



PART 70
TECHNICAL SUPPORT DOCUMENT
(STATEMENT of BASIS)

APPLICATION FOR:
Operating Permit Renewal

SUBMITTED BY
Las Vegas Paving Corporation

FOR:
LAS VEGAS PAVING CORPORATION
Operated within Lhoist North America of Arizona Apex Plant, Source: 00003
Source: 17333

LOCATION:
12101 North Las Vegas Boulevard
North Las Vegas, Nevada 89165

SIC Code 1442, “Construction Sand and Gravel”
NAICS Code 212321, “Construction Sand and Gravel Mining”

Application Received: December 10, 2024

TSD Date: April 7, 2026

EXECUTIVE SUMMARY

Las Vegas Paving (LVP) is a multifaceted paving company comprised of asphalt-manufacturing hot plants, concrete manufacturing, excavation and grading, and aggregate-crushing divisions. The company entered into an agreement with Lhoist North America (LNA), Air Quality Source: 3, to crush, screen, and remove the overburden reject material produced from the limestone mining process. LVP does not conduct any drilling, blasting, or mining operations.

By itself, LVP emits only PM emissions at this location, which do not exceed major source thresholds for PM₁₀ and PM_{2.5}. However, LVP will operate within the property boundaries of LNA, a major stationary source of PM₁₀, PM_{2.5}, NO_x, CO, SO₂, and HAP (HCl) pollutants. As a result, both plants are being considered as one source for purposes of establishing source status. In addition, the PTE of the source includes the combined emissions from LNA and LVP operations. The source is a categorical stationary source, as defined by AQR 12.2.2(j)(12).

Although the two plants are classified as one stationary source, there are no corporate or organizational relationships between LNA and LVP. Therefore, a separate Title V operating permit is being issued to LVP for administrative purposes and to facilitate compliance demonstration.

Both plants are located approximately twenty miles north of the City of Las Vegas, Nevada, in Hydrographic Area 216 (Garnet Valley), a section of the Apex Valley Airshed. Garnet Valley is designated as attainment area for all criteria pollutants. The legal description is: portions of T18S, R63E, Sections 23 and 26 County of Clark, State of Nevada. Las Vegas Paving falls under SIC Code 1442 “Construction Sand and Gravel” and NAICS Code 212321 “Construction Sand and Gravel.”

The following table summarizes the source potential to emit for each regulated air pollutant from all emission units, owned and operated by LVP, for which the operating permit has been issued:

Table 1: PTE from Las Vegas Paving Operations (tons per year)

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAPs ¹	Pb	H ₂ S	GHG ²
tons/year	10.68	2.29	0	0	0	0	0	0	0	0

¹ A major source is defined as 10 tons for any individual HAP or 25 tons for combination of all HAPs.

² In units of CO₂e

The following table summarizes the source PTE for each regulated air pollutant for the combined emission units for both LVP and LNA when considering a single major stationary source. Air Quality decided to issue separate Part 70 Operating Permits for LVP and LNA:

Table 2: Source PTE for LNA¹ and LVP Operations (tons per year)

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP ² (HCl)	HAP ³ (total)	Pb	H ₂ S	GHG ⁴
tons/year	350.02	205.46	1,901.34	968.90	1,646.76	8.46	21.12	22.96	ND ⁵	0	697,494.80

¹LNA PTE obtained from Part 70 operating permit issued 11/16/2023.

²A major source is defined as 10 tons for any individual HAP or 25 tons for combination of all HAPs.

³Included HCl HAP.

⁴Metric tons (in units of CO₂e).

⁵Not determined.

DAQ has received delegated authority from the U.S. Environmental Protection Agency to implement the requirements of the Part 70 OP. Based on the information submitted by the applicant, supplemental information provided to the application, and a technical review performed by DAQ staff, the draft Part 70 OP to Las Vegas Paving Corporation is proposed.

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulation
CF	control factor
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
EF	emission factor
EPA	U.S. Environmental Protection Agency
EU	emission unit
GHG	greenhouse gas
HAP	hazardous air pollutant
LNA	Lhoist North America
LVP	Las Vegas Paving
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NO _x	nitrogen oxide(s)
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
PSD	prevention of significant deterioration
PTE	potential to emit
RACT	Reasonably Achievable Control Technology
RT	Round trip
SCC	Source Classification Code
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SOP	standard operating procedure
TPH	tons per hour
UTM	Universal Transverse Mercator
VGF	vibrating grizzly feeder
VMT	vehicle miles traveled
VOC	volatile organic compound

II. SOURCE INFORMATION

A. DESCRIPTION OF PROCESS

Nonmetallic Mineral Processing

The feed source for LVP is stockpiles consisting of overburden materials produced by LNA from the limestone mining process.

The LVP aggregate plant will operate three crushers and three screens in association with various conveyor systems to produce various sizes rock products that will be transferred off site via paved and unpaved haul roads. LVP is limited to processing 1,400,000 tons of overburden material per any consecutive 12-month period on a 10 acre parcel of land located within the property boundaries of LNA.

B. PERMITTING HISTORY

The current Title V operating permit for LVP was issued on June 2, 2021, and will expire on June 1, 2026. The source submitted a renewal application within the time frame specified by AQR 12.5.2.1(a)(2). As a result, the source is covered by an application shield.

Reopen for Cause September 2, 2021

Revisions made to AQR Sections 92 and 94 became effective on August 17, 2021. The operating permits for all mineral processing operations were subsequently reopened to add applicable conditions. The revised Las Vegas Paving permit was issued on December 7, 2021.

It was later determined that additional revisions were necessary for proper enforceability, so the rules were temporarily stayed. On March 2, 2023, the Clark County District Attorney's Office recommended removal of the AQR 92 and 94 conditions until subsequent revisions could be finalized. As a result, all conditions that had been added to operating permits as part of a reopen for cause permitting action were removed when the permits were revised or renewed. Since Las Vegas Paving has not requested any permit revisions since these conditions were implemented, these conditions remain in the current permit.

C. CURRENT PERMITTING ACTION

The permittee did not request any changes to the permitted emission units or to annual throughputs for this permitting action. However, the emission unit list has been revised to conform with the current DAQ policy of combining stackers with conveyor systems when there is no interruption in flow of material. These changes are itemized below. The permittee approved of these changes.

- Stacker I (EU: A05) has been combined with EU: A04.
- Stacker G (EU: A09) has been combined with EU: A08.
- Stacker A (EU: A13) has been combined with EU: A12.
- Stacker B (EU: A21) has been combined with EU: A20.
- Stacker C (EU: A23) has been combined with EU: A22.
- Stacker D (EU: A25) has been combined with EU: A24.

- Stacker F (EU: A33) has been combined with EU: A32.
- Stacker H (EU: A36) has been combined with EU: A35.

D. ALTERNATE OPERATING SCENARIO

None are proposed.

III. EMISSIONS INFORMATION

A. EMISSION UNITS

Table III-A-1 lists the emission units covered by this operating permit.

Table III-A-1: Summary of Emission Units

EU	EU Type	Rating	Description	SCC
A01	Feeder		Loader to Feeder	30502006
A02	Grizzly	600 TPH	Feeder to Grizzly	30502013
			Grizzly	
			Grizzly to Conveyor #1	
A03	Primary Crusher	400 TPH	Feeder to Primary Crusher	30502001
			Primary Crusher	
			Primary Crusher to Conveyor #1	
A04	Conveyor System (2 Belts & Stacker)		Conveyor #1 to Conveyor #2	30502006
			Conveyor #2 to Stacker I	
			Stacker I to Stockpile	
A06	Tunnel Feeder		Tunnel Feeder #1 to Conveyor #3	30502006
A07	Primary Screen	800 TPH	Conveyor #3 to Primary Screen	30502006
			Primary Screen	
			Primary Screen to Conveyor #4	
			Primary Screen to Conveyor #5	
			Primary Screen to Conveyor #6	
A08	Conveyor System (1 Belt & Stacker)		Conveyor #4 to Stacker G	30502006
			Stacker G to Stockpile G	
A10	Conveyor		Conveyor #6 to Conveyor #11	30502006
A11	Conveyor System (3 Belts)		Conveyor #6 to Conveyor #12	30502006
			Conveyor #12 to Conveyor #13	
			Conveyor #13 to Conveyor #20	
A12	Conveyor System (3 Belts & Stacker)		Conveyor #7 to Conveyor #8	30502006
			Conveyor #8 to Conveyor #9	
			Conveyor #9 to Stacker A	
			Stacker A to Stockpile A	
A14	Conveyor		Conveyor #5 to Conveyor #10	30502006
A15	Secondary Crusher	400 TPH	Conveyor #10 to Crusher	30502002
			Conveyor #17 to Crusher	
			Secondary Crusher	

EU	EU Type	Rating	Description	SCC
			Crusher to Conveyor #14	
A16	Conveyor System (2 Belts)		Conveyor #14 to Conveyor #15	30502006
			Conveyor #15 to Conveyor #16	
A17	Secondary Screen	200 TPH	Conveyor #16 to Screen	30502006
			Secondary Screen	
			Screen to Conveyor #17	
			Screen to Conveyor #18	
A18	Conveyor System (2 Belts)		Conveyor #18 to Conveyor #19	30502006
			Conveyor #19 to Conveyor #20	
A19	Finish Screen	600 TPH	Conveyor #20 to Finish Screen	30502006
			Finish Screen	
			Finish Screen to Conveyor #21	
			Finish Screen to Conveyor #22	
			Finish Screen to Conveyor #23	
A20	Conveyor System (1 Belt & Stacker)		Conveyor #21 to Stacker B	30502006
			Stacker B to Stockpile B	
A22	Conveyor System (1 Belt & Stacker)		Conveyor #22 to Stacker C	30502006
			Stacker C to Stockpile C	
A24	Conveyor System (1 Belt & Stacker)		Conveyor #23 to Stacker D	30502006
			Stacker D to Stockpile D	
A26	Conveyor System (3 Belts) with Washer		Conveyor #21 to Washer	30502006
			Washer (wet process)	
			Washer to Conveyor #33	
			Conveyor #33 to Stacker E	
A27	Stacker		Stacker E to Stockpile E	30502006
A28	Conveyor		Conveyor #22 to Conveyor #30	30502006
A29	Conveyor System (2 Belts)		Conveyor #23 to Conveyor #31	30502006
			Conveyor #31 to Conveyor #32	
A30	Conveyor System (3 Belts)		Conveyor #24 to Conveyor #25	30502006
			Conveyor #25 to Conveyor #26	
			Conveyor #26 to Conveyor #27	
A31	Conveyor System (3 Belts) with Air Separator		Conveyor #27 to Air Separator	30502006
			Air Separator	
			Air Separator to Conveyor #28	
			Air Separator to Conveyor #29	
A32	Conveyor System (2 Belts & Stacker)		Conveyor #28 to Conveyor #38	30502006
			Conveyor #38 to Stacker F	
			Stacker F to Stockpile F	
A34	Conveyor System (4 Belts) with Classifier		Conveyor #28 to Conveyor #39	30502006
			Conveyor #39 to Classifier	
			Classifier (enclosed)	
			Classifier to Conveyor #40	
A35	Conveyor System (1 Belt & Stacker)		Conveyor #40 to Stacker H	30502006
			Stacker H to Stockpile H	

EU	EU Type	Rating	Description	SCC
A37	Conveyor System (3 Belts)		Conveyor #29 to Conveyor #36	30502006
			Conveyor #36 to Conveyor #37	
			Conveyor #37 to Conveyor #9	
A38	Feeder		Loader to Feeder #2 (3-compartment)	30502006
			Feeder #2 to Conveyor #37	
A39	Tertiary Crusher		Conveyor #11 to Tertiary Crusher	30502003
			Conveyor #30 to Tertiary Crusher	
		400 TPH	Conveyor #32 to Tertiary Crusher	
			Tertiary Crusher	
	Tertiary Crusher to Conveyor #34			
A40	Conveyor System (2 Belts)		Conveyor #34 to Conveyor #35	30502006
			Conveyor #35 to Conveyor #16	
A41	Stockpiles	10 Acres	Stockpiles	30502007
A42	Haul Roads	RT = 0.6 Mile	Haul Road; Paved	30502011
			Haul Road; Unpaved	

B. APPLICABILITY EMISSIONS

Permitting applicability is determined by calculating the emissions for all proposed emission units using 8,760 hours of operation (except for emergency generators or fire pumps, which use 500 hours), any inherent controls, any inherent throughput limitations, and the emission factors provided by the manufacturer, by source test results, by EPA AP-42, or by other approved methods. As a noncategorical source, fugitive emissions are not required to be included with applicability calculations.

Applicability emissions include emissions from insignificant emission units and activities, but do not include fugitive emissions (except for categorical sources listed in AQR 12.2.2(j) or any other stationary source category that, as of August 7, 1980, is being regulated under Sections 111 or 112 of the Clean Air Act).

Table III-B-1: Emissions for Permit Applicability – Summary (tons per year)

Pollutants	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP (HCl)	HAP (total)	GHG ¹
Las Vegas Paving	164.59	31.33	0	0	0	0	0	0	0
Lhoist ²	21,272.93	565.24	1,907.67	903.67	1,643.61	11.94	21.12	22.97	697,494.80
Total	21,437.52	596.57	1,907.67	903.67	1,643.61	11.94	21.12	22.97	697,494.80
Major Source Thresholds (Title V)	100	100	100	100	100	100	10/25 ³	10/25 ³	75,000
Major Stationary Source Thresholds (PSD)	250	250	250	250	250	250	10/25 ³	10/25 ³	-

¹Metric tons (in units of CO₂e).

²From TSD issued 11/16/2023.

³Ten tons for any individual hazardous air pollutant, or 25 tons for the combination of all hazardous air pollutants.

As shown in Table III-B-1, the combined applicability emissions for Lhoist and LVP are above stationary source permitting thresholds for PM₁₀, PM_{2.5}, NO_x, CO, SO₂, VOC and HAP (HCl) pollutants. Based on the combined source PTE, this source is a major source for all pollutants other than VOC, and the source is a minor source for VOC. The calculations are included as an attachment.

C. SOURCE PTE

Table III-C-1: Source-Wide PTE for LVP Only (tons per year)

PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOCs	HAPs	GHG
10.68	2.29	0	0	0	0	0	0

Table III-C-2: Emission Increase for LVP Only (tons per year)

Description	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	GHG
Current Permitting Action	10.68	2.29	0	0	0	0	0	0
Renewal OP Issued 06/02/2021	10.93	2.65	0	0	0	0	0	0
Difference ¹	-0.25	-0.36	0	0	0	0	0	0
Net Emissions Increase	0	0	0	0	0	0	0	0
AQR 12.5.1(d) Minor NSR Significance Levels	7.5	5.0	20	50	20	20		N/A
RACT Analysis Required	No	No	No	No	No	No	No	No

¹Difference is the result of how PTE is calculated. The current calculations are from the DAQ Mineral Processing Tool versus Excel calculation sheet calculations for previous permitting actions.

D. OPERATIONAL LIMITS

The following operational limits were proposed by the permittee and are listed in the current permit:

1. The permittee shall limit the throughput of aggregate materials to 1,400,000 tons per any consecutive twelve month period.
2. The permittee shall not exceed 10 acres of total stockpile area at any given time (EU: A41).
3. The permittee shall not exceed 24,706 VMT per any consecutive twelve month period on paved roads (EU: A42).
4. The permittee shall not exceed 37,059 VMT per any consecutive twelve month period on unpaved roads (EU: A42).

IV. CONTROL TECHNOLOGY

The revised versions of AQR Sections 92 and 94 became effective on December 31, 2024. The current DAQ policy is to incorporate applicable conditions only when a permitting action triggers a RACT analysis. This permitting action does not trigger any RACT requirements, therefore AQR 92 and 94 conditions will not be added. In addition, the conditions added with the December 7, 2021, permitting action have been removed as they were not added as a result of a controls analysis.

Material Processing

The source shall employ water sprays, wherever necessary, to maintain sufficient moisture content to the crushers, screens, conveyors and feed systems to comply with the opacity limits established in the operating permit.

The washer and classifier units (EUs: A26 and A34) are wet processes. To be classified as a wet process, the Permittee shall maintain the minimum moisture content of 10 percent. This level of control is assumed to be 100 percent for controlling particulate emissions from these units.

Storage Piles

The permittee shall regulate the moisture content of the stockpiles so as to comply with the permitted opacity limits.

Haul Roads

Control of emissions from the paved roads shall be achieved by sweeping, as necessary, to maintain opacity within permitted limits.

Control of emissions from the unpaved roads shall be achieved by adding water or dust palliatives, as necessary, to maintain opacity within permitted limits.

V. MONITORING

Compliance with permitting requirements will be met through the following:

1. Daily visual emission checks for the entire facility while in operation.
2. Daily inspections of the water suppression systems for the mineral processing operations.
3. Daily monitoring of total stockpile acreage.
4. Monthly recordkeeping of material processing.
5. Monthly recordkeeping of the vehicle miles travelled on haul roads, paved and unpaved.

Compliance Assurance Monitoring (CAM): This source is not subject to CAM requirements because none of the emission units proposed is equipped with an add-on control.

VI. PERFORMANCE TESTING

EPA Method 9 performance testing shall be conducted upon written notification from the Control Officer.

VII. REGULATORY REVIEW

A. LOCAL REGULATORY REQUIREMENTS

Table V-1: Applicable Air Quality Regulations-DAQ

Applicable Section – Title	Applicable Subsection - Title	SIP	Affected Emission Unit
0: Definitions	applicable definitions	yes	entire source
2: Air Pollution Control Board	all subsections	yes	entire source
4: Control Officer	all subsections	yes	entire source
5: Interference with Control Officer	all subsections	yes	entire source
6: Injunctive Relief	all subsections	yes	entire source
7: Hearing Board and Hearing Officer	Applicable subsections	yes	entire source
8: Persons Liable for Penalties - Punishment: Defense	all subsections	yes	entire source
9: Civil Penalties	all subsections	yes	entire source
10: Compliance Schedule	when applicable; applicable subsections	yes	entire source
12.4: ATC Application and Permit Requirements for Part 70 Sources	All Subsections	yes	entire source
12.5: Part 70 Operating Permit Requirements	applicable subsections	yes	entire source
12.6: Confidentiality	all subsections	no	entire source
12.9: Annual Emissions Inventory	all subsections	yes	entire source
12.13: Posting of Permit	all subsections	no	entire source
14: New Source Performance Standards	14.1(b)(69): Subpart OOO, Nonmetallic Mineral Processing	yes	entire source
18: Permit and Technical Service Fees	18.1 Operating Permit Fees	yes	entire source
	18.2 Annual Emission Unit Fees		
	18.4 New Source Review Application Review Fee		
	18.5 Part 70 Application Review Fee		
	18.6 Annual Part 70 Emission Fee		
	18.16 Billing Procedures		
25.1: Upset/Breakdown, Malfunctions	§ 25.2 Requirements for the excess emissions caused by upset/breakdown and malfunctions	yes	entire source
25.2: Upset/Breakdown, Malfunctions	§ 25.6 Reporting and Consultation	yes	entire source
26: Emission of Visible Air Contaminates	26.1 Limit on opacity (\leq 20 percent for 6 minutes in a 60-minute period)	yes	entire source
40: Prohibitions of Nuisance Conditions	40.1 Prohibitions	yes	entire source
41: Fugitive Dust	41.1 Prohibitions	yes	entire source
70: Emergency Procedures	all subsections	yes	entire source
80: Circumvention	all subsections	yes	entire source
81: Provisions of Regulations Severable	all subsections	yes	entire source

B. FEDERALLY APPLICABLE REGULATIONS

1. Clean Air Act, as amended (CAAA), Authority: 42 U.S.C. § 7401, et seq

2. 40 CFR 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES:

Subpart A – General Provisions

40 CFR 60.1 – Applicability

Discussion: This regulation requires all sources which commence construction after November 17, 1975, to obtain a stationary source permit and to adhere to all standards of performance applicable to the facility.

40 CFR 60.7 – Notification and record keeping

Discussion: This regulation requires the source to notify Air Quality of modifications, opacity testing, records of malfunctions of process equipment and performance test data. These requirements are found in the Part 70 OP. Air Quality requires records to be maintained for five years, which is more stringent than the two years required by 40 CFR 60.7.

40 CFR 60.8 – Performance tests

Discussion: These requirements are found in the Part 70 OP. Notice of intent to test, the applicable test methods, acceptable test method operating conditions, and the requirement for three runs are outlined in this regulation. Air Quality requirements for initial performance testing are identical to AQR Section 60.8.

40 CFR 60.11 – Compliance with standards and maintenance requirements

Discussion: Compliance with various applicable standards will be demonstrated by performance tests unless otherwise specified in the standard. The source is subject to 40 CFR 60 Subpart OOO. Compliance requirements are discussed in corresponding sections.

40 CFR 60.12 – Circumvention

Discussion: This regulation forbids the Permittee from building, erecting, or installing any article, machine, equipment or process for the purpose of concealing an emission which would otherwise constitute a violation of an applicable standard. This prohibition is also addressed in AQR 80.1.

40 CFR 60.13 – Monitoring requirements

Discussion: These requirements are found in the Part 70 OP.

Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.670 – Applicability and designation of affected facility

Discussion: The source is subject to the standards of Subpart OOO since it commenced construction after August 31, 1983.

40 CFR 60.672 – Standard for Particulate Matter

Discussion: Opacity requirements are addressed in the Part 70 OP.

40 CFR 60.675 – Test Methods and Procedures

Discussion: The Permittee is subject to the requirements of particulate matter standards and emissions limits, including PM limit and opacity limits, as described in Tables 2 and 3 of the Subpart. These requirements are found in the Part 70 OP.

40 CFR 60.676 – Reporting and Recordkeeping

Discussion: The Permittee shall submit to the Administrator and to the Control Officer information required by this subsection. Specific recordkeeping and reporting requirements are identified in the Part 70 OP.

VIII. COMPLIANCE SUMMARY

A. COMPLIANCE CERTIFICATION

Regardless of the date of issuance of this Part 70 Operating Permit, the schedule for the submittal of reports to DAQ shall be as follows:

Table VI-1: Reporting Schedule

Required Report	Applicable Period	Due Date
Semiannual report for 1 st six-month period	January, February, March, April, May, June	July 30 each year ¹
Semiannual report for 2 nd six-month period; any additional annual records required.	July, August, September, October, November, December	January 30 each year ¹
Annual Compliance Certification Report	Calendar year	January 30 each year ¹
Annual Emission Inventory Report	Calendar year	March 31 each year ¹
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emissions	As required	Within 24 hours of the permittee learning of the event
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emissions	As required	Within 72 hours of notification
Deviation Report without Excess Emissions	As required	Along with semiannual reports ¹
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of the permittee learns of the event
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date ¹
Performance Testing	As required	Within 60 days of end of test ¹

¹If the due date falls on a Saturday, Sunday, or federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

Table VI-2: AQR Compliance Summary

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 0	"Definitions"	<i>Applicable.</i> LVP will comply with all applicable definitions as they apply.	LVP will meet all applicable test methods if new definitions apply.	LVP complies with applicable requirements.
AQR 4	"Control Officer"	<i>Applicable.</i> The Control Officer or representative may enter into LVP property, with or	LVP will allow the Control Officer to enter its property as required.	LVP complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
		without prior notice, at any reasonable time to establish compliance.		
AQR 12.5	"Part 70 Operating Permit Requirements"	<i>Applicable.</i> LVP is a major stationary source, and the initial Title V permit application was submitted as required by 40 CFR 70. Renewals are due 6-18 months before expiration. Revisions will be submitted within 12 months of starting operation of any new EU.	LVP shall submit renewal applications between 6 and 18 months before permit expiration, and revision applications within 12 months of starting operation of any new EU.	LVP complies with applicable requirements.
AQR 14.1(a)	"New Source Performance Standards: 40 CFR Part 60 Incorporated by Reference"	<i>Applicable.</i> LVP is an affected facility under the regulations. AQR 14 is locally enforceable; however, the NSPS standards referenced are federally enforceable.	Applicable monitoring, recordkeeping, and reporting requirements.	LVP complies with applicable requirements.
AQR 14.1(b)(69)	"Subpart 000 – Standards of Performance for Nonmetallic Mineral Processing Plants"	<i>Applicable.</i> LVP operates crushers processing more than 25 tons/hour of nonmetallic mineral material.	Applicable performance tests, opacity tests, and monitoring, recordkeeping and reporting requirements.	LVP complies with applicable requirements.
AQR 18	"Permit and Technical Service Fees"	<i>Applicable.</i> LVP will be required to pay all required & applicable permit and technical service fees.	LVP is required to pay all required and applicable permit and technical service fees.	LVP complies with applicable requirements.
AQR 21	"Acid Rain Permits"	<i>Not Applicable</i> per 40 CFR 72.6(b)(1).	Not applicable.	Not applicable.
AQR 25	"Affirmative Defense for Excess Emissions due to Malfunctions, Startup, and Shutdown"	<i>Applicable.</i> Any upset, break-down, emergency condition, or malfunction which causes emissions of regulated air pollutants in excess of any permit limits shall be reported to the Control Officer. Locally and federally enforceable.	Any upset, breakdown, emergency condition, or malfunction in which emissions exceed any permit limit shall be reported to the Control Officer within 24 hours of the time the owner learns of the emissions.	LVP complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 26	“Emission of Visible Air Contaminants”	<i>Applicable.</i> Opacity shall not exceed 20% for more than 3 minutes in any 60-minute period.	Compliance determined by EPA Method 9.	LVP complies with applicable requirements.
AQR 40	“Prohibitions of Nuisance Conditions”	<i>Applicable.</i> No person shall cause or allow any source to discharge air contaminants (or other material) in quantities that will cause a nuisance. Locally enforceable only.	LVP will monitor all production activities to avoid nuisance conditions.	LVP complies with applicable requirements.
AQR 41	“Fugitive Dust”	<i>Applicable.</i> LVP shall take necessary actions to abate fugitive dust from becoming airborne.	LVP utilizes appropriate best practices to not allow airborne fugitive dust.	LVP complies with applicable requirements.
AQR 42	“Open Burning”	<i>Applicable.</i> If LVP burns combustible material in open areas, the Control Officer will approve it in advance. Locally enforceable rule only.	LVP will contact DAQ and obtain advance approval for burning activities identified in AQR 42.	LVP complies with applicable requirements.
AQR 43	“Odors in the Ambient Air”	<i>Applicable.</i> An odor occurrence is a violation if the Control Officer is able to detect the odor twice within an hour, if the odor causes a nuisance, and if odor detection is separated by at least 15 minutes. Locally enforceable rule only.	LVP is not expected to cause odors.	LVP complies with applicable requirements.

Table VI-3: Applicable Federal Air Quality Regulations

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 52.21	“Approval and Promulgation of Implementation Plans: Subpart A—General Provisions:	<i>Applicable.</i> LVP will comply with all applicable definitions.	LVP will continue to meet RACT and other impact analysis requirements by monitoring & keeping records of emission data.	LVP complies with applicable state SIP requirements, including monitoring and keeping records of emission data.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 52.1470	“Approval and Promulgation of Implementation Plans: Subpart DD—Nevada” [SIP rules]	<i>Applicable.</i> LVP is classified as a Title V source, so SIP rules apply.	Applicable requirements for monitoring & keeping records of emission data.	LVP complies with applicable state SIP requirements, including monitoring and keeping records of emission data.
40 CFR Part 60	Appendix A-4 to Part 60—Test Methods 6 through 10B” (Method 9, opacity)	<i>Applicable.</i> LVA is subject to opacity standards.	EPA Test Method 9.	LVP complies with applicable requirements.
40 CFR 60, Subpart A	“Standards of Performance for New Stationary Sources – General Provisions”	<i>Applicable.</i> LVP is an affected facility under this rule.	Applicable monitoring, recordkeeping & reporting requirements.	LVP complies with applicable requirements.
40 CFR 60, Subpart 000	“Standards of Performance for Nonmetallic Mineral Processing Plants”	<i>Applicable.</i> LVP is an affected facility under this rule.	Applicable monitoring, recordkeeping & reporting requirements.	LVP complies with applicable requirements.
40 CFR 64	“Compliance Assurance Monitoring	<i>Not Applicable.</i> LVP does not employ any add-on control devices	Not applicable.	Not applicable.
40 CFR 68	“Chemical Accident Prevention Provisions”	<i>Not Applicable.</i> LVP does not store or handle any chemicals subject to this rule.	Not applicable.	Not applicable.
40 CFR Part 70	“State Operating Permit Programs”	<i>Applicable.</i> LVP is a major stationary source permitted under this rule. The initial Title V permit application was submitted as required. Renewals are due 6-18 months before expiration; revisions will be submitted within 12 months of starting operation of any new EUs.	Applications for new EUs will be submitted within 12 months of startup.	LVP complies with applicable requirements.
40 CFR Part 72	“Permits Regulation”	<i>Not Applicable.</i>	Not applicable.	Not applicable.
40 CFR Part 75	“Continuous Emission Monitoring”	<i>Not Applicable.</i>	Not applicable.	Not applicable.

IX. EMISSION REDUCTION CREDITS (OFFSETS)

This permitting action does not trigger any Federal Offset requirements.

X. PERMIT SHIELD

The permittee did not request a permit shield.

XI. INCREMENT ANALYSIS

Las Vegas Paving Apex Plant is a major source in Hydrographic Area 216 (Garnet Valley). Permitted emission units include mineral processing. Since minor source baseline dates for PM₁₀ (December 31, 1980), NO₂ (January 24, 1991) and SO₂ (December 31, 1980) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ modeled the source using AERMOD to track the increment consumption. The average of 2022 and 2023 actual emissions for Lhoist North America were used in the model. PM₁₀ Baseline actual emissions of 58.52 pound/hour and 176.65 tons/year were used in the model. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table XI-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

Table XI-1: PSD Increment Consumption

Pollutant	Averaging Period	Source's PSD Increment Consumption (µg/m ³)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
PM ₁₀	24-hour	27.63 ¹	687181	4024666
PM ₁₀	Annual	2.89	687092	4024661

¹ Highest Second High Concentration.

XII. ENVIRONMENTAL JUSTICE

The primary principle of environmental justice is that all people have a right to live in a healthful environment that is protected from industrial pollution. Environmental justice focuses on the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. One technique in which this is accomplished is through the methodical distribution of new large pollution-emitting sources based on a balance of socioeconomic factors.

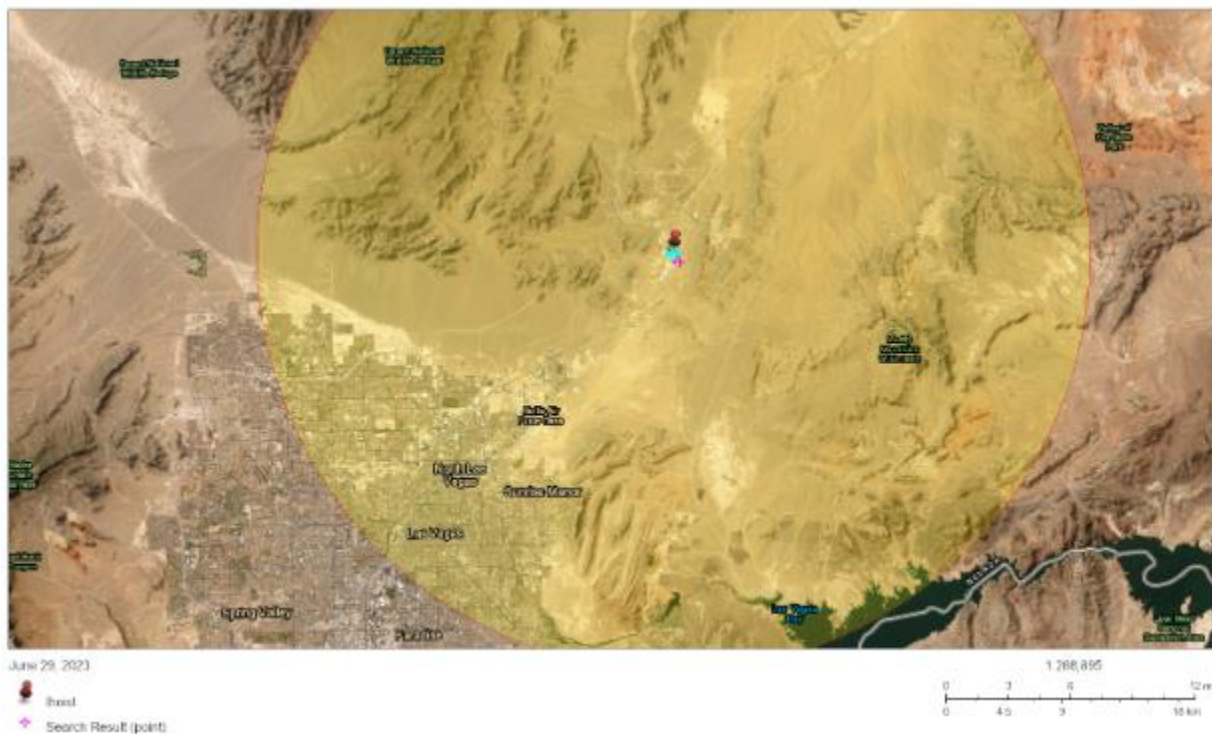
The EPA EJ Screen website allows users to obtain demographic indicators (e.g., low-income communities, communities of color, and tribal/indigenous communities) with environmental indicators in order to conduct a screening of a community potentially disproportionately and adversely affected by environmental and human health harms or risks.

Due to the fact that Las Vegas Paving is operating within the boundaries of Lhoist, the environmental justice analysis conducted for the Lhoist TSD issued on November 16, 2023, is used for this permitting action. It can be reasonably assumed that the demographics for this region of Clark County have not changed substantially in the past 15 months.

The Lhoist North America Apex Plant is located outside of the Las Vegas metropolitan area. The nearest residential area in Las Vegas is approximately 11 miles southwest of the source and the Moapa Indian reservation, which is approximately 13 miles northwest of the source.

The map and statistical tables included in this section were obtained from the EJ Screen website. As a means to obtain reasonable demographic data, a 20 miles radius from the center of the source was selected. The area within this circle equates to 1,256 square miles and represents a residential population of 774,561. The statistics indicate that there is a high percentile of the socioeconomic indicators in this area. However, the increase for all criteria pollutants associated with this permitting action is less than 4 tons per year, which is not considered to be a sufficient to warrant additional outreach.

Map of Selected Area



SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	6.4	5.65	76	8.08	11
Ozone (ppb)	66.1	64.1	60	61.6	81
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.615	0.446	72	0.261	95
Air Toxics Cancer Risk* (lifetime risk per million)	28	25	5	28	3
Air Toxics Respiratory HI*	0.37	0.34	23	0.31	31
Toxic Releases to Air	180	1,400	67	4,600	31
Traffic Proximity (daily traffic count/distance to road)	210	200	71	210	75
Lead Paint (% Pre-1960 Housing)	0.057	0.063	76	0.3	27
Superfund Proximity (site count/km distance)	0.0045	0.014	16	0.13	0
RMP Facility Proximity (facility count/km distance)	0.44	0.29	83	0.43	74
Hazardous Waste Proximity (facility count/km distance)	2.1	1.8	62	1.9	74
Underground Storage Tanks (count/ km^2)	3.9	3.3	72	3.9	72
Wastewater Discharge (toxicity-weighted concentration/m distance)	4.4	7	93	22	95
SOCIOECONOMIC INDICATORS					
Demographic Index	57%	41%	76	35%	81
Supplemental Demographic Index	21%	16%	74	14%	81
People of Color	73%	50%	77	39%	79
Low Income	42%	33%	68	31%	71
Unemployment Rate	9%	7%	69	6%	77
Limited English Speaking Households	9%	6%	77	5%	84
Less Than High School Education	22%	14%	77	12%	84
Under Age 5	7%	5%	69	6%	68
Over Age 64	12%	17%	42	17%	35
Low Life Expectancy	20%	20%	38	20%	52

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	57%
Spanish	36%
Other Indo-European	1%
Tagalog (including Filipino)	3%
Other Asian and Pacific Island	1%
Total Non-English	43%

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	20%	20%	38	20%	52
Heart Disease	6	6.4	44	6.1	50
Asthma	11	10.3	76	10	77
Cancer	4.6	5.7	30	6.1	19
Persons with Disabilities	12.9%	13.2%	55	13.4%	52

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	16%	13%	67	14%	66
Lack of Health Insurance	15%	12%	71	9%	84
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	2%	6%	45	12%	21
Wildfire Risk	6%	33%	60	14%	80

XIII. ATTACHMENTS

XI-1. Source PTE for Mineral Processing – Calculated with DAQ Mineral Processing Tool

EU	EU Type	Description	Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
A01	Feeder	Loader to Feeder	1,400,000	0.001	2.8E-05	0.70	0.02
A02	Grizzly	Feeder to Grizzly	840,000	1.0E-05	4.6E-05	0.06	0.03
		Grizzly	840,000	1.0E-05	4.6E-05		
		Grizzly to Conveyor #1	840,000	1.0E-05	4.6E-05		
A03	Primary Crusher	Feeder to Primary Crusher	560,000	1.0E-05	4.6E-05	0.17	0.05
		Primary Crusher	560,000	1.0E-04	5.4E-04		
		Primary Crusher to Conveyor #1	560,000	1.0E-05	4.6E-05		
A04	Conveyor System (2 Belts & Stacker)	Conveyor #1 to Conveyor #2	1,400,000	1.0E-05	4.6E-05	0.09	0.03
		Conveyor #2 to Stacker I	1,400,000	1.0E-05	4.6E-05		
		Stacker I to Stockpile	1,400,000	1.0E-05	4.6E-05		
A06	Tunnel Feeder	Tunnel Feeder #1 to Conveyor #3	1,120,000	1.0E-05	4.6E-05	0.03	0.01
A07	Primary Screen	Conveyor #3 to Primary Screen	1,120,000	1.0E-05	4.6E-05	0.49	0.09
		Primary Screen	1,120,000	5.0E-05	7.4E-04		
		Primary Screen to Conveyor #4	350,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #5	210,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #6	210,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #7	350,000	1.0E-05	4.6E-05		
A08	Conveyor System (1 Belt & Stacker)	Conveyor #4 to Stacker G	350,000	1.0E-05	4.6E-05	0.02	0.02
		Stacker G to Stockpile G	350,000	1.0E-05	4.6E-05		
A10	Conveyor	Conveyor #6 to Conveyor #11	105,000	1.0E-05	4.6E-05	0.01	0.01
A11	Conveyor System (3 belts)	Conveyor #6 to Conveyor #12	105,000	1.0E-05	4.6E-05	0.03	0.03
		Conveyor #12 to Conveyor #13	105,000	1.0E-05	4.6E-05		
		Conveyor #13 to Conveyor #20	105,000	1.0E-05	4.6E-05		
A12	Conveyor System	Conveyor #7 to Conveyor #8	350,000	1.0E-05	4.6E-05	0.04	0.04
		Conveyor #8 to Conveyor #9	350,000	1.0E-05	4.6E-05		

EU	EU Type	Description	Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
	(3 belts & Stacker)	Conveyor #9 to Stacker A	350,000	1.0E-05	4.6E-05		
		Stacker A to Stockpile A	350,000	1.0E-05	4.6E-05		
A14	Conveyor	Conveyor #5 to Conveyor #10	210,000	1.0E-05	4.6E-05	0.01	0.01
A15	Secondary Crusher	Conveyor #10 to Crusher	210,000	1.0E-05	4.6E-05	0.11	0.04
		Conveyor #17 to Crusher	70,000	1.0E-05	4.6E-05		
		Secondary Crusher	280,000	1.0E-04	5.4E-04		
		Crusher to Conveyor #14	280,000	1.0E-05	4.6E-05		
A16	Conveyor System (2 belts)	Conveyor #14 to Conveyor #15	280,000	1.0E-05	4.6E-05	0.02	0.02
		Conveyor #15 to Conveyor #16	280,000	1.0E-05	4.6E-05		
A17	Secondary Screen	Conveyor #16 to Screen	525,000	1.0E-05	4.6E-05	0.22	0.04
		Secondary Screen	525,000	5.0E-05	7.74E-04		
		Screen to Conveyor #17	70,000	1.0E-05	4.6E-05		
		Screen to Conveyor #18	455,000	1.0E-05	4.6E-05		
A18	Conveyor System (2 belts)	Conveyor #18 to Conveyor #19	455,000	1.0E-05	4.6E-05	0.02	0.02
		Conveyor #19 to Conveyor #20	455,000	1.0E-05	4.6E-05		
A19	Finish Screen	Conveyor #20 to Finish Screen	455,000	1.0E-05	4.6E-05	0.26	0.06
		Finish Screen	560,000	5.0E-05	7.74E-04		
		Finish Screen to Conveyor #21	140,000	1.0E-05	4.6E-05		
		Finish Screen to Conveyor #22	140,000	1.0E-05	4.6E-05		
		Finish Screen to Conveyor #23	140,000	1.0E-05	4.6E-05		
		Finish Screen to Conveyor #24	140,000	1.0E-05	4.6E-05		
A20	Conveyor System (1 Belt & Stacker)	Conveyor #21 to Stacker B	70,000	1.0E-05	4.6E-05	0.02	0.02
		Stacker B to Stockpile B	70,000	1.0E-05	4.6E-05		
A22	Conveyor System (1 Belt & Stacker)	Conveyor #22 to Stacker C	70,000	1.0E-05	4.6E-05	0.02	0.02
		Stacker C to Stockpile C	70,000	1.0E-05	4.6E-05		
A24	Conveyor System (1 Belt & Stacker)	Conveyor #23 to Stacker D	70,000	1.0E-05	4.6E-05	0.02	0.02
		Stacker D to Stockpile D	70,000	1.0E-05	4.6E-05		
A26	Conveyor System (3 belts) with Washer	Conveyor #21 to Washer	70,000	1.0E-05	4.6E-05	0.04	0.04
		Washer (wet process)	70,000	0	0		
		Washer to Conveyor #33	70,000	1.0E-05	4.6E-05		
		Conveyor #33 to Stacker E	70,000	1.0E-05	4.6E-05		
A27	Stacker	Stacker E to Stockpile E	70,000	1.0E-05	4.6E-05	0.01	0.01
A28	Conveyor	Conveyor #22 to Conveyor #30	70,000	1.0E-05	4.6E-05	0.01	0.01
A29	Conveyor System (2 belts)	Conveyor #23 to Conveyor #31	70,000	1.0E-05	4.6E-05	0.02	0.02
		Conveyor #31 to Conveyor #32	70,000	1.0E-05	4.6E-05		
A30	Conveyor System	Conveyor #24 to Conveyor #25	140,000	1.0E-05	4.6E-05	0.03	0.03
		Conveyor #25 to Conveyor #26	140,000	1.0E-05	4.6E-05		

EU	EU Type	Description	Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
	(3 belts)	Conveyor #26 to Conveyor #27	140,000	1.0E-05	4.6E-05		
A31	Conveyor System (3 belts) with Air Separator	Conveyor #27 to Air Separator	140,000	1.0E-05	4.6E-05	0.09	0.04
		Air Separator	140,000	0	0	0.04	0.04
		Air Separator to Conveyor #28	126,000	1.0E-05	4.6E-05		
		Air Separator to Conveyor #29	14,000	1.0E-05	4.6E-05		
A32	Conveyor System (2 belts & Stacker)	Conveyor #28 to Conveyor #38	63,000	1.0E-05	4.6E-05	0.03	0.03
		Conveyor #38 to Stacker F	63,000	1.0E-05	4.6E-05		
		Stacker F to Stockpile F	63,000	1.0E-05	4.6E-05		
A34	Conveyor System (4 belts) with Classifier	Conveyor #28 to Conveyor #39	63,000	1.0E-05	4.6E-05	0.04	0.04
		Conveyor #39 to Classifier	63,000	1.0E-05	4.6E-05		
		Classifier (enclosed)	63,000	0	0		
		Classifier to Conveyor #40	63,000	1.0E-05	4.6E-05		
A35	Conveyor System (1 Belt & Stacker)	Conveyor #40 to Stacker H	63,000	1.0E-05	4.6E-05	0.02	0.02
		Stacker H to Stockpile H	63,000	1.0E-05	4.6E-05		
A37	Conveyor System (3 belts)	Conveyor #29 to Conveyor #36	14,000	1.0E-05	4.6E-05	0.03	0.03
		Conveyor #36 to Conveyor #37	14,000	1.0E-05	4.6E-05		
		Conveyor #37 to Conveyor #9	35,000	1.0E-05	4.6E-05		
A38	Feeder	Loader to Feeder #2 (3-compartment)	21,000	0.001	2.8E-05	0.02	0.02
		Feeder #2 to Conveyor #37	21,000	1.30E-05	4.6E-05		
A39	Tertiary Crusher	Conveyor #11 to Tertiary Crusher	105,000	1.30E-05	4.6E-05	0.11	0.05
		Conveyor #30 to Tertiary Crusher	70,000	1.30E-05	4.6E-05		
		Conveyor #32 to Tertiary Crusher	70,000	1.30E-05	4.6E-05		
		Tertiary Crusher	245,000	1.00E-04	5.4E-04		
		Tertiary Crusher to Conveyor #34	245,000	1.30E-05	4.6E-05		
A40	Conveyor System (2 Belts)	Conveyor #34 to Conveyor #35	245,000	1.30E-05	4.6E-05	0.02	0.02
		Conveyor #35 to Conveyor #16	245,000	1.30E-05	4.6E-05		

XI-2. Applicability Emissions for Mineral Processing – Calculated with DAQ Mineral Processing Tool

EU	EU Type	Description	Proposed Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
A01	Feeder	Loader to Feeder	1,400,000	0.001	2.8E-05	4.71	0.14
A02	Grizzly	Feeder to Grizzly	840,000	1.0E-05	4.6E-05	9.11	2.67
		Grizzly	840,000	1.0E-05	4.6E-05		
		Grizzly to Conveyor #1	840,000	1.0E-05	4.6E-05		
A03	Primary Crusher	Feeder to Primary Crusher	560,000	1.0E-05	4.6E-05	8.34	2.01
		Primary Crusher	560,000	1.0E-04	5.4E-04		
		Primary Crusher to Conveyor #1	560,000	1.0E-05	4.6E-05		

EU	EU Type	Description	Proposed Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
A04	Conveyor System (2 Belts & Stacker)	Conveyor #1 to Conveyor #2	1,400,000	1.0E-05	4.6E-05	15.54	4.65
		Conveyor #2 to Stacker I	1,400,000	1.0E-05	4.6E-05		
		Stacker I to Stockpile	1,400,000	1.0E-05	4.6E-05		
A06	Tunnel Feeder	Tunnel Feeder #1 to Conveyor #3	1,120,000	1.0E-05	4.6E-05	4.15	1.25
A07	Primary Screen	Conveyor #3 to Primary Screen	1,120,000	1.0E-05	4.6E-05	38.79	4.55
		Primary Screen	1,120,000	5.0E-05	7.4E-04		
		Primary Screen to Conveyor #4	350,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #5	210,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #6	210,000	1.0E-05	4.6E-05		
		Primary Screen to Conveyor #7	350,000	1.0E-05	4.6E-05		
A08	Conveyor System (1 Belt & Stacker)	Conveyor #4 to Stacker G	350,000	1.0E-05	4.6E-05	2.60	0.78
		Stacker G to Stockpile G	350,000	1.0E-05	4.6E-05		
A10	Conveyor	Conveyor #6 to Conveyor #11	105,000	1.0E-05	4.6E-05	0.39	0.12
A11	Conveyor System (3 belts)	Conveyor #6 to Conveyor #12	105,000	1.0E-05	4.6E-05	1.17	0.36
		Conveyor #12 to Conveyor #13	105,000	1.0E-05	4.6E-05		
		Conveyor #13 to Conveyor #20	105,000	1.0E-05	4.6E-05		
A12	Conveyor System (3 belts & Stacker)	Conveyor #7 to Conveyor #8	350,000	1.0E-05	4.6E-05	3.90	1.56
		Conveyor #8 to Conveyor #9	350,000	1.0E-05	4.6E-05		
		Conveyor #9 to Stacker A	350,000	1.0E-05	4.6E-05		
		Stacker A to Stockpile A	350,000	1.0E-05	4.6E-05		
A14	Conveyor	Conveyor #5 to Conveyor #10	210,000	1.0E-05	4.6E-05	0.78	0.23
A15	Secondary Crusher	Conveyor #10 to Crusher	210,000	1.0E-05	4.6E-05	6.28	1.39
		Conveyor #17 to Crusher	70,000	1.0E-05	4.6E-05		
		Secondary Crusher	280,000	1.0E-04	5.4E-04		
		Crusher to Conveyor #14	280,000	1.0E-05	4.6E-05		
A16	Conveyor System (2 belts)	Conveyor #14 to Conveyor #15	280,000	1.0E-05	4.6E-05	2.08	0.62
		Conveyor #15 to Conveyor #16	280,000	1.0E-05	4.6E-05		
A17	Secondary Screen	Conveyor #16 to Screen	525,000	1.0E-05	4.6E-05	11.50	1.68
		Secondary Screen	525,000	5.0E-05	7.74E-04		
		Screen to Conveyor #17	70,000	1.0E-05	4.6E-05		
		Screen to Conveyor #18	455,000	1.0E-05	4.6E-05		
A18	Conveyor System (2 belts)	Conveyor #18 to Conveyor #19	455,000	1.0E-05	4.6E-05	3.36	1.00
		Conveyor #19 to Conveyor #20	455,000	1.0E-05	4.6E-05		
A19	Finish Screen	Conveyor #20 to Finish Screen	455,000	1.0E-05	4.6E-05	22.62	2.65
		Finish Screen	560,000	5.0E-05	7.74E-04		
		Finish Screen to Conveyor #21	140,000	1.0E-05	4.6E-05		
		Finish Screen to Conveyor #22	140,000	1.0E-05	4.6E-05		
		Finish Screen to Conveyor #23	140,000	1.0E-05	4.6E-05		

EU	EU Type	Description	Proposed Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
		Finish Screen to Conveyor #24	140,000	1.0E-05	4.6E-05		
A20	Conveyor System (1 Belt & Stacker)	Conveyor #21 to Stacker B	70,000	1.0E-05	4.6E-05	0.52	0.16
		Stacker B to Stockpile B	70,000	1.0E-05	4.6E-05		
A22	Conveyor System (1 Belt & Stacker)	Conveyor #22 to Stacker C	70,000	1.0E-05	4.6E-05	0.52	0.16
		Stacker C to Stockpile C	70,000	1.0E-05	4.6E-05		
A24	Conveyor System (1 Belt & Stacker)	Conveyor #23 to Stacker D	70,000	1.0E-05	4.6E-05	0.52	0.16
		Stacker D to Stockpile D	70,000	1.0E-05	4.6E-05		
A26	Conveyor System (3 belts) with Washer	Conveyor #21 to Washer	70,000	1.0E-05	4.6E-05	0.78	0.24
		Washer (wet process)	70,000	0	0		
		Washer to Conveyor #33	70,000	1.0E-05	4.6E-05		
		Conveyor #33 to Stacker E	70,000	1.0E-05	4.6E-05		
A27	Stacker	Stacker E to Stockpile E	70,000	1.0E-05	4.6E-05	0.26	0.08
A28	Conveyor	Conveyor #22 to Conveyor #30	70,000	1.0E-05	4.6E-05	0.26	0.08
A29	Conveyor System (2 belts)	Conveyor #23 to Conveyor #31	70,000	1.0E-05	4.6E-05	0.52	0.16
		Conveyor #31 to Conveyor #32	70,000	1.0E-05	4.6E-05		
A30	Conveyor System (3 belts)	Conveyor #24 to Conveyor #25	140,000	1.0E-05	4.6E-05	1.04	0.30
		Conveyor #25 to Conveyor #26	140,000	1.0E-05	4.6E-05		
		Conveyor #26 to Conveyor #27	140,000	1.0E-05	4.6E-05		
A31	Conveyor System (3 belts) with Air Separator	Conveyor #27 to Air Separator	140,000	1.0E-05	4.6E-05	1.04	0.31
		Air Separator	140,000	0	0		
		Air Separator to Conveyor #28	126,000	1.0E-05	4.6E-05		
		Air Separator to Conveyor #29	14,000	1.0E-05	4.6E-05		
A32	Conveyor System (2 belts & Stacker)	Conveyor #28 to Conveyor #38	63,000	1.0E-05	4.6E-05	0.69	0.21
		Conveyor #38 to Stacker F	63,000	1.0E-05	4.6E-05		
		Stacker F to Stockpile F	63,000	1.0E-05	4.6E-05		
A34	Conveyor System (4 belts) with Classifier	Conveyor #28 to Conveyor #39	63,000	1.0E-05	4.6E-05	0.69	0.21
		Conveyor #39 to Classifier	63,000	1.0E-05	4.6E-05		
		Classifier (enclosed)	63,000	0	0		
		Classifier to Conveyor #40	63,000	1.0E-05	4.6E-05		
A35	Conveyor System (1 Belt & Stacker)	Conveyor #40 to Stacker H	63,000	1.0E-05	4.6E-05	0.46	0.14
		Stacker H to Stockpile H	63,000	1.0E-05	4.6E-05		
A37	Conveyor System (3 belts)	Conveyor #29 to Conveyor #36	14,000	1.0E-05	4.6E-05	0.23	0.08
		Conveyor #36 to Conveyor #37	14,000	1.0E-05	4.6E-05		
		Conveyor #37 to Conveyor #9	35,000	1.0E-05	4.6E-05		
A38	Feeder	Loader to Feeder #2 (3-compartment)	21,000	0.001	2.8E-05	0.15	0.02

EU	EU Type	Description	Proposed Throughput (tons/yr)	PM _{2.5} EF (lb/ton)	PM ₁₀ EF (lb/ton)	PTE PM ₁₀ (tons/yr)	PTE PM _{2.5} (tons/yr)
		Feeder #2 to Conveyor #37	21,000	1.30E-05	4.6E-05		
A39	Tertiary Crusher	Conveyor #11 to Tertiary Crusher	105,000	1.30E-05	4.6E-05	6.02	1.32
		Conveyor #30 to Tertiary Crusher	70,000	1.30E-05	4.6E-05		
		Conveyor #32 to Tertiary Crusher	70,000	1.30E-05	4.6E-05		
		Tertiary Crusher	245,000	1.00E-04	5.4E-04		
		Tertiary Crusher to Conveyor #34	245,000	1.30E-05	4.6E-05		
A40	Conveyor System (2 Belts)	Conveyor #34 to Conveyor #35	245,000	1.30E-05	4.6E-05	1.82	0.54
		Conveyor #35 to Conveyor #16	245,000	1.30E-05	4.6E-05		

XI-3. Source PTE From Paved Haul Roads (tons per year)

EU	Description	Vehicle Weight (tons) (W)	Annual VMT	k (PM ₁₀) ¹	k (PM _{2.5}) ¹	P	sL	PM _{2.5}	PM ₁₀
A42	Material Transfer	36.25	24,706	0.0022	0.00054	28	3	0.71	2.88

¹Value obtained from AP-42, Table 13.2.1-1

Equation for Paved Haul Roads: $E = [k(sL)^{0.91} * (W)^{1.02}] * (1-P/4N)$; where

E = particulate emission factor (lbs/VMT)

k = particle size multiplier (lbs/VMT)

W = average weight of vehicles traveling the road

sL = road surface silt loading (g/m²)

P = number of days with at least 0.01 inch of precipitation during the averaging period.

N = number of days in averaging period (365)

XI-4. Source PTE From Unpaved Haul Roads (tons per year)

EU	Description	Vehicle Weight (tons) (W)	Annual VMT	k (PM ₁₀) ¹	k (PM _{2.5}) ¹	P	s	Control Factor	PTE (tons/yr)	
									PM _{2.5}	PM ₁₀
A42	Material Transfer	36.25	13,000	1.5	0.15	28	3	0.1	0.08	0.79
	Feed Loader	59.71	2,588	1.5	0.15	28	3	0.1	0.02	0.20
	Loadout Loader	41.58	3,850	1.5	0.15	28	3	0.1	0.02	0.25
	Feed Operation	74.72	766	1.5	0.15	28	3	0.1	0.01	0.06
	Plant Cleanup	3.14	3,831	1.5	0.15	28	3	0.1	0.01	0.08
	Plant Repairs	11	1,916	1.5	0.15	28	3	0.1	0.01	0.07
	Service Trucks	7.25	766	1.5	0.15	28	3	0.1	0.00	0.02
	Lube Trucks	12	383	1.5	0.15	28	3	0.1	0.00	0.01
	Aggregate Trucks	41.75	383	1.5	0.15	28	3	0.1	0.00	0.02
	Supervisor Trucks	4.3	1,915	1.5	0.15	28	3	0.1	0.00	0.04
	Foreman Trucks	5.13	1,915	1.5	0.15	28	3	0.1	0.00	0.05

EU	Description	Vehicle Weight (tons) (W)	Annual VMT	k (PM ₁₀) ¹	k (PM _{2.5}) ¹	P	s	Control Factor	PTE (tons/yr)	
									PM _{2.5}	PM ₁₀
	Water Trucks	51.6	5,746	1.5	0.15	28	3	0.1	0.04	0.41
Total									0.20	2.02

¹Value obtained from AP-42, Table 13.2.2-2

Equation for Unpaved Haul Roads: $E = [k(s/12)^{0.9} * (W/3)^{0.45}] * [(365-P)/365]$; where

E = particulate emission factor (lbs/VMT)

k = particle size multiplier (lbs/VMT)

W = average weight of vehicles traveling the road

s = surface material silt content (%)

P = number of days with at least 0.01 inch of precipitation during the averaging period.

N = number of days in averaging period (365)

XI-5. PTE for Stockpiles

EU	Description	Throughput	EF (PM ₁₀)	PM _{2.5} (Percentage)	PTE	
					PM _{2.5}	PM ₁₀
A41	Stockpiles	10 Acres	1.66 lb/acre-day	15	0.45	3.03