



Intrepid Potash – New Mexico, LLC
P.O. Box 101
1996 Potash Mines Road
Carlsbad, NM 88221
303.296.3006

April 28, 2023

NMED - Air Quality Bureau
Permitting Section
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505-1816

RE: Intrepid Potash – New Mexico, LLC
NSR Application for Bennet Sand Mine
AI# 40957

Dear Program Manager:

Intrepid Potash - New Mexico, LLC ("Intrepid") is applying to obtain an air quality construction permit under 20.2.72.200.A.(1) to operate a sand quarry with two modular washing systems. The modular washing systems will be model Sandstorm 620 manufactured by McCloskey Washing Systems' (MWS). The facility is currently permitted under the General Air Quality Permit No. GCP-2 for quarrying, crushing and screening facilities. Although normal operation of the facility will occur during daylight hours, this application is being submitted to allow operation at any time of day depending on product demand needs. The facility will be an industrial sand production facility and the material process will consist of sand mining, handling, washing, screening, storage, and distribution operations.

Enclosed are two (2) hard copies of the application, one (1) Compact Disk containing the Word and Excel files as well as an electronic PDF document of the entire application, and the required Disclosure Form. Also included is check # 00816996 for the filing fee of \$500.00.

We appreciate the AQB's attention to this application. If you have any questions, please contact me or Matt Preston at 303.296.3006, matt.preston@intrepidpotash.com.

Sincerely,

Conrad Parrish
Environmental Manager
Enclosures

Intrepid Potash
1001 17th Street
Suite 1050
Denver, CO 80202



Date: 4/27/2023
Check #: 00816996
Payment Amount: 500.00
Vendor#: 001618

NM ENVIRONMENT DEPT AQB

AIR QUALITY BUREAU
525 CAMINO DE LOS MARQUEZ STE 1
SANTA FE NM87505

Remittance Advice

Invoice Date	Invoice #	Related PO #	Invoice Gross Amt	Discount Amount	Invoice Net Amt
2023-04-27	CKREQ042523		500.00	0.00	500.00

FOR SECURITY PURPOSES, THE FACE OF THIS DOCUMENT CONTAINS A TWO-TONED COLORED BACKGROUND AND MICROPRINTING IN THE BORDER

Intrepid Potash
1001 17th Street
Suite 1050
Denver, CO 80202



00816996
70-1558/719

Date: 4/27/2023

Pay Exactly ***Five Hundred and 00/100 Dollars***

Amount

\$ *****500.00

TO THE ORDER OF NM ENVIRONMENT DEPT AQB

AIR QUALITY BUREAU
525 CAMINO DE LOS MARQUEZ STE 1
SANTA FE NM 87505

VOID AFTER 180 DAYS

BMO HARRIS CENTRAL N.A.
ROSELLE, ILLINOIS

Authorized Signatures

SECURITY FEATURES INCLUDED. DETAILS ON BACK

00816996 0719155801 042946564

Mail Application To: New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		For Department use only:
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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: ☐ a 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.: **00816996** 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

		Updating Permit/NOI #:GCP2-9883
1	Facility Name: Intrepid Potash-New Mexico, LLC Bennett Sand Mine	AI #: 40957 Plant primary SIC Code (4 digits): 1421 Plant NAIC code (6 digits): 212322
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): From south side of Jal, head south on State Road 205 (South 3rd St/Frying Pan Rd) for approximately 3 miles through. Approximately 150 feet after mile marker 4, head southwest on unnamed gravel road for approximately 0.4 miles. Site entrance is to the north. Alternate Entrance Road directions: From south side of Jal, head south on State Road 205 (South 3rd St/Frying Pan Rd) for approximately 1.9 miles, facility entrance road is to the west.	
2	Plant Operator Company Name: Intrepid Potash-New Mexico, LLC	Phone/Fax: (575) 887-5591

a	Plant Operator Address: 1996 Potash Mines Road, Carlsbad, NM 88220	
b	Plant Operator's New Mexico Corporate ID or Tax ID: 26-1501877	
3	Plant Owner(s) name(s): Intrepid Potash-New Mexico, LLC	Phone/Fax: (575) 887-5591
a	Plant Owner(s) Mailing Address(s): 1996 Potash Mines Road, Carlsbad, NM 88220	
4	Bill To (Company): Intrepid Potash-New Mexico, LLC	Phone/Fax: (575) 887-5591
a	Mailing Address: 1996 Potash Mines Road, Carlsbad, NM 88220	E-mail:
5	<input type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: Ken Faulkner, FC&E Engineering	Phone/Fax: 601-824-1860
a	Mailing Address: 807 Colonial Court, Carlsbad, NM 88220	E-mail: kfaulkner@fce-engineering.com
6	Plant Operator Contact: Roy Torres	Phone/Fax: 575-234-3701
a	Address: 1996 Potash Mines Road, Carlsbad, NM 88220	E-mail: roy.torres@intrepidpotash.com
7	Air Permit Contact: Will Fenley	Title: Director of Business Development
a	E-mail: will.fenley@intrepidpotash.com	Phone/Fax: 303-296-3006
b	Mailing Address: 707 17th St. Suite 4200, Denver, CO 80202	
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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the permit No. is:
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the permit No. is:
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the register No. is: GCP2-9883

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	Hourly: 440 tons	Daily: 10,560 tons	Annually: 3,854,400 tons
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			

a	Current	Hourly:	Daily:	Annually:
b	Proposed	Hourly: 440 tons	Daily: 10,560 tons	Annually: 3,854,400 tons

Section 1-D: Facility Location Information

1	Section: 1 6	Range: 26S 26S	Township: 36E 37E	County: Lea	Elevation (ft):
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 668000			UTM N (in meters, to nearest 10 meters): 3549500	
b	AND Latitude (deg., min., sec.): 32.069275			Longitude (deg., min., sec.): -103.220168	
3	Name and zip code of nearest New Mexico town: Jal 88252				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From south side of Jal, head south on State Road 205 (South 3rd St/Frying Pan Rd) for approximately 3 miles through. Approximately 150 feet after mile marker 4, head southwest on unnamed gravel road for approximately 0.4 miles. Site entrance is to the north.				
5	The facility is 1.5 (distance) miles SW (direction) of Jal (nearest town).				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
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: Jal, Lea County NM, Andrew County TX, Winkler County TX				
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/)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: 7.7 km to Texas				
9	Name nearest Class I area: Carlsbad Caverns NP				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 108 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: 2,000 feet South				
12	Method(s) used to delineate the Restricted Area: Public access will be restricted by rugged physical terrain and lack of public roads. The Restricted Area is adjoined by private property lacking accessibility. Site entrances will be gated and routine security patrols will be conducted. "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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

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 ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:		<input type="checkbox"/> AM <input type="checkbox"/> PM	End: <input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: April 2023			
4	Month and year of anticipated construction completion: May 2023			

5	Month and year of anticipated startup of new or modified facility: May 2023
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify:		
a	If yes, NOV date or description of issue:	NOV Tracking No:	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
a	If Yes, what type of source? <input type="checkbox"/> Major (<input type="checkbox"/> ≥ 10 tpy of any single HAP OR <input type="checkbox"/> ≥ 25 tpy of any combination of HAPS) OR <input type="checkbox"/> Minor (<input type="checkbox"/> < 10 tpy of any single HAP AND <input type="checkbox"/> < 25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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Section 1-H: Current Title V Information - Required for all applications from TV Sources

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 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): Matt Preston		Phone: 303.296.3006
a	R.O. Title: Chief Financial Officer	R.O. e-mail: matt.preston@intrepidpotash.com	
b	R. O. Address: 707 17th St., Suite 4200, Denver, Colorado 80202		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Roy Torres		Phone: 575-234-3701
a	A. R.O. Title: General Manager - Intrepid Potash New Mexico, LLC	A. R.O. e-mail: roy.torres@intrepidpotash.com	
b	A. R. O. Address: 1996 Potash Mines Road, Carlsbad, NM 88220		
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.): Intrepid		
a	Address of Parent Company: 707 17th St., Suite 4200, Denver, Colorado 80202		
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:
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Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

- 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-toe 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 _____, Email _____ Phone number _____.

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.

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Table 2-A: Regulated Emission Sources

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

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	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
F-1	Unpaved Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-2	Mine Material Handling	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-3	Raw Material Storage Pile 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-4	Raw Material Storage Pile 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-5	Feed Hopper 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-6	Feed Hopper 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
F-7	Product Loading	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							N/A	Fugitive				
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> 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 Activities¹ (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.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
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							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> 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.

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.

[illegible]

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All applications for facilities that have emissions during routine or 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).

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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.

[illegible]

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:

[illegible]

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)			

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.

[illegible]

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

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

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

[illegible]

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

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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 M³ = 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)
Sand	Quartz	Solid	440 tons/hr	Sand	Quartz	Solid	tons/hr

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.

[illegible]

Table 2-O: Parametric Emissions Measurement Equipment

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

[illegible]

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 ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²									Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs ¹	1	298	25	22,800	footnote 3										
	mass GHG															
	CO ₂ e															
	mass GHG															
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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.

Intrepid Potash New Mexico, LLC is applying to obtain an air quality construction permit under 20.2.72.200.A.(1) to operate a sand quarry with two modular washing systems. The modular washing systems will be model Sandstorm 620 manufactured by McCloskey Washing Systems' (MWS). The facility is currently permitted under the General Air Quality Permit No. GCP-2 for quarrying, crushing and screening facilities. Although normal operation of the facility will occur during daylight hours, this application is being submitted to allow operation at any time of day depending on product demand needs.

The facility will be a industrial sand production facility and the material process will consist of sand mining, handling, washing, screening, storage, and distribution operations.

The mine base will be approximately 30 feet below existing grade. Sand will be surface mined by a hydraulic track hoe excavator and loaded to dump trucks. The material will be transported to a raw material pile in the vicinity of the modular wash systems. Sand from the raw material pile will be loaded into the modular washing system feed hopper using front end loaders. The material exits the feed hopper on the main conveyor and is transported to a wash box where the material is saturated and transfers to the rinser screen box. The sand and silt mixture slurry passes through the bottom deck and the slurry is pumped to hydrocyclones which separate the sand and silt. The washed sand is sent to a stockpile to air dry and the waste silt slurry is removed.

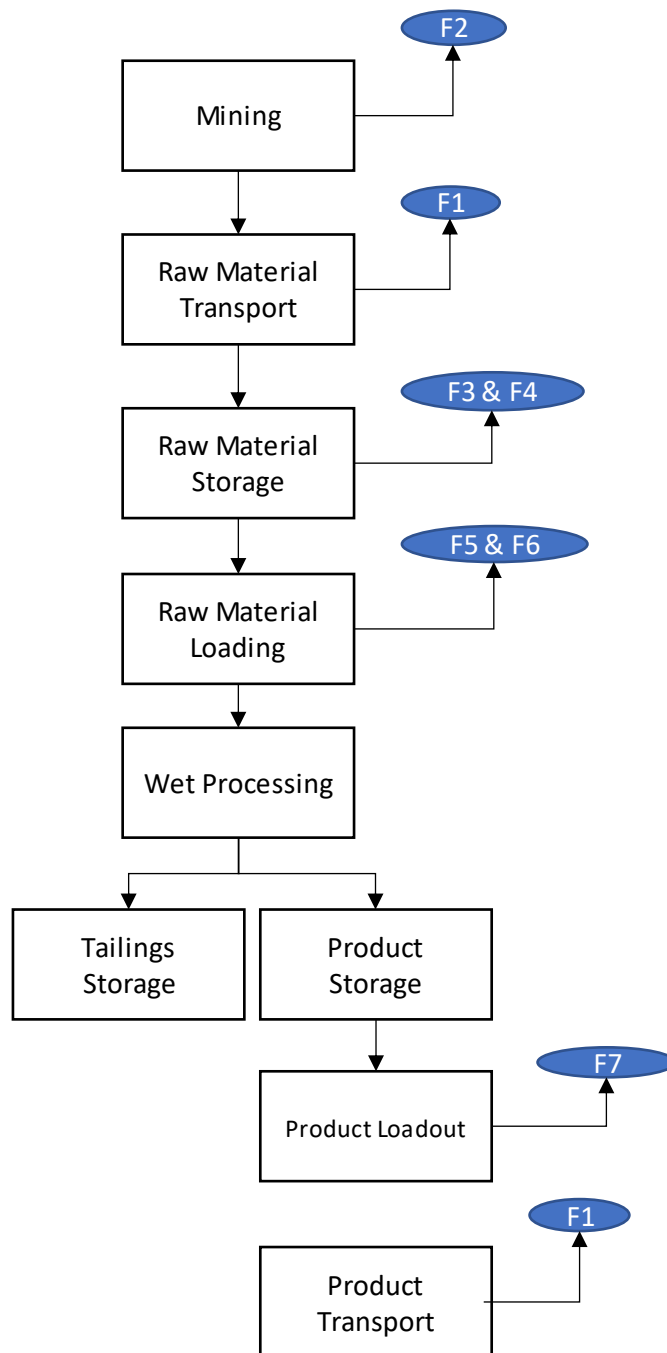
The finished product will be loaded into sand boxes on transport trucks using front end loaders at a moisture content of approximately 5%. The target size is 140 mesh for the product which is equivalent to ~ 105 microns. The finished product will therefore be larger than total suspended particulates (TSP) which is measured by the EPA reference method as ~ 100 microns.

Silt fraction is determined by measuring the proportion of material that passes through a 200-mesh screen. The analysis of the raw material indicates the silt content of the raw material is 2.4%.

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.



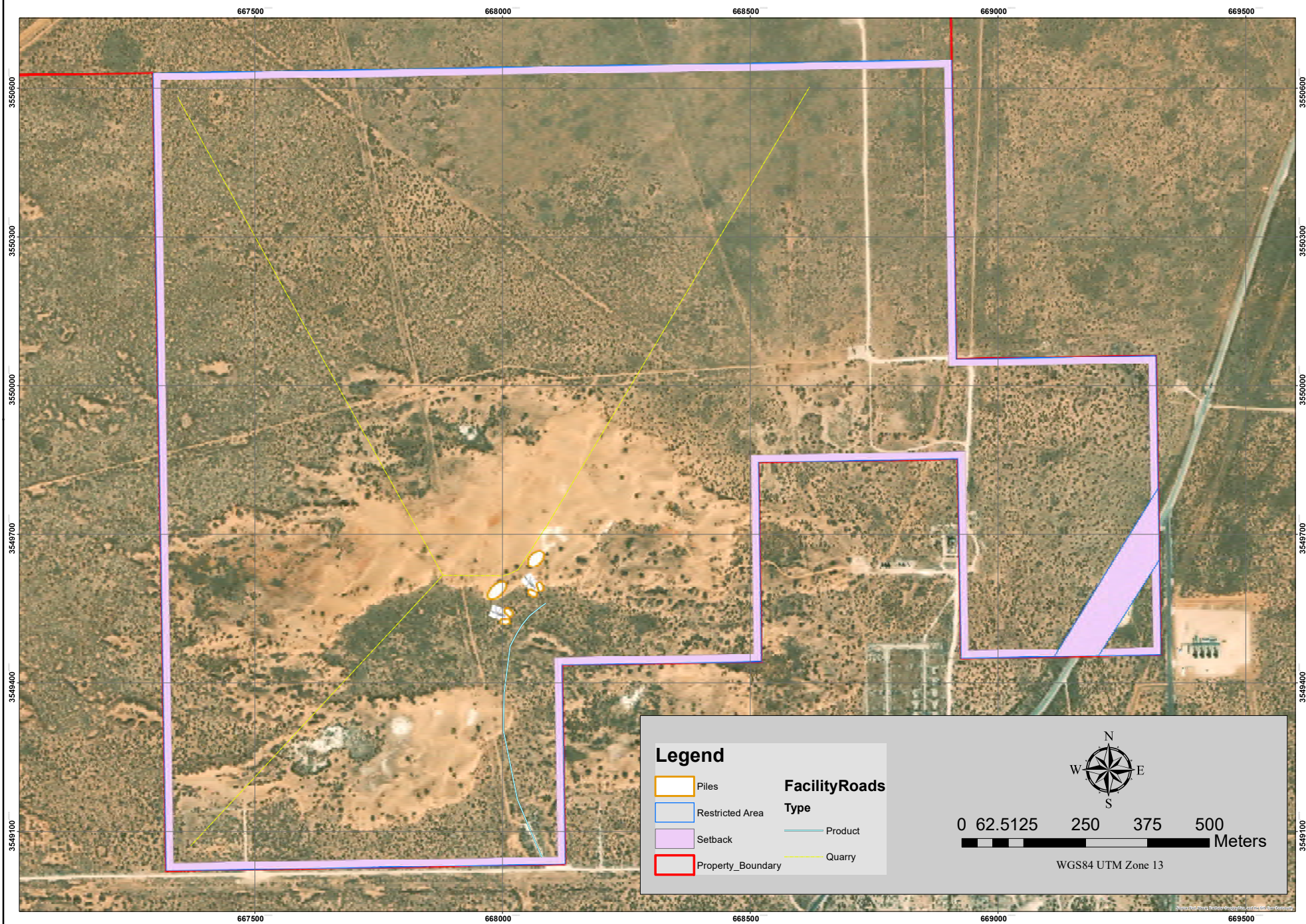
Section 5

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.

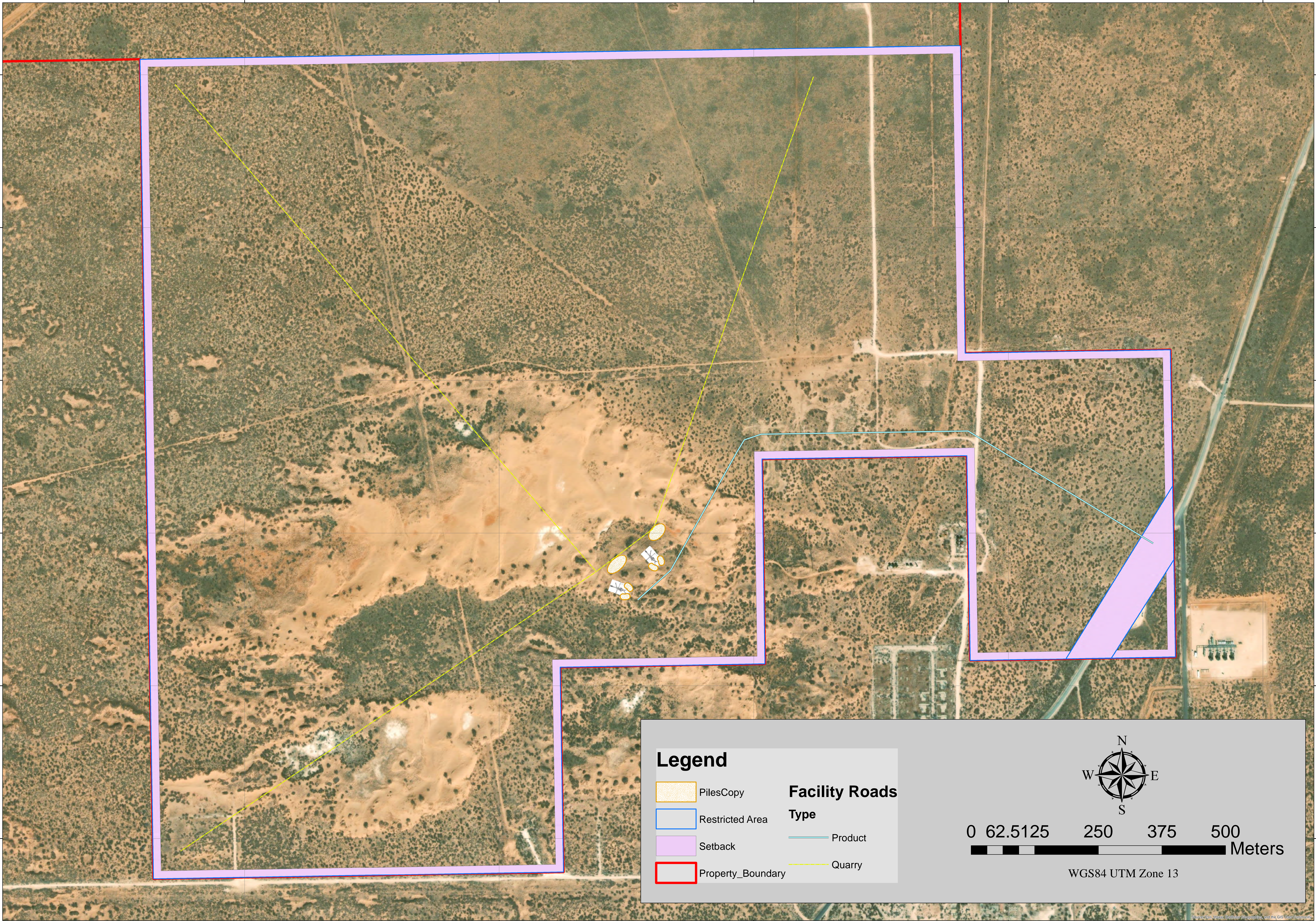
Bennett Sand Mine

Bennett, Lea County, NM



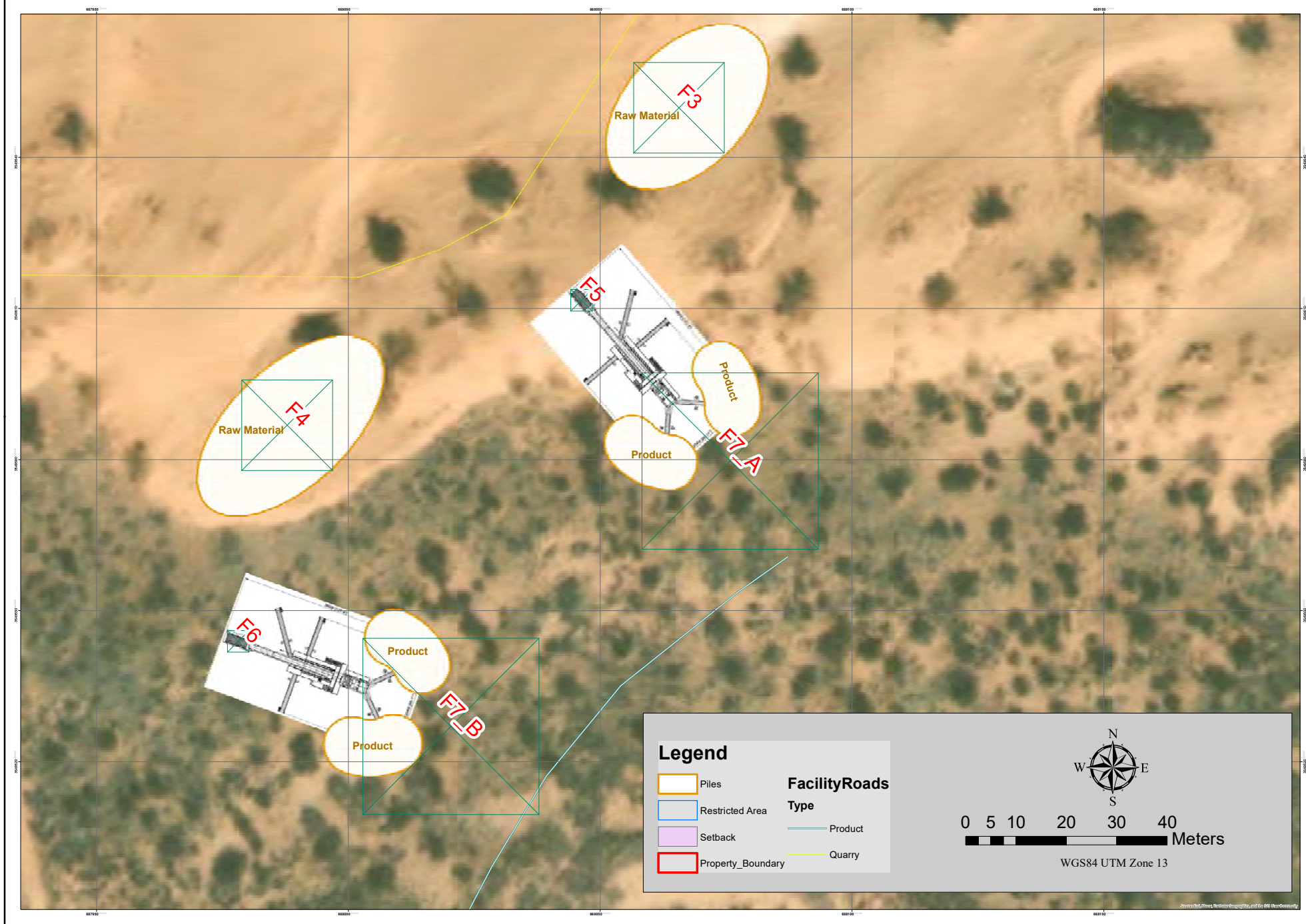
Bennett Sand Mine

Alternate Entrance Road
Bennett, Lea County, NM



Bennett Sand Mine

Bennett, Lea County, NM



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 rationale 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.

Unit No. F-1 - Haul Roads - Scenario 1

	Production Rate (TPD)	Load Wgt (tons)	Truck Wgt (tons)	Avg Wgt (W)	One-way Trips/hr	Length (miles)	VMT/hr
Mine Roads	10,560	45	31.25	31.1	9	0.90	16.25
Product Roads	10,560	27	13	20.0	16	0.77	24.77

Uncontrolled Emissions									
Road Type	Emission Factor (lb/VMT)			Emissions (lb/hr)			Emissions (TPY)		
	PM-2.5	PM-10	PM-30	PM-2.5	PM-10	PM-30	PM-2.5	PM-10	PM-30
Mine Roads	0.101	1.010	4.551	1.64	16.41	73.94	5.81	58.07	261.75
Product Roads	0.154	1.544	6.059	3.82	38.25	150.08	13.54	135.40	531.27
Totals				5.47	54.65	224.02	19.35	193.48	793.02

Controls			
Road Type	Control	Control	Total Efficiency
		Efficiency	
Mine Roads	Base course or watering	60%	82.800%
	Speed Limit 15 mph	57%	
Product Roads	Base course or watering	60%	97.248%
	Apply dust suppressant (Road Guard)	84%	
	Speed Limit 15 mph	57%	

Controlled Emissions (Uncontrolled x (1-control efficiency))									
Road Type	Emission Factor (lb/VMT)			Emissions (lb/hr)			Emissions (TPY)		
	PM-2.5	PM-10	PM-30	PM-2.5	PM-10	PM-30	PM-2.5	PM-10	PM-30
Mine Roads	0.017	0.174	0.783	0.28	2.82	12.72	1.00	9.99	45.02
Product Roads	0.027	0.266	1.042	0.11	1.05	4.13	2.33	23.29	91.38
Totals				0.39	3.87	16.85	3.33	33.28	136.40

Unit No. F-1 - Haul Roads - Scenario 1

Unpaved Road Emissions Equations & Default Constants

$$E = k(s/12)^a(W/3)^b \quad \text{Equation 1(a) AP-42 Section 13.2.2.2}$$

$$E_{ext} = E(365 - P)/365 \quad \text{Equation 2 AP-42 Section 13.2.2.2}$$

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

M = surface material moisture content (%)

k, a, and b = empirical constants from Table 13.2.2-2

AP-42 Table 13.2.2-2. CONSTANTS FOR EQUATIONS 1a AND 1b						
	Industrial Roads (Equation			Public Roads		
	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

Default Values for Chapter 13.2.2, Equation 2

Parameter	Default Value
P = number of days in a year with at least 0.01 inches of	70 days

NMMED Default Values for Chapter 13.2.2, Equation 1(a)

Parameter	Default Value %
s = surface material silt content (%)	4.80

Mine Roads - Facility Sampling

Parameter	Default Value %
s = surface material silt content (%)	2.40

Control Efficiencies

NMMED Haul Road	
Control Measure	Control Efficiency
None	0%
Base course or watering	60%
Base course and watering	80%
Base course and surfactant	90%
Paved and Swept	95%

Fugitive Dust Control Measures Applicable for the WRAP

Control Measure	Efficiency	Source Category
Limit vehicle speed to 15 mph	57%	Unpaved Roads
Limit vehicle speed to 25 mph	44%	
Apply water	10 – 74%	
Apply dust suppressant	84%	
Pave the surface	>90%	

Material Handling

250.26

3

Emission Unit	Emission Source	Loading Rate Tons/hr	M %	U mph	Emission Factor (lb/ton)			Emissions (lb/hr)			Emissions (TPY)		
					PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*
F-2	Mine Material Handling	440	5.21	11	0.0001	0.0008	0.0017	0.05	0.36	0.76	0.24	1.57	3.33
F-3	Raw Material Storage Pile 1	220	2	11	0.0005	0.0031	0.0066	0.10	0.69	1.45	0.46	3.01	6.36
F-4	Raw Material Storage Pile 2	220	2	11	0.0005	0.0031	0.0066	0.10	0.69	1.45	0.46	3.01	6.36
F-5	Feed Hopper 1	220	2	11	0.0005	0.0031	0.0066	0.10	0.69	1.45	0.46	3.01	6.36
F-6	Feed Hopper 2	220	2	11	0.0005	0.0031	0.0066	0.10	0.69	1.45	0.46	3.01	6.36
F-7	Product Loading*	440	5	11	0.0001	0.0009	0.0018	0.06	0.38	0.81	0.25	1.67	3.53

*Product moisture content at approximately 5%.

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$

AP-42 Section 13.2.4.3, Equation 1

0.028832

E= Emission Factor (lb/ton)

k= particle size multiplier (dimensionless)

U= Mean wind speed (mph)

M= material moisture content

lb/hr= E x loading rate

TPY= (lb/hr)x(8760 hr/yr)(ton/2000 lb)

Aerodynamic Particle Size Multiplier (k) For Equation 1				
< 30 :m	< 15 :m	< 10 :m	< 5 :m	< 2.5 :m
0.74	0.48	0.35	0.20	0.053

Parameter - NMED default	Default Value
U = Mean wind speed (miles per hour)	11 mph
M = Material moisture content (% water)	2%

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 (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e 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 CO₂e 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 CO₂e 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 ☐ 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 CO₂ 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.
-

Emission Factor Reference



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DEPARTMENT ACCEPTED VALUES FOR: AGGREGATE HANDLING, STORAGE PILE, and HAUL ROAD EMISSIONS

TO: Applicants and Air Quality Bureau Permitting Staff

SUBJECT: Department accepted default values for percent silt, wind speed, moisture content, and control efficiencies for haul road control measures

This guidance document provides the Department accepted default values for correction parameters in the emission calculation equations for aggregate handling and storage piles emissions in construction permit applications and notices of intent submitted under 20.2.72 and 20.2.73 NMAC; and the Department accepted control efficiencies for haul road control measures for applications submitted under 20.2.72 NMAC.

Aggregate Handling and Storage Pile Emission Calculations

Applicants should calculate the particulate matter emissions from aggregate handling and storage piles using the EPA's AP-42 Chapter 13.2.4.

<http://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0204.pdf>

Equation 1 from Chapter 13.2.4 requires users to input values for two correction parameters, U and M, where U = mean wind speed and M = material moisture content. Below are the accepted values for U and M:

Default Values for Chapter 13.2.4, Equation 1:

Parameter	Default Value
U = Mean wind speed (miles per hour)	11 mph
M = Material moisture content (% water)	2%

Applicants must receive preapproval from the Department if they wish to assume a higher moisture content and/or a lower wind speed in these calculations. Higher moisture contents may require site specific testing either as a permit condition or submitted with the application. Applicants may assume higher wind speeds and lower percent moisture content in their calculations without prior approval from the Department.

Haul Road Emissions and Control Measure Efficiencies

Quarry moisture content based on included data. Product moisture content based on process knowledge of 5% moisture exiting conveyor.

Applicants should calculate the particulate matter emissions from unpaved haul roads using the EPA's AP-42 Chapter 13.2.2. <http://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0202.pdf>

Equation 1(a) from Chapter 13.2.2 requires users to input values for two correction parameters, *s* and *W*, where *s* = surface material silt content (%) and *W* = mean vehicle weight (tons). The applicant should calculate the mean vehicle weight in accordance with the chapter's instructions. Below is the accepted value for the parameter *s*:

Default Values for Chapter 13.2.2, Equation 1(a):

Parameter	Default Value
<i>s</i> = surface material silt content (%)	4.8%

Quarry silt content based on sieve analysis pan value of 2.7%

Applicants may use a higher silt content without prior approval from the Department. Use of a lower silt content requires prior approval from the Department and may require site specific testing in support of the request.

Equation 2 from Chapter 13.2.2 allows users to take credit for the number of days that receive precipitation in excess of 0.01 inches, in the annual emissions calculation, where *P* = number of days in a year with at least 0.01 inches of precipitation.

Default Values for Chapter 13.2.2, Equation 2:

Parameter	Default Value
<i>P</i> = number of days in a year with at least 0.01 inches of precipitation	70 days

Applications submitted under Part 72 may request to apply control measures to reduce the particulate matter emissions from facility haul roads. Applications submitted under Part 73 may not consider any emission reduction from control measures in the potential emission rate calculation, as registrations issued under Part 73 are not federally enforceable under the Clean Air Act or the New Mexico Air Quality Control Act. In order for those control measures to be federally enforceable, the controls must be a requirement in an air quality permit.

Below are the Department accepted control efficiencies for various haul road control measures:

Haul Road Control Measures and Control Efficiency:

Control Measure	Control Efficiency
None	0%
Base course or watering	60%
Base course and watering	80%
Base course and surfactant	90%
Paved and Swept	95%

WRAP Fugitive Dust Handbook



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September 7, 2006

Fugitive Dust Control Measures Applicable for the WRAP Region

Source Category	Control Measure	Published PM10 Control Efficiency
Agricultural Tilling	Reduce tilling during high winds	1 – 5%
	Roughen surface	15 – 64%
	Modify equipment	50%
	Employ sequential cropping	50%
	Increase soil moisture	90%
	Use other conservation management practices	25 - 100%
Agricultural Harvesting	Limited activity during high winds	5 – 70%
	Modify equipment	50%
	Night farming	10%
	New techniques for drying fruit	25 –60%
Construction/Demolition	Water unpaved surfaces	10 – 74%
	Limit on-site vehicle speed to 15 mph	57%
	Apply dust suppressant to unpaved areas	84%
	Prohibit activities during high winds	98%
Materials Handling	Implement wet suppression	50 – 90%
	Erect 3-sided enclosure around storage piles	75%
	Cover storage pile with a tarp during high winds	90%
Paved Roads	Sweep streets	4 – 26%
	Minimize trackout	40 – 80%
	Remove deposits on road ASAP	> 90%
Unpaved Roads	Limit vehicle speed to 25 mph	44%
	Apply water	10 – 74%
	Apply dust suppressant	84%
	Pave the surface	>90%
Mineral Products Industry	Cyclone or muliclone	68 –79%
	Wet scrubber	78 –98%
	Fabric filter	99 – 99.8%
	Electrostatic precipitator	90 – 99.5%
Abrasive Blasting	Water spray	50 – 93%
	Fabric filter	> 95%
Livestock Husbandry	Daily watering of corrals and pens	> 10%
	Add wood chips or mulch to working pens	> 10%
Wind Erosion (agricultural, open area, and storage piles)	Plant trees or shrubs as a windbreak	25%
	Create cross-wind ridges	24 – 93%
	Erect artificial wind barriers	4 – 88%
	Apply dust suppressant or gravel	84%
	Revegetate; apply cover crop	90%
	Water exposed area before high winds	90%

	2018		2019		2020		2021		2022		5-yr Avg		
Month	mm H ₂ O	Volumetric Moisture Content (%)	mm H ₂ O	Volumetric Moisture Content (%)	mm H ₂ O	Volumetric Moisture Content (%)	mm H ₂ O	Volumetric Moisture Content (%)	mm H ₂ O	Volumetric Moisture Content (%)	Volumetric Moisture Content (%)	Min	Max
Jan	167.4893	10.47%	207.514313	12.97%	165.4709	10.34%	83.05691	5.19%	109.556	6.85%	9.16%	5.19%	12.97%
Feb	151.3384	9.46%	187.503174	11.72%	162.0214	10.13%	83.22002	5.20%	100.0871	6.26%	8.55%	5.20%	11.72%
Mar	136.0266	8.50%	175.52858	10.97%	173.7739	10.86%	78.95844	4.93%	92.47343	5.78%	8.21%	4.93%	10.97%
Apr	116.1961	7.26%	174.306229	10.89%	163.7089	10.23%	78.77141	4.92%	77.78027	4.86%	7.63%	4.86%	10.89%
May	108.3592	6.77%	178.967529	11.19%	141.781	8.86%	95.24035	5.95%	68.96648	4.31%	7.42%	4.31%	11.19%
Jun	109.7718	6.86%	183.160217	11.45%	125.7172	7.86%	132.995	8.31%	78.3251	4.90%	7.87%	4.90%	11.45%
Jul	116.1771	7.26%	171.510834	10.72%	112.4198	7.03%	159.5645	9.97%	78.3251	4.90%	7.97%	4.90%	10.72%
Aug	129.5903	8.10%	151.635971	9.48%	97.19038	6.07%	172.744	10.80%	114.105	7.13%	8.32%	6.07%	10.80%
Sep	155.2987	9.71%	150.777054	9.42%	96.19531	6.01%	166.3324	10.40%	144.137	9.01%	8.91%	6.01%	10.40%
Oct	201.5661	12.60%	163.756104	10.23%	95.46981	5.97%	152.8541	9.55%	160.6959	10.04%	9.68%	5.97%	12.60%
Nov	229.8809	14.37%	172.609024	10.79%	86.25264	5.39%	137.7585	8.61%	179.258	11.20%	10.07%	5.39%	14.37%
Dec	220.064	13.75%	164.57785	10.29%	76.20178	4.76%	119.767	7.49%	161.6664	10.10%	9.28%	4.76%	13.75%
											Averages	5.21%	11.82%

Moisture obtained from National Integrated Drought Information System <https://www.drought.gov/data-maps-tools/cpc-soil-moisture>

Soil moisture is estimated by a one-layer Leaky Bucket hydrological model. The model takes as forcing observed precipitation and temperature and calculates soil moisture, evaporation, runoff, and snowpack (global daily version). The potential evaporation is estimated from observed temperature. Model parameters are constant spatially and tuned to reproduce runoff of several small river basins in eastern Oklahoma. This resulted in a maximum holding capacity of 760mm (or 29.9 inches) of water. Along with a common porosity of 0.47 this implies a soil column of 1.6 meter (=5.25 ft).

The past five years were downloaded from soil moisture maps at http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#.

The data is based on 60 mile grid resolution. Both the Section 21 mine and Bennett Sand mine are within the same grid cell.

Moisture content was calculated as:

$$\text{Moisture Content} = (\text{mm H}_2\text{O})/(\text{meter}/1000 \text{ mm})/1.6 \text{ meters}$$

Moisture content for mine truck loading taken as the average minimum moisture content over the past 5-years of data or 5.21%.

Bennett	
Sieve Size	Wt. %
8.0	0.0
16.0	0.0
30.0	0.1
40.0	1.8
45.0	3.5
50.0	8.4
60.0	13.7
70.0	13.6
80.0	15.0
100.0	15.4
120.0	11.0
140.0	7.2
170.0	4.4
200.0	3.8
Pan	2.0

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

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

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

(1)

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

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:

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

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

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

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:

$$1 \text{ lb/VMT} = 281.9 \text{ g/VKT}$$

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

as shown in Table 13.2.2-4

Table 13.2.2-4. EMISSION FACTOR FOR 1980'S VEHICLE FLEET
EXHAUST, BRAKE WEAR AND TIRE WEAR

Particle Size Range ^a	C, Emission Factor for Exhaust, Brake Wear and Tire Wear ^b lb/VMT
PM _{2.5}	0.00036
PM ₁₀	0.00047
PM ₃₀ ^c	0.00047

^a Refers to airborne particulate matter (PM-x) with an aerodynamic diameter equal to or less than x micrometers.

^b Units shown are pounds per vehicle mile traveled (lb/VMT).

^c PM-30 is sometimes termed "suspendable particulate" (SP) and is often used as a surrogate for TSP.

It is important to note that the vehicle-related source conditions refer to the average weight, speed, and number of wheels for all vehicles traveling the road. For example, if 98 percent of traffic on the road are 2-ton cars and trucks while the remaining 2 percent consists of 20-ton trucks, then the mean weight is 2.4 tons. More specifically, Equations 1a and 1b are *not* intended to be used to calculate a separate emission factor for each vehicle class within a mix of traffic on a given unpaved road. That is, in the example, one should *not* determine one factor for the 2-ton vehicles and a second factor for the 20-ton trucks. Instead, only one emission factor should be calculated that represents the "fleet" average of 2.4 tons for all vehicles traveling the road.

Moreover, to retain the quality ratings when addressing a group of unpaved roads, it is necessary that reliable correction parameter values be determined for the road in question. The field and laboratory procedures for determining road surface silt and moisture contents are given in AP-42 Appendices C.1 and C.2. Vehicle-related parameters should be developed by recording visual observations of traffic. In some cases, vehicle parameters for industrial unpaved roads can be determined by reviewing maintenance records or other information sources at the facility.

In the event that site-specific values for correction parameters cannot be obtained, then default values may be used. In the absence of site-specific silt content information, an appropriate mean value from Table 13.2.2-1 may be used as a default value, but the quality rating of the equation is reduced by two letters. Because of significant differences found between different types of road surfaces and between different areas of the country, use of the default moisture content value of 0.5 percent in Equation 1b is discouraged. The quality rating should be downgraded two letters when the default moisture content value is used. (It is assumed that readers addressing industrial roads have access to the information needed to develop average vehicle information in Equation 1a for their facility.)

The effect of routine watering to control emissions from unpaved roads is discussed below in Section 13.2.2.3, "Controls". However, all roads are subject to some natural mitigation because of rainfall and other precipitation. The Equation 1a and 1b emission factors can be extrapolated to annual

average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual average emissions are inversely proportional to the number of days with measurable (more than 0.254 mm [0.01 inch]) precipitation:

$$E_{\text{ext}} = E [(365 - P)/365] \quad (2)$$

where:

E_{ext} = annual size-specific emission factor extrapolated for natural mitigation, lb/VMT

E = emission factor from Equation 1a or 1b

P = number of days in a year with at least 0.254 mm (0.01 in) of precipitation (see below)

Figure 13.2.2-1 gives the geographical distribution for the mean annual number of “wet” days for the United States.

Equation 2 provides an estimate that accounts for precipitation on an annual average basis for the purpose of inventorying emissions. It should be noted that Equation 2 does not account for differences in the temporal distributions of the rain events, the quantity of rain during any event, or the potential for the rain to evaporate from the road surface. In the event that a finer temporal and spatial resolution is desired for inventories of public unpaved roads, estimates can be based on a more complex set of assumptions. These assumptions include:

1. The moisture content of the road surface material is increased in proportion to the quantity of water added;
2. The moisture content of the road surface material is reduced in proportion to the Class A pan evaporation rate;
3. The moisture content of the road surface material is reduced in proportion to the traffic volume; and
4. The moisture content of the road surface material varies between the extremes observed in the area. The CHIEF Web site (<http://www.epa.gov/ttn/chief/ap42/ch13/related/c13s02-2.html>) has a file which contains a spreadsheet program for calculating emission factors which are temporally and spatially resolved. Information required for use of the spreadsheet program includes monthly Class A pan evaporation values, hourly meteorological data for precipitation, humidity and snow cover, vehicle traffic information, and road surface material information.

It is emphasized that the simple assumption underlying Equation 2 and the more complex set of assumptions underlying the use of the procedure which produces a finer temporal and spatial resolution have not been verified in any rigorous manner. For this reason, the quality ratings for either approach should be downgraded one letter from the rating that would be applied to Equation 1.

13.2.2.3 Controls¹⁸⁻²²

A wide variety of options exist to control emissions from unpaved roads. Options fall into the following three groupings:

1. Vehicle restrictions that limit the speed, weight or number of vehicles on the road;

Manufacturer's Information

MWS McCLOSKEY
WASHING SYSTEMS



**SMARTER
WASHING
SOLUTIONS**

SANDSTORMTM 620
Modular Wash Range

McCloskey Washing Systems' (MWS) *design team has over 100 years of washing experience with a distinct capability for Material and Mineral Washing needs in Aggregates, Waste & Recycling, Mining and Construction sectors.*



Choose MWS to help you find a **SMARTER SOLUTION** for your **WASHING NEEDS**

Across the globe, the Mining and Minerals industry is met with challenges and uncertainty.

There is a growing need to meet today's stringent specifications for cleaner and higher quality aggregates, more effective water recycling processes and the drive to provide highly productive equipment. It is therefore vital to invest in a flawless washing system, that is made to work more productive and smarter than before.

McCloskey International has been a market leader for more than 30 years in providing superior quality equipment to a large customer network worldwide. To ensure we remain at the forefront of our industry, we make it our goal to assure our customers that the service we provide is 'second to none' and, that we continually meet their exact specifications for their aggregate requirements.

We have two state of the art manufacturing facilities, our headquarters in Ontario, Canada and in Co. Tyrone, N. Ireland. McCloskey International is the largest independent manufacturer of portable crushing, screening and washing equipment in the world.

MWS is the obvious choice to be the preferred partner in delivering the Modular, Mobile and Static Washing Systems across the globe.

Our unique approach incorporates partnership, engagement and collaboration underpinned by market leading experience and a commitment to the highest health and safety standards. We ensure the appropriate skill set is applied into the design and quality to all our washing products to meet the specific challenges of our customer's requirements.

MWS is the perfect choice for taking your problem and uncertainty and providing you with a smarter and more efficient solution to washing.



SANDSTORM 620

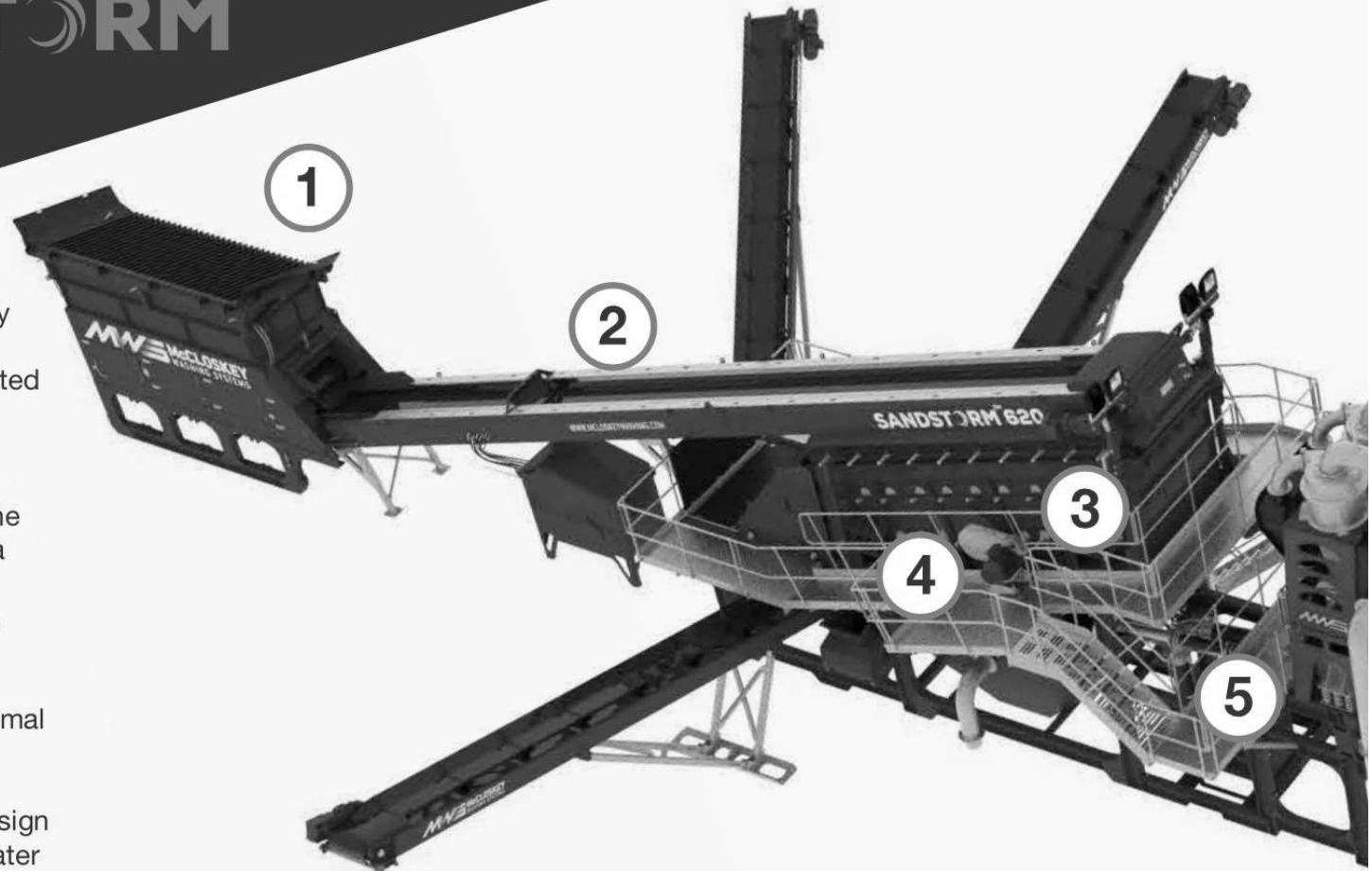
SANDSTORM™ 620

Due to its modular and easily customisable design, the Sandstorm™ is perfectly suited to the majority of washing applications.

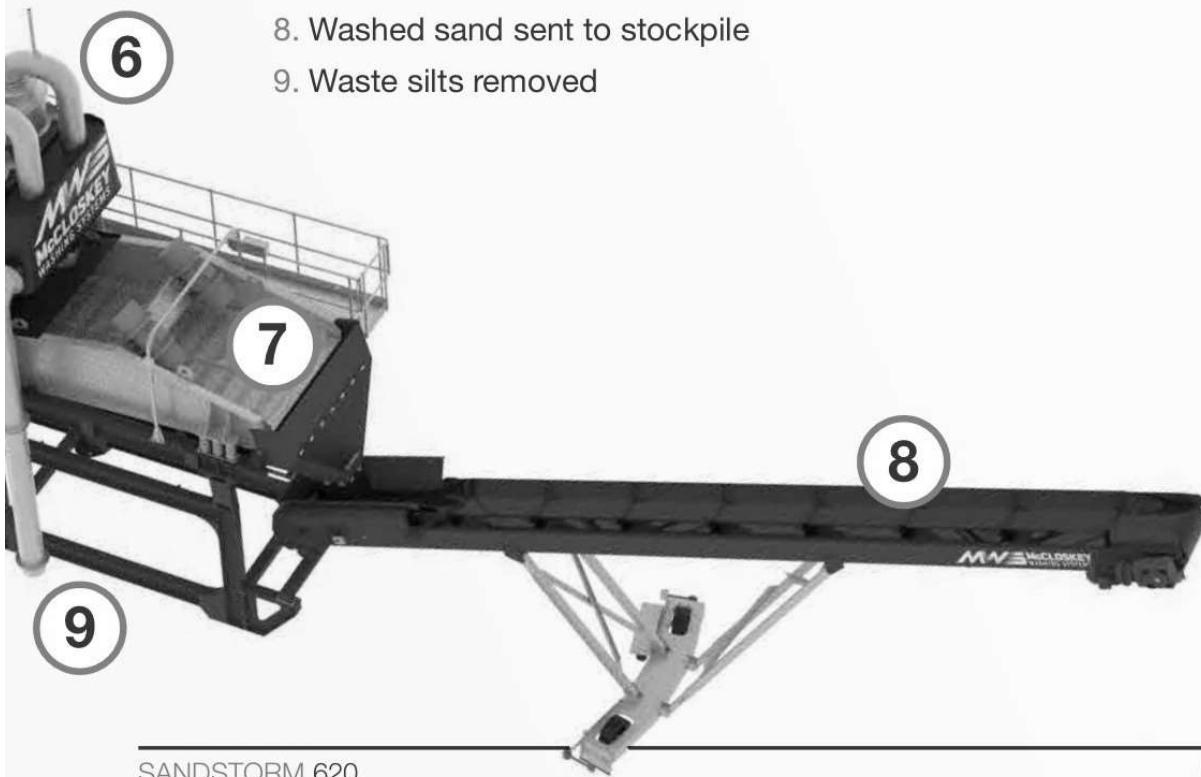
With its innovative design, the plant size has been kept to a minimum, while maximising access to serviceable areas.

Its unique features deliver exceptional results with minimal maintenance required.

The Sandstorm™ unique design has eliminated spillage of water and materials, creating a clean and safe working environment.



1. Feed into hopper
2. Material travels up the main conveyor
3. Material is washed and sized on rinsing screen
4. Sand and silt mixture (slurry) passed through bottom deck
5. Slurry pumped to hydrocyclones
6. Hydrocyclones separate sand and silt
7. Sand is dewatered
8. Washed sand sent to stockpile
9. Waste silts removed



SANDSTORM 620

KEY FEATURES

Dimensions & Weights

Length	148ft (45.2m)
Width	111.5ft (34m)
Height	26ft (7.9m)

- Modular design
- Containerised transport
- 1 water connection point
- Fully automated
- Quick setup time
- Radio controlled
- Full plant LED flood lighting

OPTIONS

- Vibrating grid
- Main conveyor covers
- 100ft conveyors (30.5m)
- Bespoke Guarding
- 2 deck screenbox
- Single sand
- Belt weigher on main and product belts
- Overband magnet

APPLICATIONS

- Sand & Aggregates
- C&D Waste Recycling
- Industrial Sands
- Mineral Ores

TECHNICAL DATA

DEWATERING SCREEN

- 14ft x 6ft (4.5m x 1.8m)
- Dual and single sand options up to 200TPH
- Dewatered sand is discharged ready for market

HYDROCYCLONES

- Hydrocyclones produce highly accurate separation of silts and clays from the final washed sand product
- Pump to hydrocyclone delivery system fully rubber lined ensuring maximum wear resistance

WASHBOX

- Fully enclosed, sealed and rubber lined wash box
- Access door for maintenance
- Easily replaceable rubber lining
- Water saturation of material
- Targeting of material at rear of screenbox maximising screening area

CHUTE

- Blending chute
- Chute rolls back for maintenance

SAND CONVEYORS 1 OR 2

- 37ft (11.3m) sand conveyors
- Automated Radial
- 20 degree incline
- Stockpile capacity 575yds³ (440m³)
- High quality polyurethane scraper
- Galvanised undercarriage
- 100ft (30.5m) conveyor option

PUMPS

- Pumps roll out for ease maintenance

WALKWAYS

- Galvanised walkways
- 30 inch (760mm) wide walkways

RINSE SCREENBOX

- 20ft x 6ft (6.1m x 1.8m) 2 deck or 3 deck
- 18 degree optimum working angle
- Rosta tensioned belt drive unit for increased belt life, efficiency and ease of maintenance
- Isolated spraybars
- Wire mesh or Polyurethane modular panels
- Integrated fully sealed subframe and catchbox



FEED/HOPPER

- Adjustable feeder and hopper door for consistent material feed
- Large capacity 15ft hopper 16yds³ (12m³)
- Radio controlled Tipping grid
- Grid spacing 4"
- Vibrating grid option
- Variable speed belt feeder

MAIN CONVEYOR

- 41 inch (1050mm) wide belt
- 18 degree incline
- High quality polyurethane scraper
- Galvanised undercarriage
- Overband magnet option

POWERPACK

Electric hydraulic powerpack 30kW (40Hp)
for maximum control of feeder functions

MAIN TANK

- Large inspection door(s) on tank

AGGREGATE CONVEYORS 2 OR 3

- 37ft (11.3m) aggregate conveyors
- Positioned to the left or right
- 18 degree incline
- Stockpile capacity 125yds³ (95m³)
- High quality polyurethane scraper
- Galvanised undercarriage

SANDSTORMTM 620

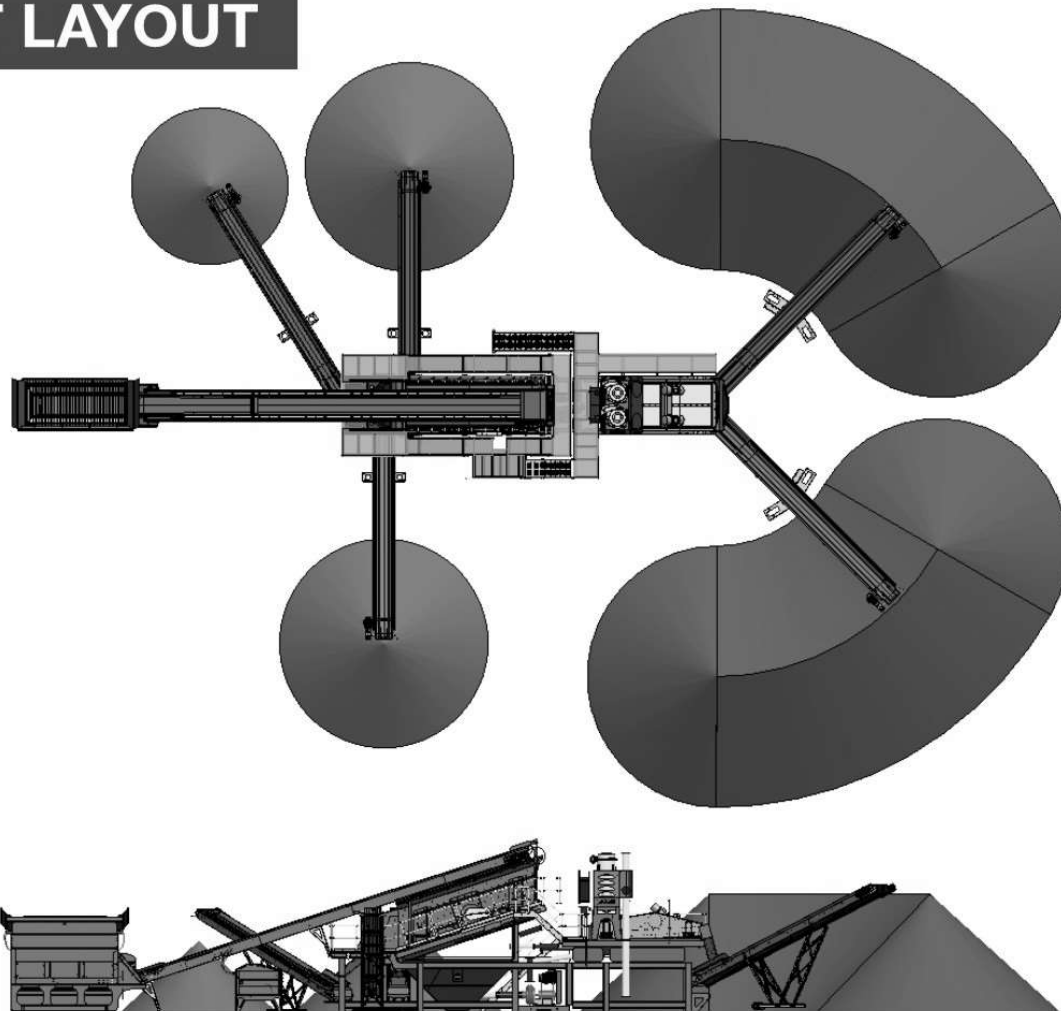
MAXIMUM POWER REQUIREMENT

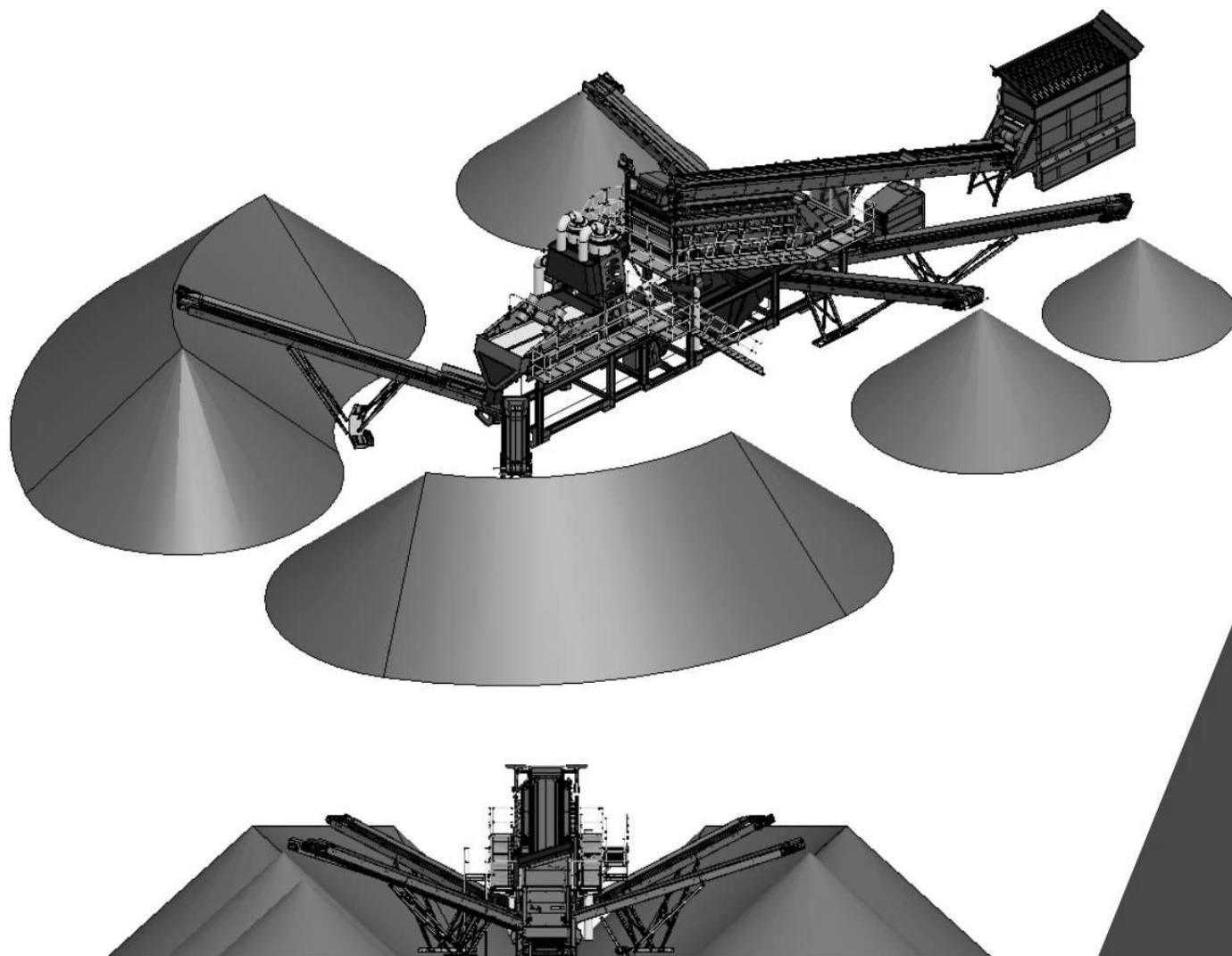
	3 DECK	3 DECK	2 DECK	2 DECK
	ONE SAND	TWO SAND	ONE SAND	TWO SAND
Total kW	141	156	136	151
Total HP	189	209	182	202
kVA Approx Required	246	271	237	263

AVERAGE WATER REQUIREMENT

	3 DECK	3 DECK	2 DECK	2 DECK
	ONE SAND	TWO SAND	ONE SAND	TWO SAND
m ³ /h	340	340	240	240
yds ³ /h	445	445	314	314

PLANT LAYOUT

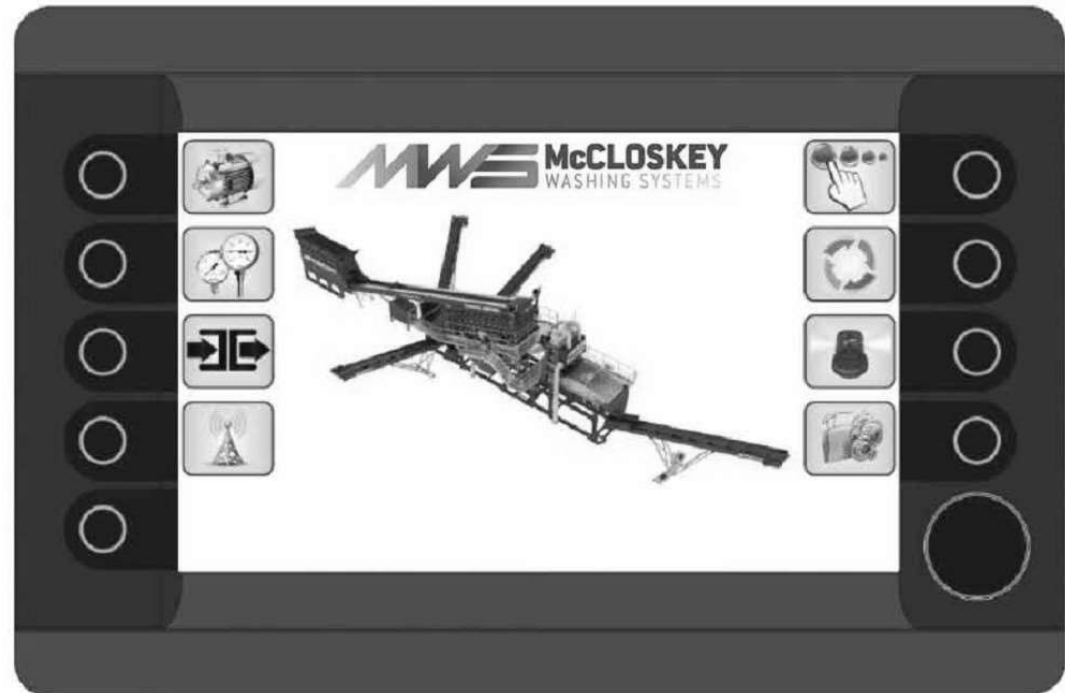




SANDSTORM 620

CONTROL SYSTEM

All of our control systems can be modified to suit customer preference and interact with other equipment on site as required.



MACHINE CONTROL SYSTEM

MWS offer a range of control system options on the Sandstorm™ Modular Wash Plant from basic motor isolators on the machine to fully automated controls. Heavy-duty graphical user interfaces are used for ease of operation. All key data such as water flow, pressure, motor current etc. is displayed in real-time to allow operators to keep a close eye on all aspects of the machine. Common functions include automatic start / stop, feeder speed control and conveyor radial drive.

RADIO CONTROL

All major control and automation functions are also available via Radio Control. Our robust transmitter handset is kept with the operator to ensure safe and easy control of the machine.

REMOTE DIAGNOSTICS

The highest level of control allows all key data to be transmitted wirelessly to a second graphical user interface located in the cab of the loader feeding the Sandstorm™. This option gives complete control and information feedback to the machine operator from the comfort and safety of the operating cabin. All operational data as well as any fault codes and parameters are transmitted to the loader display module providing information and warnings to allow the operator to take the appropriate action in a controlled and timely manner.



OUR GLOBAL NETWORK

Our drive to expand our operational footprint has been a hallmark of the business for many decades. We now trade and operate in more than 100 countries.



McCloskey's success is built on a reputation for designing and manufacturing top quality equipment which offers exceptional value. But this success is not due to McCloskey alone. Key partners in our business are the dealers who market, support and service the products we build.





At MWS we are committed to:

Providing our customers with the highest performance and most reliable products. Our customers rely on us to deliver quality products that go above and beyond expected performance.

Delivering Innovation. Constantly we are striving to improve the Mining and Minerals industry by integrating new technologies. These allow our customers – to add maximum value, to produce high quality end products and to strengthen their market share.

Maintaining the highest standards for safety and quality is reflected in our innovative methods and our state of the art technology. Most of all, that commitment is reflected in the dedication and expertise of the people who work for us.

AFTER SALES SERVICE

Following delivery of our highly productive products, our customers benefit from a comprehensive After Sales Service which ensures that our quality service and attention to detail goes beyond machine dispatch. This important service is staffed and resourced to provide fast response times and excellent service.



HEADQUARTERS

1 McCloskey Road, Keene, Ontario, K9J 0G6, Canada

T 1 (705) 295-4925

F 1 (705) 295-4777

E sales@mccloskeywashing.com

W mccloskeywashing.com

EUROPEAN OFFICE

47 Moor Road, Coalisland, Co. Tyrone, BT71 4QB, N. Ireland

T +44 (0) 28 87 740 926

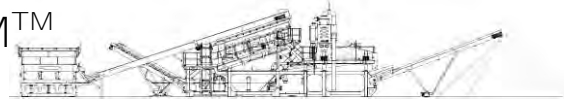
F +44 (0) 28 87 747 242

E sales@mccloskeywashing.com

W mccloskeywashing.com

Part of McCloskey International Group

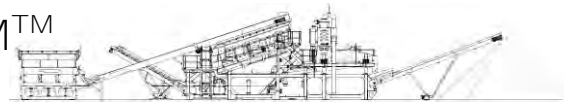
McCloskey
INTERNATIONAL



SPECIFICATIONS



McCloskey
SANDSTORM™



DESCRIPTION

- Modular design
- Containerised transport
- Open chassis design for ease of maintenance
- Fast setup time
- 1 water connection point
- Pre plumbed
- Raised chassis for wash down

DIMENSIONS AND WEIGHTS

Length	38m (124' – 8")
Width	20.4m (66' – 11")
Height	7.9m (25' – 11")
Weight	58,000 Kgs approx.

FEED CONVEYOR

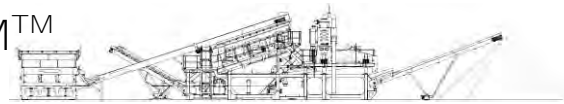
Belt width	1200mm (48")
Belt spec	Plain 500/3 6+3
Drive drum dia.	335mm (13.1")
Tail drum dia.	320mm (12.5")
Gearbox	Bonfig 805 W2
Motor	160cc motor
Flow rate	72.6 Lpm (19.2 US gpm)
Adjustable speed	YES
Maximum speed	18.75 rpm

FEEDER POWERUNIT AND HYDRAULICS

Hydraulic tank capacity	300 L (79 US Gals)
Hydraulic Oil cooler	YES

ELECTRICS

Emergency stops	11 off, 1 Feeder, 1 Powerunit, 2 Screenbox, 6 Chassis, 1 Dewatering screen
Chassis cabling	Armored cable
Start Siren	YES - 10 sec delay
Control panel	IFM
Plant shutdowns:	Low hydraulic tank level High Hydraulic oil temperature
Remote tipping grid	YES



MAIN CONVEYOR

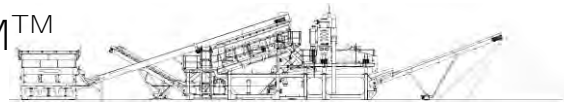
Belt width	1050mm (42")
Belt spec	Plain 400/3 4+2
Drive drum dia.	293mm (11.5")
Tail drum dia.	273mm (10.6")
Motor	1 off 15kW (20hp)
Gearbox	1 off Bonfiglioli
Speed	2m/s

AGGREGATE PRODUCT CONVEYORS

Stockpile height	4250mm (13' - 11")
Belt width	650mm (26")
Belt spec	Plain - 400/3 4+2
Drive drum dia.	293mm (11.5")
Tail drum dia.	273mm (10.6")
Motor	5.5kW motor and gearbox
Speed	1m/s
Wheel drive	0.4kW (0.5hp)
Drum centers	11320mm (37' - 2")

SAND PRODUCT CONVEYORS

Stockpile height	5250mm (17' - 3")
Belt width	650mm (26")
Belt spec	Plain - 400/3 4+2
Drive drum dia.	293mm (11.5")
Tail drum dia.	273mm (10.6")
Motor	5.5kW motor and gearbox
Speed	1m/s
Wheel drive	0.4kW (0.5hp)
Drum centers	11320mm (37' - 2")


SCREENBOX 620 2 DECK OR 3 DECK

Dimensions - each deck	6100mm x 1830mm (20' x 6')
Bearing type	150mm bore
Poly deck – each deck	Panels 315mm x 895mm 38 off
Screens - each deck	6' x 4' side tension – 5 off
Tensioning - each deck	Quick release pin and wedge
Screen angle	18 degrees
Screen stroke adjustable	6 mm
Screen shaft speed	1100 rpm
Screen 'g' force	4g
Drive	Electric
Motor	22kW (30hp)

SCREENBOX 516 2 DECK & 3 DECK

Dimensions - each deck	4900mm x 1524mm (16' x 5') TBC
Bearing type	130mm bore TBC
Poly deck – each deck	Panels TBC
Screens - each deck	5' x 4' side tension – 4 off TBC
Tensioning - each deck	Quick release pin and wedge
Screen angle	18 degrees
Screen stroke adjustable	6 mm
Screen shaft speed	1100 rpm
Screen 'g' force	4g
Drive	Electric
Motor	15kW (20hp)

DEWATERING SCREEN 620

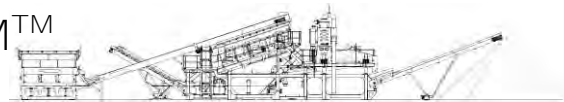
Screen width	1900mm (6' 3")
Screen length	4500mm (14' 9")
Drive	Electric vibrating motors.
Motor	2 off 8.3kW (11hp)
Speed	900rpm

DEWATERING SCREEN 516

Screen width	1500mm (5') TBC
Screen length	3700mm (12') TBC
Drive	Electric vibrating motors.
Motor	TBC
Speed	900rpm TBC

SANDPLANT 620 1 SAND

Coarse pump	250/200 45kW (58hp)
Total maximum power requirement	141kW (189hp)
Average water requirements	2 deck 240m³/h (314 yd³/h)
	3 deck 345m³/h (450 yd³/h)


SANDPLANT 620 2 SAND

Fines pump	200/150 22kW (30hp) TBC
Coarse pump	200/150 30kW (40hp)
Total maximum power requirement	156kW (209hp)
Average water requirements	2 deck 240m ³ /h (314 yd ³ /h)
	3 deck 345m ³ /h (450 yd ³ /h)

SANDPLANT 516 1 SAND

Coarse pump	200/150 30kW (40hp)
Total maximum power requirement	118kW (158hp)
Average water requirements	2 deck 200m ³ /h (260 yd ³ /h)
	3 deck 250m ³ /h (325 yd ³ /h)

SANDPLANT 516 2 SAND

Fines pump	150/125 15kW (20hp)
Coarse pump	200/150 22kW (30hp)
Total maximum power requirement	133kW (178hp)
Average water requirements	2 deck 200m ³ /h (260 yd ³ /h)
	3 deck 250m ³ /h (325 yd ³ /h)

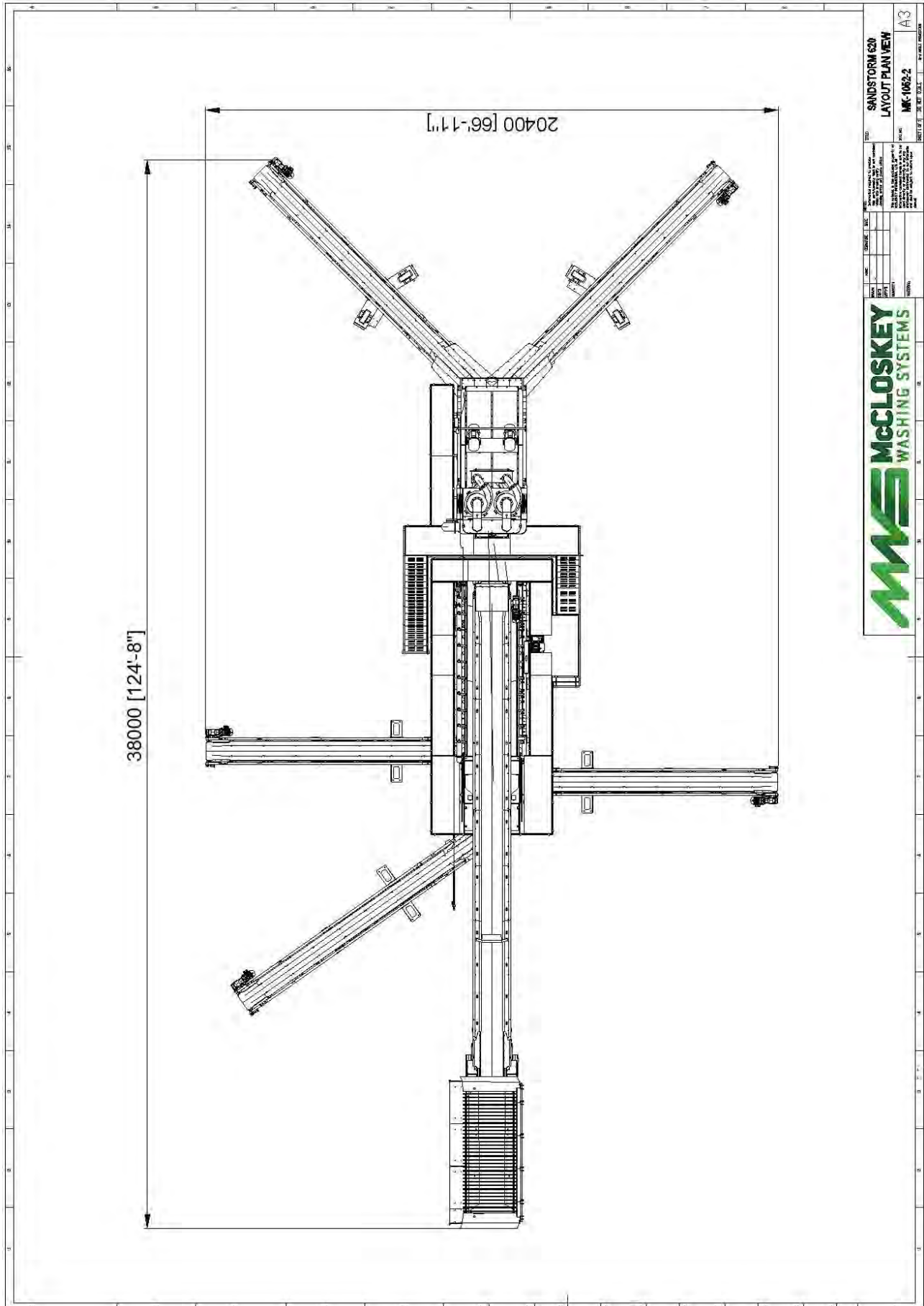
OPTIONS

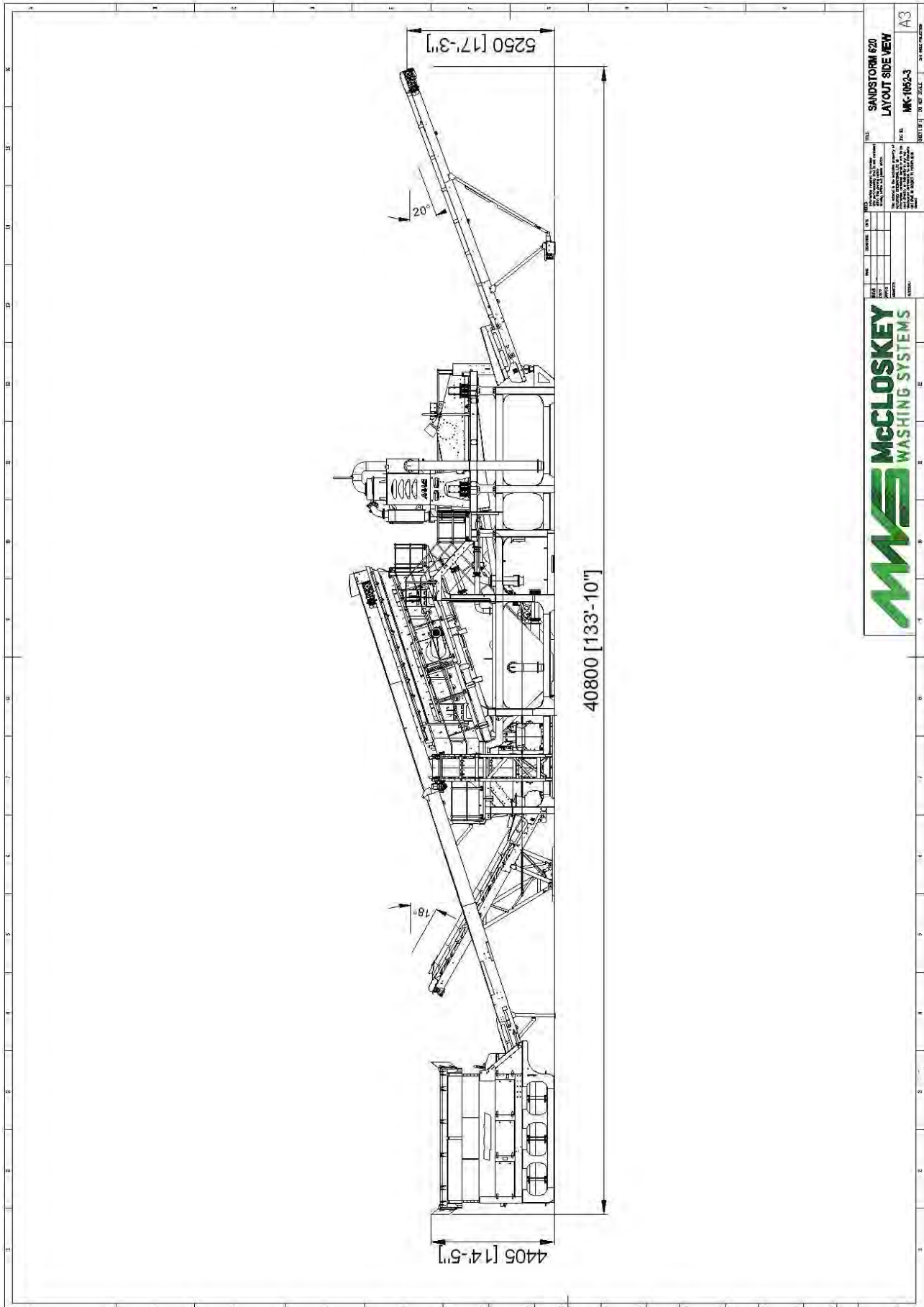
- Hopper extensions
- Overband magnet
- Single or double deck live head
- Radio remote control

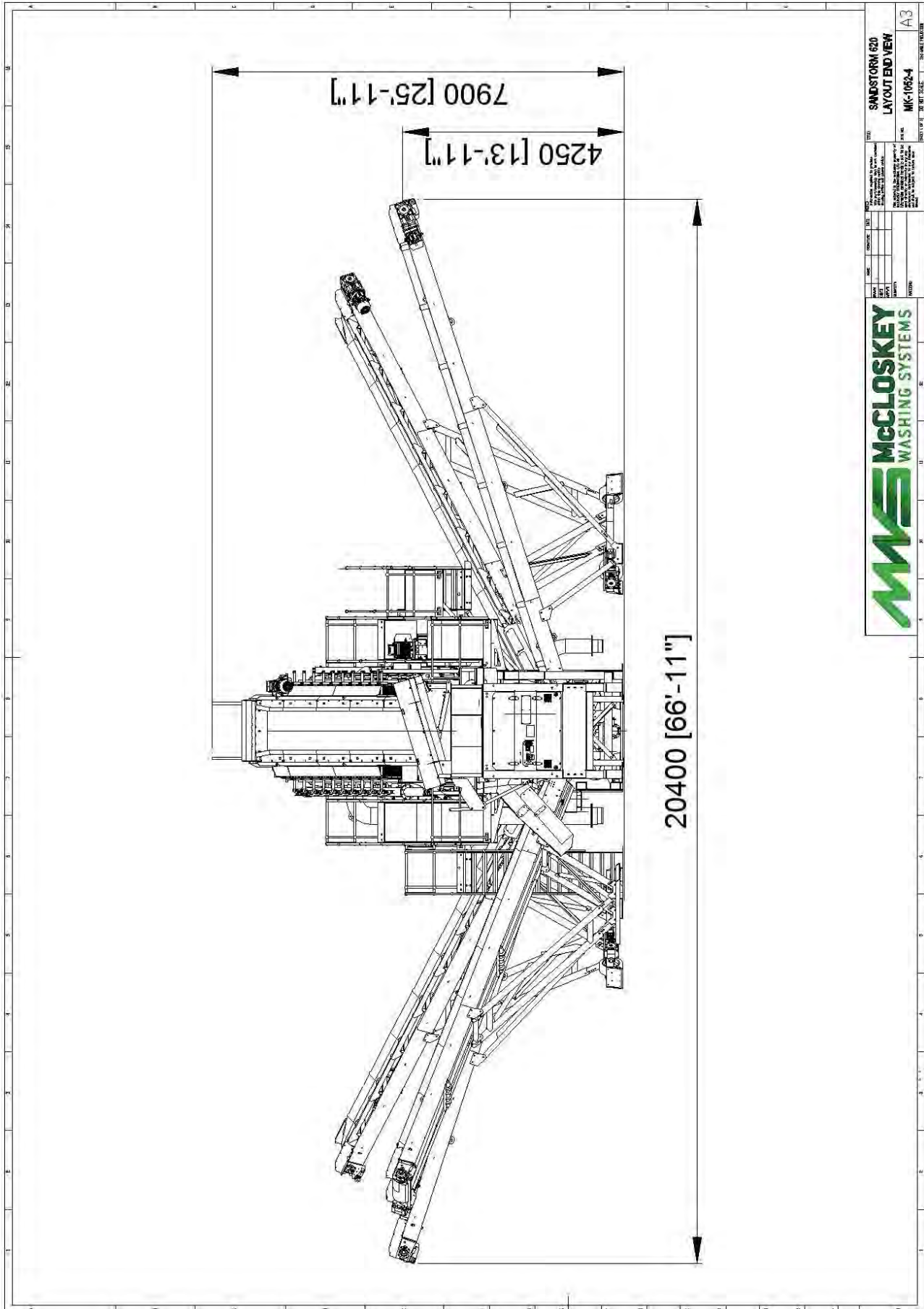
SAFETY FEATURES

- External grease points
- Safety shutdown systems
- Full safety guarding for nip points









Section 8

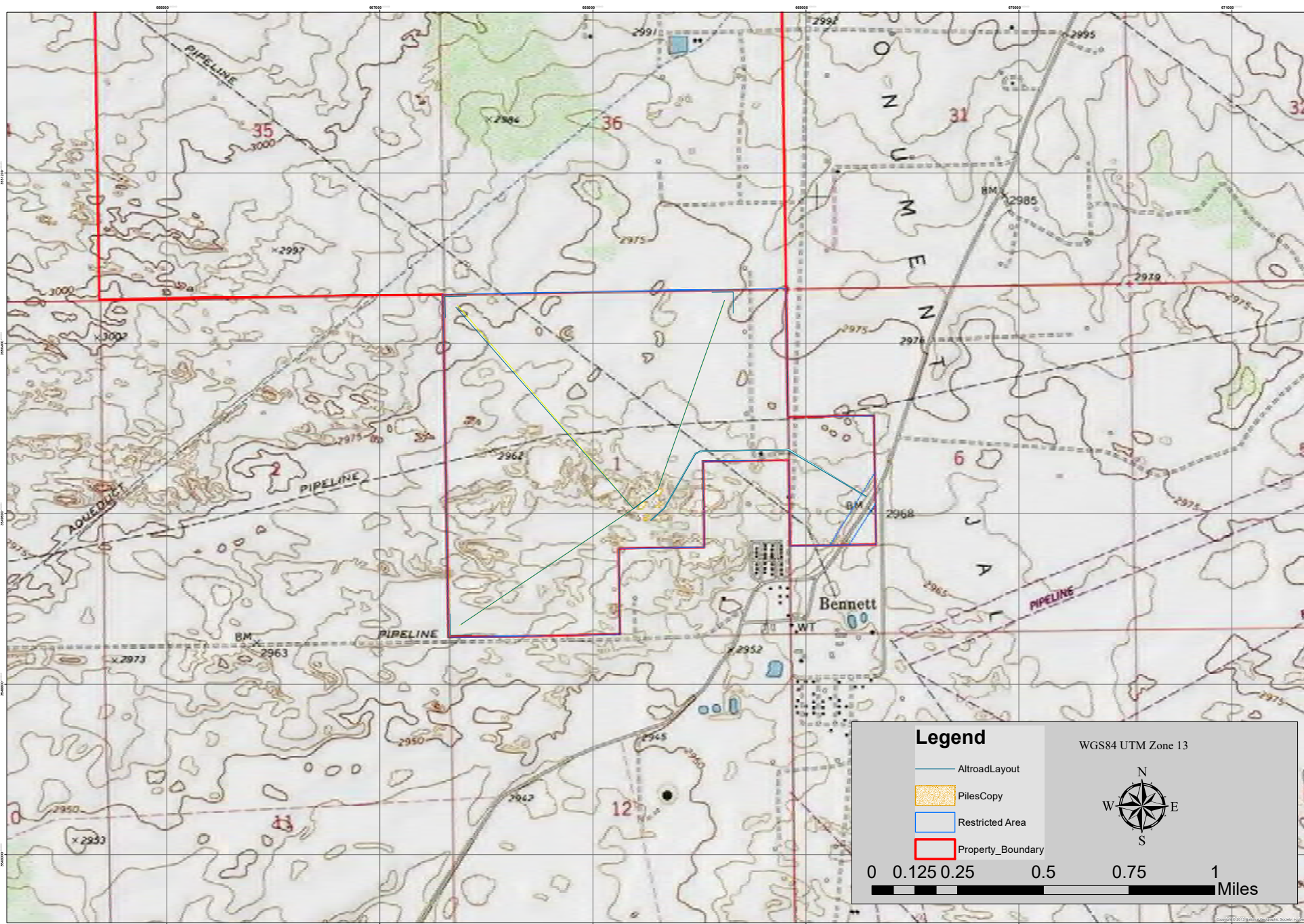
Map(s)

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	

Bennett Sand Mine

Bennett, Lea County, NM



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. ☒ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
 2. ☒ 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. ☒ A copy of the property tax record (20.2.72.203.B NMAC).
 4. ☒ A sample of the letters sent to the owners of record.
 5. ☒ A sample of the letters sent to counties, municipalities, and Indian tribes.
 6. ☒ A sample of the public notice posted and a verification of the local postings.
 7. ☒ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
 8. ☒ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
 9. ☒ 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. ☒ 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. ☒ 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.
-

Section 9

Proof of Public Notice

Item 1

Copy of Certified Letter Receipts

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee \$4.15 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Wayne W. Webster
Marsha J. Webster
14 Gasoline Alley Road
Jal, NM 88252

Postmark Here
APR 18 2023
CARLSBAD NM 88220

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee \$4.15 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Oscar Rodriguez
P.O. Box 549
Jal, NM 88252

Postmark Here
APR 18 2023
CARLSBAD NM 88220

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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OFFICIAL USE

Certified Mail Fee \$4.15 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Velma Y. Taylor
April Thomas
P.O. Box 857
Jal, NM 88252

Postmark Here
APR 18 2023
CARLSBAD NM 88220

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☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Juan Tapia Sanchez
P.O. Box 818
Jal, NM 88252

Postmark Here
APR 18 2023
CARLSBAD NM 88220

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☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Leo G. Taylor
Leslie Hipp
2050 NM CR 2162
Barry, TX 75102

Postmark Here
APR 18 2023
CARLSBAD NM 88220

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☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ \$0.00

☐ Adult Signature Restricted Delivery \$ \$0.00

Postage \$0.63 0.60

Total Postage and Fees \$8.13 8.10

Sent To: Victor Sanchez
P.O. Box 301
Magdalena, NM 87825

Postmark Here
APR 18 2023
CARLSBAD NM 88220

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 2720 0000 598E 7354

7021 2720 0000 3865 7323

7021 2720 0000 3865 7248

7021 2720 0000 3865 7347

60E2 598E 0000 0222 T202

7021 2720 0000 3865 7202

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☒ Return Receipt (hardcopy) \$ 3.35
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent Elvia Andrade
Street Luis Tavarez
City P.O. Box 28
Jal, NM 88252



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☒ Return Receipt (hardcopy) \$ 3.35
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent El Paso Natural Gas Co.
Street P.O. Box 4372
City Houston, TX 77210



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☒ Return Receipt (hardcopy) \$ 3.35
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent Hobbs City Hall
Street 200 E. Broadway
City Hobbs, NM 88240



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☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent City of Jal
Street City Clerk's Office
City 710 W. Wyoming
Jal, NM 88252



PS Form 3800, April 2015 PSN 7530-02-000-9047

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☒ Return Receipt (hardcopy) \$ 3.35
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent To Delores Nunez
Street Javier Santillan
City P.O. Box 656
Jal, NM 88252



PS Form 3800, April 2015 PSN 7530-02-000-9047

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☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60
Total Postage and Fees \$ 8.10

Sent To Desert Town Investments, LLC
Street P.O. Drawer Y
City Jal, NM 88252



PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7021 2720 0000 3865 7293

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Certified Mail Fee \$ 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

Street Mary Gonzales

#13 Bennett Road

City, St. Jal, NM 88252

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7224

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Certified Mail Fee \$ 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

Street Melina Flores de Hernandez

Jose Hernandez Jr.

City, St. P.O. 670

Jal, NM 88252

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7166

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Certified Mail Fee \$ 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

Street Elisa Gomez

Gloria Avilla

City, St. 6885 S. Redwood # 417

West Jordan, UT 84084

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7392

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Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

Street Jere Galle

303 21m Dale

City, State, ZIP+4® Carlsbad NM 88220

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7149

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Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

Street Billy Emerson

Mike Emerson

City, St. P.O. Box 75

Jal, NM 88252

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7170

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☒ Return Receipt (hardcopy) \$ 3.35

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage \$ 0.60

Total Postage and Fees \$ 8.10

Sent To

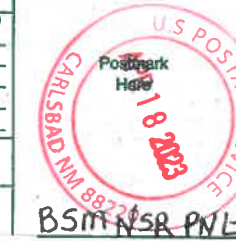
Street Robbie & Misty Galloway

Brenda Arzate

City, St. P.O. Box 153

Jal, NM 88252

PS Form 3800, April 2015 PSN 7530-02-000-9047



7021 2720 0000 3865 7095

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Certified Mail Fee	\$ 4.15
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **Lea County Clerk's Office**
Street: **PO Box 1507**
City, State: **Lovington, NM 88260**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 2720 0000 3865 7385

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Certified Mail Fee	\$ 4.15
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **NM State Land Office**
Street: **310 Old Santa Fe Trail**
City, State: **Santa Fe, NM 87501**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 2720 0000 3865 7330

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OFFICIAL USE

Certified Mail Fee	\$ 4.15
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **Humberto Juarez**
Street: **P.O. Box 618**
City, State: **Jal, NM 88252**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7021 2720 0000 3865 7279

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OFFICIAL USE

Certified Mail Fee	\$ 4.15
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **Mary Lyn Limbert**
Street: **P.O. Box 713**
City, State: **Magdalena, NM 87825**

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7021 2720 0000 3865 7255

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Certified Mail Fee	\$ 4.15
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **James Houston**
Street: **Jennifer Houston**
City, State: **P.O. Box 1193**
Jal, NM 88252

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7021 2720 0000 3865 7316

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Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.35
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 0.60
Total Postage and Fees	\$ 8.10



Sent To: **Karla Immel**
Street: **Eugene Immel**
City, State: **P.O. Box 862**
Jal, NM 88252

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Certified Mail Fee

\$ 4.15

Extra Services & Fees (check box, add fee as appropriate)

☒ Return Receipt (hardcopy) \$ 3.95

☐ Return Receipt (electronic) \$ _____

☐ Certified Mail Restricted Delivery \$ _____

☐ Adult Signature Required \$ _____

☐ Adult Signature Restricted Delivery \$ _____

Postage

\$ 0.60

Total Postage and Fees

\$ 8.10

Sent To

Fulfer Ranch, LLC

P.O. Box 1224

Jal, NM 88252

City, S



BSM NSR PN 46

PS Form 3900, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7021 2720 0000 3865 7187

Section 9

Proof of Public Notice

Item 2

List of Public Notice Posting Locations

PUBLIC NOTICE POSTING LOCATIONS

IPNM BENNETT SAND MINE

NSR PERMIT APPLICATION

- Intrepid Potash, Bennett Sand Mine Entrance
- Hobbs City Hall at 200 East Broadway Street in Hobbs, NM
- Hobbs Public Library at 509 North Shipp Street in Hobbs, NM
- La Tienda at 420 East Marland Street in Hobbs, NM

Section 9

Proof of Public Notice

Item 3

Copy of Property Tax Record (20.2.72.203.B NMAC)

Click to Print

Owner Information

Owner # 51645 **District** 190
INTREPID POTASH-NEW MEXICO LLC

707 17TH ST
STE. 4200
DENVER CO 80202

Estimated Taxes for Owner

Estimated Tax Estimated Year used
\$7697.66 2022

Calculate Estimated Tax

Recap Value Information

Central Full Value	0	Full Value	1009896
Land Full Value	973323	Taxable Value	336632
Improvements Full value	36573	Exempt Value	0
Personal Property Full Value	0	Net Value	336632
Manufactured Home Full Value	0		
Livestock Full Value	0		

Property Information

Property Code 4000516450002
Book 2150 **Page** 23 **Reception#** 40958
Physical Address
Bldg **Apt**

Section 22 Township 25 S Range 36 E

640.00 AC - ALL

11/01/11-ANTHONY, JAY

05/01/19-DINWIDDIE CATTLE CO LLC

Property Value Information

170 Residential	Land	1.00	0.00	1443
150 Non-Residential	Land	5786.97	0.00	920907
210 Residential	Improvements		0.00	36573

Section 9

Proof of Public Notice

Item 4 & 5

Sample of Letter Sent to Owners of Record, Counties, and Municipalities

[date]

CERTIFIED MAIL XXXX XXXX XXXX XXXX

RETURN RECEIPT REQUESTED (*certified mail is required, return receipt is optional*)

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

Intrepid Potash-New Mexico, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the **construction** of its **sand** facility. The expected date of application submittal to the Air Quality Bureau is **April 28, 2023**.

The exact location for the proposed facility known as, **Bennett Sand Mine**, will be at latitude **32** deg, **4** min, **12** sec and longitude **-103** deg, **13** min, **12** sec. The approximate location of this facility is **2.4** miles south on Hwy 205 of the intersection of Hwy 205 and Whitworth Drive in Jal, Lea county.

The proposed **construction** consists of a sand quarry with a wet processing wash plant.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM) [for TV & PSD only]	24.22	168.69
PM ₁₀	7.36	48.55
PM _{2.5}	0.92	5.64
Sulfur Dioxide (SO ₂)	0	0
Nitrogen Oxides (NO _x)	0	0
Carbon Monoxide (CO)	0	0
Volatile Organic Compounds (VOC)	0	0
Total sum of all Hazardous Air Pollutants (HAPs)	0	0
Toxic Air Pollutant (TAP)	0	0
Green House Gas Emissions as Total CO ₂ e	n/a	0

The standard operating schedule of the facility will be from 6 a.m. to 9 p.m. Seven days a week and a maximum of 52 weeks per year. The maximum operating schedule will be from 6 a.m. to 6 a.m. Seven days a week and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is: **Intrepid Potash-New Mexico, LLC; 1996 Potash Mines Road, Carlsbad, NM 88220**

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.

Please refer to the company name and facility name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a 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.

Sincerely,

Intrepid Potash – New Mexico, LLC
1996 Potash Mines Road
Carlsbad, NM 88220

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 505-629-3395.

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: Kathryn Becker, 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.

Section 9

Proof of Public Notice

Item 6

Sample of Public Notice Posted

Verification of the Local Postings

NOTICE

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM) [for TV & PSD only]	24.22	168.69
PM ₁₀	7.36	48.55
PM _{2.5}	0.92	5.64
Sulfur Dioxide (SO ₂)	0	0
Nitrogen Oxides (NO _x)	0	0
Carbon Monoxide (CO)	0	0
Volatile Organic Compounds (VOC)	0	0
Total sum of all Hazardous Air Pollutants (HAPs)	0	0
Toxic Air Pollutant (TAP)	0	0
Green House Gas Emissions as Total CO ₂ e	n/a	0

The standard operating schedule of the facility will be from 6 a.m. to 9 p.m. Seven days a week and a maximum of 52 weeks per year. The maximum operating schedule will be from 6 a.m. to 6 a.m. Seven days a week and a maximum of 52 weeks per year.

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Notice of Non-Discrimination

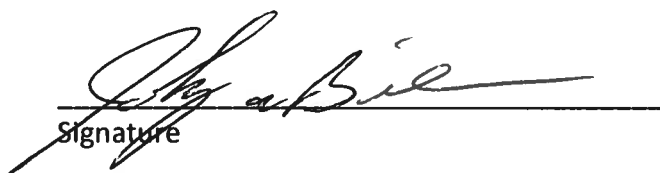
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination 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: Kathryn Becker, 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, John Bierhaus, the undersigned, certify that on **April 20, 2023** and **April 24, 2023** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in **City of Hobbs** of **Lea** County, State of New Mexico on the following dates:

1. Intrepid Potash, Bennett Sand Mine Entrance April 24, 2023
2. Hobbs City Hall at 200 East Broadway Street in Hobbs, NM April 20, 2023
3. Hobbs Public Library at 509 North Shipp Street in Hobbs, NM April 20, 2023
4. La Tienda at 420 East Marland Street in Hobbs, NM April 20, 2023

Signed this 25th day of APRIL, 2023.


Signature

4-25-2023
Date

John Bierhaus
Printed Name

Construction Manager
Title

IPNM NSR Permit Bennett Sand Mine

Public Notice

Entrance Photograph of Posting

April 24, 2023



Section 9

Proof of Public Notice

Item 7

List of Notified Parties

List of Notified Parties
IPNM NSR Permit Bennett Sand Mine
Public Notice Letters
List of Notified Parties

Addressee	Address	Property Code	Date of Certified Mail
Hobbs City Hall	200 E Broadway; Hobbs, NM 88240	Municipality	April 18, 2023
City of Jal City Clerk's Office	710 W. Wyoming; Jal, NM 88252	Municipality	April 18, 2023
Lea County Clerk's Office	P.O. Box 1507; Lovington, NM 88260	Municipality	April 18, 2023
NM State Land Office	310 Old Santa Fe Trail; Santa Fe, NM 87501	State Land	April 18, 2023
Andrade, Elvia Tavaréz, Luis	P.O. Box 28; Jal, NM 88252	4000531790001	April 18, 2023
Desert Town Investments, LLC	P.O. Drawer Y; Jal, NM 88252	4000517250001	April 18, 2023
EL PASO NATURAL GAS CO	P.O. Box 4372; Houston, TX 77210	4900105145623; 4900105150523; 4900105130427	April 18, 2023
Emerson, Billy Ralph Emerson, Mike	P.O. Box 75; Jal, NM 88252	400051655001	April 18, 2023
Fulfer Ranch LLC	P.O. Box 1224; Jal, NM 88252	4950125130904; 4000516850005; 4000516840001	April 21, 2023
Gallaway, Robbie & Misty Arzate, Brenda	P.O. Box 153; Jal, NM 88252	4000518060001	April 18, 2023
Galle, Jere R	303 Elm Dale, Carlsbad, NM 88220	4000517260001	April 18, 2023
Gomez, Elisa Avilla, Gloria	6885 S Redwood Rd #417; West Jordan, UT 84084	400053251001	April 18, 2023
Gonzales, Mary	#13 Bennett Rd.; Jal, NM 88252	4000518300001	April 18, 2023
Hernandez, Melina Flores De Hernandez, Jose Jr.	P.O. Box 670; Jal, NM 88252	4000517740001	April 18, 2023
Houston, James Houston, Jennifer	P.O. Box 1193; Jal, NM 88252	4000517450001	April 18, 2023
Immel, Karla Immel, Eugene	P.O. Box 862; Jal, NM 88252	4000518770001	April 18, 2023
Juarez, Humberto	P.O. Box 618; Jal, NM 88252	4920112094115; 4980723114553; 4000517150001	April 18, 2023

List of Notified Parties
IPNM NSR Permit Bennett Sand Mine
Public Notice Letters
List of Notified Parties

Addressee	Address	Property Code	Date of Certified Mail
Limberty, Mary Lyn	P.O. Box 713; Magdalena, NM 87825	4000518390001	April 18, 2023
Nunez, Delores Santillan, Javier	P.O. Box 656; Jal, NM 88252	4000517080001; 4000517540001	April 18, 2023
Nunez, Randy Nunez, Delores	P.O. Box 656; Jal, NM 88252	4000518550001	April 18, 2023
Orozco, Maria R Etvir Arzate, Brenda	P.O. Box 153; Jal, NM 88252	4000516530001	April 18, 2023
PLAINS PIPELINE LP PROPERTY	333 Clay St; Ste 1600; Houston, TX 77002	4000901460001	April 18, 2023
Railey, Juanita	3613 Jonette Dr.; Ft Worth, TX 76118	4000518230001	April 18, 2023
Ramos, Erasmos T Ramos, Elsa S	8 Bennett St.; Jal, NM 88252	400051840001	April 18, 2023
Ramsey, Marjorie Mattison Fancher, Mary Mattison	PMB #342 1703 Sudderth Dr; Ruidoso, NM 88345	4000517970001	April 18, 2023
Rodriguez, Oscar	P.O. Box 549; Jal, NM 88252	4000517210001; 4000518180001	April 18, 2023
Sanchez, Juan Tapia	P.O. Box 818; Jal, NM 88252	4000530790001; 4000516940001; 4000518690001	April 18, 2023
Sanchez, Victor	P.O. Box 301; Jal, NM 88252	4000516580001	April 18, 2023
Taylor, Leo G Hipp Leslie	2050 NW CR 2162; Barry, TX 75102	4000518540001	April 18, 2023
Taylor, Velma Y Thomas, April Dawn	Box 857, Jal NM 88252	4000518520001; 4000517710001; 4000518500001; 4000518530001; 4000518510001	April 18, 2023

List of Notified Parties**IPNM NSR Permit Bennett Sand Mine****Public Notice Letters****List of Notified Parties**

Addressee	Address	Property Code	Date of Certified Mail
Webster, Wayne W Webster, Marsha J	14 Gasoline Alley Rd; Jal, NM 88252	400051722001; 400051730001; 400051816001; 400051830001; 400079067001; 4000516440001; 4000517160001; 4000517200001; 4000517430001; 4000517440001; 4000517530001; 4000517610001; 4000517670001; 4000517930001; 4000518050001; 4000518120001; 4000518210001; 4000518220001; 4000518280001; 4000518350001; 4000518350002; 4000518360001; 4000518450001; 4000518720001; 4000532760001; 4000780780001	April 18, 2023

Section 9

Proof of Public Notice

Item 8

Copy of Public Service Announcement

Documentary Proof of Submittal

Submittal of Public Service Announcement – Certification

PUBLIC SERVICE ANNOUNCEMENT

Intrepid Potash Notice of Application for New Source Review (NSR) Air Quality Permit

Intrepid Potash-New Mexico, LLC announces its application to the New Mexico Environment Department for an air quality permit for the construction of its sand facility. The proposed construction consists of a sand quarry with a wet processing wash plant. The expected date of application submittal to the Air Quality Bureau is April 28, 2023.

The exact location for the proposed facility known as, **Bennett Sand Mine**, will be located 2.4 miles south on Hwy 205 of the intersection of Hwy 205 and Whitworth Drive in Jal, Lea County, New Mexico.

Intrepid has posted complete notices containing the locations of the facilities and describing the proposed permit at the following locations:

- Intrepid Potash South Bennett Sand Mine Entrance
- Hobbs City Hall at 200 East Broadway Street in Hobbs
- Hobbs Public Library at 509 North Shipp Street in Hobbs
- La Tienda at 420 East Marland Street in Hobbs

If you have any comments about this proposed modification and you want your comments to be made as part of the permit review process, you must submit your comments in writing to:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico; 87505-1816

The Department may be contacted by telephone at (505) 476-4300 or 1 800 224-7009.

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 505-629-3395.

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: Kathryn Becker, 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.

From: [Robin Hughes](#)
To: [aaron](#)
Cc: [Taylor Cable](#); [Ken Faulkner](#); [Jason Jones](#); [Conrad Parrish](#); [Christina Sheehan](#)
Subject: Request for Intrepid Potash Public Service Announcement for NSR Permit Bennett Sand Mine on Thursday April 20th
Date: Friday, April 14, 2023 12:44:00 PM
Attachments: [image001.jpg](#)
[2023-04-14 IPNM Bennett Sand Mine PSA.pdf](#)

Hi Aaron,

I am requesting a 2 minute public service announcement for Intrepid Potash NSR Permit for Bennett Sand Mine, to be aired once on each station, KIX, KZOR and KPZA, around noon on Thursday the 20th.

Attached is the Public Notice.

Please provide me with a copy of the orders and the proof of airing by April 24th.
Also, please send me the invoices.

Thank you.

[Robin Hughes](#)
[Environmental Technician III](#)



[210 Red Cloud Road](#)
[Carlsbad, NM 88220](#)
[575-941-2212](#)
robin.hughes@intrepidpotash.com

RADIO TIME ORDER

APRIL 2023

For Office Use Only	
Customer No. _____	
Cart No. _____	
Contract No. _____	

KIXN ☒ KPZA ☒ KZOR ☒ KEJL ☐ KLEA ☐ KBIM FM ☐ La Ley ☐

Date 4/17/23

ACCOUNT INTREPID POTASH

AGENCY

ADDRESS 210 RED CLOUD ROAD CARLSBAD, NM 88220

E-Bill robin.hughes@intrepidpotash.com

AUTHORIZED BY ROBIN HUGHES

PHONE 575-941-2212

START 4/20/23		STOP AFTER: 4/20/23					TOTAL WEEKS: 1	
TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	
	17	18	19	20 1 NOON	21	22	23	
	24	25	26	27	28	29	30	

LENGTH OF SPOTS: 2 MINUTES	PROGRAM NSR PERMIT	RATE & CLASS 75.00	COST. \$ 225.00
AFFIDAVIT YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	COOP FOR	TOTAL NUMBER PURCHASED: 3	<input type="checkbox"/> Prod/DUB <input type="checkbox"/> TAX <input type="checkbox"/> A.C.
ADDITIONAL INSTRUCTIONS			NO TAX TOTAL 225.00

Payment to Noalmark Broadcasting Corporation is the responsibility of the client. Delinquency of third party vendors, such as advertising agencies, will not absolve client obligation.

Noalmark Broadcasting Corp. and its stations do not discriminate in advertising contracts on the basis of race, ethnicity, or gender, and will not accept any advertising which is intended to discriminate on the basis of race, ethnicity, or gender. Advertiser represents and warrants that it is not purchasing advertising time from Licensee or its stations that is intended to discriminate on the basis of race, ethnicity, or gender.

Jan _____ Apr 225.00 Jul _____ Oct _____
 Feb _____ May _____ Aug _____ Nov _____
 Mar _____ Jun _____ Sep _____ Dec _____

STATION REP. AARON FORRISTER

CLIENT SIGNATURE _____

Submittal of Public Service Announcement – Certification

I, Robin Hughes, the undersigned, certify that on **April 14, 2023**, submitted a public service announcement to **Hobbs Radio Station** that serves the City of **Hobbs, Lea County, New Mexico**, in which the source is or is proposed to be located and that **Hobbs Radio Station RESPONDED THAT IT WOULD AIR THE ANNOUNCEMENT.**

Signed this 28th day of April, 2023,

Robin Hughes
Signature

4/28/2023
Date

Robin Hughes
Printed Name

Environmental Technician III
Title

Section 9

Proof of Public Notice

Item 9 & 10

Affidavits of Legal Ad & Display Ad

Hobbs News Sun 4-20-2023

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
April 20, 2023
and ending with the issue dated
April 20, 2023.


Publisher

Sworn and subscribed to before me this
20th day of April 2023.


Business Manager

My commission expires
January 29, 2027
(Seal)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
April 20, 2023

NOTICE OF AIR QUALITY PERMIT APPLICATION

Intrepid Potash-New Mexico, LLC announces its application to the New Mexico Environment Department for an air quality permit for the **construction** of its **sand** facility. The expected date of application submittal to the Air Quality Bureau is **April 28, 2023**.

The exact location for the proposed facility known as, **Bennett Sand Mine**, will be at latitude 32 deg, 4 min, 12 sec and longitude -103 deg, 13 min, 12 sec. The approximate location of this facility is **2.4 miles south on Hwy 205 of the intersection of Hwy 205 and Whitworth Drive in Jal, Lea county.**

The proposed **construction** consists of a **sand quarry with a wet processing wash plant.**

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM) [for TV & PSD only]	24.22	168.69
PM 10	7.36	48.55
PM 2.5	0.92	5.64
Sulfur Dioxide (SO ₂)	0	0
Nitrogen Oxides (NO _x)	0	0
Carbon Monoxide (CO)	0	0
Volatile Organic Compounds (VOC)	0	0
Total sum of all Hazardous Air Pollutants (HAPs)	0	0
Toxic Air Pollutant (TAP)	0	0
Green House Gas Emissions as Total CO ₂ e	0	0

The standard operating schedule of the facility will be from 6 a.m. to 9 p.m. **Seven** days a week and a maximum of **52** weeks per year. The maximum operating schedule will be from 6 a.m. to 6 a.m. **Seven** days a week and a maximum of **52** weeks per year.

The owner and/or operator of the Facility is: **Intrepid Potash-New Mexico, LLC; 1996 Potash Mines Road, Carlsbad, NM 88220**

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.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a 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.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section-home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención

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#00277805

01102032

00277805

ROBIN HUGHES
INTREPID POTASH, INC.
P.O. BOX 101
1996 POTASH MINES RD.
CARLSBAD, NM 88220

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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Beginning with the issue dated
April 20, 2023
and ending with the issue dated
April 20, 2023.


Publisher

Sworn and subscribed to before me this
20th day of April 2023.


Business Manager

My commission expires
January 29, 2027
(Seal)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

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Sulfur Dioxide (SO ₂)	0	0
Nitrogen Oxides (NO _x)	0	0
Carbon Monoxide (CO)	0	0
Volatile Organic Compounds (VOC)	0	0
Total sum of all Hazardous Air Pollutants (HAPs)	0	0
Toxic Air Pollutant (TAP)	0	0
Green House Gas Emissions as Total CO ₂ e	n/a	0

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01102032

00277812

ROBIN HUGHES
INTREPID POTASH, INC.
P.O. BOX 101
1996 POTASH MINES RD.
CARLSBAD, NM 88220

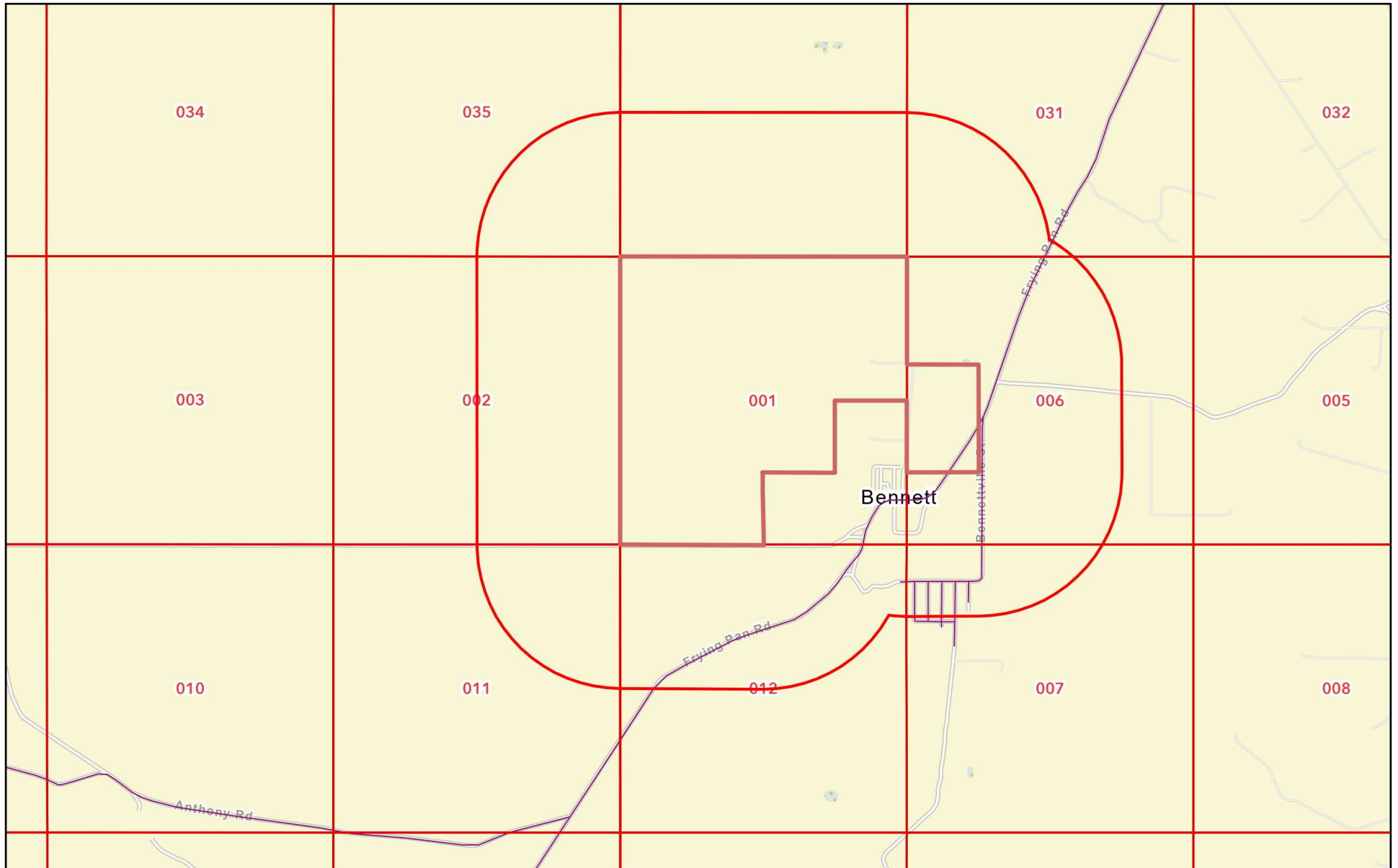
Section 9

Proof of Public Notice




Item 11

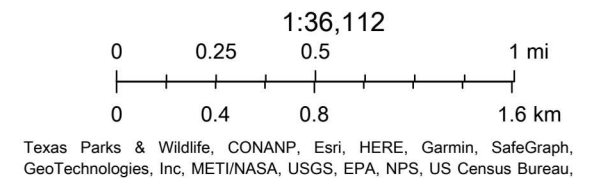
Map Showing Facility & Surrounding Area

ArcGIS Web AppBuilder



4/13/2023, 1:16:46 PM

-  Sections
-  Lea County Boundary
-  Lea County Roads



Section 10

Written Description of the Routine Operations of the Facility

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.

Sand will be quarried using a hydraulic track hoe excavator and loaded to dump trucks. The moisture content of the mined material is expected to range from 5.1% to 11.8%, on average, depending on the season. The transfer distance of the mined material will vary as the mined area expands with the maximum distance estimated as 0.7 miles. The material will be transported to a raw material stockpile located near the wash plant.

Sand is expected to be mined in the area to a depth of 30 feet below current grade. The wash plant area will be graded and stabilized. Haul path existing the mine will be at an approximate 8% grade from the mine floor to the wash plant area. Haul paths within the mine will vary as the material is mined and recovered. Material from the quarry will be deposited in raw material piles near the wash units.

The material from the raw material stockpile will be loaded into the feed hopper of a Sandstorm 620 modular wash (wet) plant. The washing and wet sizing equipment are set to remove the minus 140 mesh (equivalent to ~105 microns), washing out all of the particles smaller than this size. The sand will exit the wash unit by conveyor to a storage pile. This sand will be at a moisture content in excess of 12% and the grain size will be above 105 microns. The damp sand will be allowed to air dry to reduce its moisture content to approximately 5% by natural drainage and evaporation.

There will be no additional drying of the sand. The sand will be loaded into truck boxes using a front-end loader and shipped off-site for sale.

The production capacity is limited by the washing capacity of the Sandstorm 620 units. The site will utilize two of the wash units with capacities of 220 tons per hour for each unit. The capacity of the facility will be the combined capacity of these units, or 440 tons/hr.

The facility entrance road will be approximately 0.35 miles long and will consist of base course. An alternate facility entrance was also evaluated at 0.80 miles in length. Facility traffic will be limited to 15 mph to minimize any emissions from vehicle traffic. The entrance road will be watered, and dust suppressant added as needed. The mining haul routes will be watered as needed and the speed will be limited to 15 mph also.

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):

Intrepid Potash New Mexico, LLC, Bennett Sand Mine

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.

☐ Yes ☒ No

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

☐ Yes ☒ No

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☐ Yes ☒ No

C. Make a determination:

☒ 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:

- ☒ a minor PSD source before and after this modification (if so, delete C and D below).
- ☐ a major PSD source before this modification. This modification will make this a PSD minor source.
- ☐ an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- ☐ an existing PSD Major Source that has had a major modification requiring a BACT analysis
- ☐ a new PSD Major Source after this modification.

B. This facility **is not** one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **not significant. All of the emissions from the facility are fugitive and below the major source threshold.** The “project” emissions listed below **do** only result from changes described in this permit application, thus no emissions from other **revisions or modifications, past or future** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. NOx: **00.0** TPY
- b. CO: **00.0** TPY
- c. VOC: **00.0** TPY
- d. SOx: **00.0** TPY
- e. PM: **174.14**TPY
- f. PM10: **49.85** TPY
- g. PM2.5: **5.77** TPY
- h. Fluorides: **00.0** TPY
- i. Lead: **00.0** TPY
- j. Sulfur compounds (listed in Table 2): **00.0** TPY
- k. GHG: **00.0** TPY

C. Netting **is not required (project is not significant.)**

D. BACT is **not required for this modification, as this application is a minor modification.**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

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 RELEVANT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

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

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

Example of a Table for State Regulations:

<u>State Regulation Citation</u>	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	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC The TSP NM ambient air quality standard was repealed by the EIB effective November 30, 2018.
20.2.7 NMAC	Excess Emissions		Facility	If subject, this would normally apply to the entire facility. If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies. This would not apply to Notices of Intent since these are not permits.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	20.2.23.108 APPLICABILITY: B. The following fugitive dust sources are exempt from this part: (3) operations issued permits pursuant to the state of New Mexico Air Quality Control Act, Mining Act or Surface Mining Act; and The facility will be issued an air permit
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	Facility	This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers. The facility will not operate external combustion emission sources.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	Facility	This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers. The facility will not operate external combustion emission sources.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	Facility	Proposed facility not a natural gas plant
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	No	Facility	Proposed facility not a petroleum processing facility
20.2.38 NMAC	Hydrocarbon Storage Facility	No	Facility	Proposed facility not a hydrocarbon storage facility
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	Facility	Proposed facility is not a sulfur recovery plant,
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	No	Facility	Proposed facility is not in the oil and gas sector.
20.2.61.109 NMAC	Smoke & Visible Emissions	No	Facility	The proposed facility will not operate stationary combustion equipment.
20.2.70 NMAC	Operating Permits	No	Facility	If subject, this would normally apply to the entire facility. Applies if your facility's potential to emit (PTE) is 100 tpy or more of any regulated air pollutant other than HAPs; and/or a HAPs PTE of 10 tpy or more for a single HAP or 25 or more tpy for combined HAPs; is subject to a 20.2.79 NMAC nonattainment permit; or is a facility subject to a federal regulation that requires you to obtain a Title V permit such as landfills or air curtain incinerators. Include both stack and fugitive emissions to determine the HAP's PTE regardless of the facility type.

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.)
				<p>If your facility is one of those listed at 20.2.70.7(2)(a) through (aa) state which source type your facility is and count both fugitive and stack emissions to determine your PTE. If your facility is not in this (a) through (aa) list, count only stack emissions to determine your PTE.</p> <p>The proposed facility is not listed at 20.2.70.7(2)(a) through (aa) and will only emit fugitive emissions.</p> <p>Landfills and Air Curtain Incinerators are not Title V Major Sources, but it would apply pursuant to 20.2.70.200.B NMAC.</p>
20.2.71 NMAC	Operating Permit Fees	No	Facility	<p>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.</p> <p>The proposed facility will not be subject to 20.2.70 NMAC.</p>
20.2.72 NMAC	Construction Permits	Yes	Facility	<p>If subject, this would normally apply to the entire facility.</p> <p>Could apply if your facility's potential emission rate (PER) is greater than 10 pph or greater than 25 tpy for any pollutant subject to a state or federal ambient air quality standard (does not include VOCs or HAPs); if the PER of lead is 5 tpy or more; if your facility is subject to 20.2.72.400 NMAC; or if you have equipment subject to 40 CFR 60 Subparts I and OOO, 40 CFR 61 Subparts C and D.</p> <p>Include both stack and fugitive emissions to determine PER.</p>
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	<p>If subject, this would normally apply to the entire facility.</p> <p>A Notice of Intent application 20.2.73.200 NMAC could apply if your facility's PER of <u>any</u> regulated air pollutant, including VOCs and HAPs, is 10 tpy or more or if you have lead emissions of 1 tpy or more. Include both fugitive and stack emissions to determine your PER.</p> <p>You could be required to submit Emissions Inventory Reporting per 20.2.73.300 NMAC if your facility is subject to 20.2.73.200, 20.2.72, or emits more than 1 ton of lead or 10 tons of PM10, PM2.5, SOx, NOx CO, or VOCs in any calendar year.</p> <p>All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC, are subject to Emissions Inventory Reporting.</p>
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	<p>20.2.74.7.AG(2) A stationary source not listed in Table 1 of this Part (20.2.74.501 NMAC) and which emits or has the potential to emit stack emissions of two hundred fifty (250) tons per year or more of any regulated pollutant; or</p> <p>The facility potential to emit is less than the PSD threshold.</p>
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	<p>If subject, this would apply to the entire facility. It is not necessary to include each low level regulatory citation for this regulation. This regulation applies if you are submitting an application pursuant to 20.2.72, 20.2.73, 20.2.74, and/or 20.2.79 NMAC.</p> <p>If this is a 20.2.73 NMAC application it is subject to the filing fee at 20.2.75.10 NMAC. If this is a 20.2.72, 20.2.74, and/or 20.2.79 NMAC application it is subject to 20.2.75.10, 11 permit fee, and 11.E annual fees. You are not subject to the 75.11.E annual fees if you are subject to 20.2.71 NMAC.</p>
20.2.77 NMAC	New Source Performance	No	Units subject to 40 CFR 60	<p>This is a stationary source which is subject to the requirements of 40 CFR Part 60.</p>
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	<p>This facility emits hazardous air pollutants which are subject to the requirements of 40 CFR Part 61.</p> <p>The proposed facility is not a source of HAPs.</p>
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	<p>The proposed facility is not a major source and is not in a nonattainment area.</p>
20.2.80 NMAC	Stack Heights	No		<p>The proposed facility will not emit through stacks.</p>

<u>State Regulation Citation</u>	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	No	Units Subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. The proposed facility is not a source of HAPs.

Example of a Table for Applicable Federal Regulations (Note: This is not an exhaustive list):

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	If subject, this would normally apply to the entire facility. This applies if you are subject to 20.2.70, 20.2.72, 20.2.74, and/or 20.2.79 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions		Units subject to 40 CFR 60	Applies if any other Subpart in 40 CFR 60 applies.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No		The proposed source will not operate steam generating units
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No		
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units			

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No		The facility will not have tanks with volumes greater than 40,000 gallons.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No		The facility will not have tanks with volumes greater than or equal to 75 m³.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No		The facility will not operate a stationary gas turbine
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No		The proposed facility is not a gas plant.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO₂ Emissions	No		The proposed facility is not a gas plant.
NSPS 40 CFR Part 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	No		§ 60.670 (a)(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in <u>§ 60.671</u>). The facility will not operate crushers or grinders and will operate a wet material processing operation.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before	No		The proposed facility is not a natural gas facility.

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
	September 18, 2015			
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No		The proposed facility is not a natural gas facility.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No		The proposed facility will not operate stationary combustion engines.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No		The proposed facility will not operate stationary combustion engines.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No		The proposed facility will not operate electric generating units.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		The proposed facility will not operate electric generating units.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No		The proposed facility is not a landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions		Units Subject to 40 CFR 61	Applies if any other Subpart in 40 CFR 61 applies.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No		The proposed facility does not process mercury ore.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No		The proposed facility does not operate equipment in VHAP service.

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
MACT 40 CFR 63, Subpart A	General Provisions		Units Subject to 40 CFR 63	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No		The proposed facility is not an oil and gas production facility.
MACT 40 CFR 63 Subpart HHH		No		The proposed facility is not a natural gas facility.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No		The proposed facility will not operate a boiler.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		The proposed facility will not operate an electric utility steam generating unit.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	No		The proposed facility will not operate RICE.
40 CFR 64	Compliance Assurance Monitoring	No		The proposed facility will not be a Title V source.
40 CFR 68	Chemical Accident Prevention	No		The proposed facility will not have more than the threshold quantity of a regulated substance in a process, as determined under §68.115
Title IV – Acid Rain 40 CFR 72	Acid Rain	No		The proposed facility will not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No		
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No		

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No		
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	The proposed facility will not emit ozone depleting substances.

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.
-

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).

There are no alternative scenarios proposed.

The quarry operations can move within the facility property.

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.

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.

The proposed facility is a greenfield site and does not have historical compliance tests.

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.

Section 22: Certification

Company Name: Intrepid Potash – New Mexico, LLC

I, Roy Torres, 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 28th day of April, 2023, upon my oath or affirmation, before a notary of the State of

New Mexico.

Roy Torres
*Signature

4-28-2023
Date

Roy Torres
Printed Name

IPNM General Manager
Title

Scribed and sworn before me on this 28th day of April, 2023.

My authorization as a notary of the State of New Mexico expires on the

16th day of November, 2025.

Robin L. Hughes
Notary's Signature

4/28/2023
Date

ROBIN L. HUGHES
Notary's Printed Name

STATE OF NEW MEXICO
NOTARY PUBLIC
ROBIN L. HUGHES
Commission Number 1103223
My Commission Expires November 6, 2025

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

Universal Application 4

Air Dispersion Modeling Report

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

16-A: Identification

1	Name of facility:	Bennet Sand Mine
2	Name of company:	Intrepid Potash-New Mexico, LLC
3	Current Permit number:	TBD
4	Name of applicant’s modeler:	Bruce Ferguson
5	Phone number of modeler:	(601) 824-1860
6	E-mail of modeler:	bferguson@fce-engineering.com

16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes☒	No☐
2	Why is the modeling being done?	New Facility	
3	Describe the permit changes relevant to the modeling.		
	The facility was permitted under the GCP-2. An application for an individual permit is being submitted to allow for operation at times other than daytime.		
4	What geodetic datum was used in the modeling?	WGS84	
5	How long will the facility be at this location?	15 years	
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	155	

8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO ₂	3/16/1988	
	SO ₂	7/28/1978	
	PM ₁₀	2/20/1979	
	PM _{2.5}	11/13/2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	Nearest Class I area is Carlsbad Caverns National Park, 109.1 km to the west.		
10	Is the facility located in a non-attainment area? If so describe below	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
11	Describe any special modeling requirements, such as streamline permit requirements.		
	None		

16-C: Modeling History of Facility

1	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	-		
	NO ₂	-		
	SO ₂	-		
	H ₂ S	-		
	PM _{2.5}	-		
	PM ₁₀	-		
	Lead	-		
	Ozone (PSD only)	-		
	NM Toxic Air Pollutants (20.2.72.402 NMAC)	-		

16-D: Modeling performed for this application

1	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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	NO ₂	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	SO ₂	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	H ₂ S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	PM _{2.5}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM ₁₀	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Ozone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	State air toxic(s) (20.2.72.402 NMAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

16-E: New Mexico toxic air pollutants modeling

1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. None					
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

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

16-G: Surrounding source modeling

1	Date of surrounding source retrieval	11/27/22
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.	
	AQB Source ID	Description of Corrections

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?	1
	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

3	The facility only consists of fugitive emission sources. AERMOD does not account for downwash for fugitive sources.	
4	Building comments	

16-I: Receptors and modeled property boundary

1	<p>“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.</p> <p>Describe the fence or other physical barrier at the facility that defines the restricted area.</p> <p>Public access will be restricted by rugged physical terrain and lack of public roads. The Restricted Area is located within a larger property owned by the applicant which is also adjoined by private property lacking accessibility. Site entrances will be gated and routine security patrols will be conducted.</p>							
	2					Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	3					Are restricted area boundary coordinates included in the modeling files?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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		
	Cartesian	Polygon	50	fence line				
	Cartesian	Circular	50	center	1500 m			
	Cartesian	Circular	100	1500 m	3000 m	Significant Impact ~2 km		
	Cartesian	Circular	200	2000 m	3000 m	Alt entrance scenario		
5	Describe receptor spacing along the fence line.							
	25-meter							
6	Describe the PSD Class I area receptors.							
	None							

16-J: Sensitive areas

	Are there schools or hospitals or other sensitive areas near the facility? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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1	This information is optional (and purposely undefined) but may help determine issues related to public notice.		
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).						
	Three scenarios were modeled for setback to consider progression of mining activity. A source group was used for quarry routes to the three furthest corners of the quarry from the wash plant area.						
	Which scenario produces the highest concentrations? Why?						
2	Emission sources lining up in the direction of worst case meteorology direction is probably the major factor for highest scenario impacts. The significant impact analysis is summarized on the next page. The scenario with the highest 24-hour impact was used in the cumulative analysis. .						
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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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: F2x, F3, F4, F5, F6, F7_A&B						
5	Wind Speed Category (m/s)	Factor	=(	Carlsbad Median Speed in Category (m/s)	/	Default wind speed for calculations, 11 mph (4.92 m/s)	) ^1.3
	A (1.54)	0.179	=(	1.31	/	4.92	) ^1.3
	B (3.09)	0.385	=(	2.36	/	4.92	) ^1.3
	C (5.14)	0.73	=(	3.86	/	4.92	) ^1.3
	D (8.23)	1.34	=(	6.16	/	4.92	) ^1.3
	E (10.8)	2.248	=(	9.17	/	4.92	) ^1.3
	F (no upper)	3.248	=(	12.17	/	4.92	) ^1.3
	If hourly, variable emission rates were used that were not described above, describe them below.						
	Material handling activities were scale by wind speed categories. Default upper bound values in AERMOD was used for the wind categories. The percent factor was determined using the median wind speed in each category in the Carlsbad met data on the NMED website and the default wind speed for determining material handling emissions of 11 mph. The material handling emission factor is proportional to the wind speed raised to a power of 1.3 based on AP42.						
6	Were different emission rates used for short-term and annual modeling? If so describe below.					Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Significant Impact Analysis									
Pollutant	Impact Rank	Entrance Location	Quarry Area	Concentration (ug/m ³)	Impact Date	UTM-X	UTM-Y	Elevation	Hill Height
PM _{2.5}	Highest Annual Value	South	S1	1.12159	2018	668,633.96	3,550,651.11	907.55	907.55
			S2	1.18053	2017	667,345.57	3,550,630.72	908.42	908.42
			S3	0.84485	2018	667,320.06	3,549,119.64	900.68	900.68
		East	S1	1.21754	2018	668,633.96	3,550,651.11	907.55	907.55
			S2	1.14213	2017	667,370.35	3,550,631.12	908.47	908.47
			S3	0.84202	2018	667,320.06	3,549,119.64	900.68	900.68
	H1H 24-hr Value	South	S1	2.71147b	17021024	668,683.51	3,550,651.89	907.74	907.74
			S2	3.61107c	15011324	667,296.41	3,550,605.18	908.37	908.37
			S3	3.05643	18120724	667,320.85	3,549,070.12	900.65	900.65
		East	S1	4.56391	17020724	668,518.04	3,549,726.42	903.85	903.85
			S2	4.60697c	15010124	668,309.03	3,549,438.55	904.75	904.75
			S3	4.66694	17020724	668,518.04	3,549,726.42	903.85	903.85
PM ₁₀	Highest Annual Value	South	S1	8.89632	2018	668,609.18	3,550,650.72	907.22	907.22
			S2	9.5936	2018	667,345.57	3,550,630.72	908.42	908.42
			S3	6.50255	2018	667,320.06	3,549,119.64	900.68	900.68
		East	S1	9.6008	2018	668,609.18	3,550,650.72	907.22	907.22
			S2	9.27555	2018	667,370.35	3,550,631.12	908.47	908.47
			S3	6.42761	2018	667,320.06	3,549,119.64	900.68	900.68
	H1H 24-hr Value	South	S1	23.14140b	17021024	668,658.73	3,550,651.50	907.7	907.7
			S2	33.42872c	15011324	667,296.41	3,550,605.18	908.37	908.37
			S3	28.24066	18120724	667,320.85	3,549,070.12	900.65	900.65
		East	S1	29.23080c	15010124	668,332.55	3,549,438.96	904.93	904.93
			S2	37.73517c	15011324	667,296.41	3,550,605.18	908.37	908.37
			S3	30.71912c	15010124	668,309.03	3,549,438.55	904.75	904.75

16-L: NO₂ Modeling**(N/A)**

1	Which types of NO ₂ modeling were used? Check all that apply.		
	None		
	<input type="checkbox"/>	ARM2	
	<input type="checkbox"/>	100% NO _x to NO ₂ conversion	
	<input type="checkbox"/>	PVMRM	
	<input type="checkbox"/>	OLM	
<input type="checkbox"/>	Other:		
2	Describe the NO ₂ modeling.		
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 <input type="checkbox"/> No <input type="checkbox"/>
4	Describe the design value used for each averaging period modeled.		
	1-hour: Choose an item.		
	Annual: Choose an item.		

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.																																															
	<input type="checkbox"/>	PM2.5																																														
	<input checked="" type="checkbox"/>	PM10																																														
	<input type="checkbox"/>	None																																														
2	Describe the particle size distributions used. Include the source of information.																																															
	<p>The depletion values used for fugitive dust vehicle traffic are summarized below. These are based on the values from the file Particlesizedistributionforplume depletionApr252007.xls posted on the NMED website. The weighted size fraction is based on the k-values for unpaved roads rather than paved roads.</p> <table border="1"> <thead> <tr> <th colspan="5">Vehicle Fugitive Dust PM₁₀ Depletion Parameters</th> </tr> <tr> <th>Unpaved Road AP42 k values</th> <th>Particle Size Category</th> <th>Mass Mean Particle Diameter (um)</th> <th>Mass Weighted Size Fraction</th> <th>Density (g/cm³)</th> </tr> </thead> <tbody> <tr> <td>0.15</td> <td>0-2.5</td> <td>1.57</td> <td>0.1</td> <td>2.5</td> </tr> <tr> <td>1.5</td> <td>2.5-10</td> <td>6.91</td> <td>0.9</td> <td>2.5</td> </tr> </tbody> </table> <p>The depletion parameter for sand material handling is based on the k values presented in AP-42 Section 13.2.4.3 as presented below. The particle density was taken as the midpoint of the range for sandstone listed in the NMED worksheet, Particlesizedistributionforplume depletionApr252007.xls posted. [Calculations Tab, average of cells B19 & D19.]</p> <table border="1"> <thead> <tr> <th colspan="5">Sand Material Handling</th> </tr> <tr> <th>Aggregate Handling AP42 k values</th> <th>Particle Size Category</th> <th>Mass Mean Particle Diameter (um)</th> <th>Mass Weighted Size Fraction</th> <th>Density (g/cm³)</th> </tr> </thead> <tbody> <tr> <td>0.053</td> <td>0-2.5</td> <td>1.57</td> <td>0.15</td> <td>2.25</td> </tr> <tr> <td>0.2</td> <td>2.5-5</td> <td>3.88</td> <td>0.42</td> <td>2.25</td> </tr> <tr> <td>0.35</td> <td>5-10</td> <td>7.77</td> <td>0.43</td> <td>2.25</td> </tr> </tbody> </table>				Vehicle Fugitive Dust PM ₁₀ Depletion Parameters					Unpaved Road AP42 k values	Particle Size Category	Mass Mean Particle Diameter (um)	Mass Weighted Size Fraction	Density (g/cm ³)	0.15	0-2.5	1.57	0.1	2.5	1.5	2.5-10	6.91	0.9	2.5	Sand Material Handling					Aggregate Handling AP42 k values	Particle Size Category	Mass Mean Particle Diameter (um)	Mass Weighted Size Fraction	Density (g/cm ³)	0.053	0-2.5	1.57	0.15	2.25	0.2	2.5-5	3.88	0.42	2.25	0.35	5-10	7.77	0.43
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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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>																																											
4	Was secondary PM modeled for PM2.5?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>																																											
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.																																															
	NO _x (ton/yr)	SO ₂ (ton/yr)	[PM2.5] _{annual}	[PM2.5] _{24-hour}																																												
	-	-	-	-																																												
	The facility conducts material handling only and is not a NO _x or SO ₂ emitter																																															

16-N: Setback Distances

1	<p>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.</p> <p>A setback of 10 meters as included in the GCP-2 was used for quarry material handling. Two entrance roads were proposed. The wash plant area was located as near the restricted boundary as possible to remain compliant with the PM10 24-hr PSD increment, which was the controlling standard. The wash plant and associated piles should be placed 190 meters west of an eastern boundary and 130 meters north of any boundary to the south to assure compliance with the PM10 24-hr PSD increment.</p>
2	<p>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.</p> <p>The wash plant area was located as near the restricted boundary as possible to remain compliant with the PM10 24-hr PSD increment, which was the controlling standard. The wash plant and associated piles should be placed 190 meters west of an eastern boundary and 130 meters north of any boundary to the south to assure compliance with the PM10 24-hr PSD increment.</p>

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Unit Number in UA-2		Unit Number in Modeling Files			
	F-1 – Unpaved roads		SLINE1 – Facility Entrance Road			
	SLINE2 – Mine Haul Road Scenario 1					
	SLINE3 – Mine Haul Road Scenario 2					
	SLINE4 – Mine Haul Road Scenario 3					
	F-2 – Mine Material Handling		F2_A – Scenario 1			
	F2_B – Scenario 2					
	F2_C – Scenario 3					
	F-3 Raw Material Storage Pile 1		F3			
	F-4 Raw Material Storage Pile 2		F4			
	F-5 Feed Hopper 1		F5			
	F-6 Feed Hopper 2		F6			
	F-7 Product Loading 1		F7_A			
	F7_B					
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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	SLINE2,3 & 4 emission rates vary due to the different distances to corners of the quarry. The maximum length included in the roads emission source F1 in table 2-E.					
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Which units consume increment for which pollutants?					
	Unit ID	NO ₂	SO ₂	PM10	PM2.5	
	All Facility Sources			X	X	
5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).			None		
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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>

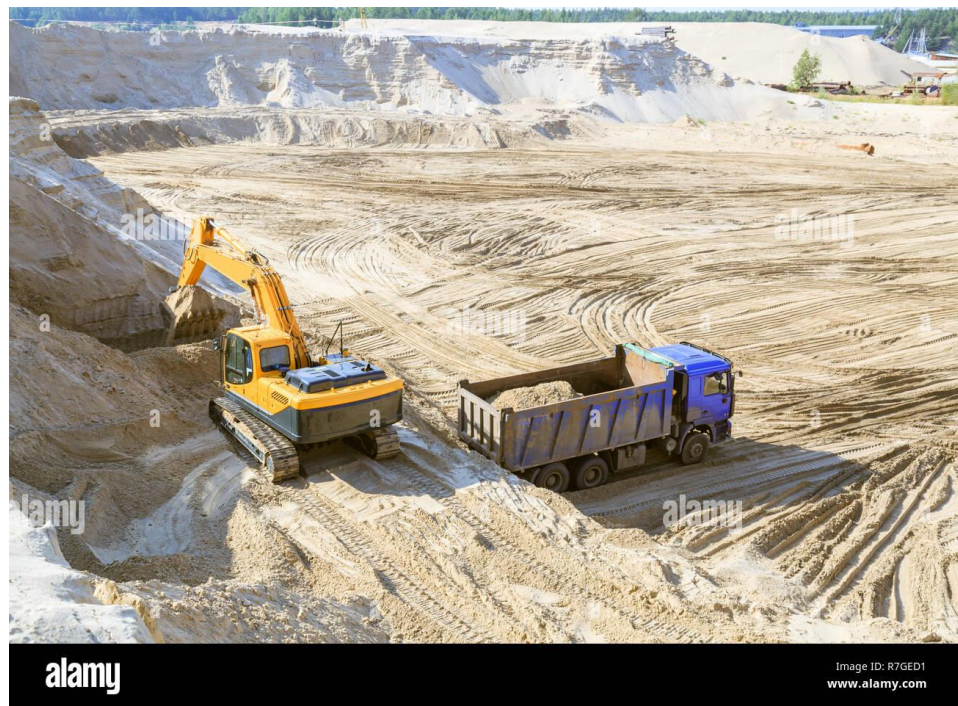
16-P: Flare Modeling (Not Applicable)

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

16-Q: Volume and Related Sources

1	<p>Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?</p> <p>If not please explain how increment consumption status is determined for the missing installation dates below.</p>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>																
2	<p>Describe the determination of sigma-Y and sigma-Z for fugitive sources.</p> <p>Quarry truck loading was modeled as a line volume source. The conceptual model is pictured on the following page. The quarrying was assumed to be conducted in 10 ft lifts with the track hoe on a bench loading the quarry truck on a lower level. The lateral dimension was taken as the length of the truck bed of approximately 15.45 ft. The initial sigma sigma y was calculated as</p> $\text{Sigma-y} = (15.45 \text{ ft})(0.3048 \text{ m/ft})/2/15 = 2.19 \text{ meters}$ <p>The initial sigma-z was calculated using the height of the truck at approximately 11.29 ft. The initial sigma z was calculated as:</p> $\text{Sigma-z} = (11.29 \text{ ft})(0.3048 \text{ m/ft})/(2.15) = 1.6 \text{ meters}$ <p>Because each truck is not loaded in the same location, the truck loading was approximated using a line volume source with adjacent volume sources using the initial sigma values described above. The length of the line source was determined using a cross sectional area of the volume being quarried as 10' x 30', the capacity of the facility of 440 tons/hr and the averaging period of the standard of 24 hours. The length was estimates as:</p> $\text{Length} = [(220 \text{ tons/hr})(19.64 \text{ ft}^3/\text{ton})(24 \text{ hr/day})]/[(30 \text{ ft})(10 \text{ ft})] = 345 \text{ ft/day}$ <p>The line volume sources were placed at the corners of the extent of the mine 30 feet inside the facility extents.</p> <p>The remaining material handling activities were approximated using volume sources with the characteristics summarized below:</p> <table border="1"> <thead> <tr> <th>Source</th> <th>Sigma-y (m)</th> <th>Sigma-z (m)</th> <th>Release Height (m)</th> </tr> </thead> <tbody> <tr> <td>Raw Material Dump Pile</td> <td>4.186</td> <td>3.024</td> <td>4.572</td> </tr> <tr> <td>Feed Hopper</td> <td>0.995</td> <td>2.056</td> <td>4.877</td> </tr> <tr> <td>Product Loading</td> <td>8.140</td> <td>1.601</td> <td>4.000</td> </tr> </tbody> </table> <p>These values were selected based on the activity over the course of an hour and the equipment (as structures) located by the material handling activity, i.e., dump trucks, excavators, feed hopper. Figures on following pages illustrate the fugitive activities.</p>			Source	Sigma-y (m)	Sigma-z (m)	Release Height (m)	Raw Material Dump Pile	4.186	3.024	4.572	Feed Hopper	0.995	2.056	4.877	Product Loading	8.140	1.601	4.000
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Feed Hopper	0.995	2.056	4.877																
Product Loading	8.140	1.601	4.000																

	The roads were approximated using line volume sources as described in the NMED guidelines.
3	Describe how the volume sources are related to unit numbers. Or say they are the same.
	All emissions from the proposed facility are fugitive. Cross reference to application is provided in Section 16-O.
	There will only be one quarry route at any given time. The quarry route was represented by line sources named SLINE2, SLINE3 and SLINE4. The product road was represented by a line source named SLINE1. The quarry route and product road combined represent emission unit F1 in the application. The loading of quarry trucks is represented by line sources named F2A, F2B and F2C. Again, this loading will only occur in one location and these volume sources correspond to emission unit F2 in the application.
4	Describe any open pits.
5	Describe emission units included in each open pit.
	The quarry trucks haul road emissions and loading of the quarry trucks will occur in the excavated area.



Mine Truck Loading



Raw Material Stockpile and Feed Hopper

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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	CO: N/A			
	NO ₂ : N/A			
	PM2.5: Hobbs-Jefferson (350450019)			
	PM10: Hobbs-Jefferson (350250008)			
	SO ₂ : N/A			
	Other:			
	Comments:	Background values obtained from “New Mexico Air Quality Bureau Air Dispersion Modeling Guidelines Revised July 2022”		
2	Were background concentrations refined to monthly or hourly values? If so describe below.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Carlsbad		
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.		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	What was the source of the terrain data?		
	NED downloaded through third party GUI AERMOD-View		

16-U: Modeling Files

1	Describe the modeling files:		
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)

	SIA\PM10_East_Entrance.zip SIA\PM10_South_Entrance.zip	PM10	PM10 Significance Analysis
	SIA\PM25_East_Entrance.zip SIA\PM25_South_Entrance.zip	PM2.5	PM2.5 Significance Analysis
	CIA\PM10_East_Entrance_by_Year.zip CIA\PM10_South_Entrance_by_Year.zip	PM10	PM10 NAAQS and PSD Analysis
	CIA\PM25_East_Entrance.zip CIA\PM25_South_Entrance.zip	PM2.5	PM2.5 NAAQS and PSD Analysis
	Surrounding Sources	PM10/PM2.5	Surrounding source inventory for MergeMaster and that provided by TCEQ

16-V: PSD New or Major Modification Applications		(Not applicable)	
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 <input type="checkbox"/>	No <input type="checkbox"/>
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

16-W: Modeling Results

1	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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
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)
PM ₁₀ 24- hr NAAQS		29.20834	N/A	37.3	66.5	150	44.3	668,120.82	3,549,435.27	903.53
PM _{2.5} 24- hr NAAQS		2.86739	0.00	16.5	19.4	35	55.4	668,518.04	3,549,726.42	903.85
PM _{2.5} Annual NAAQS		1.24121	0.00	7.1	8.3	12	69.2	667,345.57	3,550,630.72	908.42
PM ₁₀ 24- hr PSD		29.21205	0.00	N/A	29.2	30	97.3	668,120.82	3,549,435.27	903.53
PM ₁₀ Annual PSD		10.05892	0.00	N/A	10.1	17	59.4	667,345.57	3,550,630.72	908.42
PM _{2.5} 24- hr PSD		4.18291	0.00	N/A	4.2	9	46.7	668,518.26	3,549,702.74	902.79
PM _{2.5} Annual PSD		1.29774	0.00	N/A	1.3	4	32.5	667,345.57	3,550,630.72	908.42

16-X: Summary/conclusions

1	A statement that modeling requirements have been satisfied and that the permit can be issued.
	The proposed source was evaluated with a proposed entrance road from the south and a proposed entrance road from the east with a corresponding wash plant location for each entrance road. The quarry traffic was evaluated for each direction in the quarry, only one area will be worked at a time. The area with the maximum 24-hour impacts was used in the cumulative analysis.
	The surrounding sources from the NMED MergeMaster database as well as sources obtained from TCEQ were included in the modeling analysis. Monitored background was added to the NAAQS analyses. The maximum modeled impacts, inclusive of monitored background, were below the NAAQS and PSD increment for both PM10 and PM2.5.
	The proposed activates will not cause or contribute to an exceedance of the ambient air quality standards and the permit can be issued.