# **Statement of Basis - Narrative**

#### **NSR Permit**

Type of Permit Action: Regular-New

Facility:Bennett Sand MineCompany:Intrepid Potash New Mexico LLCPermit No(s).:9883-M1Tempo/IDEA ID No.:40957 - PRN20230002Permit Writer:Rhonda Romero

## Fee Tracking (not required for Title V)

Tracking	NSR tracking entries completed: [X] Yes [] No					
	NSR tracking page attached to front cover of permit folder: [X] Yes [] No					
	Paid Invoice Attached: [X] Yes [] No					
	Balance Due Invoice Attached: [] Yes [X] No					
	Invoice Comments: Paid in full					

Permi Reviev	Date to Enforcement: N/A	Date of Enforcement Reply: N/A					
	Date to Applicant: 8/24/2023	Date of Applicant Reply: 9/14/2023					
ž iť	Date to EPA: N/A	Date of EPA Reply: N/A					
	Date to Supervisor: TBD						

## 1.0 Plant Process Description:

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.

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 hoper 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  $\sim$  105 microns. The finished product will therefore be larger than total suspended particulates (TSP) which is measured by the EPA reference method as  $\sim$  100 microns.

Silt fraction is determined by measuring the proportion of material that passes through a 200-mesh screen.

## 2.0 <u>Description of this Modification:</u>

This modification consists of converting the permit type from a GCP-2 to a Regular NSR Permit.

## 3.0 <u>Source Determination:</u>

1. The emission sources evaluated include the entire facility.

2. Single Source Analysis:

A. <u>SIC Code:</u> Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes

B. <u>Common Ownership or Control:</u> Are the facilities under common ownership or control? Yes

C. <u>Contiguous or Adjacent</u>: Are the facilities located on one or more contiguous or adjacent properties? Yes

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

## 4.0 <u>PSD Applicability:</u>

A. The source, as determined in 3.0 above is a minor source before and after this modification.

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: \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	lssue Date	Action Type	Description of Action (Changes)
9883-M1	TBD	Regular-New	Conversion to Regular NSR permit to allow operation at any
			time during the day to meet product demands.
*9883	3-17-23	GCP-2	Initial GCP-2 Permit

**6.0 Public Response/Concerns:** As of August 24, 2023, this permit writer received two public comments or concerns. One set of comments was submitted during the public comment period.

# 7.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? N/A
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? N/A
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? No. If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? N/A
- **8.0** <u>**Compliance and Enforcement Status:** As of 8/18/2023\_Teresa McDill, Enforcement Manager indicated that there is no ongoing enforcement action.</u>
- **9.0** <u>Modeling:</u> The air dispersion modeling was conducted by Eric Peters. He concluded that: This modeling analysis demonstrates that operation of the facility described in this report neither

causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for PM10 and PM2.5; and Class I and Class II PSD increments for PM10 and PM2.5.

Citation	Title	Applies	Unit(s) or	Justification:
20 NMAC		(Y/N)	Facility	
2.1	General Provisions	Yes, Always	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so
		Always	Facility	is subject to Part 1 General Provisions, Update to Section 116 of
				regulation for Significant figures & rounding. Applicable with no
				permitting requirements.
2.3	Ambient Air	No for		<b>NSR:</b> 20.2.3 NMAC is a SIP approved regulation that establishes
_	Quality Standards	both NSR		State standards. The NMAAQS themselves are not an
		and TV		"applicable requirement" with which a source must directly
				comply. The promulgation of a NMAAQS does not, in and of
				itself automatically result in actionable measures to a source.
				Instead, the specific measures contained in each individual
				issued permit, other state promulgated rules, and NM's EPA
				approved SIP are the relevant applicable requirements (such as
				NSPS and MACT).
				Title V: 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO
				20.2.70 NMAC. The requirements of NMAAQS are not
				applicable requirements under 20.2.70 NMAC, as defined by
				20.2.3.9 NMAC, 20.2.3.9 NMAC does not limit the applicability
				of this part to sources required to obtain a permit under the
				minor NSR regulation, 20.2.72 NMAC, nor does it limit which
				terms and conditions of NSR permits issued pursuant to 20.2.72 NMAC are applicable requirements in a Title V permit.
2.7	Excess Emissions	Yes,	Entire	Applies to all facilities' sources. Federally enforceable except for
2.7	EXCESS ETTISSIONS	Always	Facility	Sections 6(b); 110(b)(15); 111; 112; 113; 115; and 116 that are
		/	racinty	State Enforceable Only.
2.72	Construction	Yes	Entire	Specify Section 200.A.1 - 200 A.6, or 219.B.X
	Permits		Facility	PER > 10 pph or 25 tpy for a criteria pollutant.
2.73	NOI & Emissions	Yes,	Entire	Applicable to all facilities that require a permit.
	Inventory	Always	Facility	PER > 10 tpy for a regulated air contaminant.
	Requirements			
2.75	Construction	Yes	Entire	This facility is subject to 20.2.72 NMAC OR
	Permit Fees		Facility	
				TV: No, in accordance with 20.2.75.11.E an annual NSR
				enforcement and compliance fee shall not apply to sources
				subject to 20.2.71 NMAC.

# 10.0 <u>State Regulatory Analysis(NMAC/AQCR)</u>:

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Yes	Entire Facility	Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.

# 11.0 Federal Regulatory Analysis:

# 12.0 Exempt and/or Insignificant Equipment that do not require monitoring:

#### **NSR Exempt Equipment**

Intrepid Pota	sh New Mexico, LLC			Bennett	Sand Mine		Application Date:	Revision #
	Table 2	-B: Insignifi	cant Activiti	es <sup>1</sup> (20.2.70 NMA	AC) OR Exempted Equ	ipment (20.2.	72 NMAC)	
under 20.2.72.20 20.2.72.202 NM 012.00 (see http 20.2.72.301.D.4	02.B.5, include emissions calcul IAC may not necessarily be Ins ://www.env.nm.gov/aqb/permit NMAC Auxiliary Equipment f	ations and emission ignificant under 20.1 /aqb_pol.html ), 20.1 or Streamline applic	s totals for 202.B.5 2.70 NMAC (and y 2.72.202.B NMAC ations in Table 2-A	"similar functions" vice versa). Unit & Exemptions do no The List of Insig	MAC applications must list Exempted E ' units, operations, and activities in Secti & stack numbering must be consistent th ot apply, but 20.2.72.202.A NMAC exer gnificant Activities (for TV) can be four mificant Activities and Part 72 Exempti	on 6, Calculations. roughout the appli- nptions do apply to id online at https://v	Equipment and activi ation package. Per H NOI facilities under 2	ties exempted under Exemptions Policy 02- 20.2.73 NMAC. List
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 <sup>2</sup>	- For Each Piece of Equipment, Check Onc	
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>		
TK-1	Diesel Tank	TBD		45 m <sup>3</sup>	Diesel Storage	TBD	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	To be Removed
							To Be Modified	<ul> <li>Replacement Unit</li> <li>To be Replaced</li> </ul>
							Existing (unchanged)     New/Additional     To Po Modified	To be Removed     Replacement Unit     To be Replaced

# **13.0** Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.

A. Public comments were submitted, and a public hearing was suggested. A hearing determination request will need to be made by the Secretary Kenney or his designee.