Perf Ref:		**Turbocharger Model**	BTV7510-0.96
Certification Ref:		**Fuel Injector**	2563663
Certification Year:		**Timing-Static (DEG):**	--
Compression Ratio:	14.0	**Timing-Static Advance (DEG):**	--
Combustion System:	DI	**Timing-Static (MM):**	--
Aftercooler Temperature (F):	194	**Unit Injector Timing (MM):**	64.3
Crankcase Blowby Rate(CFH):	2,171.9	**Torque Rise (percent)**	--
Fuel Rate (Rated RPM) No Load(Gal/HR):	11.8	**Peak Torque Speed RPM**	--
Lube Oil Press @ Low Idle Spd(PSI):	20.0	**Peak Torque (LB.FT):**	--

Alternate **Pit #1** or Pit #2 **Plant**

Engine CAT 3512

31-0002

EMISSIONS DATA [24Z09726] ***JANUARY 15, 2019***

For Help Desk Phone Numbers Click here (/tmi/tmihome/TMIContactInfo.htm)

TMI Emissions Data Survey (https://www.caterpillarsurveys.com/se.aspx?s=4F5AA3C87FC94347)

Emissions Certificates Search (https://dealer.cat.com/en/products/standards-regulations/emissions-certificates.html)

Engine Emissions Data

For Emissions / Certification feedback and questions, please submit a ticket via our ERC Request Portal (https://ercrequestspilotprogram.atlassian.net/servicedesk/customer/portal/2)

This emission data is Caterpillar's best estimate for this rating. If actual emissions are required then an emission test needs to be run on your engine.

Serial Number (Machine)	
Serial Number (Engine)	**24Z09726**
Sales Model	3512
Regulatory Build Date	01-JUN-2000
As Shipped Data	
Engine Arrangement Number	2W8405
Certification Arrangement	
Test Spec Number	0T6411

Regulatory Status	Please Contact Engine Certification using Request portal (https://ercrequestspilotprogram.atlassian.net/servicedesk/customer/portal/2/create/25)
Current Flash file	No Flash File Found
CORR FL Power at RPM	1,604 HP (1,196.0 KW)1800 RPM
Advertised Power	1,447 HP 1,800RPM

Disclaimer: The information provided has been compiled from third party sources and is accurate to the best of Caterpillar's knowledge. However, Caterpillar cannot guarantee the accuracy, completeness, or validity of the information and is not liable for any errors or omissions contained therein. All information provided should be independently verified and confirmed, including by examining the emissions label located on the engine.

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INITIAL COMPLIANCE TEST REPORT

FROM ONE

CATERPILLAR 3512

RECIPROCATING INTERNAL COMBUSTION ENGINE

IN SERVICE AT THE

MSCI HMA #3

PREPARED FOR

MOUNTAIN STATES CONSTRUCTORS

NEW MEXICO ENVIRONMENT DEPARTMENT
AIR QUALITY BUREAU PERMIT NUMBERS
GCP-3-8180

TEST DATE: FEBRUARY 25, 2019

PREPARED BY

COMPLIANCE SERVICES AND TESTING, LLC

PROJECT NUMBER: 1899

COMPLIANCE SERVICES & TESTING
P.O. Box 94191-87199
7108 Washington St. NE
Suite A
Albuquerque, NM 87109
(505) 681-4909 Phone
www.comptesting.com

March 1, 2019

Mr. Henry Smith
Mountain States Constructors
3601 Pan American Frwy NE #111
Albuquerque, NM 87107

Re: Emissions testing at MSCI HMA #3

Mr. Smith,

On February 25, 2019, exhaust emissions testing was performed on a Caterpillar 3512 engine in service at the MSCI HMA #3. The engine is used to power the plant. The testing was conducted to determine its compliance status NMED-AQB GCP-3-8180 permit. The generator engine is identified as follows:

Engine Information	
Manufacturer	Caterpillar
Model Number	3512
Unit Number	31-0002
Serial Number	24Z09726
Rated Kilowatt	1000
Rated Speed	1800

The testing followed procedures found the in NMED "ASTM D6522-00 Performance Testing." The mass emission rates were calculated using the exhaust concentrations and the exhaust flow rate determined by EPA Method 2 (velocity head pressures). The theoretical moisture content at the observed oxygen concentration was stoichiometrically calculated using Method 19.
The exhaust flow rates are in terms of pounds per hour and tons per year. Three 10-minute Method 9 opacity readings were performed on the engine.

The test matrix consisted of three 20-minute test runs on engine exhaust in accordance with 40CFR60.8 requirements. Stack gas entered the system through a stainless-steel probe with an in-line filter. The sample was delivered

Summary of Results
Unit #: 31-0002

Company: Mountain States Constructors
Location: MSCI HMA #3
Source: Caterpillar 3512 SN: 24Z09726
Engine Site Rating: 1341 Hp @ 1800 RPM
Generator Rating: 1000 KW @ 1800 RPM
Technician: JC

Test Run Number	***1***	***2***	***3***	
Unit Number	**31-0002**	**31-0002**	**31-0002**	
Date	2/25/19	2/25/19	2/25/19	
Start Time	12:10	12:35	13:00	
Stop Time	12:30	12:55	13:20	
Engine/Compressor Operation				***Average***
Engine Speed (rpm)	1800	1800	1800	**1800**
Load (%)	93	93	93	**93**
Engine Horsepower (Hp)	1247	1247	1247	**1247**
Generator Wattage (kW)	930	930	930	**930**
Voltage (V)	480.0	480.0	480.0	**480.0**
Amperage (A) (3 phase)	1120	1120	1120	**1120.0**
Frequency (Hz)	60	60	60	**60.0**
Fuel Data				
Calculated Fuel Consumption (Gal/Hr)	77.9	77.9	77.9	**77.9**
O2 F-Factor (DSCF/MMBtu, HHV basis)	9190	9190	9190	**9190**
Fuel Heating Value (Btu/gal, HHV)	136000	136000	136000	**136000**
BHp Specific Fuel Rate (Btu/Hp-hr, HHV basis)	8500	8500	8500	**8500**
Ambient Conditions				
Pressure Altitude (MSL)	5220	5220	5220	**5220**
Atmospheric Pressure ("Hg)	24.72	24.72	24.72	**24.72**
Dry Bulb Temperature (°F)	49.0	52.0	53.0	**51.3**
Wet Bulb Temperature (°F)	39.3	41.3	41.6	**40.7**
Humidity (lb/lb air)	0.0039	0.0041	0.0040	**0.0040**
Measured Exhaust Emissions (Corrected)				***Average***
NOx (ppmv)	1129.00	962.96	973.99	**1021.98**
CO (ppmv)	600.13	572.16	584.82	**585.71**
O2 (vol %)	8.23	8.15	8.16	**8.18**
CO2 (vol %)	9.34	9.35	9.38	**9.36**
Fo (Distillate #2 Fuel Oil)	1.36	1.36	1.36	**1.36**
Opacity (%) **{Limit = 7%}**	5.0	5.0	5.0	**5.0**
Exhaust Flow Rates (EPA Method 2)				
SCF/Min (dry basis, calc. from meas. stack velocity)	863.9	869.4	878.1	**870.5**
SCF/Hr (dry basis, calc. from meas. stack velocity)	51,834	52,165	52,685	**52,228**
Calculated Mass Emission Rates (Pitot Tube: EPA Method 2)				
NOx (lbs/hr)	6.99	6.00	6.13	**6.37**
CO (lbs/hr)	2.26	2.17	2.24	**2.22**
*NOx (tons/yr) **{Facility Wide Limit = 95}**	30.61	26.28	26.84	**27.91**
*CO (tons/yr) **{Facility Wide Limit = 95}**	9.91	9.50	9.81	**9.74**

***Based upon 8760 hours/year.**

GEN SET PERFORMANCE DATA [24Z09726]

JANUARY 15, 2019

For Help Desk Phone Numbers Click here

Performance Number: TM8946 **Change Level:** 12

Sales Model: 3512 DITA **Combustion:** DI **Aspr:** TA
Engine Power:
1010 W/O F EKW 1,447 HP **Speed:** 1,800 RPM **After Cooler:** JWAC
Manifold Type: DRY **Governor Type:** WDWRD **After Cooler Temp(F):** 180
Turbo Quantity: **Engine App:** GS **Turbo Arrangement:**
Hertz: 60 **Application Type:** GEN SET-DIE **Engine Rating:** GS **Strategy:**
Rating Type: PRIME **Certification:**

General Performance Data

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	ENGINE BMEP PSI	FUEL BSFC LB/BHP-HR	FUEL RATE GPH	INTAKE MFLD TEMP DEG F	INTAKE MFLD P IN-HG	INTAKE AIR FLOW CFM	EXH MFLD TEMP DEG F	EXH STACK TEMP DEG F	EXH GAS FLOW CFM
1,010	100	1430	199.28	0.35	70.59	190.4	52.47	3,238.36	1,114.34	854.78	8,267.17
909	90	1285	179.12	0.35	63.93	187.52	45.31	2,984.09	1,074.02	844.88	7,557.35
808	80	1142	159.11	0.35	57.43	185.36	38.5	2,743.95	1,037.3	832.1	6,875.77
757.5	75	1070	149.1	0.35	54.21	184.28	35.15	2,623.88	1,019.66	825.26	6,540.28
707	70	999	139.24	0.36	51.01	183.38	31.89	2,507.34	1,002.2	817.7	6,208.32
606	60	857	119.51	0.36	44.7	181.58	25.56	2,277.8	967.46	800.42	5,555
505	50	717	99.79	0.38	38.41	179.06	19.4	2,044.72	923	780.62	4,905.21
404	40	579	80.79	0.39	32.33	176.72	13.77	1,825.77	867.2	754.52	4,280.14
303	30	439	61.21	0.42	26.15	174.2	8.44	1,606.82	798.26	720.32	3,655.07
252.5	25	368	51.34	0.44	23.04	172.94	6.19	1,515	755.06	691.16	3,358.43
202	20	296	41.19	0.47	19.89	171.86	4.26	1,437.31	705.2	652.46	3,079.44
101	10	150	20.89	0.63	13.58	170.06	1.15	1,306.64	588.74	555.26	2,539.13

Engine Heat Rejection Data

GEN PWR EKW	PERCENT LOAD	REJ TO JW BTU/MN	REJ TO ATMOS BTU/MN	REJ TO EXHAUST BTU/MN	EXH RCOV TO 350F BTU/MN	FROM OIL CLR BTU/MN	FROM AFT CLR BTU/MN	WORK ENERGY BTU/MN	LHV ENERGY BTU/MN	HHV ENERGY BTU/MN
1,010	100	36,226.1	6,653.8	58,121.0	30,596.0	8,075.5	7,620.6	60,680.2	151,501.4	161,396.7
909	90	32,700.2	6,426.3	52,604.6	27,581.9	7,336.2	5,743.9	54,481.3	137,227.0	146,155.6
808	80	29,288.0	6,198.8	47,315.7	24,624.7	6,540.0	4,094.6	48,396.3	123,237.0	131,312.5
757.5	75	27,581.9	6,085.1	44,756.6	23,202.9	6,198.8	3,412.2	45,382.2	116,355.8	123,976.3
707	70	25,932.7	6,028.2	42,197.4	21,781.2	5,800.7	2,729.8	42,368.1	109,474.5	116,640.1
606	60	22,634.2	5,800.7	37,192.9	18,994.5	5,118.3	1,592.4	36,339.9	95,882.6	102,138.3
505	50	19,449.5	5,573.2	32,245.2	16,264.8	4,379.0	625.6	30,368.5	82,404.5	87,807.1
404	40	16,321.7	5,402.6	27,581.9	13,535.0	3,696.5	-170.6	24,567.8	69,381.3	73,930.8
303	30	13,193.8	5,175.2	22,804.8	10,862.2	3,014.1	-739.3	18,653.3	56,130.6	59,770.2
252.5	25	11,601.5	5,061.4	20,416.3	9,383.5	2,616.0	-966.8	15,582.3	49,419.9	52,661.5
202	20	10,009.1	4,947.7	18,027.8	7,791.2	2,274.8	-1,137.4	12,568.2	42,709.3	45,495.9
101	10	6,767.5	4,720.2	13,193.8	4,720.2	1,535.5	-1,364.9	6,369.4	29,117.4	31,051.0

REFERENCE EXHAUST STACK DIAMETER	10 IN
WET EXHAUST MASS	14,762.1 LB/HR
WET EXHAUST FLOW (854.60 F STACK TEMP)	8,274.23 CFM
WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	3,091.00 STD CFM
DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	2,831.53 STD CFM
FUEL FLOW RATE	70 GAL/HR

RATED SPEED "Potential site variation"

EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,010	100	1430	35.5200	5.1800	1.2100	.6200	11.6000	2.8000	1.2800
757.5	75	1285	26.8200	3.3100	1.3000	.5200	12.3000	2.9000	1.2900
505	50	1142	17.6900	2.6400	1.1300	.7100	13.0000	3.3000	1.3000
252.5	25	1070	9.1300	2.7500	1.1500	.7300	14.2000	4.8000	1.4200
101	10	999	4.6200	3.1100	1.3200	.5400	15.4000	5.9000	1.5300

RATED SPEED "Nominal Data"

EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	TOTAL CO2 LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,010	100	1430	29.6000	2.8800	.9100	1,609.4	.4400	11.6000	2.8000	1.2800
757.5	75	1070	22.3500	1.8400	.9800	1,220.4	.3700	12.3000	2.9000	1.2900
505	50	717	14.7400	1.4700	.8500	863.5	.5100	13.0000	3.3000	1.3000
252.5	25	368	7.6100	1.5300	.8600	512.9	.5200	14.2000	4.8000	1.4200
101	10	150	3.8500	1.7300	.9900	296.4	.3800	15.4000	5.9000	1.5300

Altitude Capability Data(Corrected Power Altitude Capability)

Ambient Operating Temp. / Altitude	50 F	68 F	86 F	104 F	122 F	NORMAL
0 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
984.25 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
1,640.42 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
3,280.84 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
4,921.26 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp
6,561.68 FT	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,446.96 hp	1,404.05 hp	1,446.96 hp
8,202.1 FT	1,446.96 hp	1,446.96 hp	1,406.73 hp	1,361.14 hp	1,319.56 hp	1,446.96 hp
9,842.52 FT	1,413.44 hp	1,365.16 hp	1,320.9 hp	1,277.99 hp	1,239.1 hp	1,409.41 hp
10,498.69 FT	1,378.57 hp	1,331.63 hp	1,287.38 hp	1,245.81 hp	1,206.92 hp	1,379.91 hp

Alternate **Pit #1** or Pit #2 **Plant**

Engine CAT 3512

31-9701

NEW MEXICO ENVIRONMENT DEPARTMENT
AIR QUALITY BUREAU PERMIT NUMBER GCP-2-6894
EMISSIONS TEST REPORT

FROM ONE:

CATERPILLAR 3612 DITA
COMPRESSION IGNITION COMBUSTION ENGINE

IN SERVICE AT THE:

GAGE PIT

PREPARED FOR:

MOUNTAIN STATES CONSTRUCTORS INCORPORATED

TEST DATE:

DECEMBER 19, 2024

PREPARED BY:

COMPLIANCE SERVICES AND TESTING, LLC

PROJECT NUMBER:

2726

COMPLIANCE SERVICES & TESTING
P.O. Box 94191-87199
7108 Washington St. NE
Suite A
Albuquerque, NM 87109
(505) 681-4909 Phone
www.comptesting.com

January 2, 2025

Mr. Neil Jackson
Mountain State Constructors, Inc.
3601 Pan American Freeway, #111
Albuquerque, NM 87107

Re: Emissions testing at the Gage Pit Crusher

Mr. Jackson,

On December 19, 2024, exhaust emissions testing was performed on a Caterpillar 3512 DITA diesel generator engine in service at the MSCI Gage Pit located near Deming, NM. The testing was conducted to determine its compliance status NMED-AQB GCP-2-6894 permit. The generator engine is identified as follows:

Engine Informatoin	
Manufacturer	Caterpillar
Model Number	3512 DITA
Unit Number	31-9701
Serial Number	3MS00159
Rated Horsepower	1818
Rated Speed	1800

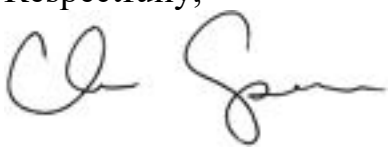
The testing followed procedures found the in the ASTM D6522-00 Performance Testing protocol. The exhaust flow rate for the diesel generator engine was determined by using EPA Method 19. The theoretical moisture content at the observed oxygen concentration was stoichiometrically calculated using Method 19. The mass emission rates are reported in terms of pounds per hour. Three 10-minute Method 9 opacity readings were performed on the engine concurrent with the gaseous test.

The test matrix consisted of three 20-minute test runs on engine exhaust in accordance with 40CFR60.8 requirements. Stack gas entered the system through a stainless-steel probe with an in-line filter. The sample was delivered

to the instrument via a specially designed manifold that allowed for uninterrupted continuous sampling that did not vary by more than 10%. CST personnel recorded engine operational data such as engine speed from engine control panel. The percent load was determined by the exhaust flow rate and oxygen content.

A summary of the results is presented in the appendix and is in tabular format. This table includes emission concentrations, engine and generator operational data, and mass emission rates in terms of pounds per hour and tons per year (based on 4380 hours per year). The quality assurance and control results associated with the ASTM method is also presented in tabular format in the appendix. Examples of these procedures include multipoint calibrations, instrument linearization checks, zero and span bias calibrations, and analyzer interference test results. The appendix also includes field data sheets, the datalog record, example calculations, calibration gas certifications, instrument detection principles and limits, and a sampling system diagram.

Respectfully,



Chris Spencer
Compliance Services & Testing

Summary of Results
Gage Pit - Unit #31-9701

Company: Mountain States Constructors Inc.
Location: Gage Pit
Source: Caterpillar 3512 DITA
Engine Serial Number: 3MS00159
Engine Site Rating: 1818 HP @ 1800 RPM
Generator Rating: 1250 kW @ 1800 RPM
Technician: CS

Test Run Number	***1***	***2***	***3***	
Emission Unit Number	**31-9701**	**31-9701**	**31-9701**	
Date	12/19/24	12/19/24	12/19/24	
Start Time	10:39	11:00	11:21	
Stop Time	10:59	11:20	11:41	
Engine / Generator Operational Parameters				***Average***
Load (%)	35.8	36.6	37.0	**36.5**
Engine Speed (rpm)	1827	1829	1837	**1831.0**
Horsepower (Hp)	448.0	457.3	462.9	**456.1**
Generator Wattage (kW)	320	411	312	**347.7**
Voltage (V)	480	480	479	**479.7**
Amperage (A) (3 phase)	703	742	634	**693.0**
Power Factor	0.55	0.54	0.54	**0.54**
Frequency (Hz)	60.9	61.1	60.6	**60.9**
Fuel Data				
Calculated Fuel Consumption (Gal/Hr)	24.0	24.5	24.8	**24.4**
O2 F-Factor (DSCF/MMBtu, HHV basis)	9,190	9,190	9,190	**9,190**
Fuel Heating Value (Btu/gal, HHV)	140,000	140,000	140,000	**140,000**
BHp Specific Fuel Rate (Btu/Hp-hr, HHV basis)	7,500	7,500	7,500	**7,500**
Ambient Conditions				
Pressure Altitude (MSL)	4420	4420	4420	**4420**
Atmospheric Pressure ("Hg)	25.47	25.47	25.47	**25.47**
Dry Bulb Temperature (°F)	58.5	58.5	58.5	**58.5**
Wet Bulb Temperature (°F)	48.5	48.5	48.5	**48.5**
Humidity (lb/lb air)	0.0061	0.0061	0.0061	**0.0061**
Measured Exhaust Emissions				
NOx (ppmv)	508.86	387.29	337.43	**411.19**
CO (ppmv)	43.76	201.57	324.95	**190.10**
O2 (vol %)	16.89	16.86	16.91	**16.89**
CO2 (vol % - Calculated from Fo = 1.36)	2.95	2.97	2.94	**2.95**
Opacity (%) **{Limit = 10%}**	0.00	0.00	0.00	**0.00**
Exhaust Flow Rates (EPA Method 19)				
Dry Standard Cubic Feet per Minute	2,685.16	2,718.16	2,784.26	**2,729.19**
Dry Standard Cubic Feet per Hour	161,109	163,089	167,056	**163,752**
Calculated Mass Emission Rates				
NOx (lbs/hr)	9.79	7.54	6.73	**8.02**
CO (lbs/hr)	0.51	2.39	3.95	**2.28**
NOx (tons/yr) **{4380 hours/year}**	21.44	16.52	14.74	**17.57**
CO (tons/yr) **{4380 hours/year}**	1.12	5.23	8.64	**5.00**

CATERPILLAR®

GEN SET PACKAGE PERFORMANCE DATA [3MS00159]

OCTOBER 25, 2024

For Help Desk Phone Numbers Click here

Performance Number: DM2083

Change Level: 03

Sales Model: 3512 DITA
Combustion: DI
Aspr: TA
Engine Power: 1250 W/F EKW 1252 W/O F EKW 1,818 HP
Speed: 1,800 RPM
After Cooler: JWAC
Manifold Type: DRY
Governor Type: ADEM
After Cooler Temp(F): 180
Turbo Quantity: 2
Engine App: GP
Turbo Arrangement: Parallel
Hertz: 60
Application Type: PACKAGE-DIE
Engine Rating: PGS
Strategy:
Rating Type: STANDBY
Certification:

General Performance Data

GEN W/F EKW	PERCENT LOAD	ENGINE POWER BHP	ENGINE BMEP PSI	FUEL BSFC LB/BHP-HR	FUEL RATE GPH	INTAKE MFLD TEMP DEG F	INTAKE MFLD P IN-HG	INTAKE AIR FLOW CFM	EXH MFLD TEMP DEG F	EXH STACK TEMP DEG F	EXH GAS FLOW CFM
1,250	100	1786	248.89	0.33	85.2	208.04	62.87	3,665.67	1,186.52	861.98	9,524.38
1,125	90	1606	223.8	0.33	76.53	204.08	56.98	3,450.25	1,134.32	827.6	8,715.67
1,000	80	1428	198.99	0.33	68.31	200.48	49.84	3,178.32	1,094.18	806.18	7,882.24
937.5	75	1339	186.52	0.34	64.3	199.04	45.96	3,026.47	1,074.2	798.44	7,469.06
875	70	1251	174.19	0.34	60.34	197.78	42.11	2,878.15	1,054.4	791.24	7,062.94
750	60	1074	149.68	0.34	52.6	195.44	34.41	2,581.5	1,014.44	779.36	6,264.83
625	50	899	125.31	0.35	45.07	193.64	27.13	2,288.39	968.18	769.1	5,498.5
500	40	728	101.38	0.36	37.78	192.2	20.37	2,009.41	915.98	758.66	4,774.55
375	30	555	77.31	0.38	30.41	190.94	14.33	1,755.14	846.14	733.46	4,075.32
312.5	25	468	65.12	0.4	26.71	190.4	11.61	1,638.6	804.38	714.74	3,739.83
250	20	380	52.94	0.42	23.01	189.86	9.15	1,536.19	756.86	688.28	3,414.93
125	10	204	28.43	0.54	15.64	189.14	5.15	1,370.21	641.12	603.14	2,814.58

MECHANICAL Sound Data: 49.21 FEET

GEN W/F EKW	PERCENT LOAD	OVERALL SOUND DB(A)	OBCF 63HZ DB	OBCF 125HZ DB	OBCF 250HZ DB	OBCF 500HZ DB	OBCF 1000HZ DB	OBCF 2000HZ DB	OBCF 4000HZ DB	OBCF 8000HZ DB
1,250	100	88	104	95	87	81	82	83	80	84
1,125	90	88	104	95	87	81	82	83	80	84
1,000	80	88	104	95	87	81	82	83	80	84
937.5	75	88	104	95	87	81	82	83	80	84
875	70	88	104	95	87	81	82	83	80	84
750	60	88	104	95	87	81	82	83	80	84
625	50	88	104	95	87	81	82	83	80	84
500	40	88	104	95	87	81	82	83	80	84
375	30	88	104	95	87	81	82	83	80	84
312.5	25	88	104	95	87	81	82	83	80	84
250	20	88	104	95	87	81	82	83	80	84
125	10	87	104	95	86	80	80	81	78	82

EMISSIONS DATA

Certification:

To properly apply this data you must refer to performance parameter DM1176 for additional information...

REFERENCE EXHAUST STACK DIAMETER	10 IN
WET EXHAUST MASS	16,856.5 LB/HR
WET EXHAUST FLOW (861.80 F STACK TEMP)	9,531.44 CFM
WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	3,476.00 STD CFM
DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	3,184.33 STD CFM
FUEL FLOW RATE	85 GAL/HR

RATED SPEED "Potential site variation"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,250	100	1786	69.8800	4.1900	1.6000	.2700	10.0000	.3000	1.2800
937.5	75	1339	46.9400	2.9500	1.1200	.2400	11.0000	.5000	1.2800
625	50	899	35.4600	2.4400	.8400	.2000	11.8000	.8000	1.2800
312.5	25	468	21.4900	2.0900	.7100	.1600	13.4000	1.1000	1.2800
125	10	204	11.7800	2.4000	.8600	.1300	15.7000	.9000	1.2800

RATED SPEED "Nominal Data"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	TOTAL CO2 LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT	DRY SMOKE OPACITY PERCENT	BOSCH SMOKE NUMBER
1,250	100	1786	58.2300	2.3300	1.2000	1,822.1	.1900	10.0000	.3000	1.2800
937.5	75	1339	39.1100	1.6400	.8500	1,378.9	.1700	11.0000	.5000	1.2800
625	50	899	29.5500	1.3600	.6300	967.4	.1400	11.8000	.8000	1.2800
312.5	25	468	17.9100	1.1600	.5300	573.9	.1100	13.4000	1.1000	1.2800
125	10	204	9.8200	1.3300	.6500	336.9	.0900	15.7000	.9000	1.2800

ENGINE TEST [3MS00159]

DECEMBER 02, 2024

For Help Desk Phone Numbers Click here

Sales Model: 3512
Tested Date: 08Sep1997
Plant: Lafayette

TMI Load Date: 08Sep1997
Shipped Date: 18Sep1997
Cell Number: 509

Built Date: 04Sep1997
Tested: B

Show 50 **entries** **Search:**

Test Element	Eng Updates	Test Value	Test Spec Value	Measure
Spec Number		2T9742	2T9742	
Arrangement Number		1295490	1295490	
Corr Fl Power		1,878	1,871	HP
Speed		1,800	1,800	RPM
COR FL FUEL RATE		89.4	90.0	GAL/HR
CSFC		0.337	0.340	LB/HP-HR
Adj Boost		65.0	65.7	IN HG
Fuel Pressure		76	71	PSI
Oil Pressure		61	59	PSI
TQ COR FUEL RATE		90.0	88.9	GAL/HR
TQ CK CSFC		0.333	0.337	LB/HP-HR
TQ CK ADJ BST		66.3	65.4	IN HG
Torq Ck Speed		1,700	1,700	RPM
TQ CK COR TQ		5,899	5,764	LB.FT
Low Idle Speed		900	900	RPM
Low Idle Oil Pressure		55	51	PSI
High Idle Speed		1,818	1,818	RPM
FL Static Fuel Setting		0.984	0.984	IN
FT Static Fuel Setting		1.016	1.016	IN
Full Load Setting(FLS) Intercept		0	0	
Full Torque Setting(FTS) Slope		0	0	

Showing 1 to 21 of 21 entries

Previous 1 Next

	Value	Unit
Advertised Power	1,818	HP
Advertised Speed	1,800	RPM

Caterpillar Confidential: **Green**
Content Owner: Commercial Processes Division
Web Master(s): PSG Web Based Systems Support
Current Date: 12/2/2024, 2:15:07 PM
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RAP Plant Engine

CUMMINS QSX15-G9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2023 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Cummins Inc.**
(U.S. Manufacturer or Importer)

Certificate Number: PCEXL015.AAJ-055

Effective Date: 10/06/2022

Expiration Date: 12/31/2023

Byron J. Bunker, Division Director
Compliance Division

Issue Date: 10/06/2022

Revision Date: N/A

Model Year: 2023
Manufacturer Type: Original Engine Manufacturer
Engine Family: PCEXL015.AAJ

Mobile/Stationary Indicator: Stationary
Emissions Power Category: 560<kW<=2237
Fuel Type: Diesel
After Treatment Devices: No After Treatment Devices Installed
Non-after Treatment Devices: Electronic Control

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

2023 EPA Tier 2 Exhaust Emission Compliance Statement
500DFEK
Stationary Emergency
60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 2 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII.

Engine Manufacturer:	Cummins Inc.
EPA Certificate Number:	PCEXL015.AAJ-055
Effective Date:	10/06/2022
Date Issued:	10/06/2022
EPA Engine Family (Cummins Emissions Family):	PCEXL015.AAJ

Engine Information:

Model:	QSX/QSX15/QSX15-G/QSX15-G9	Bore:	5.39 in. (137 mm)
Engine Nameplate HP:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	912 cu. in. (15 liters)
Aspiration:	Turbocharged and CAC	Compression ratio:	17.0:1
Emission Control Device:	Electronic Control	Exhaust stack diameter:	8 in. (203 mm)

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions

	Grams per BHP-hr			Grams per kWm-hr		
	NO_X + NMHC	CO	PM	NO_X + NMHC	CO	PM
EPA Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20

Test methods: EPA emissions recorded per 40 CFR Part 60, 89, 1039, 1065 and weighted at load points prescribed in the regulations for constant speed engines.

Diesel fuel specifications: Cetane number: 40-50, Reference: ASTM D975 No. 2-D, 300-500 ppm Sulfur

Reference conditions: Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NOx correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to a maximum allowable limit..

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

Generator set data sheet

Model:	**DFEK**
Frequency:	**60 Hz**
Fuel type:	**Diesel**
kW rating:	**500 Standby**
	455 Prime
Emissions level:	**EPA NSPS Stationary Emergency Tier 2**

Exhaust emission data sheet:	**EDS-173**
Exhaust emission compliance sheet:	**EPA-1005**
Sound performance data sheet:	**MSP-177**
Cooling performance data sheet:	**MCP-105**
Prototype test summary data sheet:	**PTS-145**
Standard set-mounted radiator cooling outline:	**0500-3326**
Optional set-mounted radiator cooling outline:	
Optional heat exchanger cooling outline:	
Optional remote radiator cooling outline:	

Fuel consumption

	Standby				**Prime**				**Continuous**
	kW (kVA)				**kW (kVA)**				**kW (kVA)**
Ratings	500 (625)				455 (569)				
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**	**Full**
US gph	11.6	18.8	25.7	34.4	10.9	17.6	23.7	30.4	
L/hr	44	71	97	130	41	67	90	115	

Engine

	Standby rating	**Prime rating**	**Continuous rating**
Engine manufacturer	Cummins Inc.		
Engine model	QSX15-G9		
Configuration	Cast iron with replaceable wet cylinder liners, in-line 6 cylinder		
Aspiration	Turbocharged with air-to-air charge air-cooling		
Gross engine power output, kWm (bhp)	563.0 (755.0)	507.3 (680.0)	
BMEP at set rated load, kPa (psi)	2433.9 (353.0)	2213.2 (321.0)	
Bore, mm (in.)	136.9 (5.39)		
Stroke, mm (in.)	168.9 (6.65)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	10.1 (1995.0)		
Compression ratio	17.0:1		
Lube oil capacity, L (qt)	83.3 (88.0)		
Overspeed limit, rpm	2150 ± 50		
Regenerative power, kW	52.00		

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Fuel flow	Standby rating	Prime rating	Continuous rating
Maximum fuel flow, L/hr (US gph)	423.9 (112.0)		
Maximum inlet restriction, mm Hg (in Hg)	127.0 (5.0)		
Maximum return restriction, mm Hg (in Hg)	165.1 (6.5)		

Air

Combustion air, m^3/min (scfm)	41.6 (1470.0)	38.8 (1370.0)	
Maximum air cleaner restriction, kPa (in H_2O)	6.2 (25.0)		
Alternator cooling air, m^3/min (scfm)	62.0 (1290.0)		

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	102.6 (3625.0)	88.7 (3135.0)	
Exhaust temperature, °C (°F)	482.8 (901.0)	466.7 (872.0)	
Maximum back pressure, kPa (in H_2O)	10.2 (41.0)		

Standard set-mounted radiator cooling

Ambient design, °C (°F)	40 (104)		
Fan load, kW_m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m^3/min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional set-mounted radiator cooling

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m^3/min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional heat exchanger cooling

Set coolant capacity, L (US Gal.)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, after-cooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, after-cooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US gal/min)			
Maximum raw water flow, after-cooler circuit, L/min (US gal/min)			
Maximum raw water flow, fuel circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, after-cooler circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)			

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VOLUME II: CHAPTER 3

PREFERRED AND ALTERNATIVE METHODS FOR ESTIMATING AIR EMISSIONS FROM HOT-MIX ASPHALT PLANTS

Final Report

July 1996

Prepared by:
Eastern Research Group, Inc.
Post Office Box 2010
Morrisville, North Carolina 27560

Prepared for:
Point Sources Committee
Emission Inventory Improvement Program

In the counterflow drum mixing process, the aggregate is proportioned through a cold feed system prior to introduction to the drying process. As opposed to the parallel flow drum mixing process though, the aggregate moves opposite to the flow of the exhaust gases. After drying and heating take place, the aggregate is transferred to a part of the drum that is not exposed to the exhaust gas and coated with asphalt cement. This process prevents stripping of the asphalt cement by the hot exhaust gas. If RAP is used, it is usually introduced into the coating chamber.

2.2 EMISSION SOURCES

Emissions from HMA plants derive from both controlled (i.e., ducted) and uncontrolled sources. Section 7 lists the source classification codes (SCCs) for these emission points.

2.2.1 MATERIAL HANDLING (FUGITIVE EMISSIONS)

Material handling includes the receipt, movement, and processing of fuel and materials used at the HMA facility. Fugitive particulate matter (PM) emissions from aggregate storage piles are typically caused by front-end loader operations that transport the aggregate to the cold feed unit hoppers. The amount of fugitive PM emissions from aggregate piles will be greater in strong winds (Gunkel, 1992). Piles of RAP, because RAP is coated with asphalt cement, are not likely to cause significant fugitive dust problems. Other pre-dryer fugitive emission sources include the transfer of aggregate from the cold feed unit hoppers to the dryer feed conveyor and, subsequently, to the dryer entrance. Aggregate moisture content prior to entry into the dryer is typically 3 percent to 7 percent. This moisture content, along with aggregate size classification, tend to minimize emissions from these sources, which contribute little to total facility PM emissions. PM less than or equal to 10 µm in diameter (PM_{10}) emissions from these sources are reported to account for about 19 percent of their total PM emissions (NAPA, 1995).

If crushing, breaking, or grinding operations occur at the plant, these may result in fugitive PM emissions (TNRCC, 1994). Also, fine particulate collected from the baghouses can be a source of fugitive emissions as the overflow PM is transported by truck (enclosed or tarped) for on-site disposal. At all HMA plants there may be PM and slight process fugitive volatile organic compound (VOC) emissions from the transport and handling of the hot-mix from the mixer to the storage silo and also from the load-out operations to the delivery trucks (EPA, 1994a). Small amounts of VOC emissions can also result from the transfer of liquid and gaseous fuels, although natural gas is normally transported in a pipeline (Gunkel, 1992, Wiese, 1995).

TABLE 3.2-1

TYPICAL HOT-MIX ASPHALT PLANT EMISSION CONTROL TECHNIQUES

Emission Source	Pollutant	Control Technique	Typical Efficiency (%)
Process	PM and PM_{10}	Cyclones	50 - 75[a,b]
		Multiple cyclones	90[c]
		Settling chamber	<50[b]
		Baghouse	99 - 99.97[a,d]
		Venturi scrubber	90 - 99.5[d,e]
	VOC	Dryer and combustion process modifications	37 - 86[f,g]
	SO_x	Limestone	50[b,e]
		Low sulfur fuel	80[c]
Fugitive dust	PM and PM_{10}	Paving and maintenance	60 - 99[g]
		Wetting and crusting agents	70[b] - 80[c]
		Crushed RAP material, asphalt shingles	70[h]

[a] Control efficiency dependent on particle size ratio and size of equipment.
[b] Source: Patterson, 1995c.
[c] Source: EIIP, 1995.
[d] Typical efficiencies at a hot-mix asphalt plant.
[e] Source: TNRCC, 1995.
[f] Source: Gunkel, 1992.
[g] Source: TNRCC, 1994.
[h] Source: Patterson, 1995a.

Emission Factors for Greenhouse Gas Inventories

Last Modified: February 13, 2024

Blue text indicates an update from the 2023 version of this document.

Typically, greenhouse gas emissions are reported in units of carbon dioxide equivalent (CO_2e). Gases are converted to CO_2e by multiplying by their global warming potential (GWP). In most cases, the emission factors listed in this document generally have not been converted to CO_2e. To do so, multiply the emissions by the corresponding GWP listed in the table below.

Gas	100-Year GWP
CH_4	28
N_2O	265

Source: Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report (AR5), 2013. See the source note to Table 11 for further explanation.

Notes:
These GWP values represent a change from the previous version of this document. In alignment with the U.S. Inventory of U.S. GHG Emissions and Sinks 1990-2021 Inventory Report, the recommended GWP values have been updated to Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report (AR5) values.

Table 1 Stationary Combustion

Fuel Type	Heat Content (HHV)	CO_2 Factor	CH_4 Factor	N_2O Factor	CO_2 Factor	CH_4 Factor	N_2O Factor
	mmBtu per short ton	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per short ton	g CH_4 per short ton	g N_2O per short
Coal and Coke							
Anthracite	25.09	103.69	11	1.6	2,602	276	40
Bituminous	24.93	93.28	11	1.6	2,325	274	40
Sub-bituminous	17.25	97.17	11	1.6	1,676	190	28
Lignite	14.21	97.72	11	1.6	1,389	156	23
Mixed (Commercial Sector)	21.39	94.27	11	1.6	2,016	235	34
Mixed (Electric Power Sector)	19.73	95.52	11	1.6	1,885	217	32
Mixed (Industrial Coking)	26.28	93.90	11	1.6	2,468	289	42
Mixed (Industrial Sector)	22.35	94.67	11	1.6	2,116	246	36
Coal Coke	24.80	113.67	11	1.6	2,819	273	40
Other Fuels - Solid							
Municipal Solid Waste	9.95	90.70	32	4.2	902	318	42
Petroleum Coke (Solid)	30.00	102.41	32	4.2	3,072	960	126
Plastics	38.00	75.00	32	4.2	2,850	1,216	160
Tires	28.00	85.97	32	4.2	2,407	896	118
Biomass Fuels - Solid							
Agricultural Byproducts	8.25	118.17	32	4.2	975	264	35
Peat	8.00	111.84	32	4.2	895	256	34
Solid Byproducts	10.39	105.51	32	4.2	1,096	332	44
Wood and Wood Residuals	17.48	93.80	7.2	3.6	1,640	126	63
	mmBtu per scf	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per scf	g CH_4 per scf	g N_2O per scf
Natural Gas							
Natural Gas	0.001026	53.06	1.0	0.10	0.05444	0.00103	0.00010
Other Fuels - Gaseous							
Blast Furnace Gas	0.000092	274.32	0.022	0.10	0.02524	0.000002	0.000009
Coke Oven Gas	0.000599	46.85	0.48	0.10	0.02806	0.000288	0.000060
Fuel Gas	0.001388	59.00	3.0	0.60	0.08189	0.004164	0.000833
Propane Gas	0.002516	61.46	3.0	0.60	0.15463	0.007548	0.001510
Biomass Fuels - Gaseous							
Landfill Gas	0.000485	52.07	3.2	0.63	0.025254	0.001552	0.000306
Other Biomass Gases	0.000655	52.07	3.2	0.63	0.034106	0.002096	0.000413
	mmBtu per gallon	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per gallon	g CH_4 per gallon	g N_2O per gallon
Petroleum Products							
Asphalt and Road Oil	0.158	75.36	3.0	0.60	11.91	0.47	0.09
Aviation Gasoline	0.120	69.25	3.0	0.60	8.31	0.36	0.07
Butane	0.103	64.77	3.0	0.60	6.67	0.31	0.06
Butylene	0.105	68.72	3.0	0.60	7.22	0.32	0.06
Crude Oil	0.138	74.54	3.0	0.60	10.29	0.41	0.08
Distillate Fuel Oil No. 1	0.139	73.25	3.0	0.60	10.18	0.42	0.08
Distillate Fuel Oil No. 2	0.138	73.96	3.0	0.60	10.21	0.41	0.08
Distillate Fuel Oil No. 4	0.146	75.04	3.0	0.60	10.96	0.44	0.09
Ethane	0.068	59.60	3.0	0.60	4.05	0.20	0.04
Ethylene	0.058	65.96	3.0	0.60	3.83	0.17	0.03
Heavy Gas Oils	0.148	74.92	3.0	0.60	11.09	0.44	0.09
Isobutane	0.099	64.94	3.0	0.60	6.43	0.30	0.06
Isobutylene	0.103	68.86	3.0	0.60	7.09	0.31	0.06
Kerosene	0.135	75.20	3.0	0.60	10.15	0.41	0.08
Kerosene-Type Jet Fuel	0.135	72.22	3.0	0.60	9.75	0.41	0.08
Liquefied Petroleum Gases (LPG)	0.092	61.71	3.0	0.60	5.68	0.28	0.06
Lubricants	0.144	74.27	3.0	0.60	10.69	0.43	0.09
Motor Gasoline	0.125	70.22	3.0	0.60	8.78	0.38	0.08
Naphtha (<401 deg F)	0.125	68.02	3.0	0.60	8.50	0.38	0.08
Natural Gasoline	0.110	66.88	3.0	0.60	7.36	0.33	0.07
Other Oil (>401 deg F)	0.139	76.22	3.0	0.60	10.59	0.42	0.08
Pentanes Plus	0.110	70.02	3.0	0.60	7.70	0.33	0.07
Petrochemical Feedstocks	0.125	71.02	3.0	0.60	8.88	0.38	0.08
Propane	0.091	62.87	3.0	0.60	5.72	0.27	0.05
Propylene	0.091	67.77	3.0	0.60	6.17	0.27	0.05
Residual Fuel Oil No. 5	0.140	72.93	3.0	0.60	10.21	0.42	0.08
Residual Fuel Oil No. 6	0.150	75.10	3.0	0.60	11.27	0.45	0.09
Special Naphtha	0.125	72.34	3.0	0.60	9.04	0.38	0.08
Unfinished Oils	0.139	74.54	3.0	0.60	10.36	0.42	0.08
Used Oil	0.138	74.00	3.0	0.60	10.21	0.41	0.08
Biomass Fuels - Liquid							
Biodiesel (100%)	0.128	73.84	1.1	0.11	9.45	0.14	0.01
Ethanol (100%)	0.084	68.44	1.1	0.11	5.75	0.09	0.01
Rendered Animal Fat	0.125	71.06	1.1	0.11	8.88	0.14	0.01
Vegetable Oil	0.120	81.55	1.1	0.11	9.79	0.13	0.01
Biomass Fuels - Kraft Pulping Liquor, by Wood Furnish							
North American Softwood		94.4	1.9	0.42			
North American Hardwood		93.7	1.9	0.42			
Bagasse		95.5	1.9	0.42			
Bamboo		93.7	1.9	0.42			
Straw		95.1	1.9	0.42			

Source:
Federal Register EPA; 40 CFR Part 98; e-CFR, (see link below). Table C-1 and Table C-2 (78 FR 71950, Nov. 29, 2013, as amended at 81 FR 89252, Dec. 9, 2016), Table AA-1 (78 FR 71965, Nov. 29, 2013).
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-98

Notes:
Emission factors are per unit of heat content using higher heating values (HHV). If heat content is available from the fuel supplier, it is preferable to use that value. If not, default heat contents are provided.
All CO_2 emission factors assume that 100 percent of the carbon content of the fuel is oxidized to CO_2, as is recommended by the Intergovernmental Panel on Climate Change (IPCC).
The CH_4 and N_2O emission factors provided represent emissions in terms of fuel type and by end-use sector (i.e., residential, commercial, industrial, electricity generation).
The factors represented in the table above represent combustion emissions only and do not represent upstream emissions.

Section 8

Map(s)

A map 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	

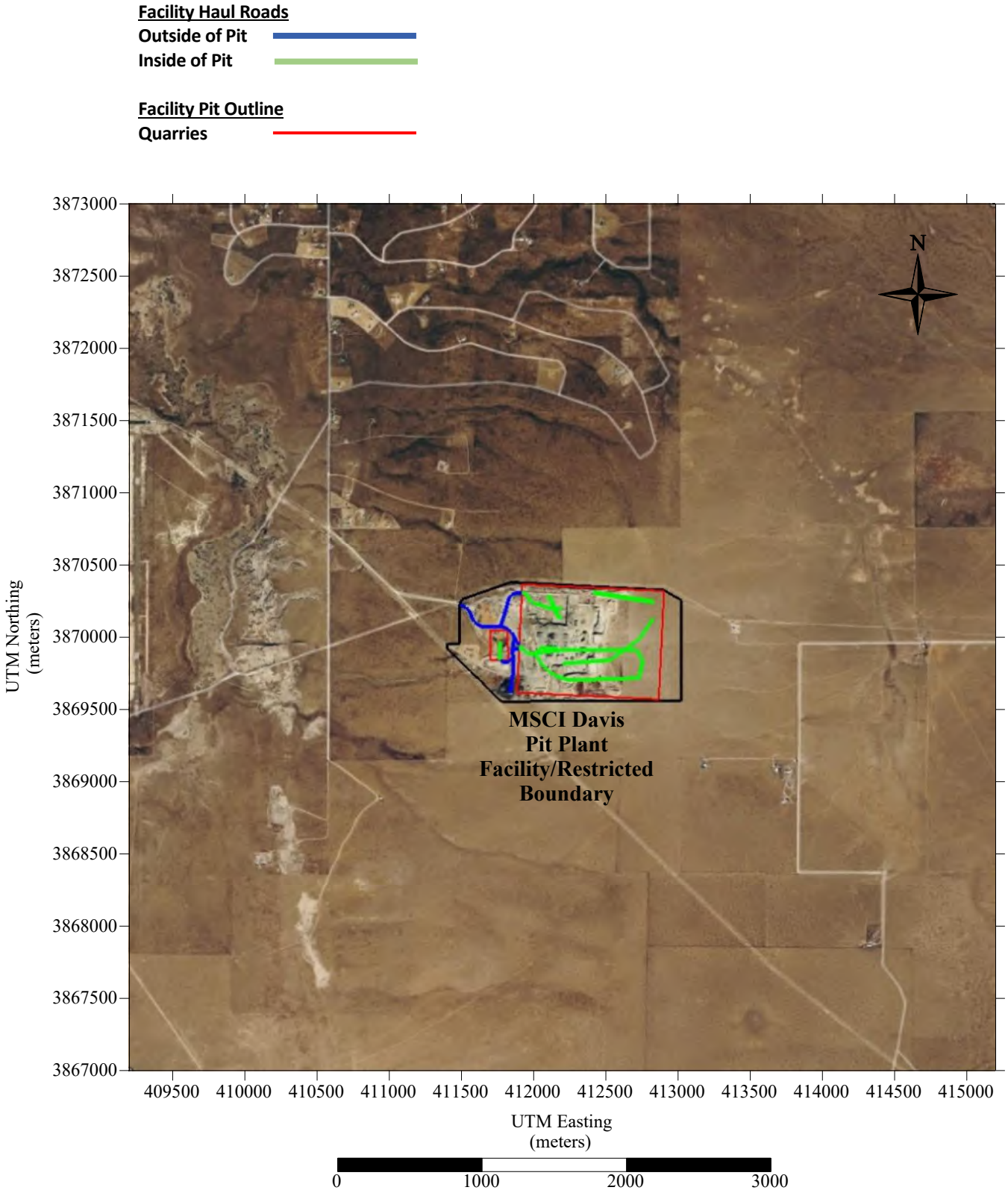


Figure 8-1: Aerial View of MSCI Davis Pit Plant and Surrounding Terrain

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☐ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

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

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

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

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

1. **X** A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
2. **X** A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
3. **X** A copy of the property tax record (20.2.72.203.B NMAC).
4. **X** A sample of the letters sent to the owners of record.
5. **X** A sample of the letters sent to counties, municipalities, and Indian tribes.
6. **X** A sample of the public notice posted and a verification of the local postings.
7. **X** A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. **X** A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
9. **X** A copy of the classified or legal 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 display 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.

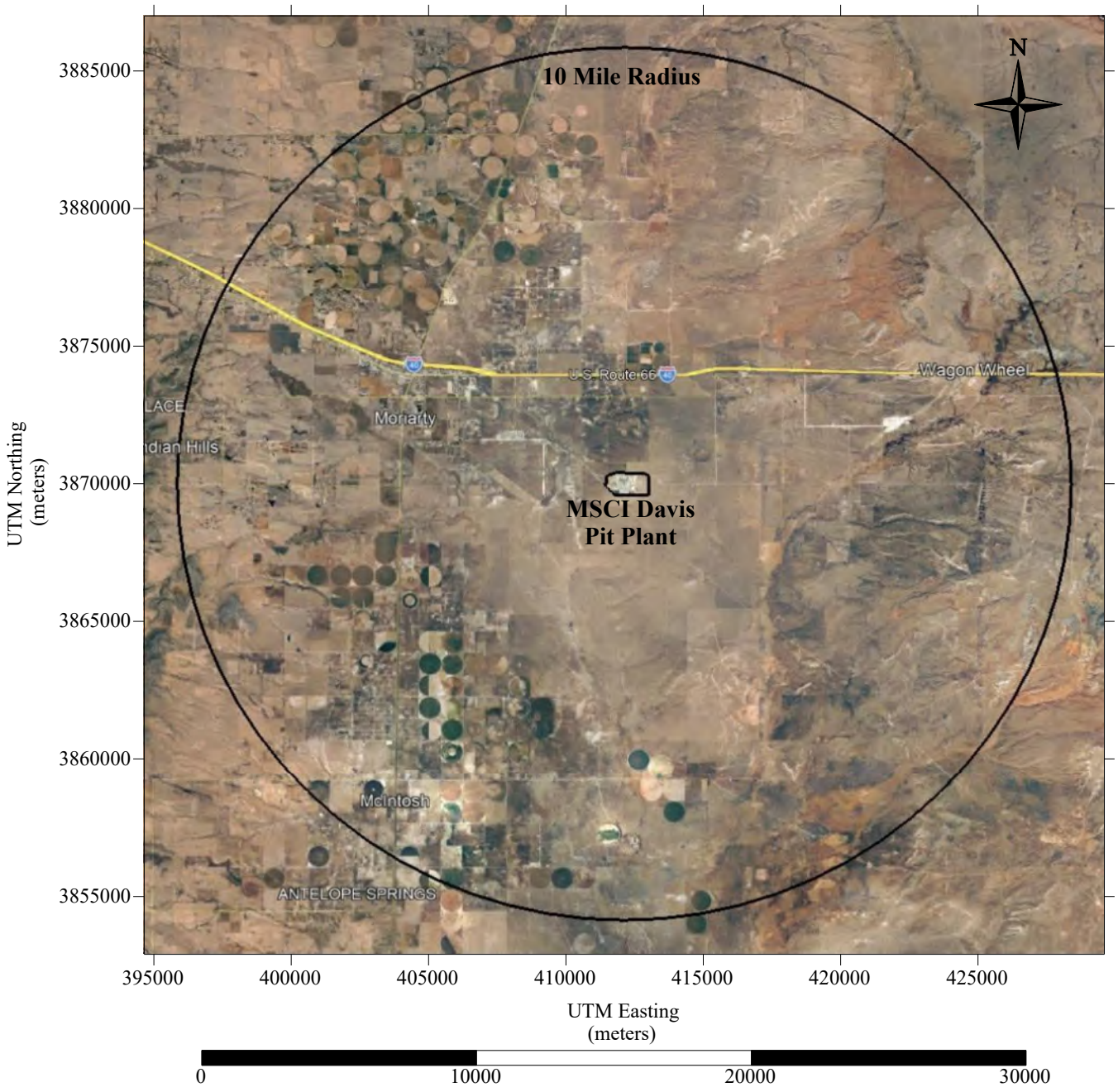


Figure 9-1: Ten-Mile Radius around Site

Government List within 10 Miles

GOVERNMENT ENTITY	GOVERNMENT REPRESENTATIVE	MAILADD	MCITY	STATE	ZIP
City of Moriarty	Emily Sanchez, City Clerk	PO Box 130	Moriarty	NM	87035-0130
Torrence County	Sylvia Chavez, County Clerk	PO Box 767	Estancia	NM	87016-0767
Santa Fe County	Katharine E. Clark, County Clerk	240 Grant Ave	Santa Fe	NM	87501-1932

Landowner List within 0.5 miles

Acct_No	OWNNAME	MAILADD	MCITY	STATE	ZIP
R011876	ALARID ANTHONY	14 CAMINO CERRO LINDO	SANTA FE	NM	87507
R012158	ALARID ANTHONY	14 CAMINO CERRO LINDO	SANTA FE	NM	87507
R012164	ALARID ANTHONY	14 CAMINO CERRO LINDO	SANTA FE	NM	87507
R012155	ALARID ANTHONY	14 CAMINO CERRO LINDO	SANTA FE	NM	87507
R012170	BARDWELL-NELSON SCHULTE W R ETUX	7201 W LAKE MEAD BLVD STE 550	LAS VEGAS	NV	891288347
R012173	BARDWELL-NELSON WINTERS RICHARD M ETAL	9020 LAZY BROOK NE	ALBUQUERQUE	NM	87113
R012171	BARWELL-NELSON SCHULTE W R ETUX	7201 W LAKE MEAD BLVD STE 550	LAS VEGAS	NV	891288347
R012133	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST	1029 EVENING PRIMROSE LN	BERNALILLO	NM	87004
R012131	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST	1029 EVENING PRIMROSE LN	BERNALILLO	NM	87004
R012128	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST	1029 EVENING PRIMROSE LN	BERNALILLO	NM	87004
R012126	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST	1029 EVENING PRIMROSE LN	BERNALILLO	NM	87004
R012161	FUNTANILLA ANTHONY C	8447 SAN RAMON DRIVE	LAS VEGAS	NV	89147
R012159	FUNTANILLA ANTHONY C	8447 SAN RAMON DRIVE	LAS VEGAS	NV	89147
R012129	GONZALES BOBBY JR & GALLEGOS VICTO	PO BOX 3602	MORIARTY	NM	87035
R016331	HENSON STANLEY & MARY LOU	PO BOX 754	MORIARTY	NM	87035
R011863	IWANCHUK FAMILY TRUST	1007 STAGECOACH RD	SANTA FE	NM	875011147
R011865	IWANCHUK FAMILY TRUST	1007 STAGECOACH RD	SANTA FE	NM	875011147
R011860	IWANCHUK FAMILY TRUST	1007 STAGECOACH RD	SANTA FE	NM	875011147
R012146	KEPNER RAYMOND	3711 LILLO ST	LAS VEGAS	NV	89103
R012141	KEPNER RAYMOND	3711 LILLO ST	LAS VEGAS	NV	89103
R012140	LA FAMILIA UNIDA TRUST	614 CUTLER AVE NW	ALBUQUERQUE	NM	87102
R012136	LA FAMILIA UNIDA TRUST	614 CUTLER AVE NW	ALBUQUERQUE	NM	87102
R012138	LUNA DIANA M	1609 FIGUEROA DR NE	ALBUQUERQUE	NM	871124608
R018665	MCCLELLAN DONNA	3984 HWY 41	STANLEY	NM	87056
R012134	MONTOYA JOSE A REV TRUST	6118 EDITH BLVD NE # 197	ALBUQUERQUE	NM	871075074
R012132	MONTOYA JOSE A REV TRUST	6118 EDITH BLVD NE # 197	ALBUQUERQUE	NM	871075074
R012130	MONTOYA MARY C	4008 DIABLO TRAIL PL NW	ALBUQUERQUE	NM	87114
R012148	MONTOYA MICHAEL D	10226 STRONG AVE	WHITTIER	CA	90601
R011851	MORIARTY LAND TRUST LLC	PO BOX 1471	MORIARTY	NM	87035
R012151	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012060	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190

Acct_No	OWNNAME	MAILADD	MCITY	STATE	ZIP
R012079	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012057	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012088	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012068	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012084	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012061	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012157	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012059	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012076	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012085	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012053	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012072	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012078	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012083	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012062	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012075	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012055	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012054	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012069	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012065	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R012063	MORIARTY LAND TRUST LLC	PO BOX 3176	ALBUQUERQUE	NM	87190
R030014	MORIARTY ROCK LLC	3601 PAN AMERICAN FREEWAY NE #111	ALBUQUERQUE	NM	87107
R018213	ORTEGA FERMIN & JENNIE	PO BOX 483	MORIARTY	NM	87035
R028271	ORTEGA FERMIN FRANKLIN	PO BOX 827	MORIARTY	NM	87035
R011867	REYNALDO MORALES REV TRUST	640 ALTA VISTA ST	SANTA FE	NM	875054191
R011869	REYNALDO MORALES REV TRUST	640 ALTA VISTA ST	SANTA FE	NM	875054191
R011871	REYNALDO MORALES REV TRUST	640 ALTA VISTA ST	SANTA FE	NM	875054191
R012163	RK INVEST GROUP LLC	500 WESTOVER DR #16223	SANFORD	NC	27330
R012166	RK INVEST GROUP LLC	500 WESTOVER DR #16223	SANFORD	NC	27330
R012165	SEGURA EDWARD & LYDIA A	1947 W WILLOW AVE	ANAHEIM	CA	92804
R012168	SEGURA EDWARD & LYDIA A	1947 W WILLOW AVE	ANAHEIM	CA	92804
R012169	SEGURA EDWARD & LYDIA A	1947 W WILLOW AVE	ANAHEIM	CA	92804
R012167	SEGURA EDWARD & LYDIA A	1947 W WILLOW AVE	ANAHEIM	CA	92804
R012150	THE MONTOYA-BEJARANO LIVING TRUST	10226 STRONG AVE	WHITTIER	CA	90601
R011870	THE MONTOYA-BEJARANO LIVING TRUST	10226 STRONG AVE	WHITTIER	CA	90601
R012154	THE MONTOYA-BEJARANO LIVING TRUST	10226 STRONG AVE	WHITTIER	CA	90601
R028957	WALLIN KENNETH L & STEVEN D	P O BOX 250	MORIARTY	NM	87035
R018672	WILLIAMS HOLDINGS LLC	PO BOX 805	EDGEWOOD	NM	87015
R012172	WINTERS RICHARD J & GRIMM VICTORIA	PO BOX 134	PERALTA	NM	87042
R021665	WINTERS RICHARD J & GRIMM VICTORIA	26 PAULS PLACE	LOS LUNAS	NM	87031
	STATE OF NEW MEXICO LAND OFFICE	P.O. Box 1148	Santa Fe	NM	87504

NOTICE

Mountain States Constructors (MSCI), Inc. announces its application submittal to the New Mexico Environment Department for a new minor source NSR permit application for an Air Quality Permit. The permit is for the MSCI Davis Pit Plant, which processes aggregate material. The expected date of application submittal to the Air Quality Bureau is July 31, 2026.

The address for the facility known as, MSCI Davis Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Davis Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959603. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrence County.

The function of the facility is to crush and screen aggregate material from an on-site quarry into usable construction material.

The facility consists of a pit plant #1 (crushing and screening plant), pit plant #2 (crushing and screening plant), with a combined throughput of 1200 tph (tons per hour) and 2,400,000 tpy (tons per year), and 200 tph and 400,000 tpy recycled asphalt products (RAP) plant. Pit plant #1 will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) or alternate 1604 hp (1196 kW) diesel-fired engine. Pit plant #2 will be powered by a 2143 hp (1500 kW) or alternate 1604 hp (1196 kW) diesel-fired engine. The RAP plant will be powered by a 755 hp (563 kW) diesel-fired engine. Raw aggregate material is obtained from an on-site quarry and processed by one of the two crushing and screening plants, then stored in onsite finish storage piles until transported from the facility to off-site sales. Recycled asphalt material will be delivered to the facility and stored in a storage pile until processed by the RAP plant. Processed RAP material will be used as input into a co-located hot mix asphalt plant for road construction projects.

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

Pollutant:	Maximum Pounds per hour	Maximum Tons per year
PM_{10}	135.6 pph	98.4 tpy
$PM_{2.5}$	17.1 pph	14.6 tpy
Sulfur Dioxide (SO_2)	1.8 pph	3.5 tpy
Nitrogen Oxides (NO_x)	52.1 pph	99.6 tpy
Carbon Monoxide (CO)	12.5 pph	22.4 tpy
Volatile Organic Compounds (VOC)	3.5 pph	6.9 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	0.23 pph	0.46 tpy
Toxic Air Pollutant (TAP)	0.0014 pph	0.0028 tpy
Green House Gas Emissions as Total CO_2e	n/a	11153 tpy

The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 10 hours per day. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.

The owner and/or operator mailing address for the Facility is:

Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107

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. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

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, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

General Posting of Notices – Certification

I, __Christopher J. Lopez_____, the undersigned, certify that on **08/03/2026,** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the Village of Los Lunas of Valencia County, State of New Mexico on the following dates:

1. Facility entrance 08/03/2026
2. City of Moriarty 08/03/2026
3. Moriarty Civic Center 08/03/2026
4. Moriarty Public Library 08/03/2026

Signed this __3__ day of ___August_____, _2026____,

_____ __08/03/2026_____
Signature Date

Christopher J. Lopez_____
Printed Name

_Safety/Air Quality Technician_____
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Facility Entrance to the

MSCI Davis Pit Plant

152 Stagecoach Road, Moriarty, NM



NOTICE

Mountain States Constructors (MSCI), Inc. announces its application submittal to the New Mexico Environment Department for a new minor source NSR permit application for an Air Quality Permit. The permit is for the MSCI Dawn Pit Plant, which processes aggregate material. The expected date of application submittal to the Air Quality Bureau is July 31, 2026.

The address for the facility known as, MSCI Dawn Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Dawn Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959685. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrance County.

The function of the facility is to crush and screen aggregate material from an on-site quarry into usable construction material.

The facility consists of a pit plant #1 (crushing and screening plant), pit plant #2 (crushing and screening plant), with a combined throughput of 1200 tph (tons per hour) and 2,400,000 tpy (tons per year), and 200 tph and 400,000 tpy recycled asphalt products (RAP) plant. Pit plant #1 will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) or alternate 1604 hp (1196 kW) diesel-fired engine. Pit plant #2 will be powered by a 2143 hp (1599 kW) or alternate 1604 hp (1194 kW) diesel-fired engine. The RAP plant will be powered by a 755 hp (563 kW) diesel-fired engine. Raw aggregate material is obtained from an on-site quarry and processed by one of the two crushing and screening plants, then stored in onsite finish storage piles until transported from the facility to off-site sales. Recycled asphalt material will be delivered to the facility and stored in a storage pile until processed by the RAP plant. Processed RAP material will be used as input into a co-located hot mix asphalt plant for road construction projects.

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

Pollutant:	Maximum Pounds per hour	Maximum Tons per year
PM =	193.6 pph	98.4 tpy
PM $_{10}$	17.1 pph	14.4 tpy
Sulfur Dioxide (SO_2)	1.8 pph	1.5 tpy
Nitrogen Oxides (NO_x)	35.7 pph	99.4 tpy
Carbon Monoxide (CO)	11.5 pph	22.4 tpy
Volatile Organic Compounds (VOC)	3.7 pph	4.9 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	0.23 pph	0.41 tpy
Toxic Air Pollutant (TAP)	0.0014 pph	0.0028 tpy
Green House Gas Emissions as Total CO_2e	n/a	11155 tpy

The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 95 hours per day. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.

The owner and/or operator mailing address for the Facility is:
Mountain States Constructors, Inc.
3601 Pan American Freeway NE #311
Albuquerque, New Mexico 87107

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. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

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.

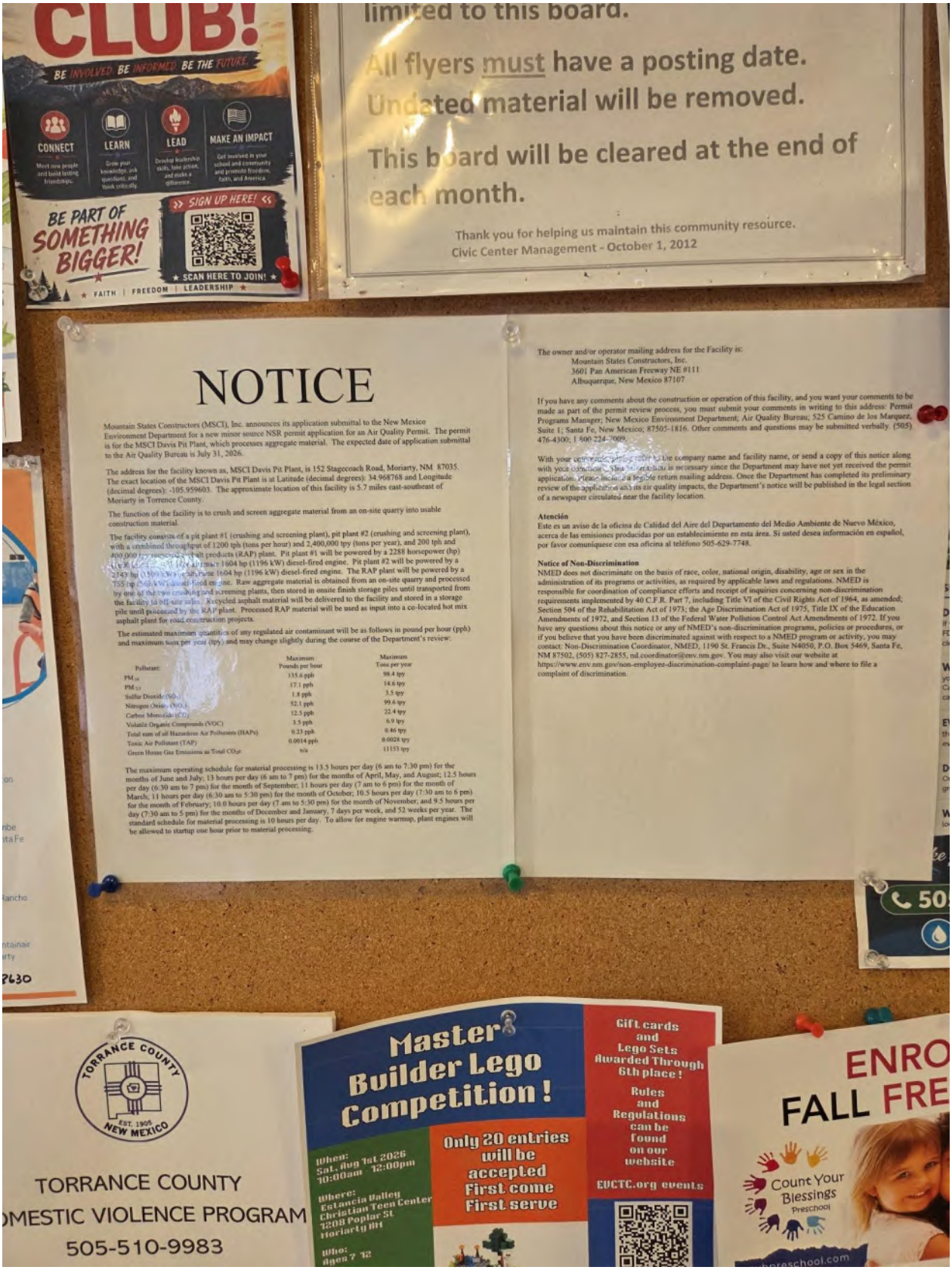
Atención
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Notice of Non-Discrimination
NMED does not discriminate on the basis of *race, color, national origin, disability, age or sex in the administration of its programs or activities*, as required by applicable laws and regulations. NMED is responsible 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, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, *P.O. Box 5469, Santa Fe, NM 87502*, (505) 827-2855, nd.coordinator@state.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.


NO
TRESPASSIN

Moriarty Civic Center

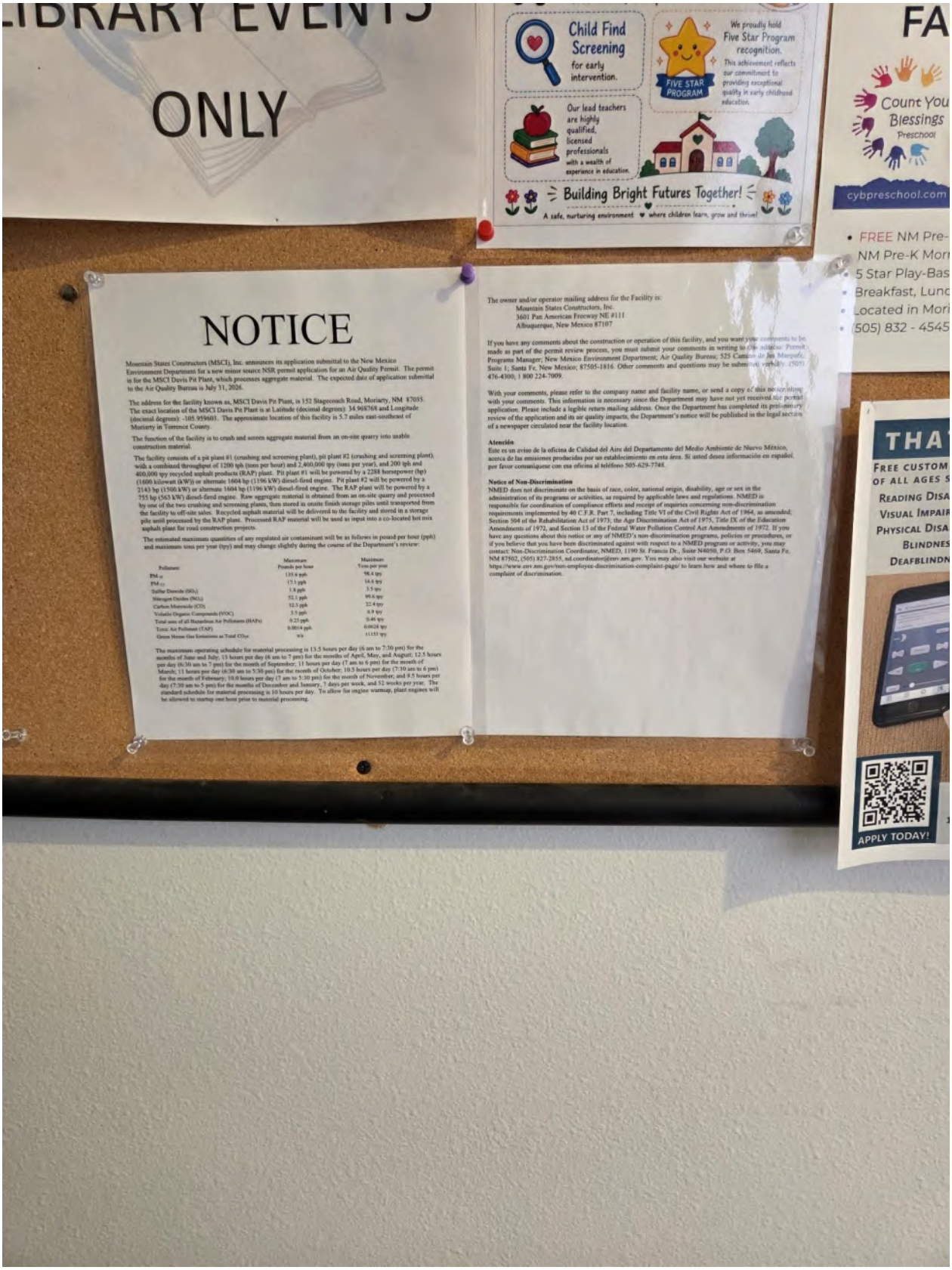
202 Broadway St South, Moriarty, NM


CLUB!
BE INVOLVED. BE INFORMED. BE THE FUTURE.
CONNECT
LEARN
LEAD
MAKE AN IMPACT
BE PART OF SOMETHING BIGGER!
>> SIGN UP HERE! <<
★ SCAN HERE TO JOIN! ★
★ FAITH | FREEDOM | LEADERSHIP ★
limited to this board.
All flyers must have a posting date.
Undated material will be removed.
This board will be cleared at the end of each month.
Thank you for helping us maintain this community resource.
Civic Center Management - October 1, 2012
NOTICE
Mountain States Constructors (MSCI), Inc. announces its application submittal to the New Mexico Environment Department for a new minor source NSR permit application for an Air Quality Permit. The permit is for the MSCI Davis Pit Plant, which processes aggregate material. The expected date of application submittal to the Air Quality Bureau is July 31, 2026.
The address for the facility known as, MSCI Davis Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Davis Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959603. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrence County.
The function of the facility is to crush and screen aggregate material from an on-site quarry into usable construction material.
The facility consists of a pit plant #1 (crushing and screening plant), pit plant #2 (crushing and screening plant), with a combined throughput of 1200 tph (tons per hour) and 2,400,000 tpy (tons per year), and 200 tph and 400,000 tpy recycled asphalt products (RAP) plant. Pit plant #1 will be powered by a 2288 horsepower (hp) [illegible] diesel-fired engine. Pit plant #2 will be powered by a 2,747 hp (1800 kW) or an Astec 1604 hp (1196 kW) diesel-fired engine. The RAP plant will be powered by a 755 hp (563 kW) natural gas-fired engine. Raw aggregate material is obtained from an on-site quarry and processed by one of the two crushing and screening plants, then stored in onsite finish storage piles until transported from the facility to off-site sales. Recycled asphalt material will be delivered to the facility and stored in a storage pile until processed by the RAP plant. Processed RAP material will be used as input into a co-located hot mix asphalt plant for road construction projects.
The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and maximum tons per year (tpy) and may change slightly during the course of the Department's review:
Pollutant | Maximum Pounds per hour | Maximum Tons per year
PM10 | 135.6 pph | 98.4 tpy
PM2.5 | 17.1 pph | 14.6 tpy
Sulfur Dioxide (SO2) | 1.8 pph | 3.5 tpy
Nitrogen Oxides (NOx) | 52.1 pph | 99.6 tpy
Carbon Monoxide (CO) | 12.5 pph | 22.4 tpy
Volatile Organic Compounds (VOC) | 3.5 pph | 6.9 tpy
Total sum of all Hazardous Air Pollutants (HAPs) | 0.23 pph | 0.46 tpy
Toxic Air Pollutant (TAP) | 0.0014 pph | 0.0028 tpy
Green House Gas Emissions as Total CO2e | n/a | 11153 tpy
The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 10 hours per day. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.
The owner and/or operator mailing address for the Facility is:
Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107
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. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.
With your comments, please state the company name and facility name, or send a copy of this notice along with your comments. You [illegible] 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 as to 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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TORRANCE COUNTY
EST. 1905 NEW MEXICO
TORRANCE COUNTY
OMESTIC VIOLENCE PROGRAM
505-510-9983
Master Builder Lego Competition !
When: Sat. Aug 1st 2026 10:00am - 12:00pm
Where: Estancia Valley Christian Teen Center 1208 Poplar St Moriarty NM
Who: Ages 7 -12
Only 20 entries will be accepted First come First serve
Gift cards and Lego Sets Awarded Through 6th place!
Rules and Regulations can be found on our website
EVCTC.org events
ENRO
FALL FRE
Count Your Blessings Preschool


MORIARTY
COMIC CON

Moriarty Public Library

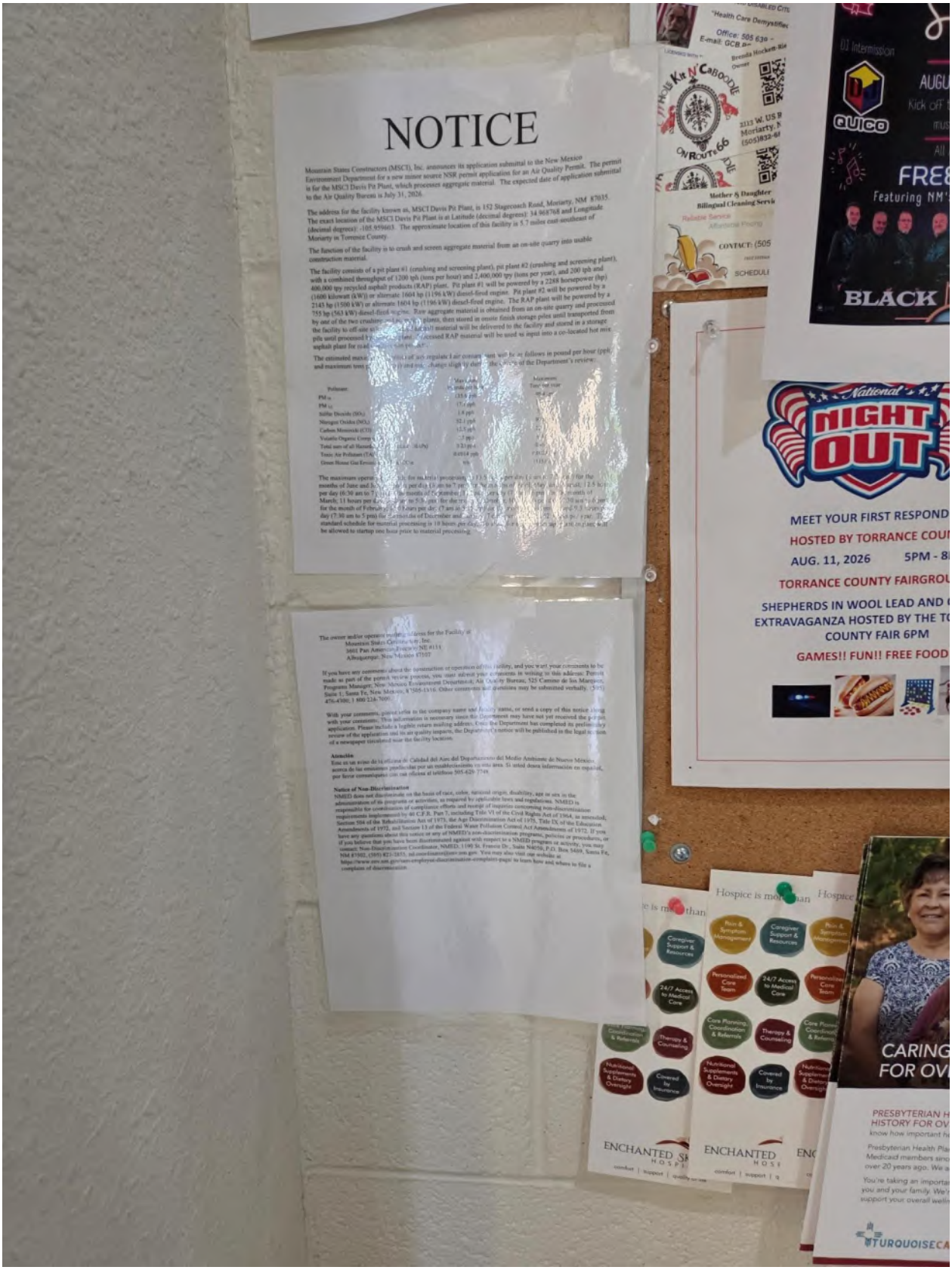
202 S. Broadway, Moriarty, NM


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(505) 832 - 4545
NOTICE
Mountain States Constructors (MSCI), Inc. announces its application submittal to the New Mexico Environment Department for a new minor source NSR permit application for an Air Quality Permit. The permit is for the MSCI Davis Pit Plant, which processes aggregate material. The expected date of application submittal to the Air Quality Bureau is July 31, 2026.
The address for the facility known as, MSCI Davis Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Davis Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959603. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrence County.
The function of the facility is to crush and screen aggregate material from an on-site quarry into usable construction material.
The facility consists of a pit plant #1 (crushing and screening plant), pit plant #2 (crushing and screening plant), with a combined throughput of 1200 tph (tons per hour) and 2,400,000 tpy (tons per year), and 200 tph and 400,000 tpy recycled asphalt products (RAP) plant. Pit plant #1 will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) or alternate 1604 hp (1196 kW) diesel-fired engine. Pit plant #2 will be powered by a 2143 hp (1500 kW) or alternate 1604 hp (1196 kW) diesel-fired engine. The RAP plant will be powered by a 755 hp (563 kW) diesel-fired engine. Raw aggregate material is obtained from an on-site quarry and processed by one of the two crushing and screening plants, then stored in otsite finish storage piles until transported from the facility to off-site sales. Recycled asphalt material will be delivered to the facility and stored in a storage pile until processed by the RAP plant. Processed RAP material will be used as input into a co-located hot mix asphalt plant for road construction projects.
The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and maximum tons per year (tpy) and may change slightly during the course of the Department's review:
Pollutant | Maximum Pounds per hour | Maximum Tons per year
PM10 | 133.6 pph | 98.4 tpy
PM2.5 | 17.1 pph | 14.6 tpy
Sulfur Dioxide (SO2) | 1.8 pph | 3.5 tpy
Nitrogen Oxides (NOx) | 52.1 pph | 89.6 tpy
Carbon Monoxide (CO) | 12.5 pph | 22.4 tpy
Volatile Organic Compounds (VOC) | 3.5 pph | 6.9 tpy
Total sum of all Hazardous Air Pollutants (HAPs) | 0.23 pph | 0.46 tpy
Toxic Air Pollutant (TAP) | 0.0014 pph | 0.0028 tpy
Green House Gas Emissions as Total CO2e | n/a | 11153 tpy
The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 10 hours per day. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.
The owner and/or operator mailing address for the Facility is:
Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107
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 the address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally: (505) 476-4300; 1 800 224-7009.
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.
Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.
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, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.
APPLY TODAY!


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NOTICE
ENROLL NOW
FALL FREE NM PRE-K

City of Moriarty

201 Broadway Street (S), Moriarty, NM


NOTICE
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The address for the facility known as, MSCI Davis Pit Plant, is 152 Stagecoach Road, Moriarty, NM 87035. The exact location of the MSCI Davis Pit Plant is at Latitude (decimal degrees): 34.968768 and Longitude (decimal degrees): -105.959603. The approximate location of this facility is 5.7 miles east-southeast of Moriarty in Torrance County.
The function of the facility is to crush and screen aggregate material from an on-site quarry into usable construction material.
The facility consists of a pit plant #1 (crushing and screening plant), pit plant #2 (crushing and screening plant), with a combined throughput of 1200 tph (tons per hour) and 2,400,000 tpy (tons per year), and 200 tph and 400,000 tpy recycled asphalt products (RAP) plant. Pit plant #1 will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) or alternate 1604 hp (1196 kW) diesel-fired engine. Pit plant #2 will be powered by a 2143 hp (1500 kW) or alternate 1604 hp (1196 kW) diesel-fired engine. The RAP plant will be powered by a 755 hp (563 kW) diesel-fired engine. Raw aggregate material is obtained from an on-site quarry and processed by one of the two crushing plants. The plants, then stored in onsite finish storage piles until transported from the facility to off-site sites. Additional material will be delivered to the facility and stored in a storage piles until processed by the plant. Processed RAP material will be used as input into a co-located hot mix asphalt plant for road construction purposes.
The estimated maximum emissions of air regulated air contaminants will be as follows in pound per hour (pph) and maximum tons per year (tpy) and may change slightly due to the discretion of the Department's review:
Pollutant | Maximum Hourly rate | Maximum Tons per year
PM
PM
Sulfur Dioxide (SO2)
Nitrogen Oxides (NOx)
Carbon Monoxide (CO)
Volatile Organic Compounds
Total sum of all Hazardous Air Pollutants (HAPs)
Toxic Air Pollutant (TAP)
Green House Gas Emissions
The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7 pm) for the months of June and July; 12 hours per day (6 am to 7 pm) for the months of April, May and August; 12.5 hours per day (6:30 am to 7 pm) for the months of September and October; 11 hours per day (7 am to 6 pm) for the months of March; 11 hours per day (7 am to 5:30 pm) for the months of January and November; 10 hours per day (7 am to 5 pm) for the month of February; 9.5 hours per day (7 am to 4:30 pm) for the month of December; and 7 hours per day (7:30 am to 5 pm) for Saturdays in December and January. The standard schedule for material processing is 10 hours per day, 5 days per week and 52 weeks per year. Facility will be allowed to startup one hour prior to material processing.
The owner and/or operator mailing address for the Facility is:
Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107
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. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.
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.
Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México acerca de las emisiones predecidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-420-7748.
Notice of Non-Discrimination
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"Health Care Demystified"
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E-mail: GCB.pr
Brenda Hocken-Ri
Owner
Licensed Insty
House Kit N' Caboodle
On Route 66
2113 W. US
Moriarty, N
(505)832-6
Mother & Daughter
Bilingual Cleaning Servi
Reliable Service
Affordable Pricing
CONTACT: (505
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DJ Intermission
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AUGU
Kick off
FRE
Featuring NM'
BLACK
National
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OUT
MEET YOUR FIRST RESPOND
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AUG. 11, 2026 5PM - 8
TORRANCE COUNTY FAIRGROU
SHEPHERDS IN WOOL LEAD AND
EXTRAVAGANZA HOSTED BY THE T
COUNTY FAIR 6PM
GAMES!! FUN!! FREE FOOD
Hospice is more than
Pain & Symptom Management
Caregiver Support & Resources
24/7 Access to Medical Care
Personalized Care Team
Care Planning, Coordination & Referrals
Therapy & Counseling
Nutritional Supplements & Dietary Oversight
Covered by Insurance
ENCHANTED
HOSPICE
comfort | support | quality
CARING
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you and your family. We'
support your overall well
TURQUOISECA


RESTROOMS
THRU THE
DOUBLE DOORS
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LEFT
THIS BOARD FOR
OFFICIAL CITY USE ONLY!!!
POLICE DEPARTMENT
DOWN THE HALL
TO THE
SUPPORT
OUR
VETERANS
Coca-Cola

July 31, 2026

CERTIFIED MAIL

Dear **[Neighbor/Environmental Director/county or municipal official]**

Mountain States Constructors (MSCI), Inc. announces its application submittal to the New Mexico Environment Department for a new minor source NSR permit application for an Air Quality Permit. The permit is for the MSCI Davis Pit Plant, which processes aggregate material. The expected date of application submittal to the Air Quality Bureau is July 31, 2026.

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

Pollutant:	Maximum Pounds per hour	Maximum Tons per year
PM_{10}	135.6 pph	98.4 tpy
$PM_{2.5}$	17.1 pph	14.6 tpy
Sulfur Dioxide (SO_2)	1.8 pph	3.5 tpy
Nitrogen Oxides (NO_x)	52.1 pph	99.6 tpy
Carbon Monoxide (CO)	12.6 pph	22.5 tpy
Volatile Organic Compounds (VOC)	3.9 pph	7.6 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	0.23 pph	0.46 tpy
Toxic Air Pollutant (TAP)	0.0014 pph	0.0028 tpy
Green House Gas Emissions as Total CO_2e	n/a	11153 tpy

The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am

to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 10 hours per day. Plant diesel-fired engines will be allowed to operate 4000 hours per year. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.

The owner and/or operator mailing address for the Facility is:

Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107

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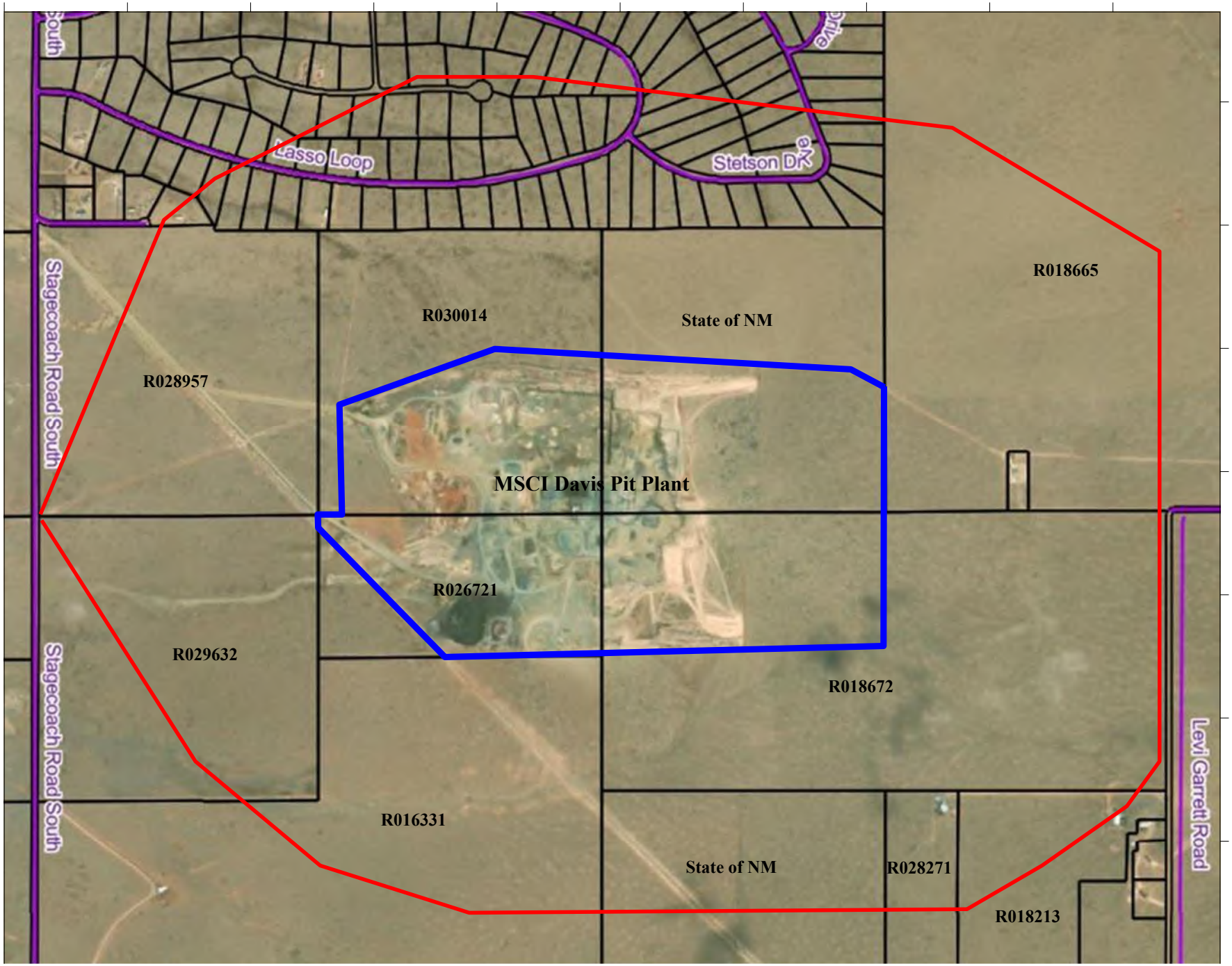
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Sincerely,

Mountain States Constructors, Inc.


21
22
Stetson Drive
Rodeo Circle
Drive
Lasso Loop
Saddlehorn Court
28
27
Stagecoach Road South
9N 9E
33
34
3
2
8N 9E


Lasso Loop
Stetson Dr
Stagecoach Road South
Stagecoach Road South
Levi Garrett Road
R018665
R030014
State of NM
R028957
MSCI Davis Pit Plant
R026721
R029632
R018672
R016331
State of NM
R028271
R018213

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	SYLVIA CHAVEZ, COUNTY CLERK TORRANCE COUNTY PO BOX 767 ESTANCIA, NM 87016-0767 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Sylvia Chavez, County Clerk
Recipient Company:	Torrance County

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	EMILY SANCHEZ, CITY CLERK CITY OF MORIARTY PO BOX 130 MORIARTY, NM 87035-0130 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Emily Sanchez, City Clerk
Recipient Company:	City of Moriarty

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	KATHERINE E CLARK, COUNTY CLERK SANTA FE COUNTY 240 GRANT AVE SANTA FE, NM 87501-1932 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Katherine E Clark, County Clerk
Recipient Company:	Santa Fe County

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MORIARTY ROCK LLC 3601 PAN AM FWY NE, STE 111 ALBUQUERQUE, NM 87107-4789 US
Signature Required	Yes
Sender Name:	Kamille Eugenio
Sender Company:	Montrose Environmental Solutions
Recipient Name:	Moriarty Rock LLC
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MORIARTY LAND TRUST LLC PO BOX 1471 MORIARTY, NM 87035-1471 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Moriarty Land Trust LLC
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	WILLIAMS HOLDINGS LLC PO BOX 805 EDGEWOOD, NM 87015-0805 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Williams Holdings LLC
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	SEGURA EDWARD & LYDIA A 1947 W WILLOW AVE ANAHEIM, CA 92804-2558 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Segura Edward & Lydia A
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MORIARTY LAND TRUST LLC PO BOX 3176 ALBUQUERQUE, NM 87190-3176 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Moriarty Land Trust LLC
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	BARDWELL-NELSON WINTERS RICHARD METAL 9020 LAZY BROOK CT NE ALBUQUERQUE, NM 87113-2113 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Bardwell-Nelson Winters Richard Metal
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	WALLIN KENNETH L & STEVEN D PO BOX 250 MORIARTY, NM 87035-0250 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Wallin Kenneth L & Steven D
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	THE MONTOYA-BEJARANO LIVING TRUST 10226 STRONG AVE WHITTIER, CA 90601-2035 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	The Montoya-Bejarano Living Trust
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	IWANCHUK FAMILY TRUST 1007 STAGECOACH RD SANTA FE, NM 87501-1147 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Iwanchuk Family Trust
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MONTOYA MARY C 4008 DIABLO TRAIL PL NW ALBUQUERQUE, NM 87114-5840 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Montoya Mary C
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MCCLELLAN DONNA 3984 NM 41 STANLEY, NM 87056-7040 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Mcclellan Donna
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	HENSON STANLEY & MARY LOU PO BOX 754 MORIARTY, NM 87035-0754 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Henson Stanley & Mary Lou
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	LUNA DIANA M 1609 FIGUEROA DR NE ALBUQUERQUE, NM 87112-4608 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Luna Diana M
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 1, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	LA FAMILIA UNIDA TRUST 614 CUTLER AVE NW ALBUQUERQUE, NM 87102-1013 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	La Familia Unida Trust
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	WINTERS RICHARD J & GRIMM VICTORIA PO BOX 134 PERALTA, NM 87042-0134 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Winters Richard J & Grimm Victoria
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	ORTEGA FERMIN FRANKLIN PO BOX 827 MORIARTY, NM 87035-0827 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Ortega Fermin Franklin
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 4, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	RK INVEST GROUP LLC 500 WESTOVER DR, # 16223 SANFORD, NC 27330-8941 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	RK Invest Group LLC
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	ALARID ANTHONY 14 CAMINO CERRO LINDO SANTA FE, NM 87507-8625 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Alarid Anthony
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	MONTOYA JOSE A REV TRUST 6118 EDITH BLVD NE, UNIT 197 ALBUQUERQUE, NM 87107-5074 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Montoya Jose A Rev Trust
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	FUNTANILLA ANTHONY C 8447 SAN RAMON DR LAS VEGAS, NV 89147-5246 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Funtanilla Anthony C
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	FUNTANILLA ANTHONY C 8447 SAN RAMON DR LAS VEGAS, NV 89147-5246 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Funtanilla Anthony C
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	BARDWELL-NELSON SCHULTE W R ETUX 7201 W LAKE MEAD BLVD, STE 550 LAS VEGAS, NV 89128-8364 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Bardwell-Nelson Schulte W R ETUX
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	REYNALDO MORALES REV TRUST 640 ALTA VISTA ST SANTA FE, NM 87505-4186 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Reynaldo Morales Rev Trust
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	KEPNER RAYMOND 3711 LILLO ST LAS VEGAS, NV 89103-2016 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Kepner Raymond
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST 1029 EVENING PRIMROSE BERNALILLO, NM 87004-5784 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Blunier Cletus B & Martha A Trustees
Recipient Company:	Blunier Living Trust

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	WINTERS RICHARD J & GRIMM VICTORIA 26 PAULS PL LOS LUNAS, NM 87031-7536 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Winters Richard J & Grimm Victoria
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	GONZALES BOBBY JR & GALLEGOS VICTO PO BOX 3602 MORIARTY, NM 87035-3602 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Gonzales Bobby Jr & Gallegos Victo
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	ORTEGA FERMIN & JENNIE PO BOX 483 MORIARTY, NM 87035-0483 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Ortega Fermin & Jennie
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	STATE OF NEW MEXICO PO BOX 1148 SANTA FE, NM 87504-1148 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	State of New Mexico
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	KRST RADIO 500 4TH ST NW ALBUQUERQUE, NM 87102-5324 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	KRST Radio
Recipient Company:	

NOTICE OF AIR QUALITY PERMIT APPLICATION

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Pollutant:	Maximum Pounds per hour	Maximum Tons per year
PM_{10}	135.6 pph	98.4 tpy
$PM_{2.5}$	17.1 pph	14.6 tpy
Sulfur Dioxide (SO_2)	1.8 pph	3.5 tpy
Nitrogen Oxides (NO_x)	52.1 pph	99.6 tpy
Carbon Monoxide (CO)	12.6 pph	22.5 tpy
Volatile Organic Compounds (VOC)	3.9 pph	7.6 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	0.23 pph	0.46 tpy
Toxic Air Pollutant (TAP)	0.0014 pph	0.0028 tpy
Green House Gas Emissions as Total CO_2e	n/a	11153 tpy

The maximum operating schedule for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10.0 hours per day (7 am to 5:30 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. The standard schedule for material processing is 10 hours per day. Plant diesel-fired engines will be allowed to operate 4000 hours per year. To allow for engine warmup, plant engines will be allowed to startup one hour prior to material processing.

The owner and/or operator mailing address for the Facility is:

Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107

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. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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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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, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

Affidavit of Publication

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO }

Ad Cost:	$291.27
Ad Number:	443480
Account Number:	1116022
Classification:	GOVERNMENT LEGALS

I, Steve Yoder, the undersigned, Legal Representative of the Albuquerque Journal, on oath, state that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, chapter 167, Session Laws of 1937, and payment of fees has been made of assessed and a copy of which is hereto attached, was published in said publication in the daily edition, 1 time on the following date:

August 5, 2026

That said newspaper was regularly issued and circulated on those dates.
SIGNED:

Legal Representative

Subscribed to and sworn to me this 5th day of August 2026.

David Lindsey Montoya
Notary Public

_____ County Bernalillo
ID#: 1140229
My commission expires: 04-26-2027

STATE OF NEW MEXICO
NOTARY PUBLIC
DAVID LINDSEY MONTOYA
COMMISSION NUMBER 1140229
EXPIRATION DATE 04-26-2027

ONTERRIS
9100 2ND ST NW
Albuquerque, NM 87114

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Nitrogen Oxides (NOx) 52.1 pph 99.6 tpy
Carbon Monoxide (CO) 12.6 pph 22.5 tpy
Volatile Organic Compounds (VOC) 3.9 pph 7.6 tpy
Total sum of all Hazardous Air Pollutants (HAPs) 0.23 pph 0.46 tpy
Toxic Air Pollutant (TAP) 0.0014 pph 0.0028 tpy
Green House Gas Emissions as Total CO2e n/a 11153 tpy

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Albuquerque, New Mexico 87107

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Journal: August 5, 2026

Affidavit of Publication

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COUNTY OF BERNALILLO }

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Account Number:	1116022
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August 4, 2026

KRST Radio
500 4th St. NW
Albuquerque, NM 87102

CERTIFIED MAIL

Dear KRST Radio:

SUBJECT: PSA Request - Proposed Air Quality Construction Permit Application for Mountain States Constructors, Inc.

Attached is a copy of a public service announcement regarding a proposed air quality construction permit application for Mountain States Constructors, Inc. This announcement is being submitted by Montrose Air Quality Services, Albuquerque, NM on behalf of Mountain States Constructors, Inc.

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 pwade@onterris.com. You may also contact Mr. Chris Lopez, Mountain States Constructors, Inc at (505) 604-9291.

Sincerely,

Paul Wade

Paul Wade
Senior Associate Engineer

PUBLIC SERVICE ANNOUNCEMENT

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

1. City of Moriarty Administration Offices at 201 Broadway Street (S), Moriarty, NM;
2. Moriarty Civic Center at 202 Broadway St South, Moriarty, NM;
3. Moriarty Public Library at 202 S. Broadway, Moriarty, NM;
4. At the main entrance to the MSCI Davis Pit Plant at 152 Stagecoach Road, Moriarty, NM.

The owner and/or operator mailing address for the Facility is:

Mountain States Constructors, Inc.
3601 Pan American Freeway NE #111
Albuquerque, New Mexico 87107

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

Submittal of Public Service Announcement – Certification

I, Paul Wade, the undersigned, certify that on August 4, 2026, submitted a public service announcement to KRST Radio that serves the City of Moriarty, Torrence County, New Mexico, in which the source is proposed to be located and that KRST Radio DID NOT RESPOND.

Signed this 4 day of August, 2026,

Paul Wade

Signature

August 4, 2026
Date

Paul Wade
Printed Name

Air Quality Consultant – Onterris USA, Inc.
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	BLUNIER CLETUS B & MARTHA A TRUSTEES BLUNIER LIVING TRUST 1029 EVENING PRIMROSE BERNALILLO, NM 87004-5784 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Blunier Cletus B & Martha A Trustees
Recipient Company:	Blunier Living Trust

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	WINTERS RICHARD J & GRIMM VICTORIA 26 PAULS PL LOS LUNAS, NM 87031-7536 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Winters Richard J & Grimm Victoria
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 3, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	GONZALES BOBBY JR & GALLEGOS VICTO PO BOX 3602 MORIARTY, NM 87035-3602 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Gonzales Bobby Jr & Gallegos Victo
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	ORTEGA FERMIN & JENNIE PO BOX 483 MORIARTY, NM 87035-0483 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	Ortega Fermin & Jennie
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	STATE OF NEW MEXICO PO BOX 1148 SANTA FE, NM 87504-1148 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	State of New Mexico
Recipient Company:	

Tracking number:	
Estimated Delivery:	August 6, 2026
Carrier:	USPS
Memo:	PROJ-063331
Service:	First-Class Mail®
Delivery address	KRST RADIO 500 4TH ST NW ALBUQUERQUE, NM 87102-5324 US
Signature Required	Yes
Sender Name:	Mountain States Constructors, Inc.
Sender Company:	c/o Onterris USA, Inc.
Recipient Name:	KRST Radio
Recipient Company:	

Section 10

Written Description of the Routine Operations of the Facility

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A written description of the routine operations of the facility. 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 Mountain States Contractors, Inc.'s MSCI Davis Pit Plant will consist of a pit plant #1 (crushing and screening plant); and pit plant #2 (crushing and screening plant) with a combined throughput of 1200 tons per hour (tph) and 2,400,000 tons per year (tpy); and 200 tph and 400,000 tpy recycled asphalt products (RAP crushing and screening) plant. Daily production rates are presented in Table 3-3.

Pit Plant #1

The 600-1200 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2288 horsepower (hp) (1600 kilowatt (kW)) diesel-fired engine. Alternative engines for Pit Plant #1 include a 1604 hp (1196 kW) diesel-fired engine or 1818 hp (1250 kW) diesel-fired engine. The Pit Plant #1 consists of Emission Units 1 – 52E. Material from the raw material quarry (Unit 1) will be loaded into the rock trucks (Unit 2) and transported and unloaded (Unit 3) to the Pit Plant #1 surge pile. Material from the Pit Plant #1 surge pile will be loaded into the plant feeder (Unit 4). This material is processed first through a jaw crusher (Unit 5), surge bin (Unit 6) and pre-screen (Unit 7) to separate products (Units 43 - 49) from waste material (Unit 42). Waste material is hauled to the waste pile (Unit 105) by rock trucks (Unit 127a-p). Product material is transported by conveyor (Unit 20) to a splitter conveyor (Unit 21) which will send the material to one of two lines. For each line material is sized in the cone crushers (Units 8 and 11). From the cone crushers, material is sent to the 3-deck screens (Units 9 and 12). Oversized material from the 3-deck screens is recycled back to the cone crushers. Part of the finished material from one of the 3-deck screen is sent to the air separator (Unit 10) for further size separation. Transfer conveyors between processing equipment includes Emission Units 13-41. Finish material is loaded into finish piles (Unit 50) located along the pit plant road located in the facility quarry. From the finish storage piles, products are transported by road haul trucks from the facility to off-site sales (Unit 127a-p). Figure 4-1 in Section 4 presents an equipment layout for pit plant #1. The engine hours of operation are presented in Table 3-1 in Section 3. The material processing hours of operation are presented in Table 3-2 in Section 3.

Pit Plant #2

The 600-1200 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2153 horsepower (hp) (1500 kilowatt (kW)) diesel-fired engine. Alternative engines for Pit Plant #2 include a 1604 hp (1196 kW) diesel-fired engine or 1818 hp (1250 kW) diesel-fired engine. The Pit Plant #2 consists of Emission Units 53 - 104E. Material from the raw material quarry (Unit 53) will be loaded into the rock trucks (Unit 54) and transported and unloaded (Unit 55) to the Pit Plant #2 surge pile. Material from the Pit Plant #2 surge pile will be loaded into the plant feeder (Unit 56). This material is processed first through a jaw crusher (Unit 57), surge bin (Unit 58) and pre-screen (Unit 59) to separate

products (Units 95 - 101) from waste material (Unit 94). Waste material is hauled to the waste pile (Unit 105) by rock trucks (Unit 127a-p). Product material is transported by conveyor (Unit 72) to a splitter conveyor (Unit 73) which will send the material to one of two lines. For each line material is sized in the cone crushers (Units 60 and 63). From the cone crushers, material is sent to the 3-deck screens (Units 61 and 64). Oversized material from the 3-deck screens is recycled back to the cone crushers. Part of the finished material from one of the 3-deck screen is sent to the air separator (Unit 62) for further size separation. Transfer conveyors between processing equipment includes Emission Units 65 - 93. Finish material is loaded into finish piles (Unit 102) located along the pit plant road located in the facility quarry. From the finish storage piles, products are transported by road haul trucks from the facility to off-site sales (Unit 127a-p). Figure 4-2 in Section 4 presents an equipment layout for pit plant #1. The engine hours of operation are presented in Table 3-1 in Section 3. The material processing hours of operation are presented in Table 3-2 in Section 3.

RAP Crushing and Screening Plant

The 200 tph recycled asphalt crushing and screening operation will include a raw material surge pile, one (1) feeder, one (1) primary crusher, one (1) surge bin, one (1) cone crusher, one (1) 2-deck screen, eight (8) transfer conveyors, and one (1) stacker conveyor. The RAP crushing plant will be powered by a 755 hp (563 kW) diesel-fired engine (Unit 104E). RAP material is brought in the facility in road haul trucks (Unit 127a-p) and stored in a RAP material storage pile (Unit 110) until loaded into the RAP plant feeder (Unit 111). This material is processed first through a VSI crusher (Unit 112), surge bin (Unit 113) and 2-deck screen (Unit 114) to produce sized RAP (Unit 124) to be used in the co-located HMA. Oversized material from the 2-deck screen sent to the cone crusher (Unit 115) then recycled back to the 2-deck screen. Transfer conveyors between processing equipment includes Emission Units 116 - 123. Recycled RAP material is loaded into a finish pile by radial conveyor (Unit 124), transported to the co-located storage pile (Unit 125) until needed for the co-located HMA. Figure 4-3 in Section 4 presents an equipment layout for RAP crushing and screening plant. The RAP crushing and screening plant engine hours of operation are presented in Table 3-1 in Section 3. The RAP material processing hours of operation are presented in Table 3-2 in Section 3.

Colored rock is extracted from Quarry 2 (Unit 107) and loaded into rock truck (Unit 108) and transported (Unit 127a-p) to one of the two pit plant surge piles (Unit 109) for processing and sizing. The colored rock product is then transported to the finish storage piles.

As seen in Section 5, Figure 5-1 and 5-2, there are multiply truck routes and two types of material haul trucks, commercial road haul trucks and quarry (rock) trucks. Commercial road haul trucks are used to transport product from the site, haul RAP material in; and rock trucks are used onsite to haul material from the quarry wall to the pit plants, product from the pit plants to the finish piles, and waste material in the pit to the waste storage pile.

The entrance road to the site is unpaved and controlled with surfactants until the intersection for Pit Plant #1 and Pit Plant #2 split to go to the north pit area or the main pit area, see Figure 5-1. All other unpaved roads outside of any quarry areas are controlled with base course and watering. All unpaved roads within the quarry areas will be controlled with base course or watering.

The following table describes the haul roads at the site and the maximum day number of trucks for each category. The maximum number of trucks per day that will be permitted for the site, including product trucks and RAP delivery trucks is 379 trucks. The total emissions from all truck traffic are included in Emission Unit 127a-p “Plant Haul Roads”.

MSCI Davis Pit Haul Road Descriptions

Emission Source ID	Description	Truck Type	Max Trucks per Day
127a	Haul Road Traffic Pit Plant #1 Into Site Entrance	Commercial	153
127d	Haul Road Traffic Pit Plant #1 and Pit #2 Into Site Entrance	Commercial	153
127m	RAP Delivery Into Site Entrance	Delivery	73
	Total Trucks Entering Site per Day		**379**
	Truck Traffic Within Site per Day (List Below)		
127b, 127c	Haul Road Traffic Pit Plant #1 In Pit to Finish Piles	Commercial	153
127e, 127f	Haul Road Traffic Pit Plant #1 & #2 In Pit to Finish Piles	Commercial	305
127g	Haul Road for Colored Rock Pit Road Out of Quarry 2 - Quarry Truck	Rock	124
127h	Haul Road for Colored Rock Road Between Quarry 2 and 1 - Quarry Truck	Rock	124
127i	Haul Road for Colored Rock Road to either Pit Plant #1 or #2 - Quarry Truck	Rock	124
127j	Haul Road Traffic with Quarry Trucks from Pit Plants #1 or #2 to Finish Piles	Rock	174
127k	Haul Road Traffic Waste with Quarry Trucks from Pit Plant #1 to Waste Pile	Rock	37
127l	Haul Road Traffic Waste with Quarry Trucks from Pit Plant 1 or 2 to Waste Pile	Rock	75
127n	RAP Delivery to RAP Plant	Delivery	73
127o, 127p	RAP Processed at the RAP Plant from RAP Plant to HMA	Delivery	73

Fugitive dust generated during aggregate processing will be controlled by the inherent moisture content of the material and a "Wet Dust Suppression System" to no more than 7% opacity at screening and conveyor transfer points and 12% opacity at crushing operations.

No fugitive dust controls are proposed for loading the feeders (4 and 56), and material handling at the quarry material source (1, 53, and 107), storage piles (3, 50, 54, 102, 106, and 109) or truck loading (2, 51, 54, 103, 105, and 108).

No fugitive dust controls are proposed for the RAP Plant with the exception of accounting for the inherent properties of RAP with a coating of asphalt which captures small particles within the material. Based on EPA documents "EIIP – Preferred and Alternative Methods for Estimating Air Emissions from Hot-Mix-Asphalt Plants, Final Report, July 1996, Table 3.2-1 Fugitive Dust – Crushed RAP material" the inherent typical efficiency of the material is 70% (see Section 7).

The MSCI Davis Pit Plant will be permitted to allow co-location with one of the three MSCI HMA plant presently operating under NSR Permits 3171-M1, 4453, or 9720. To show compliance with NAAQS for operating any of the plants, an analysis of the worst-case operating parameters was used in the model. The maximum operating schedule for any one of the 3 permits is 24 hours per day operation for 365 days per year. MSCI will accept a permit condition in the new NSR permit for the MSCI Davis Pit Plant that restricts co-location with any NSR Permits 3171-M1, 4453, or 9720 HMA plants for less than a year.

Additionally, any of the MSCI HMA plants can also co-locate under their existing GCP3 registrations. Any co-located HMA plant will operate under the terms and conditions of their individual NSR permit or the GCP3 permit requirements. Haul truck traffic for the co-located HMA plant to and from the site will travel on unpaved roads with the entrance road to the site is unpaved and controlled with surfactants until the intersection for Pit Plant #1 and Pit Plant #2 split to go to the north pit area or the main pit area controlled with base course and watering to the pit entrance and controlled with base course or watering within the quarry where the HMA plant is located. Location of the HMA plant site is shown on Figure 5-1 in Section 5.

Emission sources for the co-located HMA plant include a HMA drum and baghouse; plant main and standby generators; asphalt cement heater; mineral filler silo; asphalt storage silo; cold aggregate and RAP storage piles; cold aggregate delivery system (feeder scalping screen pugmill and conveyors); RAP delivery system (feeder, scalping screen, and conveyors).

Section 11

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, Single Source Determination Guidance, 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)**:** MSCI Davis Pit Plant

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

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

X Yes ☐ **No**

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

X Yes ☐ **No**

Contiguous or Adjacent: 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, **does not** 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

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

- **X** **a minor PSD source before and after this modification (if so, delete C and D below).**
- ☐ **a major PSD source before this modification. This modification will make this a PSD minor source.**
- ☐ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
- ☐ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
- ☐ **a new PSD Major Source after this modification.**

B. **This facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories:**

a. **NOx: 99.6 TPY**
b. **CO: 23.8 TPY**
c. **VOC: 8.2 TPY**
d. **SOx: 4.2 TPY**
e. **PM: 235.0 TPY; Regulated: 50.7 TPY**
f. **PM10: 88.3 TPY**
g. **PM2.5: 15.6 TPY**
h. **Fluorides: 0.0 TPY**
i. **Lead: 0.0007 TPY**
j. **Sulfur compounds (listed in Table 2): 0.0 TPY**
k. **GHG: 13,443 TPY**

Section 13

Determination of State & Federal Air Quality Regulations

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

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

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

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

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

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

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

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

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

Table for State Regulations:

State Regulation 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 State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This facility is subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	52E, 104E, 126E	Units 52E, 104E and 126E are limited to opacity of 20% per 20.2.61.109 NMAC.
20.2.70 NMAC	Operating Permits	No	Facility	The facility does not have potential to emit (PTE) of 100 tpy or more of any regulated air pollutant other than HAPs; and/or a HAPs PTE of 10 tpy or more for a single HAP or 25 or more tpy for combined HAPs
20.2.71 NMAC	Operating Permit Fees	No	Facility	If subject to 20.2.70 NMAC and your permit includes numerical ton per year emission limits, you are subject to 20.2.71 NMAC and normally applies to the entire facility.
20.2.72 NMAC	Construction Permits	Yes	Facility	MSCI is applicable to “Construction Permit” 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The facility is applicable to the Emissions Inventory Reporting per 20.2.73.300 NMAC since the facility is subject to 20.2.72.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	The facility is not a major PSD source
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation applies to this facility since MSCI is applying for a permit pursuant to 20.2.72 NMAC.
20.2.77 NMAC	New Source Performance	Yes	5-49, 57-101, 112-124, 126E	This is a stationary source which is subject to the requirements of 40 CFR Part 60, Subpart OOO or stationary sources subject to the requirements of 40 CFR Part 60, Subpart IIII (Unit 126E).
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	This facility does not emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61.
20.2.80 NMAC	Stack Heights	No		No citation applicable.

State Regulation 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.)
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	52E, 104E, 126E, 128	This facility is potentially subject to the requirements of 40 CFR Part 63, Subpart ZZZZ Units 52E, and 104E. Since Unit 126E is applicable to NSPS Subpart IIII, compliance with Subpart IIII is compliance with Subpart ZZZZ. This facility has a gasoline dispensing facility subject to the requirements of 40 CFR Part 63, Subpart CCCCCC, Unit 128.

Table for Applicable Federal Regulations:

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	Defined as applicable at 20.2.72, any national ambient air quality standard
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	5-49, 57-101, 112-124, 126E	Subparts IIII and OOO in 40 CFR 60 apply to this facility.
NSPS 40 CFR 60, Subpart 000	Standards of Performance for Nonmetallic Mineral Processing Plants	Yes	5-49, 57-101, 112-124	The provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	Yes	126E	If the plant is only located at the site for less than 12 months, the plant engine is defined by EPA as a "non-road" engine, and as such is not applicable to 40 CFR Part 60 Subpart IIII. If the plant operates at the site for more than 12 months, Unit 126E would then be applicable to Subpart IIII.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	Units Subject to 40 CFR 61	Applies if any other Subpart in 40 CFR 61 applies.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	52E, 104E, 126E, 128	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Yes	128	This facility has a gasoline dispensing facility subject to the requirements of 40 CFR Part 63, Subpart CCCCCC, Unit 128. The fuel usage is less than 10,000 gallons per month and will follow the requirements found in 40 CFR Part 63.11116.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	52E, 104E, 126E	This facility is potentially subject to the requirements of 40 CFR Part 63, Subpart ZZZZ Units 52E, 104E, and 126E. If the plant is only located at the site for less than 12 months, the plant engine is defined by EPA as a "non-road" engine, and as such is not applicable to 40 CFR Part 63, Subpart ZZZZ. If the plant operates at the site for more than 12 months, Unit 126E is applicable to NSPS Subpart IIII, compliance with Subpart IIII is compliance with Subpart ZZZZ.

Section 14

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 **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** 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.

☒ **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 **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

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

The preliminary operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown are as follows:

STARTUP AND SHUTDOWN PROCEDURES

Water Truck

Startup

Check water supply, inspect nozzles and open all associated valves before startup.

Shutdown

Inspect nozzles and close all associated valves after shutdown.

Processing Plant Water Spray Dust Suppression System

Startup

Daily visual inspection of water spray operation prior to material processing. All plant water sprays, required to maintain opacity limits to required levels, will be operational prior to material processing.

Shutdown

No additional requirements are proposed.

OPERATIONS PLAN

Water Truck Operation

A water truck to be operated, as needed, at plant site disturbed areas, storage piles, and haul truck traffic areas to prevent excess visible emissions. These activities include; unpaved haul roads, storage piles and active disturbed

areas. Water spray application rate will be determined based on the occurrence of visible dust and may vary depending on existing road conditions, traffic, wind, temperature, and precipitation.

Processing Plant Water Spray Dust Suppression System

Water spray dust suppression will be operated at all times when pertinent equipment is operating to maintain equipment opacity limits.

MAINTENANCE PLAN

Water Truck Maintenance

A safety check and equipment check will be conducted daily. Normal vehicle maintenance will be performed regularly or as needed.

Processing Plant Water Spray Dust Suppression Maintenance

Visual inspections will be made monthly to verify proper functioning of control equipment. When emissions are suspected to approach compliance values, equipment will be checked for problems and repaired.

No startup/shutdown emission rates are expected to be greater than what is proposed for normal operations of the plant. All controls will be operating and functioning correctly prior to the start of production.

Section 15

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: www.env.nm.gov/air-quality/permitting-section-procedures-and-guidance/. 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.

NA

Section 16

Air Dispersion Modeling

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

Check each box that applies:

☐ See attached, approved modeling **waiver for all** pollutants from the facility.

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

☒ 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.

☐ No modeling is required.

Universal Application 4

Air Dispersion Modeling Report

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

16-A: Identification		
1	Name of facility:	MSCI Davis Pit Plant
2	Name of company:	Mountain States Constructors, Inc.
3	Current Permit number:	New Permit
4	Name of applicant's modeler:	Paul Wade
5	Phone number of modeler:	505-830-9680 x11703
6	E-mail of modeler:	pwade@onterris.com

16-B: Brief			
1	Was a modeling protocol submitted and approved? Approved – 6/11/2026	Yes☒	No☐
2	Why is the modeling being done?	New Facility	
3	Describe the permit changes relevant to the modeling.		
	New Permit		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes☐	No☒

7	Identify the Air Quality Control Region (AQCR) in which the facility is located	154	
8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2	NA	
	SO2	NA	
	PM10	NA	
	PM2.5	NA	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	None within 50 km		
10	Is the facility located in a non-attainment area? If so describe below	Yes☐	No☒
	N/A		
11	Describe any special modeling requirements, such as streamline permit requirements.		
	N/A		

16-C: Modeling History of Facility

Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers).

Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
CO	New Permit		
NO_2	New Permit		
SO_2	New Permit		
H_2S	N/A		
PM2.5	New Permit		
PM10	New Permit		
Lead	New Permit		
Ozone (PSD only)	Not a PSD Source		
NM Toxic Air Pollutants (20.2.72.402 NMAC)	TAP Emissions less than threshold		

16-D: Modeling performed for this application

For each pollutant, indicate the modeling performed and submitted with this application.
Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.

Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
CO	☒	☐	☐	☐	☐

	NO_2	☒	☒	☐	☐	☐
	SO_2	☒	☐	☐	☐	☐
	H_2S	☐	☐	☐	☐	☒
	PM2.5	☒	☒	☐	☐	☐
	PM10	☒	☒	☐	☐	☐
	Lead	☒	☐	☐	☐	☐
	Ozone	☐	☐	☐	☒	☐
	State air toxic(s) (20.2.72.402 NMAC)	☐	☐	☐	☒	☐

16-E: New Mexico toxic air pollutants modeling

1 List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application.

2 List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.

Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor
N/A					

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes☒	No☐
	Version 24142		

16-G: Surrounding source modeling

1	Date of surrounding source retrieval	07/02/2025

2 If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.

PM10 and PM2.5 GCP emission sources were set to 71.25 tpy and 17.875 tpy, respectively.
GCP2 (Enviroworks LLC GCP2 8490) hours of operation were limited to daylight hours only.

AQB Source ID	Description of Corrections
37022	Mountain States Constructors Inc. GCP2 6894 is removed by submission of this permit application
1573E1	NuStar Logistics, LP Moriarty Station, adjusted to correct coordinates 413383E; 3870045N Zone 13
25141	Holly Energy Partners - Operating LP NSR 2415, adjusted to correct coordinates 406536E; 3873333N Zone 13

16-H: Building and structure downwash

1	How many buildings are present at the facility?	None		
2	How many above ground storage tanks are present at the facility?	3		
3	Was building downwash modeled for all buildings and tanks? If not explain why below.		Yes☐	No☒
	No tanks or buildings are located in an area where building downwash would affect point sources.			
4	Building comments			

16-I: Receptors and modeled property boundary

1	"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 a 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. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility. Describe the fence or other physical barrier at the facility that defines the restricted area.						
	Fencing will surround the site (modeling boundary) with gates and restricted area signs at the site entrances.						
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?					Yes☐	No☒
3	Are restricted area boundary coordinates included in the modeling files?					Yes☒	No☐
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.						
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments	
	Very Fine	Cartesian	50 meters	Border	500 Meters		
	Very Fine	Cartesian	100 meters	500 Meters	1 Kilometers		
	Fine	Cartesian	250 meters	1 Kilometers	3 Kilometers		
	Course	Cartesian	500 meters	3 Kilometers	5 Kilometers		
	Course	Cartesian	1000 meters	10 Kilometers	50 Kilometers		
5	Describe receptor spacing along the fence line.						
	25 Meters						
6	Describe the PSD Class I area receptors.						
	N/A						

16-J: Modeling Scenarios

Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).

1

The facility hours of operation for the Pit Plant #1, Pit Plant #2, and RAP Plant are presented below in Tables 1 and 2. Table 1 hours below are for the Pit Plant #1, Pit Plant #2, and RAP Plant engines, Units 52E, 104E and 126E. This allows for warm up of the engines before material processing. Table 2 presents the processing of material which will begin an hour after the engines are allowed to operate. The aggregate crushing plant will limit the daily throughput per month to the values listed in Table 3. For combustion modeling hours of operation are found in Table 1.

TABLE 1: MSCI Davis Pit Plant Engine Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
6:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	10.5	11.5	12	14	14	14.5	14.5	14	13.5	12	11	10.5

TABLE 2: MSCI Davis Pit Plant Processing Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
7:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	9.5	10.5	11	13	13	13.5	13.5	13	12.5	11	10	9.5

TABLE 3: MSCI Davis Pit Plant Daily Processing Rate

Month	Pit Plants 1 and 2 Tons Per Day	RAP Plant Tons Per Day
January	6600	1100
February	6600	1100
March	9600	1600
April	9600	1600
May	9600	1600
June	9600	1600
July	9600	1600
August	9600	1600
September	9600	1600
October	9600	1600
November	9600	1600
December	6600	1100

Since the daily production rate is less than the proposed hours of operation running at maximum hourly production rate, four modeling scenarios will be performed for particulate emissions. The model hours are presented in Tables 4, 5, 6, and 7.

TABLE 4: MSCI Davis Pit Plant Scenario 1 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
7:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	0	0	1	1	1	1	1	1	1	1	1	0
2:00 PM	0	0	1	0	0	0	0	0	0.5	0.5	1	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

ABLE 5: MSCI Davis Pit Plant Scenario 2 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0

8:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	0	0	1	1	1	1	1	1	1	1	1	0
3:00 PM	0	0	1	0	0	0	0	0	0.5	0.5	1	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

TABLE 6: MSCI Davis Pit Plant Scenario 3 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0.5	0.5	0
8:00 AM	0	0	1	0	0	0	0	0	0	1	1	0
9:00 AM	0.5	0	1	1	1	0.5	0.5	1	1	1	1	0.5
10:00 AM	1	0.5	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	0	1	1	1	1	1	1	1	1	0.5	0.5	0
4:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
5:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

TABLE 7: MSCI Davis Pit Plant Scenario 4 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0.5	1	0
10:00 AM	0	0	1	0	0	0	0	0	0	1	1	0
11:00 AM	0.5	0	1	1	1	0.5	0.5	1	1	1	1	0.5
12:00 PM	1	0.5	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

The MSCI Davis Pit Plant will be permitted to allow co-location with one of the three MSCI HMA plants presently operating under NSR Permits 3171-M1, 4453, or 9720 or associated GCP3 registrations. To show compliance with NAAQS for operating any of the plants, an analysis of the worst-case operating parameters for any of the HMA plants was used in the model. The maximum operating schedule for any one of the 3 permits is 24 hours per day operation for 365 days per year at a maximum hourly throughput of 400 tph or 4800 tons per day. Modeling was performed using 8 scenarios where the HMA operated 12 hours per day at maximum allowable emission rates. The 12 scenarios start with Scenario 1 that operates the first 12 hours of the day, then scenario 2 starts 2 hours later, then so on around the clock. The eight selected HMA time scenarios are hours that historically produce the highest concentrations, early morning and afternoon/evening hours. These include model hours Scenario 1 (12 AM to 12 PM), Scenario 6 (10 AM to 10 PM), Scenario 7 (12 PM to 12 AM), Scenario 8 (2 PM to 2AM), Scenario 9 (4 PM to 4 AM), Scenario 10 (6 PM to 6 AM), Scenario 11 (8 PM to 8 AM) and Scenario 12 (10 PM to 10 AM).

Regardless of the model results, each HMA plant will operate under the terms and conditions of their individual NSR permit. Haul truck traffic to and from the site will travel on unpaved roads. Location of the HMA site is shown on Section 5 Figure 5-3.

Emission sources for the co-located HMA plant includes HMA drum and baghouse; plant main and standby generators; asphalt cement heater; mineral filler silo; asphalt storage silo; cold aggregate and RAP storage piles; cold aggregate delivery system (feeder scalping screen pugmill and conveyors); RAP delivery system (feeder, scalping screen, and conveyors). The HMA plant will be located within the Davis Pit and was modeled as an open pit source. All particulate emitting ground release sources from the HMA plant (highlighted in yellow) are included in the open pit source (QUARRY3) except the haul road from the site entrance leading to the pit entrance.

TABLE 8: Co-Located HMA Modeled Sources

Model ID	Source Description
HMASTK	HMA Baghouse Stack
HMAGEN	HMA Plant Generator
HMASGEN	HMA Plant Standby Generator
HMAHEAT	HMA Asphalt Cement Heater
HMAFILL	HMA Mineral Filler Silo Loading
DRUMUNL	HMA Asphalt Silo Loading
HMASILO	HMA Asphalt Silo Unloading
HMAPILE1-6	HMA Storage Pile Handling 1-6
HMABIN	HMA Bin Loading
HMATP1	HMA Bin Unloading
HMASCR	HMA Scalping Screen
HMATP2	HMA Scalping Screen Unloading
HMAPUG	HMA Pug Mill
HMATP3	HMA Pug Mill Unloading
HMATP4	HMA Conveyor Transfer to Drum Conveyor
RAPBIN	HMA RAP Bin Loading
RAPTP1	HMA RAP Bin Unloading
HMARAPSCR	HMA RAP Screen
RAPTP2	HMA RAP Screen Unloading
RAPTP3	HMA RAP Transfer Point
HMASH_01-23	HMA Unpaved Entrance Road (Surfactants) Volume 1-23
HMAI_1-16	HMA Unpaved to Pit (Base Course and Watering) Haul Road Volume 1-16
HMA2_	HMA Unpaved in Pit (Base Course or Watering) Haul Road

2

Which scenario produces the highest concentrations? Why?

Scenario 4 produced the highest concentrations in particulate modeling. The later hours in the day have lower wind speeds with lower plume dispersion.
PM10 24 hour – Scenario 4
PM10 24 hour with HMA – Aggregate Plant Scenario 4 and HMA Plant Scenario 9
PM2.5 24 hour – Scenario 4
PM2.5 24 hour with HMA – Aggregate Plant Scenario 4 and HMA Plant Scenario 9
PM2.5 Annual - Scenario 4
PM2.5 Annual with HMA - Aggregate Plant Scenario 4 and HMA Plant Scenario 10

3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes☒	No☐
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources: See the discussion in 16-J.1.		
5	If hourly, variable emission rates were used that were not described above, describe them below.		
	No		
6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes☒	No☐
	For PM2.5 annual modeling an hourly factor was used to account for the difference in hourly throughput and modeled hours, and annual throughput. Based on the facility operating at the daily throughput limits found in Table 2 above, this is equivalent annual throughput from pit plant #1 and pit plant #2 of 3,234,000 tons per year. Since the annual throughput limit requested for Pit Plant #1 and Pit Plant #2 combined is 2,400,000 tons per year, an hourly factor of 0.74 (2,400,000 / 3,234,000) was used in the annual PM2.5 modeling.		

16-K: NO_2 Modeling

1	Which types of NO_2 modeling were used? Check all that apply.	
	☒	ARM2
	☐	100% NO_X to NO_2 conversion
	☐	PVMRM
	☐	OLM
	☐	Other:
2	Describe the NO_2 modeling.	
	ROI and CIA modeling was performed using the ARM2 method	
3	Were default NO_2/NO_X ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes☒ / No☐
4	Describe the design value used for each averaging period modeled.	
	1-hour: High eighth high Annual Highest Annual Average of Three Years:	

16-L: Ozone Analysis

1	NMED has performed a generic analysis that demonstrates sources that are minor with respect to PSD do not cause or contribute to any violations of ozone NAAQS. The analysis follows.

	The basis of the ozone SIL is documented in *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, EPA, April 17, 2018 and associated documents. NMED accepts this SIL basis and incorporates it into this permit record by reference. Complete documentation of the ozone concentration analysis using MERPS is included in the New Mexico Air Quality Bureau Air Dispersion Modeling Guidelines.
2	The MERP values presented in Table 10 and Table 11 of the NM AQB Modeling Guidelines that produce the highest concentrations indicate that facilities emitting no more than 250 tons/year of NO_X and no more than 250 tons/year of VOCs will cause less formation of O_3 than the O_3 significance level. $$[O_3]_{8-hour} = \left(\frac{250 \frac{ton}{yr}}{340_{MERP_{NOX}}} + \frac{250 \frac{ton}{yr}}{4679_{MERP_{VOC}}} \right) \times 1.96\ \mu g/m^3$$ =1.546 µg/m^3, which is below the significance level of 1.96 µg/m^3. Sources that produce ozone concentrations below the ozone SIL do not cause or contribute to air contaminant levels exceeding the ozone NAAQS.

3	Does the facility emit at least 250 tons per year of NO_X or at least 250 tons per year of VOCs? Sources that emit at least 250 tons per year of NO_X or at least 250 tons per year of VOCs are covered by the analysis above and require an individual analysis.	Yes☐	No☒

5	For new PSD Major Sources or PSD major modifications, if MERPs were used to account for ozone fill out the information below. If another method was used describe below.				
	NO_X (ton/yr)	$MERP_{NOX}$	VOCs (ton/yr)	$MERP_{VOC}$	$[O_3]_{8\text{-hour}}$

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.	
	☐	PM2.5
	☐	PM10
	☒	None
2	Describe the particle size distributions used. Include the source of information.	

3	Does the facility emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2? Sources that emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2 are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.	Yes☒	No☐
4	Was secondary PM modeled for PM2.5?	Yes☒	No☐

5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.				
	Pollutant	NO_X	SO_2		$[PM2.5]_{24\text{-hour}}$
	$MERP_{annual}$	130260	53898		0.00017
	$MERP_{24\text{-hour}}$	42498	9753		$[PM2.5]_{annual}$

	Emission rate (ton/yr)	99.6	3.5		0.0032

16-N: Setback Distances

1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.
	For the pit plant #1 and pit plant #2, these sources are located within the open pit where the particulate emissions are combined and input into the dispersion model as an open pit source. So long as the plants stay in the open pit, they are able to reposition within the open pit.
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.
	This facility will not relocate

16-O: PSD Increment and Source IDs

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.	Yes☐	No☒

Unit Number in UA-2	Unit Number in Modeling Files
Unit 127a – Emission Calculations P1SH	P1SH
Unit 127b – Emission Calculations P1TP	P1TP
Unit 127c – Emission Calculations P1P_	P1P_
Unit 127d – Emission Calculations P2SH	P2SH
Unit 127e – Emission Calculations P2TP	P2TP
Unit 127f – Emission Calculations P2P_	P2P_
Unit 127g – Emission Calculations CRO_	CRO_
Unit 127h – Emission Calculations CRI_	CRI_
Unit 127i – Emission Calculations CRP_	CRP_
Unit 127j – Emission Calculations QRP_	QRP_
Unit 127k – Emission Calculations QWP_1	QWP_1
Unit 127l – Emission Calculations QWP_2	QWP_2
Unit 127m – Emission Calculations RAPSH	RAPSH
Unit 127n – Emission Calculations RAPTP	RAPTP
Unit 127o – Emission Calculations RAPTQ	RAPTQ
Unit 127p – Emission Calculations RAPTH	RAPTH

2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.	Yes☐	No☒
	Hourly model emission rates for material handling sources (Emissions calculated using AP-42 Section 13.2.4) are calculated using annual average windspeed for Albuquerque 2001-2011.		

Permit ID	Model ID	Source Description	Permit Emission Rate		Modeled Emission Rate	
			PM10 Lb/Hr	PM2.5 Lb/Hr	PM10 Lb/Hr	PM2.5 Lb/Hr

	1		Pit Plant 1 Quarry Material	1.87292	0.28361	1.52677	0.23120
	2		Pit Plant 1 Quarry Truck Loading	1.87292	0.28361	1.52677	0.23120
	3		Pit Plant 1 Quarry Truck Unload	1.87292	0.28361	1.52677	0.23120
	4		Pit Plant 1 Feeder	1.87292	0.28361	1.52677	0.23120
	42		Waste Stacker Conveyor Drop to Pile	0.33723	0.05107	0.27491	0.04163
	43		Pit Plant 1 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	44		Pit Plant 1 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	45		Pit Plant 1 Stacker Conveyor to Pile	0.08993	0.01362	0.07331	0.01110
	46		Pit Plant 1 Stacker Conveyor to Pile	0.07869	0.01192	0.06415	0.00971
	47		Pit Plant 1 Stacker Conveyor to Pile	0.16862	0.02553	0.13745	0.02081
	48		Pit Plant 1 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	49		Pit Plant 1 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	50		Pit Plant 1 Finish Product Storage Pile	1.31104	0.19853	1.06874	0.16184
	51		Pit Plant 1 Product Truck Loading - Finish Pile	1.31104	0.19853	1.06874	0.16184
	53	Quarry1	Pit Plant 2 Quarry Material	1.87292	0.28361	1.52677	0.23120
	54		Pit Plant 2 Quarry Truck Loading	1.87292	0.28361	1.52677	0.23120
	55		Pit Plant 2 Quarry Truck Unload	1.87292	0.28361	1.52677	0.23120
	56		Pit Plant 2 Feeder	1.87292	0.28361	1.52677	0.23120
	94		Waste Stacker Conveyor Drop to Pile	0.33723	0.05107	0.27491	0.04163
	95		Pit Plant 2 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	96		Pit Plant 2 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	97		Pit Plant 2 Stacker Conveyor to Pile	0.08993	0.01362	0.07331	0.01110
	98		Pit Plant 2 Stacker Conveyor to Pile	0.07869	0.01192	0.06415	0.00971
	99		Pit Plant 2 Stacker Conveyor to Pile	0.16862	0.02553	0.13745	0.02081
	100		Pit Plant 2 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	101		Pit Plant 2 Stacker Conveyor to Pile	0.11241	0.01702	0.09164	0.01388
	102		Pit Plant 2 Finish Product Storage Pile	0.28103	0.04256	0.18879	0.02859
	103		Pit Plant 2 Product Truck Loading - Finish Pile	0.18735	0.02837	0.12586	0.01906
	105		Waste Truck Loading to Waste Pile	1.12375	0.17017	0.91606	0.13872
	106		Waste Storage Pile (Pit1+Pit2)	1.12375	0.17017	0.91606	0.13872
	109		Colored Rock Storage Pile at Pit Plant	1.87292	0.28361	1.52677	0.23120
	107	Quarry2	Colored Rock Quarry2	1.87292	0.28361	1.52677	0.23120
	108		Colored Rock Truck Loading Quarry2	1.87292	0.28361	1.52677	0.23120
	110	110	RAP Plant Raw Material Source	0.18729	0.02836	0.15268	0.02312
	111	111	RAP Plant Feeder/Hopper	0.18729	0.02836	0.15268	0.02312

	124	124	RAP Plant Stacker Conveyor to Pile	0.18729	0.02836	0.15268	0.02312
	125	125	RAP Plant Finish Product Storage Pile	0.18729	0.02836	0.15268	0.02312

3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?	Yes☐	No☒

4 Which units consume increment for which pollutants? PSD baseline has not been triggered for any pollutant in this AQCR.

Unit ID	NO_2	SO_2	PM10	PM2.5
NA				

5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).	PSD Baseline date has not been triggered for any pollutant in this AQCR.

6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☒	No☐

16-P: Flare Modeling

1 For each flare or flaring scenario, complete the following

	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	N/A			

16-Q: Volume and Related Sources

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines? If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☐	No☒

2	Describe the determination of sigma-Y and sigma-Z for fugitive sources.
	For storage piles the volume model inputs were based on the outline of the pile and a release height of 8 feet or a sigma-Z of 8ft*2/2.15 for Unit 110 (RAP Plant Raw Material Storage), and Unit 125 (RAP Plant Finish Product Storage Pile). All others (Volume Sources) followed standard dimensions from Air Quality Bureau (AQB) Modeling Guidelines.
3	Describe how the volume sources are related to unit numbers. Or say they are the same.
	Same
4	Describe any open pits.
	There are three open pit sources for the modeling of this site; main pit (QUARRY1) with Pit Plant 1 and Pit Plant 2 operations; colored rock pit (QUARRY2) mining operations; and main pit (QUARRY3) with HMA plant operations. The open pit source is equivalent to the volume of the actual quarry that will be operated at the extent of the quarry in the future to the east boundary.

	The main pit (QUARRY1 AND QUARRY3) width is 975 meters and length 755 meters and depth 10 meters. The volume is 7,361,250 square meters. The colored rock pit (QUARRY2) width is 120 meters and length 210 meters and depth 10 meters. The volume is 252,000 square meters.
5	Describe emission units included in each open pit.

QUARRY1 (Included Units)	QUARRY2 (Included Units)	QUARRY3 (Included Units)
Pit Plants 1 & 2, RAP Plant Haul Road Segment, and Colored Rock Haul Road Segment	**Colored Rock Mining and Colored Rock Haul Road Segment**	**HMA Units and HMA Haul Road Segment**
Units 1-51, 53-103, 105, 106, 109	Units 107, 108	Units AGGPILE, 1-12
Haul Road Section within Open Pits		
127c, 127f, 127i, 127j, 127k, 127l, 127p	127g	" TRCK" road section in pit (exclude "HMASH" and "HMAI")

16-R: Background Concentrations

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.	Yes☐	No☒
	CO: Del Norte High School (350010023)		
	NO_2: Del Norte High School (350010023)		
	PM2.5: Del Norte High School (350010023)		
	PM10: Del Norte High School (350010023)		
	SO_2: Del Norte High School (350010023)		
	Other:		
	Comments: Backgrounds used for both the initial site and relocation sites were provided by the Bernalillo County/City of Albuquerque Air Quality Program, the operator the Del Norte High School Monitoring Station (350010023).		
2	Were background concentrations refined to monthly or hourly values? If so describe below.	Yes☐	No☒

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Albuquerque	Yes☐	No☒
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		
	Provided by the Albuquerque/Bernalillo County Air Quality Program		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes☒	No☐
2	What was the source of the terrain data?		
	USGS National Elevation Data (NED)		

16-U: Modeling Files

1

Describe the modeling files: ROI modeling included all sources at the proposed MSCI Davis Pit Plant, CIA modeling for NO2 1 hour included all MSCI Davis Pit sources and significant neighboring sources; CIA modeling for NO2 Annual included MSCI Davis Pit Plant, significant neighboring sources and regional background; CIA modeling for PM10 24 hour included MSCI Davis Pit Plant, significant neighboring sources and regional background; and CIA modeling for PM2.5 24 hour and annual included MSCI Davis Pit Plant, significant neighboring sources and regional background.

Co-location with one of the three HMA NSR permits operated by MSCI was modeled to show compliance with NAAQS. CIA modeling for NO2 1 hour included all MSCI Davis Pit sources, co-located HMA plant, and significant neighboring sources; CIA modeling for NO2 Annual included MSCI Davis Pit Plant, co-located HMA plant, significant neighboring sources and regional background; CIA modeling for PM10 24 hour included MSCI Davis Pit Plant, co-located HMA plant, significant neighboring sources and regional background; and CIA modeling for PM2.5 24 hour and annual included MSCI Davis Pit Plant, co-located HMA plant, significant neighboring sources and regional background.

To limit the modeling time when co-located with one of the three HMA NSR permits operated by MSCI, modeling was performed for 8 scenarios of the HMA operating period historically producing the highest concentrations performed for HMA plants operating 24 hours per day (12 scenarios total), and the highest model concentrations scenario from the aggregate plant modeling (Scenario 4). The selected HMA modeling scenarios include early morning, afternoon and evening hours. These hours of the day historically produce the highest modeled concentration from a HMA plant operating 24 hours per day. The selected HMA operating scenarios include; Scenario 1 (12 AM to 12 PM), Scenario 6 (10 AM to 10 PM), Scenario 7 (12 PM to 12 AM), Scenario 8 (2 PM to 2AM), Scenario 9 (4 PM to 4 AM), Scenario 10 (6 PM to 6 AM), Scenario 11 (8 PM to 8 AM) and Scenario 12 (10 PM to 10 AM).

File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
MSCI Moriarty Combust ROI	CO, NO2, SO2, Lead	ROI
MSCI Moriarty PMROIS1	PM10 and PM2.5 Scenario 1	ROI
MSCI Moriarty PMROIS2	PM10 and PM2.5 Scenario 2	ROI
MSCI Moriarty PMROIS3	PM10 and PM2.5 Scenario 3	ROI
MSCI Moriarty PMROIS4	PM10 and PM2.5 Scenario 4	ROI
MSCI Moriarty NO2 1 Hour CIA	NO2 1 Hour	Cumulative
MSCI Moriarty NO2 Annual CIA	NO2 Annual	Cumulative
MSCI Moriarty PM10CIAS1	PM10 24 Hour Scenario 1	Cumulative
MSCI Moriarty PM10CIAS2	PM10 24 Hour Scenario 2	Cumulative
MSCI Moriarty PM10CIAS3	PM10 24 Hour Scenario 3	Cumulative
MSCI Moriarty PM10CIAS4	PM10 24 Hour Scenario 4	Cumulative
MSCI Moriarty PM2524hrCIAS1	PM2.5 24 Hour Scenario 1	Cumulative
MSCI Moriarty PM2524hrCIAS2	PM2.5 24 Hour Scenario 2	Cumulative
MSCI Moriarty PM2524hrCIAS3	PM2.5 24 Hour Scenario 3	Cumulative

	MSCI Moriarty PM2524hrCIAS4	PM2.5 24 Hour Scenario 4	Cumulative
	MSCI Moriarty PM25YrCIAS1	PM2.5 Annual Scenario 1	Cumulative
	MSCI Moriarty PM25YrCIAS2	PM2.5 Annual Scenario 2	Cumulative
	MSCI Moriarty PM25YrCIAS3	PM2.5 Annual Scenario 3	Cumulative
	MSCI Moriarty PM25YrCIAS4	PM2.5 Annual Scenario 4	Cumulative
		With Co-located HMA	
	MSCI Moriarty NO2 1Hr HMA CIA	NO2 1 Hour with HMA	Cumulative
	MSCI Moriarty NO2 Annual HMA CIA	NO2 Annual with HMA	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S1	PM10 24 Hour Scenario 4 HMA Scenario 1	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S6	PM10 24 Hour Scenario 4 HMA Scenario 6	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S7	PM10 24 Hour Scenario 4 HMA Scenario 7	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S8	PM10 24 Hour Scenario 4 HMA Scenario 8	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S9	PM10 24 Hour Scenario 4 HMA Scenario 9	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S10	PM10 24 Hour Scenario 4 HMA Scenario 10	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S11	PM10 24 Hour Scenario 4 HMA Scenario 11	Cumulative
	MSCI Moriarty PM10CIAS4HMA_S12	PM10 24 Hour Scenario 4 HMA Scenario 12	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S1	PM25 24 Hour Scenario 4 HMA Scenario 1	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S6	PM25 24 Hour Scenario 4 HMA Scenario 6	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S7	PM25 24 Hour Scenario 4 HMA Scenario 7	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S8	PM25 24 Hour Scenario 4 HMA Scenario 8	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S9	PM25 24 Hour Scenario 4 HMA Scenario 9	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S10	PM25 24 Hour Scenario 4 HMA Scenario 10	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S11	PM25 24 Hour Scenario 4 HMA Scenario 11	Cumulative
	MSCI Moriarty PM25 24Hr CIAS4_HMA_S12	PM25 24 Hour Scenario 4 HMA Scenario 12	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S1	PM25 Annual Scenario 4 HMA Scenario 1	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S6	PM25 Annual Scenario 4 HMA Scenario 6	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S7	PM25 Annual Scenario 4 HMA Scenario 7	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S8	PM25 Annual Scenario 4 HMA Scenario 8	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S9	PM25 Annual Scenario 4 HMA Scenario 9	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S10	PM25 Annual Scenario 4 HMA Scenario 10	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S11	PM25 Annual Scenario 4 HMA Scenario 11	Cumulative
	MSCI Moriarty PM25 Yr CIAS4_HMA_S12	PM25 Annual Scenario 4 HMA Scenario 12	Cumulative

16-V: PSD New or Major Modification Applications			
1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes☐	No☒
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes☐	No☒
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
	N/A		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
	N/A		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes☒	No☐
	PM2.5 secondary analysis was performed an added to the final model results for PM2.5 24 hour and annual averaging periods.		

16-W: Modeling Results

	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes☒	No☐

1

For NO2 1 hour model for MSCI Davis Pit Plant, exceedances were found near neighboring source (NuStar Logistics, LP Moriarty Station) east of the Davis Pit. The MaxDCount program in Beest was reviewed to determine concentrations for all receptors above 188 ug/m3 and the contribution from MSCI Davis Pit sources. For receptors above the NO2 1 hour NAAQS, the contribution from MSCI Davis Pit Plant was less than the SIL of 7.52 µg/m^3.

NO2 1 Hour Model Receptors Above NAAQS			
UTME (m)	**UTMN (m)**	**Modeled Max (ug/m3)**	**MSCI Contribution (ug/m3)**
413400	3869950	217.6	0.0376
413450	3869950	195.4	0.0165
413300	3870000	234.6	0.0410
413400	3870000	387.2	0.0853
413450	3870000	204.2	1.4336
413250	3870050	193.3	0.0172
413300	3870050	290.5	0.0000
413350	3870050	230.9	0.0199
413450	3870050	268.3	5.2516
413300	3870100	217.9	0.0500
413400	3870100	209.2	0.1093
413450	3870100	195.4	0.1133
413400	3870150	190.8	0.0216

2 Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
CO 1hr	113.7	NA	NA	NA	NA	SIL – 2000	5.7	411733.8	3869600.2	1923.37
CO 8hr	27.1	NA	NA	NA	NA	SIL – 500	5.4	411637.3	3869696.7	1916.89
NO2 1hr	130.35	130.46	NA	NA	130.5	188.0	69.4	412834.1	3870321.4	1938.30
NO2 Annual	1.12	19.7	NA	18.0	37.7	94.0	40.1	413300.0	3870050.0	1932.54
PM10 24hr	69.0	69.3	NA	22.3	91.6	150.0	61.1	412091.6	3870367.2	1930.52
PM2.5 24hr	5.3	5.4	0.0033	14.3	19.7	35.0	56.3	412331.1	3870352.5	1933.40
PM2.5 Yr	1.34	1.39	0.00017	5.4	6.8	9.0	75.6	412403.0	3870348.0	1933.76
SO2 1hr	7.5	NA	NA	NA	NA	SIL – 7.8	96.2	411733.8	3869600.2	1923.37
SO2 3hr	4.8	NA	NA	NA	NA	SIL – 25.0	19.2	412091.6	3870367.2	1930.52
SO2 24hr	1.3	NA	NA	NA	NA	SIL – 5.0	26.0	412067.6	3870368.7	1929.69
SO2 Annual	0.15	NA	NA	NA	NA	SIL – 1.0	15.0	412091.6	3870367.2	1930.52
Lead Quarterly	0.00004	NA	NA	NA	NA	SIL – 0.03	<1	412091.6	3870367.2	1930.52
With Co-located HMA										
NO2 1hr include HMA	130.38	130.44	NA	NA	130.4	188.0	69.4	412834.1	3870321.4	1938.30
NO2 Annual include HMA	1.12	19.90	NA	18.0	37.9	94.0	40.3	413300.0	3870050.0	1932.54
PM10 24hr include HMA	57.5	100.3	NA	22.3	122.6	150.0	81.7	411499.0	3870199.8	1915.52
PM2.5 24hr include HMA	5.2	7.8	0.0033	14.3	22.1	35.0	63.1	412067.6	3870368.7	1929.69
PM2.5 Yr include HMA	1.33	2.1	0.00017	5.4	7.5	9.0	83.3	412163.4	3870362.8	1932.08

16-X: Summary/conclusions

	A statement that modeling requirements have been satisfied and that the permit can be issued.
1	Dispersion modeling was performed for the new permit application for MSCI's NSR (MSCI Davis Pit Plant). All facility pollutants with ambient air quality standards and PSD Increment standards were modeled to show compliance with those standards. All results of this modeling showed the facility in compliance with applicable ambient air quality standards.

DISPERSION MODEL PROTOCOL
FOR MOUNTAIN STATES CONSTRUCTORS, INC.
MSCI DAVIS PIT PLANT
NSR MINOR SOURCE PERMIT APPLICATION

Moriarity, New Mexico

PREPARED FOR

Mountain States Constructors, Inc.

Dated June 5, 2026

Prepared by

Onterris USA, Inc.

Onterris

CONTENTS

TABLE OF CONTENTS **PAGE**

1.0 INTRODUCTION 1
1.1 FACILITY DESCRIPTION 1
1.1.1 MSCI Davis Pit Pit Plant #1 2
1.1.2 MSCI Davis Pit Pit Plant #2 2
1.1.3 MSCI Davis Pit RAP Crushing and Screening Plant 3
1.2 FACILITY IDENTIFICATION AND LOCATION 10
1.3 CO-LOCATED HMA PLANT 12
2.0 SIGNIFICANT MONITORING AIR QUALITY IMPACT ANALYSIS 13
2.1 DISPERSION MODEL SELECTION 15
2.2 BUILDING WAKE EFFECT 15
2.3 METEOROLOGICAL DATA 16
2.4 RECEPTORS AND TOPOGRAPHY 16
2.5 MODELED EMISSION SOURCES INPUTS 16
2.5.1 MSCI Davis Pit Plant Road Vehicle Traffic Model Inputs 17
2.5.2 MSCI Davis Pit Plant Material Handling Volume Source Model Inputs 17
2.5.3 MSCI Davis Pit Plant Material Handling Point Source Model Inputs 17
2.6 PARTICLE SIZE DISTRIBUTION 17
2.7 PM2.5 SECONDARY EMISSIONS MODELING 19
2.8 NO2 MODELING 20
2.9 SIGNIFICANT NEIGHBORING BACKGROUND SOURCES 21
2.10 REGIONAL BACKGROUND CONCENTRATIONS 21

TABLE OF TABLES **PAGE**

TABLE 1 MSCI Davis Pit Aggregate Plant Engine Hours of Operation (MST) 4
TABLE 2 MSCI Davis Pit Aggregate Plant Processing Hours of Operation (MST) 5
TABLE 3 Aggregate/Recycle Daily Production Rates 5
TABLE 4 MSCI Davis Pit Plant Scenario 1 Modeled Hours of Operation (MST) 6
TABLE 5 MSCI Davis Pit Plant Scenario 2 Modeled Hours of Operation (MST) 7
TABLE 6 MSCI Davis Pit Plant Scenario 3 Modeled Hours of Operation (MST) 8
TABLE 7 MSCI Davis Pit Plant Scenario 4 Modeled Hours of Operation (MST) 9
TABLE 8 MSCI Davis Pit Haul Road Descriptions 10
TABLE 9 Co-Located HMA Modeled Sources 12
TABLE 10 National and New Mexico Ambient Air Quality Standard Summary 14
TABLE 11 Standards for Which Modeling Is Not Required by NMED AQB. 14
TABLE 12 NMED Approved Particle Density Parameters. 18
TABLE 13 Road Vehicle Fugitive Dust Deposition Parameters 18
TABLE 14 Combustion Source Deposition Parameters 18
TABLE 15 Material Handling (Fugitive) Dust Source Deposition Parameters 18
TABLE 16 Co-Located Lime Baghouse Source Deposition Parameters 19
TABLE 17 Co-Located Asphalt Baghouse and Stack Source Deposition Parameters 19
TABLE 18 Summary of Selected ISR 21

TABLE OF FIGURES **PAGE**

FIGURE 1 MSCI Davis Pit Plant Aerial View with Equipment Location 11

1.0 INTRODUCTION

This dispersion modeling analysis will be conducted by Onterris USA, Inc. (Onterris) on behalf of Mountain States Constructors, Inc. (MSCI), to evaluate ambient air quality impacts from the MSCI Davis Pit Plant, as part of a minor source NSR permitting action. The facility will consist of a 600 tph and 1,200,000 tpy pit plant #1 (crushing and screening plant); 600 tph and 1,200,000 tpy pit plant #2 (crushing and screening plant); and 200 tph and 400,000 tpy recycled asphalt products (RAP crushing and screening) plant. Material will be extracted from two pits; the main pit where most of the aggregate is supplied and where the two pit plants are located, and a decorative colored rock pit where colored rock will be mined then taken down into the main pit to be processed by one of the two 600 tph aggregate plants (600 tph and 500,000 tpy).

The objective of this modeling evaluation is to predict if, operating at requested maximums, the facility operations would result in ambient air concentrations for nitrogen dioxide, (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), and particulate matter; both 10 microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$); would exceed the New Mexico and federal ambient air quality standards, NMAAQS and NAAQS respectively. Since MSCI Davis Pit Plant is a minor source for NSR permitting and is located in AQCR 154, where the minor source baseline date has not been triggered for any pollutant, no PSD II Increment analysis will be performed.

The dispersion modeling will be conducted using the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee Dispersion Model (AERMOD), Version 24142. This model is recommended by EPA for determining Class II impacts within 50 km of the source being assessed. Additionally, AERMOD was developed to handle complex terrain. The objective of this evaluation is to determine whether ambient air concentrations from the maximum operation of the facility for nitrogen dioxide, (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), and particulate matter; both 10 microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$); are below Class II federal and state ambient air quality standards (NAAQS and NMAAQS) found in 40 CFR part 50 and the state of New Mexico's air quality regulation 20.2.3 NMAC from MSCI Davis Pit Plant emission sources.

1.1 FACILITY DESCRIPTION

MSCI Davis Pit Plant is a proposed site that will operate an aggregate/recycle asphalt crushing and screening operation. 600 tph and 1,200,000 tpy pit plant #1 (crushing and screening plant); 600 tph and 1,200,000 tpy pit plant #2 (crushing and screening plant); and 200 tph and 400,000 tpy recycled asphalt products (RAP crushing and screening)

plant. Material will be extracted from two pits; the main pit where most of the aggregate is supplied and where the two pit plants are located, and a decorative colored rock pit where colored rock will be mined then taken down into the main pit to be processed by one of the two 600 tph aggregate plants (600 tph and 500,000 tpy). Daily production rates are presented in Table 4.

1.1.1 MSCI Davis Pit Pit Plant #1

The 600 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2288 hp (1600 kW) diesel-fired engine. Material from the raw material quarry will be loaded into the plant feeder. This material is processed first through a jaw crusher, surge bin and pre-screen to separate product from waste material. Waste material is haul to the waste pile by rock trucks. Product material is transported by conveyor to a splitter conveyor which will send the material to one of two lines. For each line material is sized in the cone crusher. From the cone crusher, material is sent to the 3-deck screen. Oversized material from the 3-deck screen is recycled back to the cone crusher. Part of the finished material from one of the 3-deck screen is sent to the air separator for further size separation. Finish material is loaded into finish piles located within the main pit. From the finish storage piles, product is transported by road haul trucks from the facility to off-site sales. Figure 1 presents an equipment layout for pit plant #1. The engine hours of operation are presented below in Table 1. The material processing hours of operation are presented below in Table 2.

1.1.2 MSCI Davis Pit Pit Plant #2

The 600 tph crushing and screening operation will include an aggregate quarry source, raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) pre-screen, two (2) cone crushers, two (2) 3-deck screens, one (1) air separator, twenty-nine (29) transfer conveyors, and eight (8) stacker conveyors. The crushing plant will be powered by a 2153 hp (1500 kW) diesel-fired engine. Material from the raw material quarry will be loaded into the plant feeder. This material is processed first through a jaw crusher, surge bin and pre-screen to separate product from waste material. Waste material is haul to the waste pile by rock trucks. Product material is transported by conveyor to a splitter conveyor which will send the material to one of two lines. For each line material is sized in the cone crusher. From the cone crusher, material is sent to the 3-deck screen. Oversized material from the 3-deck screen is recycled back to the cone crusher. Part of the finished material from one of the 3-deck screen is sent to the air separator for further size separation. Finish material is loaded into finish piles located

within the main pit. From the finish storage piles, product is transported by road haul trucks from the facility to off-site sales. Figure 1 presents an equipment layout for pit plant #2. The engine hours of operation are presented below in Table 1. The material processing hours of operation are presented below in Table 2.

1.1.3 MSCI Davis Pit RAP Crushing and Screening Plant

The 200 tph recycled asphalt crushing and screening operation will include a raw material surge pile, one (1) feeder, one (1) jaw crusher, one (1) surge bin, one (1) cone crusher, one (1) 2-deck screen, eight (8) transfer conveyors, and one (1) stacker conveyor. The RAP crushing plant will be powered by a 415 hp (306 kW) diesel-fired engine. RAP material is brought in the facility in road haul trucks and stored in a RAP material storage pile until loaded into the RAP plant feeder. This material is processed first through a jaw crusher, surge bin and 2-deck screen to produce sized RAP to be used in the co-located HMA. Oversized material from the 2-deck screen sent to the cone crusher then recycled back to the 2-deck screen. Recycled RAP material is loaded into a finish pile until needed for the co-located HMA. Figure 1 presents an equipment layout for RAP crushing and screening plant. The RAP crushing and screening plant processing hours of operation are presented below in Table 3.

The first hour of each day will be limited to starting and warming up of the engines, see Table 1. After the first hour, material processing can occur, see Table 2.

TABLE 1: MSCI Davis Pit Plant Engine Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
6:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	10.5	11.5	12	14	14	14.5	14.5	14	13.5	12	11	10.5

TABLE 2: MSCI Davis Pit Plant Processing Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
7:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	9.5	10.5	11	13	13	13.5	13.5	13	12.5	11	10	9.5

TABLE 3: MSCI Davis Pit Plant Daily Processing Rate

Month	Pit Plant 1 Tons Per Day	Pit Plant 2 Tons Per Day	RAP Plant Tons Per Day
January	3300	3300	1100
February	3300	3300	1100
March	4800	4800	1600
April	4800	4800	1600
May	4800	4800	1600
June	4800	4800	1600
July	4800	4800	1600
August	4800	4800	1600
September	4800	4800	1600
October	4500	4500	1600
November	4800	4800	1600
December	3300	3300	1100

Since the daily production rate is less than the proposed hours of operation running at maximum hourly production rate, four modeling scenarios will be performed for particulate emissions. The model hours are presented in Tables 4, 5, 6, and 7.

TABLE 4: MSCI Davis Pit Plant Scenario 1 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
7:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	0	0	1	1	1	1	1	1	1	1	1	0
2:00 PM	0	0	1	0	0	0	0	0	0.5	0.5	1	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

TABLE 5: MSCI Davis Pit Plant Scenario 2 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	1	1	1	1	1	0.5	0.5	0	0
8:00 AM	0.5	0.5	1	1	1	1	1	1	1	1	1	0.5
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	0	0	1	1	1	1	1	1	1	1	1	0
3:00 PM	0	0	1	0	0	0	0	0	0.5	0.5	1	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

TABLE 6: MSCI Davis Pit Plant Scenario 3 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0.5	0.5	0
8:00 AM	0	0	1	0	0	0	0	0	0	1	1	0
9:00 AM	0.5	0	1	1	1	0.5	0.5	1	1	1	1	0.5
10:00 AM	1	0.5	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	0	1	1	1	1	1	1	1	1	0.5	0.5	0
4:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
5:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

TABLE 7: MSCI Davis Pit Plant Scenario 4 Modeled Hours of Operation (MST)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0.5	1	0
10:00 AM	0	0	1	0	0	0	0	0	0	1	1	0
11:00 AM	0.5	0	1	1	1	0.5	0.5	1	1	1	1	0.5
12:00 PM	1	0.5	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0	1	1	1	1	1	1	1	1	0.5	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	5.5	5.5	8	8	8	8	8	8	8	8	8	5.5

As seen in Figure 1, there are multiply truck routes and two types of material haul trucks, commercial haul trucks and quarry (rock) trucks. Commercial haul trucks are used to transport product from the site and haul RAP material in. Rock trucks are used onsite to haul material from the quarry wall to the pit plants, product to the plant finish piles, and waste material in the pit to the waste storage pile.

The entrance road to the site is unpaved and controlled with base course and watering until entrance into the pits, see Figure 1. Pit roads will be unpaved and controlled with watering or base course.

The following Table 8 describes the haul roads at the site and if they are operating in the quarry and are included in the open pit modeled source emission rate input into the model. The total emissions from all truck traffic are included in Emission Unit 127 “Plant Haul Roads”.

TABLE 8: MSCI Davis Pit Haul Road Descriptions

Model ID	Description	Truck Type	Open Pit Emission Source
P1I_	Haul Road Traffic Pit Plant #1: into site to edge of main pit to pit plant #1	Commercial	No
P1P_	Haul Road Traffic Pit Plant #1: into main pit to pit plant #1	Commercial	Yes
P2I_	Haul Road Traffic Pit Plant #2: into site to edge of main pit to pit plant #2	Commercial	No
P2P_	Haul Road Traffic Pit Plant #2: into main pit to pit plant #2	Commercial	Yes
CRO_	Haul Road Colored Rock Pit: road out of colored rock pit	Rock	Yes
CRI_	Haul Road Colored Rock: road between colored rock pit and main pit	Rock	No
CRP_	Haul Road Colored Rock: road into main pit to one of two pit plants	Rock	Yes
QRP_	Haul Road Traffic Rock Trucks: from either pit plants #1 or #2 to product storage piles	Rock	Yes
QWP_1	Haul Road Traffic Waste: quarry trucks for pit plant #1	Rock	Yes
QWP_2	Haul Road Traffic Waste: quarry trucks for either pit plants #1 or #2	Rock	Yes
RAP_1	RAP Delivery to Site: to RAP plant location	Commercial	No
RAP_2	RAP Processed: from RAP Plant to main pit edge	Commercial	No
RAP_3	RAP Processed: into main pit to HMA location	Commercial	Yes

1.2 FACILITY IDENTIFICATION AND LOCATION

MSCI Davis Pit Plant will be located 5.7 miles east-southeast of Moriarty, New Mexico in Torrance County at latitude 34.968768 (digital degrees) and longitude -105.959603 (digital degrees). The UTM Coordinates of the facility are approximately 412,400 meters East and 3,870,000 meters North, Zone 13, with NAD83 datum at an elevation of approximately 6,310 feet above mean sea level.

Figure 1 below presents a layout of the site showing the relative locations of the facility equipment, roads and storage piles.

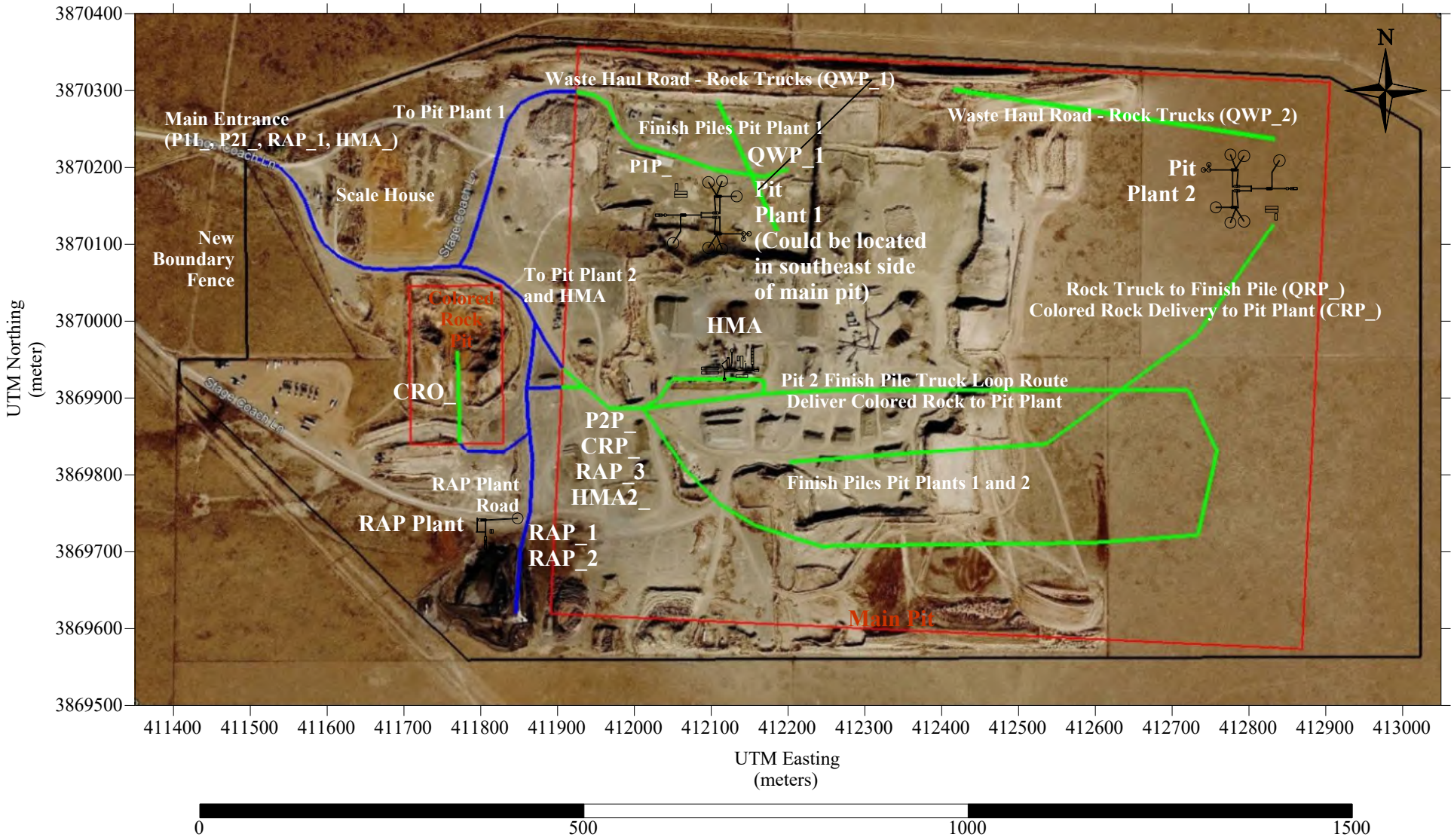


Figure 1: MSCI's Davis Pit Plant Aerial View with Equipment Location

1.3 CO-LOCATED HMA PLANT

The MSCI Davis Pit Plant will be permitted to allow co-location with one of the three MSCI HMA plant presently operating under NSR Permits 3171-M1, 4453, or 9720. To show compliance with NAAQS for operating any of the plants, an analysis of the worst-case operating parameters was used in the model. The maximum operating schedule for any one of the 3 permits is 24 hour per day operation for 365 days per year. Additionally, any of the MSCI HMA plants can also co-locate under their existing GCP3 registrations. Regardless of the model results, each HMA plant will operate under the terms and conditions of their individual NSR permit. Haul truck traffic to and from the site will travel on unpaved road around the HMA site itself. Location of the HMA site is shown on Figure 1.

Emission sources for the co-located HMA plant includes HMA drum and baghouse; plant main and standby generators; asphalt cement heater; mineral filler silo; asphalt storage silo; cold aggregate and RAP storage piles; cold aggregate delivery system (feeder scalping screen pugmill and conveyors); RAP delivery system (feeder, scalping screen, and conveyors).

TABLE 9: Co-Located HMA Modeled Sources

Model ID	Source Description
HMASTK	HMA Baghouse Stack
HMAGEN	HMA Plant Generator
HMASGEN	HMA Plant Standby Generator
HMAHEAT	HMA Asphalt Cement Heater
HMAFILL	HMA Mineral Filler Silo Loading
DRUMUNL	HMA Asphalt Silo Loading
HMASILO	HMA Asphalt Silo Unloading
QUARRY3	HMA Storage Pile Handling 1-6
	HMA Bin Loading
	HMA Bin Unloading
	HMA Scalping Screen
	HMA Scalping Screen Unloading
	HMA Pug Mill
	HMA Pug Mill Unloading
	HMA Conveyor Transfer to Drum Conveyor
	HMA RAP Bin Loading
	HMA RAP Bin Unloading
	HMA RAP Screen
	HMA RAP Screen Unloading
	HMA RAP Transfer Point
	HMA Haul Road in Main Pit
HMA_01-39	HMA Entrance Road to Main Pit Volume 1-39

2.0 SIGNIFICANT MONITORING AIR QUALITY IMPACT ANALYSIS

This section identifies the technical approach and dispersion model inputs that will be used for the Class II federal and State ambient air quality standards and Class II Increment impacts for this stationary source. NMED AQB requires that all applicable criteria pollutant emissions be modeled using the most recent versions of US EPA's approved models and be compared with National Ambient Air Quality Standards (NAAQS), and New Mexico Ambient Air Quality Standards (NMAAQS). Table 10 shows the NAAQS and NMAAQS (without footnotes) that the source's ambient impacts must meet in order to demonstrate compliance. Table 11 lists all standards for which modeling is not required by NMED AQB.

The dispersion modeling analysis will be performed to estimate concentrations resulting from the operation of the MSCI Davis Pit Plant using the maximum hourly emission rates while all emission sources are operating. The modeling will determine maximum off-site concentrations for nitrogen dioxide, (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), and particulate matter with aerodynamic diameter less than 10 micrometers (PM_{10}) and particulate matter with aerodynamic diameter less than 2.5 micrometers ($PM_{2.5}$), for comparison with modeling significance levels, and national/New Mexico ambient air quality standards (AAQS). Additionally, modeling will determine maximum off-site concentrations for PM_{10} 24 hour and annual average increment limits. The modeling will follow the guidance and protocols outlined in the New Mexico Air Quality Bureau "Air Dispersion Modeling Guidelines" (Revised June 2024) and the most up to date EPA's *Guideline on Air Quality Models*.

Initial site modeling will be performed with MSCI Davis Pit Plant sources only to determine pollutant and averaging periods that exceeds pollutant SILs. If initial modeling for any pollutant and averaging period exceeds the SILs, then cumulative modeling will be performed for those pollutants and averaging periods and will include significant neighboring sources along with background ambient concentrations as defined in the NMED's modeling guidelines.

TABLE 10: National and New Mexico Ambient Air Quality Standard Summary

Pollutant	Avg. Period	Sig. Lev. ($\mu g/m^3$)	Class I Sig. Lev. ($\mu g/m^3$)	NAAQS	NMAAQS	PSD Increment Class I	PSD Increment Class II
CO	8-hour	500		9,000 ppb(1)	8,700 ppb(2)		
	1-hour	2,000		35,000 ppb(1)	13,100 ppb(2)		
NO_2	annual	1.0	0.1	53 ppb(3)	50 ppb(2)	2.5 $\mu g/m^3$	25 $\mu g/m^3$
	24-hour	5.0			100 ppb(2)		
	1-hour	7.52		100 ppb(4)			
$PM_{2.5}$	annual	0.13	0.05	9 $\mu g/m^3$(5)		1 $\mu g/m^3$	4 $\mu g/m^3$
	24-hour	1.2	0.27	35 $\mu g/m^3$(6)		2 $\mu g/m^3$	9 $\mu g/m^3$
PM_{10}	annual	1.0	0.2			4 $\mu g/m^3$	17 $\mu g/m^3$
	24-hour	5.0	0.3	150 $\mu g/m^3$(7)		8 $\mu g/m^3$	30 $\mu g/m^3$
SO_2	annual	1.0	0.1		20 ppb(2)	2 $\mu g/m^3$	20 $\mu g/m^3$
	24-hour	5.0	0.2		100 ppb(2)	5 $\mu g/m^3$	91 $\mu g/m^3$
	3-hour	25.0	1.0	500 ppb(1)		25 $\mu g/m^3$	512 $\mu g/m^3$
	1-hour	7.8		75 ppb(8)			

Standards converted from ppb to $\mu g/m^3$ use a reference temperature of 25° C and a reference pressure of 760 millimeters of mercury.
(1) Not to be exceeded more than once each year.
(2) Not to be exceeded.
(3) Annual mean.
(4) 98th percentile of 1-hour daily maximum concentrations, averaged over 3 years.
(5) Annual mean, averaged over 3 years.
(6) 98th percentile, averaged over 3 years.
(7) Not to be exceeded more than once per year on average over 3 years.
(8) 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years.

TABLE 11: Standards for Which Modeling Is Not Required by NMED AQB.

Standard not Modeled	Surrogate that Demonstrates Compliance
CO 8-hour NAAQS	CO 8-hour NMAAQS
CO 1-hour NAAQS	CO 1-hour NMAAQS
NO_2 annual NAAQS	NO_2 annual NMAAQS
NO_2 24-hour NMAAQS	NO_2 1-hour NAAQS
O_3 8-hour	Regional modeling
SO_2 annual NMAAQS	SO_2 1-hour NAAQS
SO_2 24-hour NMAAQS	SO_2 1-hour NAAQS
SO_2 3-hour NAAQS	SO_2 1-hour NAAQS

2.1 DISPERSION MODEL SELECTION

The dispersion modeling will be conducted using the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee Dispersion Model (AERMOD), Version 24142. This model is recommended by EPA for determining Class II impacts within 50 km of the source being assessed. Additionally, AERMOD was developed to handle complex terrain. In this analysis, AERMOD will be used to estimate pollutant ambient air concentrations of NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ from the MSCI Davis Pit Plant emission sources.

AERMOD is a Gaussian plume dispersion model that is based on planetary boundary layer principles for characterizing atmospheric stability. The model evaluates the non-Gaussian vertical behavior of plumes during convective conditions with the probability density function and the superposition of several Gaussian plumes. AERMOD modeling system has three components: AERMAP, AERMET, and AERMOD. AERMAP is the terrain preprocessor program. AERMET is the meteorological data preprocessor. AERMOD includes the dispersion modeling algorithms and was developed to handle simple and complex terrain issues using improved algorithms. AERMOD uses the dividing streamline concept to address plume interactions with elevated terrain.

AERMOD will be run using all the regulatory default options including use of stack-tip downwash, buoyancy-induced dispersion, calms processing routines, upper-bound downwash concentrations for super-squat buildings, default wind speed profile exponents, vertical potential temperature gradients, and no use of gradual plume rise. Beta version options include the use of flat terrain mode for fugitive ground release sources. The model incorporated local terrain into the calculations for point sources and neighboring sources only.

2.2 BUILDING WAKE EFFECT

AERMOD can account for building downwash and cavity zone effects. Evaluation of building downwash on adjacent stack sources is deemed necessary, since most (if not all) of the stack source heights may be below Good Engineering Practice (GEP) heights. The formula for GEP height estimation is:

$H_s = H_b + 1.50L_b$

where: H_s = GEP stack height

H_b = building height

L_b = the lesser building dimension of the height, length, or width

The effects of aerodynamic downwash due to buildings and other structures will be accounted for by using wind direction-specific building parameters calculated by the USEPA-

approved Building Parameter Input Program Prime (BPIP-Prime (*Version 04274*)) and the algorithms included in the AERMOD air dispersion model. No buildings are located at the site that will cause building wake effects for facility point sources.

2.3 METEOROLOGICAL DATA

The meteorological data input file to be used in this dispersion modeling analysis is Albuquerque met data covering years 2014 through 2018 (AERMET version 23132 dated 06/11/2025) available from the Albuquerque Environment Health Department Air Quality Program.

2.4 RECEPTORS AND TOPOGRAPHY

For each pollutant, the radius of significant impact around the facility is established using a Cartesian grid. A 25-meter grid spacing is used for the facility boundary receptors. A 50-meter spacing and 100-meter spacing are extended to 500-meters and 1-km beyond the facility boundary, respectively from the facility boundary in each direction for a very fine grid resolution. Receptors for a fine grid resolution are placed with 250-meter spacing to a distance of 2.5-km from the facility boundary. Receptors for a course grid resolution are placed with 500-meter, and 1000-meter spacing to a distance of 5-km and 50-km, respectively from the facility boundary.

All model receptors will be preprocessed using the AERMAP software (*Version 24142*) associated with AERMOD. The AERMAP software establishes a base elevation and a height scale for each receptor location. The height scale is a measure of the receptor's location and base elevation and its relation to the terrain feature that has the greatest influence in dispersion for that receptor. AERMAP will be processed using U.S. Geological Survey (USGS) national elevation data (NED). Output from AERMAP will be used as input to the AERMOD runstream file for each model run. The AERMAP domain will be large enough to encompass the 10 percent slope factor required for calculating the controlling hill height.

2.5 MODELED EMISSION SOURCES INPUTS

MSCI Davis Pit Plant proposes to operate for material processing is 13.5 hours per day (6 am to 7:30 pm) for the months of June and July; 13 hours per day (6 am to 7 pm) for the months of April, May, and August; 12.5 hours per day (6:30 am to 7 pm) for the month of September; 11 hours per day (7 am to 6 pm) for the month of March; 11 hours per day (6:30 am to 5:30 pm) for the month of October; 10.5 hours per day (7:30 am to 6 pm) for the month of February; 10 hours per day (7 am to 5 pm) for the month of November; and 9.5 hours per day (7:30 am to 5 pm) for the months of December and January, 7 days per week, and 52 weeks per year. For the pit plant #1, pit plant #2, and RAP plant engines

will be permitted to allow for an additional hour in the morning for engine warmup. To represent the worst-case modeling scenario, the maximum hourly emission rates were modeling using four operating scenarios as found in Tables 4 – 7.

2.5.1 MSCI Davis Pit Plant Road Vehicle Traffic Model Inputs

The unpaved road fugitive dust for truck traffic is modeled as a line of volume sources. The AQB's approved procedure for Modeling Haul Roads was followed to develop modeling input parameters for unpaved haul roads. Volume source characterization followed the steps described in the Air Quality Bureau's Guidelines (Tables 42 and 43).

2.5.2 MSCI Davis Pit Plant Material Handling Volume Source Model Inputs

Material handling and processing will follow the procedure found in AQB's Modeling Guidelines for Fugitive Equipment Sources (Table 41).

2.5.3 MSCI Davis Pit Plant Material Handling Point Source Model Inputs

For exhaust from engines, the release height will be the height from the ground to the exhaust exit height. The stack diameter will be determined by measuring the stack. Stack temperature and flow rate (stack velocity) will be determined from manufacturer's data or conservative parameters.

2.6 PARTICLE SIZE DISTRIBUTION

PM_{10} emissions may be modeled using plume deposition. Plume deposition simulates the effect of gravity as particles "fall-out" from the plume to the ground as the plume travels downwind. Therefore, the farther the plume travels from the emission point to the receptor, the greater the effect of plume deposition and the greater the decrease in modeled impacts or concentrations. Particle size distribution, particle mass fraction, and particle density are required inputs to the model to perform this function.

Particle size distribution for fugitive road dust on unpaved roads; material handling fugitive emissions; and combustion will use the particle size distribution found in the NMED Modeling Section approved values.

The mass-mean particle diameters were calculated using the formula:

$$d = ((d^3_1 + d^2_1 d_2 + d_1 d^2_2 + d^3_2) / 4)^{1/3}$$

Where: d = mass-mean particle diameter
d_1 = low end of particle size category range
d_2 = high end of particle size category range

Representative average particle densities were obtained from NMED accepted values and presented in Table 12.

TABLE 12: NMED Approved Particle Density Parameters

Material	Density (g/cm^3)	Reference
Road Dust - MSCI and Co-Located HMA	2.5	NMED Value
Lime – Co-Located HMA	3.3	NMED Value
HMA Asphalt – Co-Located HMA	1.5	NMED Value
Combustion – MSCI and Co-Located HMA	1.5	NMED Value
Fugitive Dust – MSCI and Co-Located HMA	2.5	NMED Value

The size distribution for PM_{10} emission sources are presented in Tables 13-17.

TABLE 13: Road Vehicle Fugitive Dust Deposition Parameters

Particle Size Category (μm)	Mass Mean Particle Diameter (μm)	Mass Weighted Size Distribution (%)	Density (g/cm^3)
PM10			
0 – 2.5	1.57	25.0	2.5
2.5 – 10	6.91	75.0	2.5

Based on NMED Model Guideline – June 2024 (Vehicle Fugitive)

TABLE 14: Combustion Source Deposition Parameters

Particle Size Category (μm)	Mass Mean Particle Diameter (μm)	Mass Weighted Size Distribution (%)	Density (g/cm^3)
PM10			
0 - 2.5	1.57	100.0	1.5

Based on NMED Model Guideline – June 2024 (Combustion)

TABLE 15: Material Handling (Fugitive) Dust Source Deposition Parameters

Particle Size Category (μm)	Mass Mean Particle Diameter (μm)	Mass Weighted Size Distribution (%)	Density (g/cm^3)
PM10			
0 - 2.5	1.57	7.8	2.5
2.5 – 5	3.88	27.0	2.5
5 – 10	7.77	65.2	2.5

Based on NMED Model Guideline – June 2024 (Coal Handling)

For Co-Located HMA Plant:

TABLE 16: Co-Located Lime Baghouse Source Deposition Parameters

Particle Size Category (μm)	Mass Mean Particle Diameter (μm)	Mass Weighted Size Distribution (%)	Density (g/cm^3)
PM10			
0-2.5	1.57	25	3.3
2.5-10	6.91	75	3.3

Based on NMED Model Guideline – June 2024 (Lime Silo)

TABLE 17: Co-Located Asphalt Baghouse and Stack Source Deposition Parameters

Particle Size Category (μm)	Mass Mean Particle Diameter (μm)	Mass Weighted Size Distribution (%)	Density (g/cm^3)
PM10			
0-1.0	0.63	50.0	1.5
1.0-2.5	1.85	19.0	1.5
2.5-10	6.92	31.0	1.5

Based on NMED Model Guideline – June 2024 (Asphalt Baghouse)

2.7 PM2.5 SECONDARY EMISSIONS MODELING

Particulate matter includes both "primary" PM, which is directly emitted into the air, and "secondary" PM, which forms in the atmosphere from chemical reactions involving primary gaseous emissions of precursor air contaminants. Primary PM consists of carbon (soot)—emitted from cars, trucks, heavy equipment, forest fires, and burning waste—and crustal material from unpaved roads, stone crushing, construction sites, and metallurgical operations. Secondary PM forms in the atmosphere from gases. Some of these reactions require sunlight and/or water vapor. Secondary PM includes:

- Sulfates formed from SO_2 emissions from power plants and industrial facilities;
- Nitrates formed from NO_X emissions from cars, trucks, industrial facilities, and power plants; and
- Carbon formed from reactive organic gas (ROG or VOC) emissions from cars, trucks, industrial facilities, forest fires, and biogenic sources such as trees.

AERMOD does not account for secondary formation of $PM_{2.5}$ for near-field modeling. Any secondary contribution of the MSCI source emissions is not explicitly accounted for in the model results. While representative background monitoring data for $PM_{2.5}$ should adequately account for secondary contribution from existing background sources, the MSCI assessment of their potential contribution to cumulative impacts as secondary $PM_{2.5}$ was performed based on guidance from the NMED Modeling Section and using

prescribed equations. The permit application for MSCI's MSCI Davis Pit Plant emissions of precursors include:

- NO_X – 99.6 tons per year (above SER)
- SO_2 – 3.5 tons per year (below SER)
- Volatile Organic Compounds (VOC) – 7.0 tons per year (below SER)
- Particulate Matter with an aerodynamic diameter of 2.5 micron or less ($PM_{2.5}$) – 13.5 tons per year (above SER).

Since NO_X and $PM_{2.5}$ precursor emissions are above the significant emission rate (SER), $PM_{2.5}$ secondary emission concentration analysis will be performed.

2.8 NO2 MODELING

The AERMOD model predicts ground-level concentrations of any generic pollutant without chemical transformations. Thus, the modeled NO_X emission rate will give ground-level modeled concentrations of NO_X. NAAQS values are presented as NO_2.

EPA has a three-tier approach to modeling NO_2 concentrations.

- Tier I – total conversion, or all NOx = NO_2
- Tier II –Ambient Ratio Method 2 (ARM2)
- Tier III – case-by-case detailed screening methods, such as OLM and Plume Volume Molar Ratio Method (PVMRM) and NO_2/NO_X in-stack ratio

Initial modeling will be performed using both Tier I and Tier II methodologies. If these modeling iterations demonstrate that less conservative methods for determining 1-hour and annual NO_2 compliance would be needed for this project, then ambient impact of 1-hour and annual NOx predicted by the model will use Tier III – OLM or PVMRM.

For OLM or PVMRM, three inputs can be selected in the model, the ISR, the NO_2/NO_X equilibrium ratio for the ambient air, and the ambient ozone concentration. The ISR will be determined for each source or group of sources. The NO_2/NO_X equilibrium ratio will be the EPA default of 0.90. Ozone input will be from monitored ozone data collected from an approved monitoring station.

Based on EPA's ISR databases, a proposed conservative NO_2/NO_X ISR ratio for Diesel-fired RICE is 0.15. No data could be found for a hot mix asphalt drum, so to be conservative, the EPA default ISR of 0.50 will be used. For heater combustion, to be conservative, the EPA default ISR of 0.50 will be used. For neighboring sources, since the ISR has a diminishing impact on ambient NO_2/NO_X ratios as a plume is transported farther downwind due to mixing and reaction towards background ambient NO_2/NO_X

ratios, a default ISR of 0.30 based on the NMED Modeling Guidelines will be used. Table 18 summarizes the ISR selected for each NO_X source in the NO_2 1-hour modeling.

TABLE 18: Summary of Selected ISR

Source Description	Selected ISR
Plant Generator/Engine (RICE)	0.15
HMA Drum Dryer Exhaust	0.50
HMA Asphalt Heater Exhaust	0.50
Neighboring Sources	0.30

Model Ozone Data

For OLM or PVMRM, modeling of the project-generated 1-hour NO_2 concentrations requires use of ambient monitored ozone concentrations. This ozone data was provided by the Albuquerque Environment Health Department Air Quality Program for the Del Norte monitoring station for the years 2014 – 2018.

2.9 SIGNIFICANT NEIGHBORING BACKGROUND SOURCES

For all Cumulative Impact Analysis (CIA) combustion emissions above the SILs, NO_2 1 Hour CIA dispersion modeling will include regional monitored background. NO_2 Annual CIA and PSD dispersion modeling will include all significant neighboring sources within 50 kilometers of the MSCI Davis Pit Plant and regional monitored background. PM_{10} and $PM_{2.5}$ CIA and PSD particulate dispersion modeling will include all significant neighboring sources within 10 kilometers of the MSCI Davis Pit Plant and regional monitored background. These sources will be obtained from the NMED AQB's Merge Master program.

2.10 REGIONAL BACKGROUND CONCENTRATIONS

Ambient background concentrations represent the contribution of pollutant sources that are not included in the modeling analysis, including naturally occurring sources. If the modeled concentration of a criteria pollutant is above the modeling significance level, the background concentration for each criteria pollutant will be added to the maximum modeled concentration to calculate the total estimated pollutant concentration for comparison with the AAQS.

The ambient background concentrations are listed in the Air Quality Bureau Guidelines for NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$. For NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$, MSCI is proposing using the January 3, 2025 background concentrations from the Bernalillo County/City of Albuquerque Air Quality Program.

	$PM_{2.5}$ ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)	CO ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)
1 Hour			83.1	1870	13.1
8 Hour				1336	
24	14.3	22.3			
Annual	5.4		18.0		0.0

Attachment

City of Albuquerque Environmental Health Department Air Quality Program Background Values for Air Dispersion Modeling as of March 20, 2026

City of Albuquerque Environmental Health Department Air Quality Program
Background Values for Air Dispersion Modeling as of March 20, 2026

CO

Del Norte

1-hr: **1565** µg/m^3

8hr: **992** µg/m^3

NO2

Del Norte

1-hr: **83.1** µg/m^3

Annual: **18** µg/m^3

SO2

Del Norte

1-hr: **13.1** µg/m^3

24-hr: 0

Annual: 0

PM2.5

Del Norte

24-hr: **14.3** µg/m^3

Annual: **5.4** µg/m^3

PM10

24-hr

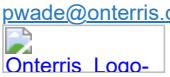
Del Norte: **22.3** µg/m^3

Released Mar. 20, 2026

Sufi
Attached is a modeling protocol for Mountain States. They are preparing a new NSR permit application for an aggregate processing facility at the Davis Pit located southeast of Moriarty, NM. The site could operate as many as two plants located in their existing pit, a RAP plant, and co-located HMA plant. The HMA plant will be one of their three existing plants that are both permitted to operate under an NSR or GCP3.

Please let me know if you have any questions or concerns with this modeling protocol.

Thank you

Paul Wade
Senior Associate Engineer
Albuquerque, NM I US Mountain Time
Office: +1-505-830-9680 x6 | Mobile:
Office Location:
9100 2nd Street NW, Suite 200
Albuquerque, NM 87114-1664
pwade@onterris.com • Onterris.com


Fong, Bryant,
Paul Wade
Mustafa, Sufi A., ENV <su

Paul,

There are no comments currently. The modeling protocols meets modeling guidelines.

Please proceed with air dispersion modeling.

Bryant Fong
Environmental Scientist / Air Dispersion Modeler
New Mexico Environment Department / Air Quality Bureau
525 Camino de los Marquez, Suite 1
Sante Fe, NM 87505
bryant.fong@env.nm.gov
TEL: 505-660-3981

From: Paul Wade <pwade@onterris.com>
Sent: Monday, June 8, 2026 11:17 AM
To: Mustafa, Sufi A., ENV <sufi.mustafa@env.nm.gov>; Fong, Bryant, ENV <bryant.fong@env.nm.gov>
Cc: neil@msconstructors.com <neil@msconstructors.com>
Subject: [EXTERNAL] Modeling Protocol for New NSR - Mountain States Constructors' MSCI Davis Pit Plant

Section 17

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.

Compliance Test History Table

Unit No.	Test Description	Test Date
5-49, 57-101, 112-124	New Permitted Facility – Subpart OOO	TBD
52E	New Permitted Facility – Engine Greater Than 180 HP	Previous Stack Test 11/17/2023
104E	New Permitted Facility – Engine Greater Than 180 HP	Previous Stack Test 07/08/2021
126E	New Permitted Facility – Engine Greater Than 180 HP	TBD
Alternative 52E or 104E (1604 hp)	New Permitted Facility – Engine Greater Than 180 HP	Previous Stack Test 02/25/2019
Alternative 52E or 104E (1818 hp)	New Permitted Facility – Engine Greater Than 180 HP	Previous Stack Test 12/19/2024

Section 20

Other Relevant Information

Other relevant information. 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.

No other relevant information.

Section 22: Certification

Company Name: Mountain States Constructors, Inc

I, Neil Jackson, 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 5 day of 2026, August, upon my oath or affirmation, before a notary of the State of New Mexico.

*Signature

8/5/2026
Date

Neil Jackson
Printed Name

~~Vice~~ President
Title

Scribed and sworn before me on this 5 day of August, 2026

My authorization as a notary of the State of New Mexico expires on the 24th day of June, 2028.

Kimberly Erin Allen
Notary's Signature

August 5, 2026
Date

Kimberly Erin Allen
Notary's Printed Name

STATE OF NEW MEXICO
NOTARY PUBLIC
Kimberly Erin Allen
Commission No. 2003534
Expires: June 24, 2028

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

MOUNTAIN STATES CONSTRUCTORS, INC., GENERAL ACCOUNT 176103

Vendor NM ENVIRON New Mexico Environmental Check 176103 08/05/26

Trx No	Invoice No	Inv Date	Job/Description	Gross	Discount	Check Amount
280092	NSR Permit A	08/05/26	NSR Permit Applica	500.00		500.00
				500.00	0.00	500.00

DOCUMENT CONTAINS COLOR BACKGROUND, VISIBLE FIBERS, TONER GRIP, AND WATERMARK PAPER - HOLD TO LIGHT TO VIEW

MOUNTAIN STATES CONSTRUCTORS, INC.
GENERAL ACCOUNT
3601 PAN AMERICAN FREEWAY, NE, #111
ALBUQUERQUE, NM 87107
(505) 292-0108

BMO Harris Bank
BMO Harris Bank, N.A.
Chicago, Illinois
2-28/710

176103

176103

**********FIVE HUNDRED DOLLARS AND 00 CENTS**********

DATE	AMOUNT
08/05/26	**********500.00

PAY TO THE ORDER OF:
NEW MEXICO ENVIRONMENTAL
AIR QUALITY BUREAU
525 CAMINO DE LOS MARQUEZ#1
SANTA FE NM 87505

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

⑈176103⑈ ⑆071000288⑆ 295005524⑈

Air Permit Application
Compliance History Disclosure Form

Pursuant to Subsection 74-2-7(S) of the New Mexico Air Quality Control Act ("AQCA"), NMSA §§ 74-2-1 to -17, the New Mexico Environment Department ("Department") may deny any permit application or revoke any permit issued pursuant to the AQCA if, within ten years immediately preceding the date of submission of the permit application, the applicant met any one of the criteria outlined below. In order for the Department to deem an air permit application administratively complete, or issue an air permit for those permits without an administrative completeness determination process, the applicant must complete this Compliance History Disclosure Form as specified in Subsection 74-2-7(P). An existing permit holder (permit issued prior to June 18, 2021) shall provide this Compliance History Disclosure Form to the Department upon request.

Permittee/Applicant Company Name		**Expected Application Submittal Date**
Mountain States Constructors, Inc.		August 4, 2026
Permittee/Company Contact	**Phone**	**Email**
Chris Lopez	505-604-292-9291	clopez@msconstructors.com

Within the 10 years preceding the expected date of submittal of the application, has the permittee or applicant:		
1	Knowingly misrepresented a material fact in an application for a permit?	☐ Yes ☒ No
2	Refused to disclose information required by the provisions of the New Mexico Air Quality Control Act?	☐ Yes ☒ No
3	Been convicted of a felony related to environmental crime in any court of any state or the United States?	☐ Yes ☒ No
4	Been convicted of a crime defined by state or federal statute as involving or being in restraint of trade, price fixing, bribery, or fraud in any court of any state or the United States?	☐ Yes ☒ No
5a	Constructed or operated any facility for which a permit was sought, including the current facility, without the required air quality permit(s) under 20.2.70 NMAC, 20.2.72 NMAC, 20.2.74 NMAC, 20.2.79 NMAC, or 20.2.84 NMAC?	☐ Yes ☒ No
5b	If "No" to question 5a, go to question 6. If "Yes" to question 5a, state whether each facility that was constructed or operated without the required air quality permit met at least one of the following exceptions: a. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Department; or b. The operator of the facility estimated that the facility's emissions would not require an air permit, **and** the operator applied for an air permit within 30 calendar days of discovering that an air permit was required for the facility.	☐ Yes ☐ No
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States?	☐ Yes ☒ No
7	For each "yes" answer, please provide an explanation and documentation.	

August 7, 2026

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

Subject: Permit Application for MSCI Davis Pit Plant

To Whom it May Concern:

Attached please find two (2) hardcopies of the 20.2.72 NMAC Permit Application for Mountain States Constructors Inc's MSCI Davis Pit Plant. 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.

Mountain States Contractors, Inc. (MSCI) is applying for a new 20.2.72 NMAC air quality permit for an aggregate crushing and screening facility operated at 152 Stagecoach Road, Moriarty, NM, in Torrence County, state of New Mexico. The site has previously had multiple aggregate crushing and screening facilities operate at the site under 20.2.72 NSR and GCP2 permits. Additionally, multiple hot mix asphalt (HMA) plants have operated at the site under 20.2.72 NSR and GCP3 permits. This application will include aggregate crushing and screening plants and a recycled asphalt products (RAP) plant. Additionally, the permit analysis includes co-location of one of three HMA plants presently owned and operated by MSCI. Regulation governing this permit application is 20.2.72.200.A(1) NMAC.

Please let me know if you have questions or need additional information. I can be reached at (505) 830-9680 ext 6. The Mountain States Constructors, Inc. contact is Neil Jackson who can be reached at (505) 238-1537.

Sincerely,

Paul Wade
Senior Associate Engineer
Onterris USA, Inc.

Cc: Neil Jackson, President, MSCI