

**CLARK COUNTY**  
DEPARTMENT OF AIR QUALITY  
*4701 W Russell Road, Suite 200, Las Vegas, Nevada 89118*  
**Authority to Construct Permit for a Part 70 Source**  
**Source: 372**  
Issued in accordance with the  
Clark County Air Quality Regulations (AQR)

**ISSUED TO:** **Aggregate Industries**  
3101 E Craig Road  
North Las Vegas, Nevada 89030

**SOURCE:** **Aggregate Industries – Sloan Quarry**  
Sloan Road  
1.5 Miles West of I-15 South  
Clark County, Nevada  
T23S, R60E, Sections 12 & 13  
Hydrographic Basin Number: 212

**NATURE OF BUSINESS:**  
SIC/NAICS Codes: 1442/212321: Construction Sand and Gravel  
3273/327390: Concrete Batch Plants  
2951/324121: Asphalt Plant

**RESPONSIBLE OFFICIAL:**  
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Title: General Manager  
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**Permit Issuance:** **XXXX, 2011**

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL MANAGEMENT**

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Richard Beckstead  
Permitting Manager, Clark County DAQ

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## I. ACRONYMS

**Table I-1: List of Acronyms**

Acronym	Term
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct Certificate or Authority to Construct
ATC/OP	Authority to Construct/Operating Permit
BCC	Clark County Board of County Commissioners
BHP	Brake Horse Power
CAO	Field Corrective Action Order
CE	Control Efficiency
CF	Control Factor
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CPI	Urban Consumer Price Index
DAQ	Clark County Department of Air Quality
DEM	Digital Elevation Model
EF	Emission Factor
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HP	Horse Power
kW	kiloWatt
LON	Letter of Noncompliance
NAICS	North American Industry Classification System
NEI	Net Emission Increase
NO <sub>x</sub>	Nitrogen Oxides
NOV	Notice of Violation
NRS	Nevada Revised Statutes
NSR	New Source Review
OP	Operating Permit
PM <sub>10</sub>	Particulate Matter less than 10 microns
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RT	Roundtrip
SCC	Source Classification Codes
SIC	Standard Industrial Classification
SO <sub>x</sub>	Sulfur Oxides
TCS	Toxic Chemical Substance
TSD	Technical Support Document
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound

## II. ADMINISTRATIVE CONDITIONS

### A. GENERAL REQUIREMENTS

1. This Authority to Construct Permit (ATC) does not revise, consolidate, supersede, or replace any ATC previously issued for this facility.
2. This ATC does not supersede or replace any Part 70 Operating Permit (OP) requirements, including any permit conditions, compliance requirements and/or emission limitations outlined in the Part 70 OP.
3. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an ATC from the Control Officer. [AQR 12.4.1.1(a)]
4. The Permittee shall post the permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. [AQR 12.4.3.1(e) (16) and AQR 12.13]
5. The Permittee shall commence the construction, modification, or reconstruction of this source within eighteen (18) months after the date of issuance of this ATC and construction shall not be discontinued for a period greater than twelve (12) months. [AQR 12.4.1.1(b)]
6. The Permittee shall submit an application for a Part 70 OP within twelve (12) months after commencing operation. If the source submits a timely application under this condition, it may continue operating under its ATC until final action is taken on its application for a new Part 70 OP. [AQR 12.4.1.1(b) and AQR 12.5.2.1(a)(1)]
7. The Permittee shall submit an application for a Part 70 OP within twelve (12) months after commencing operation of the modification or reconstruction authorized by the ATC, or on or before such earlier date that the Control Officer may establish. However, where an existing Part 70 OP would prohibit such construction or change in operation, the source must obtain a Part 70 OP revision before commencing operation. [AQR 12.5.2.1(a)(3)]
8. Notwithstanding the provisions of requirement II-A-7, if an existing Part 70 OP would prohibit such construction or change in operation, the source must obtain a Part 70 OP revision pursuant to Section 12.5.2.14 before commencing operation. [AQR 12.4.1.1(c)]
9. This ATC does not convey any property rights or any exclusive privilege. [AQR 12.4.3.1(e)(6)]
10. The Permittee shall pay all fees assessed pursuant to AQR Section 18. [AQR 12.4.3.1(e)(17)]

## **B. MODIFICATION, REVISION, RENEWAL REQUIREMENTS**

1. The Permittee shall file an application for any change in the Responsible Official of the source and may implement the change immediately upon submittal of the request. *[AQR 12.4.3.4(a)(1)(D) and 12.4.3.4(a)(2)(C)]*
2. The Permittee shall file an application for a transfer of ownership at least 30 days prior to the date of a change in ownership or operational control of the source and such application shall constitute a temporary ATC under the conditions of the existing permit. *[AQR 12.12.2(c) and (d)]*
3. The Control Officer may revise, revoke and re-issue, re-open and revise, or terminate the permit for cause. *[AQR 12.4.3.1(e)(5)]*
4. The Control Officer reserves the right, upon reasonable cause, to modify existing conditions and impose additional new compliance, monitoring and control requirements. *[AQR 12.4.3.1(e)(10)(B) and (C)]*

## **C. REPORTING/NOTIFICATIONS/PROVIDING INFORMATION REQUIREMENTS**

1. The Permittee shall report start of construction, construction interruptions exceeding nine (9) months, and completion of construction to the Control Officer in writing not later than fifteen (15) working days after occurrence of the event. *[AQR 12.4.3.1(e)(12)]*
2. The Permittee shall provide written notification of the actual date of commencing operation, received by the Control Officer, within fifteen (15) calendar days after such date. *[AQR 12.4.3.1(e)(13)]*
3. The Permittee shall provide separate written notification for commencing operation for each unit of phased construction, which may involve a series of units commencing operation at different times. *[AQR 12.4.3.1(e)(14)]*
4. The Permittee shall retain records of all required monitoring and performance demonstration data and supporting information for five (5) years after the date of the sample collection, measurement, report, or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment, all original strip-chart recordings for continuous monitoring instrumentation, and if applicable, all other records required to be maintained pursuant to 40 CFR 64.9(b). *[AQR 12.4.3.1(e)(1)]*
5. The Permittee shall allow the Control Officer or any authorized representative of the Control Officer upon presentation of credentials to enter the Permittee's premises where the source is located or emissions related activity is conducted to: *[AQR 12.4.3.1(e)(8)]*
  - a. Have access to and copy during normal business hours any records that are kept pursuant to the conditions of the permit;
  - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under this permit;

- c. Sample or monitor substances or parameters to determine compliance with the conditions of the permit or applicable requirements; and
  - d. Document alleged violations using devices such as cameras or video equipment.
6. The Permittee shall provide the Control Officer, within a reasonable time, with any information that the Control Officer requests in writing to determine whether cause exists for revising, revoking and re-issuance or terminating the permit, or to determine compliance with the conditions of the permit. Upon request the Permittee shall also furnish to the Control Officer copies of any records required to be kept by the permit, or for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 12.4.3.1(e)(7)]

#### **D. COMPLIANCE REQUIREMENTS**

1. The Permittee shall comply with all conditions contained in this ATC. Any noncompliance constitutes a violation and is grounds for an action for non-compliance, revocation and re-issuance or the termination of the permit by the Control Officer, or the re-opening or revising of the permit by the Permittee as directed by the Control Officer. [AQR 12.4.3.1(e)(3)]
2. Each of the conditions and requirements of this permit are severable and if any are held invalid, the remaining conditions and requirements continue in effect. [AQR 12.4.3.1(e)(2)]
3. The need to halt or reduce activity to maintain compliance with the conditions of the permit is not a defense to noncompliance with any condition of the permit. [AQR 12.4.3.1(e)(4)]
4. The Permittee shall promptly report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) upon the commencement of operation deviations from permit requirements, including those attributable to malfunction, startup, or shut-down. All reports of deviations shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B) and (C)]
5. A responsible official of the source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the permit are true, accurate, and complete. [AQR 12.4.3.1(e)(9)]

### III. SOURCE-WIDE PTE SUMMARY

- The source is a major source of PM<sub>10</sub> and a minor source for NO<sub>x</sub>, CO, SO<sub>x</sub>, VOC and HAP.

**Table III-1: Source PTE (tons per year)**

Pollutant	PM <sub>2.5</sub>	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP	H <sub>2</sub> S	Pb
Source Total	30.77	83.79	47.04	67.16	21.10	12.75	3.34	0.00	0.00
Major Source Threshold	100	70	100	100	100	100	10/25 <sup>1</sup>	--	--

<sup>1</sup>Ten tons for any one HAP or 25 tons for combination of all HAPs.

### IV. EMISSION UNITS AND APPLICABLE REQUIREMENTS

#### A. Emission Units, Limitations, and Standards

- The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-1 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-1: Primary Feed (Mountain Top) Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A001a	Blasting (PM <sub>10</sub> )	See Tables IV-A-4 and IV-A-5			47.67	4.26
A001	Mining	5,000,000	0.00120	0.008	33.60	20.00
A02	Gyratory Crusher (crushing) <sup>1</sup>	2,500,000	0.00010	0.00054	1.13	0.68
A02a	Enddump to Gyratory Crusher	5,000,000	0.000013	0.000046	0.19	0.12
A02b	Gyr. Crusher to Stacker 3	5,000,000	0.000013	0.000046	0.19	0.12
A012	Stacker 3 to Surge pile	5,000,000	0.000013	0.000046	0.19	0.12

<sup>1</sup>Approximately 50 percent of the five million ton throughput material is not processed/crushed by the gyratory crusher based on a close side setting of 6.0 inches.

- The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-2 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-2: Secondary Aggregate Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A013	Tunnel Belt BC-4a 3 to VGF 2a	5,000,000	0.000013	0.000046	0.12	0.12
A015	Jaw Crusher CR-1 (Nordberg) (BH) <sup>1</sup>	500,000	0.0024	0.0024	0.40	0.15
A014	VGF 2a to Jaw Crusher CR-1	500,000				
A016	VGF 2a drop to Belt 4 (BH) <sup>1</sup>	4,500,000	0.0011	0.0011	0.73	0.63
A018	Screen S-1 (Simplicity) (BH) <sup>1</sup>	5,000,000	0.0087	0.0087	5.74	5.52
A017	Belt 4 to Screen S-1 (BH) <sup>1</sup>	5,000,000				
A020	Crusher CR-2 (Hazemag) (BH) <sup>1</sup>	1,875,000	0.0024	0.0024	0.59	0.57

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A019	Screen S-1 to Crusher CR-2 (BH) <sup>1</sup>	1,875,000				
A021	Crusher CR-2 to Belt 6 (BH) <sup>1</sup>	1,875,000				
A036	Screen S-1 Underbelt to Belt 5	3,125,000	0.000013	0.000046	0.07	0.07
A022	Belt 6 Split to Belt 44 and 45	2,625,000	0.000013	0.000046	0.06	0.06
A025	Screen S-2 (JCI 8x20) (BH)	1,312,500	0.0087	0.0087	1.51	1.45
A023	Belt 44 to Screen S-2 (BH) <sup>1</sup>	1,312,500				
A027	Screen S-2 to Belt 46 (BH)	1,312,500				
A034	Screen S-2 underbelt to Belt 7	937,500	0.000013	0.000046	0.02	0.02
A026	Screen S-3 (JCI 8x20) (BH)	1,312,500	0.0087	0.0087	1.51	1.45
A024	Belt 45 to Screen S-3 (BH) <sup>1</sup>	1,312,500				
A028	Screen S-3 to Belt 47 (BH) <sup>1</sup>	1,312,500				
A035	Screen S-3 underbelt to Belt 7	937,500	0.000013	0.000046	0.02	0.02
A029	Belt 46 to Belt 8 (BH) <sup>1</sup>	437,500	0.0011	0.0011	0.06	0.06
A030	Belt 47 to Belt 8 (BH) <sup>1</sup>	437,500	0.0011	0.0011	0.06	0.06
A032	Crusher CR-3 (Canica VSI) (BH) <sup>1</sup>	875,000	0.0024	0.0024	0.26	0.27
A031	Belt 8 to Crusher CR-3 (BH) <sup>1</sup>	875,000				
A033	Crusher CR-3 to Belt 6 (BH) <sup>1</sup>	875,000				
A037	Belt 5 to Belt 43	3,125,000	0.000013	0.000046	0.07	0.07
A038	Belt 43 to Belt 7 or 62	3,125,000	0.000013	0.000046	0.07	0.07
A038a	Belt 62 to Belt 63	500,000	0.000013	0.000046	0.02	0.01
A038b	Belt 63 to Stockpile (Reject)	500,000	0.000013	0.000046	0.02	0.01
A038c	Belt 64 at H.S.I. oversize reject (alt ops) <sup>2</sup>	250,000	0.000013	0.000046	0.04	0.01
A038d	Stacker to Stockpile of Truck (alt ops) <sup>2</sup>	250,000	0.000013	0.000046	0.04	0.01
A040	Stacker 9 to Surge pile 2 (BH) <sup>3</sup>	5,000,000	0.0011	0.0011	0.73	0.70
A039	Belt 7 to Stacker 9	5,000,000	0.000013	0.000046	0.12	0.12

<sup>1</sup>BH denotes unit vented to baghouse. Emissions from baghouse points are computed based on 75% capture efficiency and 99.5% control efficiency.

<sup>2</sup>The emission unit is not included in the table subtotal. It is an alternate process that, if used, will decrease throughput from the remaining emission units.

<sup>3</sup>Baghouse on the Stacker has a collection efficiency of 25 percent.

- The Permittee shall not allow the actual emissions from each emission unit to exceed the PTE in Table IV-A-3 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-3: Overland Feed System Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A041	Belt Feeds 1-3 to Tunnel Belt 10	3,500,000	0.000013	0.000046	0.07	0.08
A042	Belt 10 to Overland Belt 48 (BH) <sup>1</sup>	3,500,000	0.0011	0.0011	0.42	0.49
A043	Overland Belt 48 to Belts 11 and 50 (BH) <sup>1</sup>	3,500,000	0.0011	0.0011	0.42	0.49
A045	Belt 11 Stacker to Surge Pile	2,250,000	0.000013	0.000046	0.03	0.05

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
	(WP1)	0				
A046	Belt 50 to Stacker 51	1,250,000	0.000013	0.000046	0.03	0.03
A046	Stacker 51 to WP2 Side Surge Pile	1,250,000	0.000013	0.000046	0.03	0.03

<sup>1</sup>BH denotes unit vented to baghouse. Emissions from baghouse points are computed based on 75% capture efficiency and 99.5% control efficiency.

4. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-4 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-4: PTE for PM<sub>2.5</sub> and PM<sub>10</sub> Associated with Blasting<sup>1</sup>**

EU	Description	Area ft <sup>2</sup> /hr	Area ft <sup>2</sup> /yr	PM <sub>2.5</sub> PTE lbs/hr	PM <sub>10</sub> PTE lbs/hr	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A001a	Blasting	35,000	1,109,836	7.15	47.67	0.64	4.26

<sup>1</sup>Emission values are based on the AP-42 formula for blasting overburden found in Section 11.9-1 dated July 1998: PM<sub>10</sub> (lbs/yr) = 0.000014 (A)<sup>1.5</sup> x 0.52 scaling factor. Where A = area blasted in square feet.

5. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-5 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-5: PTE for NO<sub>x</sub> and CO Associated with Blasting<sup>1</sup>**

EU	Description	ANFO Usage		NO <sub>x</sub>		CO	
		tons/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
A001a	Blasting	135	1,500	1,069.20	5.94	5,531.00	30.72

<sup>1</sup>Emission factors for NO<sub>x</sub> = 7.92 pounds per ton and CO = 40.97 pounds per ton based on 1997 National Institute of Safety and Health (NIOSH) contracted study "A Technique for Measuring Toxic Gases Produced by Blasting Agents."

6. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-6 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-6: Wash Plant #1 Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A080	VGF 3a through 4 to Belt 25	2,000,000	0.000013	0.000046	0.03	0.046
A081	Belt 25 Tunnel to Belt 74	2,000,000	0.000013	0.000046	0.03	0.046
A082	Belt 73 (Spare)	2,000,000	0.000013	0.000046	0.03	0.046
A083	Belt 74 (mod) to Belts 54, 55, and 30 via Surge Bin	3,000,000	0.000013	0.000046	0.03	0.069
A084 <sup>1</sup>	Belt 54 to Wet Screen S-5	1,000,000	0.00	0.00	0.00	0.00
A085 <sup>1</sup>	Belt 55 to Wet Screen S-6	1,000,000	0.00	0.00	0.00	0.00
A093 <sup>1</sup>	Belt 30 to Wet Screen S-7	1,000,000	0.00	0.00	0.00	0.00
A093a <sup>1</sup>	Screens 5-7 to BC57	500,000	0.00	0.00	0.00	0.00
A093b <sup>1</sup>	Screens 5-7 to BC28	428,571	0.00	0.00	0.00	0.00
A086 <sup>1</sup>	Screens 5-7 to BC56	500,000	0.00	0.00	0.00	0.00

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A102a <sup>1</sup>	Wet Screen S-7	1,000,000	0.00	0.00	0.00	0.00
A108 <sup>1</sup>	Screen S-7 to 44" Sand Screw	285,714	0.00	0.00	0.00	0.00
A086 <sup>1</sup>	Belt to Dewater Screen S-9	307,692	0.00	0.00	0.00	0.00
A101 <sup>1</sup>	DW Screen S-9 to Stacker BC29	307,692	0.00	0.00	0.00	0.00
A089 <sup>1</sup>	Stacker BC29 to Stockpile 1/4" chips	307,692	0.00	0.00	0.00	0.00
A099 <sup>1</sup>	Belts 56 and 57 to Belt BC31 or Belt 41	1,000,000	0.00	0.00	0.00	0.00
A091 <sup>1</sup>	Belt 41 to Belt 36	1,000,000	0.00	0.00	0.00	0.00
A090 <sup>1</sup>	Belt 36 to Surge Bin SB5	1,000,000	0.00	0.00	0.00	0.00
A075 <sup>1</sup>	Belt 28 to Dewater Screen	428,571	0.00	0.00	0.00	0.00
A076 <sup>1</sup>	Dewater Screen to BC41	428,571	0.00	0.00	0.00	0.00
A106 <sup>1</sup>	Canica VSI Crusher 6a	500,000	0.0024	0.0024	0.60	0.60
A103 <sup>1</sup>	Canica VSI Crusher 7a	500,000	0.0024	0.0024	0.60	0.60
A107	Belt 59 to Belt 39 (recirc)	1,000,000	0.000013	0.000046	0.02	0.02
A107a	Belt 39 to Belt 74	1,000,000	0.000013	0.000046	0.02	0.02
A107b	Aux Sand Refeed (Loader or Stockpile)	357,142	0.000013	0.000046	0.01	0.01
A103 <sup>1</sup>	Belt 37 to Belt 38	357,142	0.000013	0.000046	0.01	0.01
A106a <sup>1</sup>	Belt 38 to Splitter	1,057,143	0.000013	0.000013	0.02	0.02
A096a <sup>1</sup>	Belt 31 to Belt 40	771,429	0.00	0.00	0.00	0.00
A092 <sup>1</sup>	Belt 40 to Belt 33	771,429	0.00	0.00	0.00	0.00
A092a <sup>1</sup>	Belt 33 to Twin Shaft Coarse mat. Wash	771,429	0.00	0.00	0.00	0.00
A092b <sup>1</sup>	3 Deck Screen (wet process)	771,429	0.00	0.00	0.00	0.00
A092c <sup>1</sup>	Screen to Belt 34	342,857	0.00	0.00	0.00	0.00
A092d <sup>1</sup>	Screen to Belt 43 (alt)	285,714	0.00	0.00	0.00	0.00
A092e <sup>1</sup>	Screen to Stacker ST32	285,714	0.00	0.00	0.00	0.00
A096 <sup>1</sup>	Stacker ST32 to Size Screen #67/#4	285,714	0.00	0.00	0.00	0.00
A097 <sup>1</sup>	Belt BC34 to Stacker 35	285,714	0.00	0.00	0.00	0.00
A098 <sup>1</sup>	Stacker 35 to Bin #4	285,714	0.00	0.00	0.00	0.00
A096b <sup>1</sup>	Belt 43 to Belt 44 (alt)	342,857	0.00	0.00	0.00	0.00
A096d <sup>1</sup>	Belt 44 to Belt 57 (alt)	342,857	0.00	0.00	0.00	0.00
A096c <sup>1</sup>	44" Sand Screw (spare)	285,714	0.00	0.00	0.00	0.00
A109 <sup>1</sup>	Screens 5, 6, and 7 to Twin 54" Screws	771,429	0.00	0.00	0.00	0.00
A113 <sup>1</sup>	Dewater Screen S10	1,057,143	0.00	0.00	0.00	0.00
A114 <sup>1</sup>	Belt 60 to Belt 61	1,046,154	0.00	0.00	0.00	0.00
A114a <sup>1</sup>	Belt 61 to Stacker 42	1,046,154	0.00	0.00	0.00	0.00
A115 <sup>1</sup>	Stacker 42 to Stockpile	1,046,154	0.00	0.00	0.00	0.00
A110a <sup>1</sup>	Loader to Aux Hopper	500,000	0.00	0.00	0.00	0.00
A110b <sup>1</sup>	Belt to Stacker	500,000	0.00	0.00	0.00	0.00

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A110d <sup>1</sup>	Stacker to Stockpile	500,000	0.00	0.00	0.00	0.00
A110c <sup>1</sup>	Belt (spare)	400,000	0.00	0.00	0.00	0.00
A110e <sup>1</sup>	Stacker (spare)	400,000	0.00	0.00	0.00	0.00
A110f <sup>1</sup>	Dewater Screen S-12 (Spare)	400,000	0.00	0.00	0.00	0.00
A110 <sup>1</sup>	Loader to Aux Refeed Hopper	168,750	0.000013	0.000046	0.01	0.01
A111 <sup>1</sup>	Belt 72 to Belt 74	168,750	0.000013	0.000046	0.01	0.01

<sup>1</sup>Wet process (no emissions) denotes emission units processing materials with >10% moisture in the ¼" minus materials.

7. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-7 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-7: Wash Plant #2 Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A048	VGF 1 and 2 to Belt 12	1,500,000	0.000013	0.000046	0.03	0.03
A049	Belt 12 Tunnel to Belt 13	1,500,000	0.000013	0.000046	0.03	0.03
A050	Belt 13 to Surge Bin 4	1,500,000	0.000013	0.000046	0.03	0.03
A051	Belt 22 to Belt 17	923,077	0.000013	0.000046	0.02	0.02
A053	Belt 20 to Belt 21	923,077	0.000013	0.000046	0.02	0.02
A055 <sup>1</sup>	Screen S-4 (Simplicity)	923,077	0.00	0.00	0.00	0.00
A052 <sup>1</sup>	Belt 17 to East Screen S-4	923,077	0.00	0.00	0.00	0.00
A062 <sup>1</sup>	Screens S-4 and S-8 to Belt 53	923,077	0.00	0.00	0.00	0.00
A070 <sup>1</sup>	Screens S-4 and S-8 to Belt 18a	923,077	0.00	0.00	0.00	0.00
A074 <sup>1</sup>	Screens S-4 and S-8 to Screw Washer	923,077	0.00	0.00	0.00	0.00
A056 <sup>1</sup>	Screen S-8 (Svedala)	923,077	0.00	0.00	0.00	0.00
A054 <sup>1</sup>	Belt 21 to West Screen S-8	923,077	0.00	0.00	0.00	0.00
A057 <sup>1</sup>	Screens S-4 and S-8 to Belt 14	923,077	0.00	0.00	0.00	0.00
A059 <sup>1</sup>	Crusher CR-5 (Canica VSI)	250,000	0.00	0.00	0.00	0.00
A058 <sup>1</sup>	Belt 14 to Crusher CR-5	250,000	0.00	0.00	0.00	0.00
A060 <sup>1</sup>	Crusher CR-5 to Belt 19 (recirc.)	250,000	0.00	0.00	0.00	0.00
A061 <sup>1</sup>	Belt 19 to Surge Bin 4 (recirc.)	250,000	0.00	0.00	0.00	0.00
A063 <sup>1</sup>	Belt 53 to Screen S-11 (6 x 16)	461,538	0.00	0.00	0.00	0.00
A064 <sup>1</sup>	Screen S-11 to Belt 15	461,538	0.00	0.00	0.00	0.00
A068 <sup>1</sup>	Screen S-11 to Belt 24	461,538	0.00	0.00	0.00	0.00
A068a <sup>1</sup>	Screen S-11 to ST5	461,538	0.00	0.00	0.00	0.00
A068b <sup>1</sup>	Stacker ST-5 to Stockpile (alt)	115,385	0.00	0.00	0.00	0.00
A065 <sup>1</sup>	Belt 15 to Coarse Material	230,769	0.00	0.00	0.00	0.00

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
	Washer					
A066 <sup>1</sup>	Coarse Washer to Stacker 52	230,769	0.00	0.00	0.00	0.00
A067 <sup>1</sup>	Stacker 52 to Stockpile	230,769	0.00	0.00	0.00	0.00
A069 <sup>1</sup>	Stacker 24 to Stockpile	230,769	0.00	0.00	0.00	0.00
A071 <sup>1</sup>	Belt 18a to Belt 18b	461,538	0.00	0.00	0.00	0.00
A071a	Belt 18b to Belt 18c	461,538	0.00	0.00	0.00	0.00
A071b <sup>1</sup>	Belt 18c to Stockpile or Feed Hopper	461,538	0.00	0.00	0.00	0.00
A117 <sup>1</sup>	Loader to Feed Hopper	461,538	0.00	0.00	0.00	0.00
A120 <sup>1</sup>	Canica VSI Crusher CR-9	461,538	0.00	0.00	0.00	0.00
A120h <sup>1</sup>	Canica VSI Crusher CR-9a	461,538	0.00	0.00	0.00	0.00
A120c <sup>1</sup>	Canica VSI Crushers CR-9 and CR-9a to Belt 77	613,846	0.00	0.00	0.00	0.00
A120d <sup>1</sup>	Belt 72 to Canica VSI Crushers CR-9 and CR-9a	613,846	0.00	0.00	0.00	0.00
A120a <sup>1</sup>	3 Deck Size Screen	613,846	0.00	0.00	0.00	0.00
A120e <sup>1</sup>	Belt 73 to Size Screen	613,846	0.00	0.00	0.00	0.00
A120f <sup>1</sup>	Size Screen to Ubelt and Belt 79	613,846	0.00	0.00	0.00	0.00
A120b <sup>1</sup>	Belt 79 to Belt 80	152,308	0.00	0.00	0.00	0.00
A120g	Belt 80 recirc to Belt 72	152,308	0.00	0.00	0.00	0.00
A121 <sup>1</sup>	Dewatering Screen	576,923	0.00	0.00	0.00	0.00
A121a <sup>1</sup>	Belt 77 to Dewatering Screen	576,923	0.00	0.00	0.00	0.00
A121b <sup>1</sup>	Dewatering Screen to Belt 73	576,923	0.00	0.00	0.00	0.00
A122a <sup>1</sup>	Ubelt to Stacker 78 or Belt 74 (alt feed)	461,538	0.00	0.00	0.00	0.00
A122 <sup>1</sup>	Stacker 78 to Stockpile	461,538	0.00	0.00	0.00	0.00
A122b <sup>1</sup>	Belt 74 to Belt 81	461,538	0.00	0.00	0.00	0.00
A122c <sup>1</sup>	Belt 81 to Belt 82	461,538	0.00	0.00	0.00	0.00
A122d <sup>1</sup>	Belt 82 to Belt BC12	461,538	0.00	0.00	0.00	0.00
A075 <sup>1</sup>	Screw to Dewatering Screen	576,923	0.00	0.00	0.00	0.00
A077 <sup>1</sup>	Belt 65 to Stacker 66	576,923	0.00	0.00	0.00	0.00
A078 <sup>1</sup>	Stacker 66 to Stockpile	576,923	0.00	0.00	0.00	0.00

<sup>1</sup>Wet process (no emissions) denotes emission units processing materials with >10% moisture in the ¼" minus materials.

8. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-8 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-8: Wash Plant #2 Alternate Canica VSI Circuit Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A117	Loader to Feeder	200,000	0.000013	0.000046	0.01	0.01
A120	Canica VSI Crusher CR-9	100,000	0.00007	0.0012	0.24	0.06

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A120h	Canica VSI Crusher CR-9a	100,000	0.00007	0.0012	0.24	0.06
A120c	Canica VSI Crusher CR-9 to Belt 77	200,000				
A120d	Belt 72 to Canica VSI Crushers CR-9 and CR-9a	200,000				
A120a	3 Deck Size Screen	200,000	0.00005	0.00074	0.15	0.07
A120e	Belt 73 to 3 Deck Size Screen	200,000				
A120f	3 Deck Size Screen to Ubelt & Belt 79	200,000				
A117	Loader to Feeder	200,000	0.000013	0.000046	0.01	0.01

9. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-9 in any consecutive twelve on a rolling 12-month period basis. [AQR 12.5.2.3]

**Table IV-A-9: Wash Plant #2 Alternate Dewatering Screen Circuit Emission Units and Calculated PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
A120b	Belt 79 to Belt 80	66,000	0.000013	0.000046	0.01	0.01
A120g	Belt 80 to Belt 72	200,000	0.000013	0.000046	0.01	0.01
A121	Dewatering Screen	266,000	0.00005	0.00074	0.20	0.10
A121a	Belt 77 to Dewater Screen	266,000				
A121b	Dewatering Screen to Belt 73	266,000				
A122a	Ubelt to Stacker 78 or Belt 74 (alt feed)	200,000	0.000013	0.000046	0.01	0.01
A122	Stacker 78 to Stockpile	200,000	0.000013	0.000046	0.01	0.01
A122b	Belt 74 to Belt 81	200,000	0.000013	0.000046	0.01	0.01
A122c	Belt 81 to Belt 82	200,000	0.000013	0.000046	0.01	0.01
A122d	Belt 82 to Belt BC12	200,000	0.000013	0.000046	0.01	0.01
A124	Belt (Spare)	200,000	0.000013	0.000046	0.01	0.01

10. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-10 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-10: Rip Rap/Miscellaneous Screening System Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
H05c	Loader to Feeder	150,000	0.000013	0.000046	0.02	0.01
H08	Trommel Screen Hurcules HT182	150,000	0.00005	0.00074	0.37	0.06
H02	Oversize Reject #1 - #4	150,000	0.000013	0.000046	0.01	0.01

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
H02a	Grizzly Screen (Loader or Conveyor Feed)	75,000	0.00005	0.00074	0.19	0.03
H09	Belt R1 to Belt R2	75,000	0.000013	0.000046	0.01	0.01
H10	Reject Stacker	32,500	0.000013	0.000046	0.01	0.01
H05	Fines Transfer Belt	32,500	0.000013	0.000046	0.01	0.01
H05a	Fines Reject Stacker	32,500	0.000013	0.000046	0.01	0.01

11. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-11 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-11: West Screen Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
B001	Stockpile to Belt 1	1,500,000	0.000013	0.000046	0.03	0.03
B002	Belt 1 to Belt 3	1,500,000	0.000013	0.000046	0.03	0.03
B004	Belt 3 to Splitter (BH) <sup>1</sup>	1,500,000	0.0011	0.0011	0.15	0.21
B004a	Splitter to Belt 4 (BH) <sup>21</sup>	600,000	0.0011	0.0011	0.06	0.08
B006a	Splitter to Belt 5 (BH) <sup>1</sup>	600,000	0.0011	0.0011	0.06	0.08
B003a	Reject Stacker (alt ops) <sup>2</sup>	400,000	0.000013	0.000046	0.03	0.01
B006	Screen 1 ElJay (BH) <sup>1</sup>	600,000	0.0087	0.0087	0.49	0.66
B005	Belt 4 to Screen 1	600,000				
B022	Screen 1 to Belt 18	600,000				
B008	Screen 2 ElJay (BH) <sup>1</sup>	600,000	0.0087	0.0087	0.49	0.66
B007	Belt 5 to Screen 2	600,000				
B024	Screen 2 to Belt 19	600,000				
B012a	Splitter to Belt 7	600,000	0.000013	0.000046	0.01	0.01
B013	Screen 3 (JCI) (BH) <sup>1</sup>	600,000	0.0087	0.0087	0.49	0.66
B012	Belt 7 to Screen 3	600,000				
B013	Screens to Belt 10	600,000				
B028	Screen 3 to Belt 15	600,000				
B028a	Screens to Belt 17	600,000				
B039	Screen 3 to Belt 8	600,000				
B018	Screens to Belt 20	600,000				
B033	Belt 20 (rev) to Belt 11 or Belt 15	300,000	0.000013	0.000046	0.01	0.01
B029	Belt 14 to Belt 10 or Belt 16	300,000	0.000013	0.000046	0.01	0.01
B033	Belt 10 to Belt 11	300,000	0.000013	0.000046	0.01	0.01
B037	Belt 12 to Belt 9	300,000	0.000013	0.000046	0.01	0.01
B041	Belt 9 to Splitter (recirc)	300,000	0.000013	0.000046	0.01	0.01
B035	Cone Crusher (BH) <sup>1</sup>	300,000	0.0024	0.0024	0.07	0.09
B034	Belt 11 to Cone Crusher	300,000				
B036	Cone Crusher to Belt 12	300,000				

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
B043	Wet Screen <sup>3</sup>	300,000	0.00	0.00	0.00	0.00
B003	Belt 2 to Wet Screen	300,000	0.000013	0.000046	0.01	0.01
B016	Belt 16 to Stacker 2	300,000	0.000013	0.000046	0.01	0.01
B017	Stacker 2 to Stockpile	300,000	0.000013	0.000046	0.01	0.01
B020	Belt 15 to Stacker 4	381,818	0.000013	0.000046	0.01	0.01
B027	Stacker 4 to Stockpile	381,818	0.000013	0.000046	0.01	0.01
B051	Belt 17 to Belt 2	381,818	0.000013	0.000046	0.01	0.01
B052	Wash Screw to Stacker 3 <sup>3</sup>	381,818	0.00	0.00	0.00	0.00
B053	Stacker 3 to Stockpile 3/8	381,818	0.000013	0.000046	0.01	0.01
B038	Belt 18 to Belt 13	145,364	0.000013	0.000046	0.01	0.01
B026	Belt 19 to Belt 13	145,364	0.000013	0.000046	0.01	0.01
B040	Belt 8 to Belt 13	145,364	0.000013	0.000046	0.01	0.01
B053	Belt 13 to Belt 13a	436,364	0.000013	0.000046	0.01	0.01
B054	Belt 13a to Washer or Stacker 1	436,364	0.000013	0.000046	0.01	0.01
B031	Stacker 1 to Stockpile or alt feed	436,364	0.000013	0.000046	0.01	0.01
B055	Overland Belt Conveyor Transfer to Belt (to BC10 Tert. feed)	436,364	0.000013	0.000046	0.01	0.01
B047	7 x 20 Dewater Screen (spare) <sup>3</sup>	1,500,000	0.00	0.00	0.00	0.00
B011	Belt 6 (spare)	736,364	0.000013	0.000046	0.01	0.02
B045	Stacking Conveyor (spare)	600,000	0.000013	0.000046	0.02	0.01
B046	Belt Conveyor Transfer to Belt (spare)	436,364	0.000013	0.000046	0.01	0.01
B049	Stacking Conveyor (spare wet process) <sup>3</sup>	600,000	0.00	0.00	0.00	0.00
B050	Stacking Conveyor (spare wet process) <sup>3</sup>	600,000	0.00	0.00	0.00	0.00
B046a	Loader to Aux Refeed Hopper w/Feeder (alt) <sup>2</sup>	100,000	0.000013	0.000046	(0.01)	(0.01)
B056	Belt to Belt 9 (alt) <sup>2</sup>	100,000	0.000013	0.000046	(0.01)	(0.01)

<sup>1</sup>BH denotes unit vented to baghouse. Emissions from baghouse points are computed based on 75% capture efficiency and 99.5% control efficiency.

<sup>2</sup>The emission unit is not included in the table subtotal. It is an alternate process that, if used, will decrease throughput from the remaining emission units.

<sup>3</sup>Wet process (no emissions) denotes emission units processing materials with >10% moisture in the ¼" minus materials.

12. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-12 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-12: Type 2 Plant (Virgin and Recycle) Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
C001a	Mining <sup>1</sup>	500,000	0.0012	0.008	3.20	2.00
A012b	Jaw Crusher CR-10	250,000	0.001	0.00054	0.11	0.07
A012d	VGF2 to Belt 70	250,000	0.000013	0.000046	0.01	0.01
A012e	Belt 70 to Belt 2a Overland	500,000	0.000013	0.000046	0.02	0.01
A010	Belt 2a to VGF Feeder or SP	500,000	0.000013	0.000046	0.02	0.01
A10a	Loader to VGF Feeder	500,000	0.000013	0.000046	0.02	0.01
C001	Loader to VGF	700,000	0.000013	0.000046	0.02	0.02
C003	VGF to Belt 3	700,000	0.000013	0.000046	0.02	0.02
C004	Belt 3 to Belt 4	700,000	0.000013	0.000046	0.02	0.02
C002	Jaw Crusher	700,000	0.0001	0.00054	0.22	0.19
C002b	VGF to Jaw Crusher	700,000				
C002a	Jaw Crusher CR-10 to BC70	700,000				
C002c	Jaw Crusher to Belt 3	700,000				
C005a	Screen 3 Cedar Rapids	700,000	0.00005	0.00074	0.30	0.26
C005b	Belt 4 to Screen 3	700,000				
C005c	Screen 3 to Stacker 22 (alt) <sup>2</sup>	700,000				
C005d	Screen 3 to Stacker 15 (alt) <sup>2</sup>	700,000				
C005e	Screen 3 to Underbelt	700,000				
C005f	Screen 3 to Belt 5	700,000				
C003b	Stacker 22 to Stockpile (alt) <sup>2</sup>	350,000	0.000013	0.000046	0.01	0.01
C010b	Stacker 15 to Stockpile (alt) <sup>2</sup>	262,500	0.000013	0.000046	0.01	0.01
C031	S3 Underbelt to Stacker	87,500	0.000013	0.000046	0.01	0.01
C036	Stacker to Stockpile	87,500	0.000013	0.000046	0.01	0.01
C006	Belt 5 to Belt 6 & 7 (splitter)	612,500	0.000013	0.000046	0.02	0.01
C008	Screen 1 Cedar Rapids	481,250	0.00005	0.00074	0.20	0.18
C007	Belt 6 to Screen 1	481,250				
C016	Screen 1 to Belt 14	481,250				
C009	Screen 2 Cedar Rapids	612,500	0.00005	0.00074	0.26	0.23
C008a	Belt 7 to Screen 2	612,500				
C009a	Screen1 & 2 to Belt 8	612,500				
C025	Screen 2 to Belt 21	612,500				
C012	Horz. Shaft Impact Crusher	350,000	0.0001	0.00054	0.11	0.09
C012b	Belt 8 to H.S.I. Crusher	350,000				
C012a	H.S.I. to Belt 11	350,000				
C013	Belt 11 to Belt 12	350,000	0.000013	0.000046	0.01	0.01
C013a	Belt 12 to Belt 6&7 (splitter)	350,000	0.000013	0.000046	0.01	0.01
C017	Belt 14 to Belt 18a	87,500	0.000013	0.000046	0.01	0.01
C022	Belt 18a to Stacker 17	87,500	0.000013	0.000046	0.01	0.01
C020	Stacker 17 to Stockpile	87,500	0.000013	0.000046	0.01	0.01

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
C026	Belt 21 to Belt 20	612,500	0.000013	0.000046	0.02	0.01
C027	Belt 20 to Belt 16	612,500	0.000013	0.000046	0.02	0.01
C019	Belt 16 to Stacker	612,500	0.000013	0.000046	0.02	0.01
C028	Stacker to Stockpile T2	612,500	0.000013	0.000046	0.02	0.01
C033	Stacker 18 (alt) <sup>2</sup>	87,500	0.000013	0.000046	0.01	0.01
C034	Stacker 19 (alt) <sup>2</sup>	87,500	0.000013	0.000046	0.01	0.01
C011	Belt 9 Spare	350,000	0.000013	0.000046	0.01	0.01
C035	Belt 19 Spare	350,000	0.000013	0.000046	0.01	0.01

<sup>1</sup>Mining EF based on two conveyor drop points (controlled).

<sup>2</sup>The emission unit is not included in the table subtotals. It is an alternate process that, if used, will decrease throughput from the remaining emission units.

13. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-13 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-13: Asphalt System Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
D001	Loader to Hoppers (10 ea.)	527,340	0.000013	0.000046	0.01	0.01
D011	Loader to 2 RAP Hoppers	93,060	0.000013	0.000046	0.01	0.01
D002-6d	Belt Feeders 1 – 6d (10 ea)	527,340	0.000013	0.000046	0.01	0.01
D007	Conveyor 5e to Conveyor 6	527,340	0.000013	0.000046	0.01	0.01
D009	Screen to Conveyor 8 (BH) <sup>1</sup>	527,340	0.0011	0.0011	0.07	0.07
D008	Conveyor 6 to Scalping Screen	527,340	0.000013	0.000046	0.01	0.01
D012	Belts 9 and 10 to Conveyor 11	93,060	0.000013	0.000046	0.01	0.01
D029	Conveyor 11a to Conv. 11	93,060	0.000013	0.000046	0.01	0.01
D014	Aztec Drum Mixer (BH) <sup>1</sup>	660,000	See Table IV-A-14			1.62
D010	Conveyor 8 to Drum Mixer	527,340	0.000013	0.000046	0.01	0.01
D013	Conveyor 11 to Drum Mixer	93,060	0.000013	0.000046	0.01	0.01
D015	Mixer to Drag Slat Conveyor	660,000	Enclosed	Enclosed	0.00	0.00
D016	Asphalt Silo 1 Loading	110,000	0.00006	0.00006	0.01	0.01
D019e	Asphalt Silo 1 Un-Loading	110,000	0.0005	0.0005	0.03	0.03
D017	Asphalt Silo 2 Loading	110,000	0.00006	0.00006	0.01	0.01
D019e	Asphalt Silo 2 Un-Loading	110,000	0.0005	0.0005	0.03	0.03
D019a	Asphalt Silo 3 Loading	110,000	0.00006	0.00006	0.01	0.01
D019f	Asphalt Silo 3 Un-Loading	110,000	0.0005	0.0005	0.03	0.03
D019b	Asphalt Silo 4 Loading	110,000	0.00006	0.00006	0.01	0.01
D019g	Asphalt Silo 4 Un-Loading	110,000	0.0005	0.0005	0.03	0.03
D019c	Asphalt Silo 5 Loading	110,000	0.00006	0.00006	0.01	0.01
D019h	Asphalt Silo 5 Un-Loading	110,000	0.0005	0.0005	0.03	0.03
D019i	Asphalt Silo 6 Loading	110,000	0.00006	0.00006	0.01	0.01
D019j	Asphalt Silo 6 Un-Loading	110,000	0.0005	0.0005	0.03	0.03

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
D020	Baghouse to Screw Conveyor	250	Enclosed	Enclosed	0.00	0.00
D021	Screw Conveyor to Storage	250	Enclosed	Enclosed	0.00	0.00
D022	Silo to Conveyor 22	250	Enclosed	Enclosed	0.00	0.00
D023	Screw Conveyor 1 to Conveyor 2	250	Enclosed	Enclosed	0.00	0.00
D024	Screw Conveyor 21 to 22	250	Enclosed	Enclosed	0.00	0.00
D025	Asphalt Hauling (0.95 miles RT)	See Table IV-A-23				
D026	Diesel Hot Oil Heater 16	See Table IV-A-15			0.05	0.05
D027	Diesel Hot Oil Heater 17	See Table IV-A-15			0.08	0.08
D028	Diesel Hot Oil Heater 17a	See Table IV-A-15			0.05	0.05

<sup>1</sup>BH denotes unit vented to baghouse. Emissions from baghouse points are computed based on 75% capture efficiency and 99.5% control efficiency.

14. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-14 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-14: PTE for Asphalt Drum Mixer (tons/year)<sup>1</sup>**

EU D014	PM <sub>2.5</sub> /PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
Diesel	1.62	19.14	33.00	19.14	10.56	2.87
LPG Firing	1.62	12.87	33.00	1.22	10.56	2.51
<b>EU PTE</b>	<b>1.62</b>	<b>19.14</b>	<b>33.00</b>	<b>19.14</b>	<b>10.56</b>	<b>2.87</b>

<sup>1</sup>Emission values based on maximum throughput of 450 tons per hour and 660,000 tons per year. The PTE is established using the fuel that results in the highest PTE (Fuel oil). Emission Factor (lbs/ton) for PM = 0.0049 is based on performance test data with plus a 25% margin. Emission Factors (lbs/ton) for NO<sub>x</sub> = 0.058, CO = 0.10 are based on AP42 11.1-7 adjusted to reflect burner control system. Emission Factor (lbs/ton) for SO<sub>x</sub> is based on AP42 11.1-7 assuming combustion of on specification fuel oil. Emission factors (lbs/ton) for VOC = 0.032, and HAPs = 0.0076, based on AP42 11.1-7, 11.1-8, 11.1-9, and 1.5-1. Emission factor for SO<sub>x</sub> (lbs/ton) = 0.0037, based on SBAPCD sulfur content table converted to lbs/ton (0.017 lb per MMBtu / 0.22 MMBtu per ton).

15. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-15 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-15: PTE for Asphalt Hot Oil Heaters (tons/year)<sup>1</sup>**

EU	PM <sub>2.5</sub> /PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
D026 <sup>2</sup>	0.05	0.53	0.13	0.18	0.01	0.01
D027 <sup>3</sup>	0.08	0.79	0.20	0.28	0.01	0.01
D028 <sup>2</sup>	0.05	0.53	0.13	0.18	0.01	0.01

<sup>1</sup>Emission factors from AP-42 Tables 1.3-1, 1.3-3, and 1.3-9.

<sup>2</sup>Based on six (6) gallons per hour and 52,560 gallons per year.

<sup>3</sup>Based on nine (9) gallons per hour and 78,840 gallons per year.

16. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-16 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-16: Road Runner Portable Screen Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
RS01	Loader to Hopper	50,000	0.000013	0.000046	0.01	0.01
RS03	Road Runner Incline Screen	50,000	0.00005	0.00074	0.11	0.02
RS02	Conveyor to Screen	50,000				
RS04	Screen to Stacker 1	50,000				
RS06	Screen to Stacker 2	50,000				
RS08	Underbelt Transfer to Stacker 3	33,333	0.000013	0.000046	0.01	0.01
RS05	Stacker 1 to Stockpile	16,667	0.000013	0.000046	0.01	0.01
RS07	Stacker 2 to Stockpile	16,667	0.000013	0.000046	0.01	0.01
RS09	Stacker 3 to Stockpile	33,333	0.000013	0.000046	0.01	0.01
RS10	Duetz 63 hp Diesel Engine	See Table IV-A-18			0.03	0.03

17. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-17 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-17: Blending System Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
BS01	Loader to Five Bin System	500,000	0.000013	0.000046	0.02	0.01
BS02	Belt Feeders to Belt	500,000	0.000013	0.000046	0.02	0.01
BS03	Splitter to Alt Stacker (pugmill bypass)	500,000	0.000013	0.000046	0.02	0.01
BS03a	Stacker to Stockpile (bypass)	500,000	0.000013	0.000046	0.02	0.01
D013d	Pugmill Mixer (mixes supplement, water, and aggregate)	517,833	0.0055	0.0055	2.61	1.42
BS05a	Belt to Pugmill	500,000	0.000013	0.000046	0.02	0.01
BS05	Auger to Pugmill	8,333	0.000013	0.000046	0.01	0.01
D013a	Dual Lime Silo Loading	9,000	0.000051	0.00034	0.04	0.01
BS06a	Auxiliary Silo (Cement/Lime)	9,000	0.000051	0.00034	0.04	0.01
BS06	Guppy Silo	8,333	0.000051	0.00034	0.01	0.01
D013e	Belt Conveyor to Stacker	517,833	0.000013	0.000046	0.02	0.01
BS08	Stacker to Stockpile	517,833	0.000013	0.000046	0.02	0.01

18. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-18 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-18: Calculated PTE for Diesel Generators (tons/year)**

EU	Description	Emission Factor <sup>1</sup>		Pollutant	PTE
A123	Caterpillar Diesel Engine; M/N: XQ225; S/N: N/A; 306 hp 2,000 hrs/yr	2.20E-04	lbs/hr	PM <sub>2.5</sub> /PM <sub>10</sub>	0.07
		1.092E-02		NO <sub>x</sub>	3.34
		9.48E-04		CO	0.29
		2.05E-03		SO <sub>x</sub>	0.63
		2.51E-03		VOC	0.77

EU	Description	Emission Factor <sup>1</sup>		Pollutant	PTE
		4.52E-05		Total HAP	0.01
STM39	Caterpillar Diesel Engine; M/N: 3306TA; S/N: N/A; 306 hp; 12 gal/hr 2,187 hrs/yr	8.00E-03	lbs/gal	PM <sub>2.5</sub> /PM <sub>10</sub>	0.10
		2.61E-01		NO <sub>x</sub>	3.42
		4.60E-02		CO	0.60
		7.10E-03		SO <sub>x</sub>	0.09
		2.00E-02		VOC	0.26
		9.59E-03		Total HAP	0.13
		2.20E-03		lbs/hp-hr	PM <sub>2.5</sub> /PM <sub>10</sub>
3.10E-02	NO <sub>x</sub>	2.98			
6.68E-03	CO	0.64			
2.05E-03	SO <sub>x</sub>	0.20			
2.51E-03	VOC	0.24			
4.52E-05	Total HAP	0.01			
RS10	Duetz Diesel Engine; M/N: 4SL942; S/N: ; 50 kW; 67 hp; 500 hrs/yr	2.0E-03	lbs/hp-hr		PM <sub>2.5</sub> /PM <sub>10</sub>
		3.1E-02		NO <sub>x</sub>	0.52
		6.68E-03		CO	0.11
		2.05E-03		SO <sub>x</sub>	0.03
		2.51E-03		VOC	0.04
		4.52E-5		Total HAP	0.01

<sup>1</sup>PM<sub>10</sub>, CO, and NO<sub>x</sub> emission factors are from manufacturers' data. SO<sub>x</sub>, VOC, and HAP emission factors are based on AP-42 3.3-1. SO<sub>x</sub> based on a maximum 0.05% sulfur content. Emission factors are based on AP42 3.3-1 default values.

19. The Permittee shall allow neither the actual nor the allowable emissions from the Caterpillar diesel engine (EU: A123) to exceed the standards Table IV-A-19. [40 CFR 60 Subpart III]

**Table IV-A-19: Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder, g/kW-hr (g/hp-hr)**

Maximum Engine Power	NMHC + NO <sub>x</sub>	HC	NO <sub>x</sub>	CO	PM
225≤kW≤450 (300≤hp≤600)	N/A	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

20. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-20 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-20: Southern Nevada Ready Mix Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
F001	Aggregate Unloading to Hopper 1	411,625	0.000013	0.000046	0.01	0.01
F002	Belt 2 to Stacker 3	411,625	0.000013	0.000046	0.01	0.01
F003	Stacker 3 to Stockpile	411,625	0.000013	0.000046	0.01	0.01
F004	Loader to 4 Comp Agg Grind Hoppers (rock/sand)	205,812	0.000013	0.000046	0.01	0.01
F005	Belt 5 to Belt 7	205,812	0.000013	0.000046	0.01	0.01
F006	Belt 6 to Belt 7	205,812	0.000013	0.000046	0.01	0.01
F007	Belt 7 to 4-Comp Agg. Bin 10	205,812	0.000013	0.000046	0.01	0.01

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
F009	Belt 8 to 4-Comp Agg. Bin 10	205,812	0.000013	0.000046	0.01	0.01
F011	Belt 9 to 4-Comp Agg. Bin 10	205,812	0.000013	0.000046	0.01	0.01
F012	Agg Bin 10 to Hopper 11	65,833	Enclosed	Enclosed	0.00	0.00
F008	Loader to Agg. Hopper 8a	205,812	0.000013	0.000046	0.01	0.01
F010	Loader to Agg. Hopper 9a	205,812	0.000013	0.000046	0.01	0.01
F013	Belt 12 to Belt 13	411,625	0.000013	0.000046	0.01	0.01
F014a	Loading Station Central Mix (BH) <sup>1</sup>	75,000	0.0011	0.0011	0.01	0.01
F019	Batcher 18 to Truck (BH) <sup>1</sup>	75,000	0.0011	0.0011	0.01	0.01
F015	Fly Ash 15 Loading (Bin vent) <sup>1</sup>	13,125	0.0049	0.0049	0.01	0.01
F017	Cement Silo 14 Loading (Bin vent) <sup>1</sup>	61,875	0.00034	0.00034	0.01	0.01
F017a	Cement Silo 14a Loading (Bin vent) <sup>1</sup>	61,875	0.00034	0.00034	0.01	0.01
F018	Weigh Batcher Loading 18 (Bin vent) <sup>1</sup>	75,000	0.0049	0.0049	0.05	0.05
F016	Ash Silo to Weigh Hopper 18	13,125	0.000735	0.0049	0.01	0.03
F023	Fire Storm Propane-Fired Water Heater, 4.0 MMBtu/hr	See Table IV-A-21			0.01	0.01

<sup>1</sup>BH and Bin vent denote units vented to baghouses and bin vents. Emissions from baghouse and bin vent points are computed based on 75% capture efficiency and 99.5% control efficiency.

21. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-21 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-21: Ready Mix Plant Hot Water Heater PTE (tons/year)**

EU	Production Limit	PM <sub>2.5</sub> /PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
F023 <sup>1</sup>	1,200 hrs/yr	0.01	0.09	0.18	0.04	0.01	0.01

<sup>1</sup>NO<sub>x</sub> Emissions are based on 30 ppm and CO 100 ppm. All other values based on AP-42.

22. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-22 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-22: Con-E-Co Concrete Batch Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
F025	Agg. Unloading Bellydump	80,580	0.000013	0.000046	0.01	0.01
F026	Loader to Feedhoppers 1 - 3	80,580	0.000013	0.000046	0.01	0.01
F026a	Loader to Aux. Feedhopper	80,580	0.000013	0.000046	0.01	0.01
F027	Belts 1 - 3 to Overhead Bins	80,580	0.000013	0.000046	0.01	0.01
F027a	Aux Belt to Overhead Bins	80,580	0.000013	0.000046	0.01	0.01
F027b	Overhead Bins to Weighopper	80,580	0.000013	0.000046	0.01	0.01

EU	Description	Processes tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
F027c	Weighthopper to Belt	80,580	0.000013	0.000046	0.01	0.01
F027d	Belt to Loadout Aggs	80,580	0.000013	0.000046	0.01	0.01
F028	Fly Ash Silo Loading (Bin vent)	15,300	0.0049	0.0049	0.01	0.01
F028a	Fly Ash Silo to Weigh Batcher	15,300	Enclosed	Enclosed	0.00	0.00
F029	Cement Silo Loading (Bin vent)	15,300	0.00	0.00034	0.01	0.01
F029a	Cement Silo to Weigh Batcher	15,300	Enclosed	Enclosed	0.00	0.00
F030	Aux Guppy Loading 1 - 4	77,175	0.00034	0.00034	0.01	0.01
F031	Transit Truck Loading (BH) <sup>1</sup>	20,400	0.03	0.0263	0.07	0.07

<sup>1</sup>BH denotes unit vented to baghouse. Emissions from baghouses are computed based on 75% capture efficiency and 99.5% control efficiency.

23. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-23 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-23: Haul Road PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Process	Road Length (miles)	VMT/yr	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
H06 <sup>1</sup>	Aggregate	0.5	32,866	2.41	16.06
	Aggregate Haul Out	0.55	29,822		
	Type 2	0.35	10,889		
	Mine Haul	0.30	6,666		
	Asphalt	0.475	25,080		
	Portable Screen Hauling	1.0	1,100		
	Blending System	0.6	2,000		
	Southern Nevada Ready Mix	1.0	25,000		
	Aggregate	1.0	3,950		
	Rip Rap	3.0	18,000		
	Cyclone Sand	0.6	600		
	Ready-Mix Hauling	0.5	2,500		
	Admixture Haul	0.5	227		
	Cal Portland Hauling	1.0	30,000		
	Wet-Cast Cement Haul In	0.4	914		
Wet-Cast Cement Haul Out	0.4	6,720			

24. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-24 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-24: Source-wide Stockpile Area PTE for PM<sub>2.5</sub> and PM<sub>10</sub> (tons/year)**

EU	Description	Acres	PTE PM <sub>2.5</sub> tons/yr	PM <sub>10</sub> PTE tons/yr
G01	Entire Plant	45.0	2.04	13.63

25. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-25 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-25: Cyclone Sand Loadout System Emission Unit List and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Throughput tons/year	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
CS01	Loader to Masterscreen Feed Hopper w/ Static Grizzle	15,000	0.000013	0.000046	0.01	0.01
CS02	Loadout Belt to Pneumatic Truck	15,000	0.000013	0.000046	0.01	0.01

26. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-26 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-26: Precast Management Mobile Mini Mixer Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
MM01	2 Comp. Feed Bin	23,700	0.000013	0.000046	0.01	0.01
MM02	Charge Belt	23,700	0.000013	0.000046	0.01	0.01
MM03	3/4 Yard Mixer	3,300	0.000285	0.0019	0.01	0.01
MM04	Cement Hopper	3,300	0.000051	0.00034	0.01	0.01
MM05	Disturbed Surfaces	1.5 acres	0.249 lbs/acre-day	1.66 lbs/acre-day	0.07	0.45

27. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-27 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-27: Precast Management Mobile Mini Mixer Engines and PTE (tons/year)**

EU	Description	EF (lbs/hp-hr) <sup>1</sup>	Pollutant	PTE tons/yr
MM06	Perkins Diesel Engine; M/N: TBD; S/N: TBD; 21 hp 500 hrs/yr	2.20E-03	PM <sub>2.5</sub> /PM <sub>10</sub>	0.01
		3.10E-02	NO <sub>x</sub>	0.16
		6.68E-03	CO	0.04
		2.05E-03	SO <sub>x</sub>	0.01
		2.51E-03	VOC	0.01
		4.52E-05	Total HAP	0.01
MM08	MQ Power Engine; M/N: DCA25SSIU; S/N: 7105410; 30 hp 1,200 hrs/yr	1.30E-03	PM <sub>2.5</sub> /PM <sub>10</sub>	0.02
		8.91E-03	NO <sub>x</sub>	0.16
		2.43E-03	CO	0.04
		2.05E-03	SO <sub>x</sub>	0.04
		2.51E-03	VOC	0.05
		4.52E-05	Total HAP	0.01

<sup>1</sup>Emission factors from AP-42 except PM<sub>10</sub>, NO<sub>x</sub>, and CO which are from manufacturer's emission data sheets.

28. The Permittee shall not allow neither the actual nor the allowable emissions from the diesel engines (EUs: MM06 and MM08) to exceed the standards in Table IV-A-28: [40 CFR 60 Subpart IIII]

**Table IV-A-28: Emission Standards for Diesel Engines, g/kW-hr**

Maximum Engine Power	NO <sub>x</sub>	HC	NMHC + NO <sub>x</sub>	CO	PM
MM06	N/A	N/A	9.5	6.6	0.80
MM08	9.2	N/A	N/A	N/A	N/A

29. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-29 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-29: CalPortland Plant One Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Product tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
STM01	Unloading Aggregate Belly dump	642,135	0.000013	0.000046	0.01	0.01
STM02	Loader to Aggregate Hopper 1a	160,534	0.000013	0.000046	0.01	0.01
STM03	Loader to Aggregate Hopper 2a	160,534	0.000013	0.000046	0.01	0.01
STM04	Loader to Aggregate Hopper 3a	160,534	0.000013	0.000046	0.01	0.01
STM04 A	Loader to Aux. Hopper	160,534	0.000013	0.000046	0.01	0.01
STM06	Belt 1 to 5 Comp Storage Bin (T. P.)	160,534	0.000013	0.000046	0.01	0.01
STM07	Belt 2 to 5 Comp Storage Bin	160,534	0.000013	0.000046	0.01	0.01
STM08	Belt 3 to 5 Comp Storage Bin	160,534	0.000013	0.000046	0.01	0.01
STM08 a	Belt 4 to Weigh Hopper	160,534	0.000013	0.000046	0.01	0.01
STM10	Weigh Hopper 5 to Underbelt 6	642,135	0.000013	0.000046	0.01	0.01
STM13	Cement Silo 7 Loading (Bin vent) <sup>1</sup>	48,263	0.00034	0.00034	0.01	0.01
STM13 a	Cement Silo 7a Loading (Bin vent) <sup>1</sup>	48,263	0.00034	0.00034	0.01	0.01
STM14	Guppy Silo 11 Loading (Bin vent) <sup>1</sup>	96,525	0.00034	0.00034	0.01	0.01
STM15	Fly Ash Silo 8 Loading (Bin vent) <sup>1</sup>	20,475	0.0049	0.0049	0.01	0.01
STM16	Cement to Weigh Batcher (Bin vent) <sup>1</sup>	96,525	0.01	0.01	0.12	0.12
STM17	Fly Ash to Weigh Batcher (Bin vent) <sup>1</sup>	96,525	0.01	0.01	0.12	0.12
STM18	Transit Truck Loading Station (BH) <sup>1</sup>	117,000	0.0087	0.0087	0.19	0.56
STM18 a	Belt 6 to Transit Truck	117,000	0.0011	0.0074	0.06	0.43
STM19	Storage Piles- 4 Acres	N/A	0.249	1.66	0.18	1.21
STM19 a	Water Heater <1MMBtu/hr (Categorically Exempt)	Categorically Exempt				

<sup>1</sup>BH and Bin vent denote units vented to baghouses and bin vents. Emissions from baghouse and bin vent points are computed based on 75% capture efficiency and 99.5% control efficiency.

30. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-30 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-30: Cal Portland Plant Three Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Product tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
STM44	Radial Stacker	474,000	0.000013	0.000046	0.01	0.01
STM43	Drive over Hopper	474,000	0.000013	0.000046	0.01	0.01
STM45	Hopper to Agg. Belt 1	94,800	0.000013	0.000046	0.01	0.01
STM46	Hopper to Agg. Belt 2	94,800	0.000013	0.000046	0.01	0.01
STM47	Hopper to Agg. Belt 3	94,800	0.000013	0.000046	0.01	0.01
STM48	Hopper to Agg. Belt 4	94,800	0.000013	0.000046	0.01	0.01
STM49	Hopper to Agg. Belt 5	94,800	0.000013	0.000046	0.01	0.01
STM55	Agg. Bin (5 compartment)	474,000	0.000013	0.000046	0.01	0.01
STM50	Belt 6 to Agg. Bin	94,800	0.000013	0.000046	0.01	0.01
STM51	Belt 7 to Agg. Bin	94,800	0.000013	0.000046	0.01	0.01
STM52	Belt 8 to Agg. Bin	94,800	0.000013	0.000046	0.01	0.01
STM53	Belt 9 to Agg. Bin	94,800	0.000013	0.000046	0.01	0.01
STM54	Belt 10 to Agg. Bin	94,800	0.000013	0.000046	0.01	0.01
STM56	Bin to Weigh Hopper	474,000	Enclosed	Enclosed	0.00	0.00
STM57	Belt A13 to Truck Loadout	474,000	0.000051	0.00034	0.01	0.08
STM58	Cement Silo #1 Loading	20,000	0.000051	0.00034	0.01	0.01
STM59	Cement Silo #2 Loading	20,000	0.000051	0.00034	0.01	0.01
STM60	Fly Ash Silo Loading	30,000	0.000735	0.0049	0.01	0.07
STM61	Silos to Weigh Batcher	90,000	0.000360	0.0024	0.02	0.11
STM62	Truck Loading (BH) <sup>1</sup>	90,000	0.0087	0.0087	0.10	0.10
STM63	Guppy Silo (Bin vent) <sup>1</sup>	60,000	0.0034	0.00034	0.03	0.01
STM64	Ash Guppy Silo (Bin vent) <sup>1</sup>	30,000	0.0049	0.0049	0.02	0.02
STM65	Cement Silo (Bin vent) <sup>1</sup>	20,000	0.0034	0.00034	0.01	0.01
STM66	Disturbed Surface	2 acres	0.249 lbs/acre/day	1.66 lbs/acre/day	0.09	0.61
STM68	Diesel Generator (490 hp)	See Table IV-A-31			0.12	0.12
STM19a	Pearson Water Heater <1MMBtu/hr (Categorically Exempt)	Categorically Exempt		--	--	--

<sup>1</sup>BH and Bin vent denote units vented to baghouses and bin vents. Emissions from baghouse and bin vent points are computed based on 75% capture efficiency and 99.5% control efficiency.

31. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-31 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-31: Cal Portland Diesel Generator PTE (tons/year)**

EU	Conditions	PM <sub>2.5</sub> /PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
STM68 490 hp Genset <sup>1</sup>	2,000 hrs/yr	0.12	8.25	0.81	0.18	0.13	0.24

<sup>1</sup>Emissions based on AP-42 3.3-a default values.

32. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-32 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-32: Aggregate/Cement Products Wet-Cast Plant Emission Units and PTE for PM<sub>2.5</sub> and PM<sub>10</sub>**

EU	Description	Process tons/yr	Controlled PM <sub>2.5</sub> EF lbs/ton	Controlled PM <sub>10</sub> EF lbs/ton	PM <sub>2.5</sub> PTE tons/yr	PM <sub>10</sub> PTE tons/yr
AP22	Loader to 4 Comp Agg Bins	109,760	0.000013	0.000046	0.01	0.01
AP23	Belt Feeders to Belt 2	109,760	0.000013	0.000046	0.01	0.01
AP24	Belt 2 to Elevator	109,760	0.000013	0.000046	0.01	0.01
SP25	Elevator to Weigh Hopper	109,760	0.00036	0.0024	0.02	0.13
AP26	Weigh Hopper to Mixer	109,760	0.000013	0.000046	0.01	0.01
AP27	Concrete Mixer (Bin vent)	133,560	0.000013	0.000046	0.01	0.01
AP28	Mixer to Wet Concrete Molding	133,560	0.00	Wet Process	0.00	0.00
AP29	Cement Silo Loading	23,800	0.00051	0.0034	0.01	0.04
AP40a	Cement Unloading to Silo #2	23,800	0.00051	0.0034	0.01	0.04
AP30	Silo Screws to Mixer	23,800	0.00057	0.0038	0.01	0.05
AP40b	Fly Ash Silo loading via pneumatic transfer. Unload via enclosed auger	4,000	0.00074	0.0049	0.01	0.01
AP31	Storage Piles/Disturbed Surfaces	2.0 acres	0.249 lbs/acre-day	1.66 lbs/acre-day	0.09	0.61
AP48	Tumbler (BH) <sup>1</sup>	40,000	0.00005	0.00005	0.01	0.01
AP47	Hopper Belt to Tumbler	40,000	0.00001	0.00005	0.01	0.01
AP49	Tumbler to Belt Conveyor	40,000	0.00001	0.00005	0.01	0.01

<sup>1</sup>BH and Bin vent denote units vented to baghouses and bin vents. Emissions from baghouse and bin vent points are computed based on 75% capture efficiency and 99.5% control efficiency.

<sup>2</sup>Wet process (no emissions) denotes emission units processing materials with >10% moisture in the ¼" minus materials.

33. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-33 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-33: Media Blasting Emission Unit and PTE<sup>1</sup>**

EU	Description	PM <sub>10</sub> EF (lbs/1,000 lbs of abrasive)	PM <sub>10</sub> PTE lbs/hr	PM <sub>10</sub> PTE tons/yr
MB01	Media Blasting Operations, 48"x28"x28" enclosure vented to a dust collector.	0.69	0.50	0.25

<sup>1</sup>Based on a sand mass flow rate of 721.7 lbs/hr

34. The Permittee shall not allow the actual emissions from each emission unit/activity to exceed the PTE in Table IV-A-34 in any consecutive twelve month period. [AQR 12.5.2.3]

**Table IV-A-34: Gasoline Dispensing Emission Units and PTE**

EU	Description	M/N	S/N	VOC PTE (lbs/hr)	VOC PTE (tons/yr)
FT0 1	500 gallon above ground gasoline storage tank			0.06	0.26
FT0 2	500 gallon above ground gasoline storage tank			0.06	0.26

35. Unless specified otherwise below, the Permittee shall not discharge into the atmosphere, from any emission unit, exclusive of blasting activities (EU: A001a), any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
36. The Permittee shall not allow fugitive emissions from the fly ash and cement silo loading in excess of an average opacity of 20 percent. [AQR 26.1.1]
37. The Permittee shall not allow visible emissions from the asphalt plant in excess of an average of 20 percent opacity for a period or periods aggregating more than 6 minutes in any 60-minute period (EUs: D001 through D028). [40 CFR 60 Subpart I]
38. The Permittee shall not discharge into the atmosphere, from the asphalt plant, any gases that contain particulate matter in excess of 0.04 grains per dry standard cubic foot. [40 CFR 60 Subpart I]
39. The Permittee shall operate wet processes (>10% moisture in the ¼” minus materials) so no visible emissions are observed at any time. [AQR 12.5.2.3]
40. The Permittee shall not allow fugitive emissions from screens, conveyors, and transfer points that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, in excess of an average opacity of 10 percent. These units are listed in Table IV-A-35. [40 CFR 60 Subpart OOO]

**Table IV-A-35: OOO Applicable Emission Units, pre- April 22, 2008**

EU	Description
<b>Secondary Aggregate Plant</b>	
A013	Tunnel Belt BC-4a 3 to VGF 2a
A015	Jaw Crusher CR-1
A016	VGF 2a drop to Belt 4 (BH)
A018	Screen S-1 (Simplicity) (BH)
A017	Belt 4 to Screen S-1 (BH)
A020	Screen S-1 to Crusher CR-2 (BH)
A036	Screen S-1 underbelt to Belt 5
A022	Belt 6 Split to Belt 44 and 45
A025	Screen S-2 (JCI 8x20) (BH)
A023	Belt 44 to Screen S-2 (BH)
A027	Screen S-2 to Belt 46 (BH)
A034	Screen S-2 underbelt to Belt 7
A026	Screen S-3 (JCI 8x20) (BH)
A024	Belt 45 to Screen S-3 (BH)
A028	Screen S-3 to Belt 47 (BH)
A035	Screen S-3 underbelt to Belt 7
A029	Belt 46 to Belt 8 (BH)
A030	Belt 47 to Belt 8 (BH)
A032	Crusher CR-3 (BH)

EU	Description
A033	Crusher CR-3 to Belt 6 (BH)
A037	Belt 5 to Belt 43
A038	Belt 43 to Belt 7 or 62
A038a	Belt 62 to Belt 63
A039	Belt 7 to Stacker 9
<b>Overland Feed System</b>	
A041	Belt Feeds 1-3 to Tunnel Belt 10
A042	Belt 10 to Overland Belt 48 (BH)
A043	Overland Belt 48 to Belts 11 and 50 (BH)
A046	Belt 50 to Stacker 51
<b>Wash Plant #1</b>	
A080	VGF 3a through 4 to Belt 25
A081	Belt 25 Tunnel to Belt 74
A082	Belt 73 (Spare)
A107	Belt 39 to Surge Bin (recirc)
A083	Belt 74 (mod) to Belts 54, 55, and 30 via Surge Bin
A111	Belt 72 to Belt 74
<b>Wash Plant #2</b>	
A048	VGF 1 and 2 to Belt 12
A049	Belt 12 Tunnel to Belt 13
A050	Belt 13 to Surge Bin 4
A051	Belt 22 to Belt 17
A053	Belt 20 to Belt 21
A059	Crusher CR-5
A061	Belt 19 to Surge Bin 4 (recirc.)
<b>West Screen Plant</b>	
B001	Stockpile to Belt 1
B002	Belt 1 to Belt 3
B004	Belt 3 to Splitter (BH)
B004a	Splitter to Belt 4 (BH)
B006a	Splitter to Belt 5 (BH)
B003a	Reject Stacker (alt ops)
B006	Screen 1 ElJay (BH)
B005	Belt 4 to Screen 1
B022	Screen 1 to Belt 18
B008	Screen 2 ElJay (BH)
B007	Belt 5 to Screen 2
B024	Screen 2 to Belt 19
B013	Screen 3 (JCI) (BH)
B012	Belt 7 to Screen 3
B013	Screens to Belt 10
B028	Screen 3 to Belt 15
B028a	Screens to Belt 17
B039	Screen 3 to Belt 8
B018	Screens to Belt 20
B033	Belt 20 (rev) to Belt 11 or Belt 15
B029	Belt 14 to Belt 10 or Belt 16
B033	Belt 10 to Belt 11
B037	Belt 12 to Belt 9
B041	Belt 9 to Splitter (recirc)
B035	Cone Crusher

EU	Description
B043	Wet Screen
B020	Belt 15 to Stacker 4
B051	Belt 17 to Belt 2
B038	Belt 18 to Belt 13
B026	Belt 19 to Belt 13
B040	Belt 8 to Belt 13
B053	Belt 13 to Belt 13a
B031	Stacker 1 to Stockpile
B011	Belt 6 (spare)
<b>Type 2 Plant (Virgin and Recycle)</b>	
A012d	VGF2 to Belt 70 <sup>2</sup>
A012e	Belt 70 to Belt 2a Overland
A010	Loader to VGF Feeder
C003	VGF to Belt 3
C004	Belt 3 to Belt 4
C005a	Screen 3 Cedar Rapids
C005b	Belt 4 to Screen 3
C005c	Screen 3 to Stacker 22 (alt)
C005d	Screen 3 to Stacker 15 (alt)
C005e	Screen 3 to Underbelt
C005f	Screen 3 to Belt 5
C031	S3 Underbelt to Stacker
C006	Belt 5 to Belt 6 & 7 (splitter)
C008	Screen 1 Cedar Rapids
C007	Belt 6 to Screen 1
C016	Screen 1 to Belt 14
C009	Screen 2 Cedar Rapids
C009a	Screen 1 & 2 to Belt 8
C025	Screen 2 to Belt 21
C013	Belt 11 to Belt 12
C013a	Belt 12 to Belt 6&7 (splitter)
C017	Belt 14 to Belt 18a
C022	Belt 18a to Stacker 17
C027	Belt 20 to Belt 16
C019	Belt 16 to Stacker
C011	Belt 9 Spare
C035	Belt 19 Spare

41. The Permittee shall not allow fugitive emissions from crushers that commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, in excess of an average opacity of 15 percent. These units are listed in Table IV-A-36. [40 CFR 60 Subpart OOO]

**Table IV-A-36: OOO Applicable Emission Units, pre- April 22, 2008**

EU	Description
<b>Primary Feed (Mountain Top)</b>	
A02	Gyratory Crusher (crushing) and associated transfers
<b>Secondary Aggregate Plant</b>	
A015	Jaw Crusher CR-1 (Nordberg) (BH) and associated transfers
A020	Crusher CR-2 (Hazemag) (BH) and associated transfers

A032	Crusher CR-3 (Canica VSI) (BH) and associated transfers
<b>Wash Plant #2</b>	
A059	Crusher CR-5 (Canica VSI) and associated transfers
<b>West Screen Plant</b>	
B035	Cone Crusher (BH) and associated transfers
<b>Type 2 Plant (Virgin and Recycle)</b>	
A012b	Jaw Crusher CR-10 and associated transfers
C002	Jaw Crusher and associated transfers
C012	Horz. Shaft Impact Crusher and associated transfers

42. The Permittee shall not allow fugitive emissions from screens, conveyors, and transfer points that commenced construction modification, or reconstruction after April 22, 2008, not connected to baghouses, in excess of an average opacity of 7 percent. These units are listed in Table IV-A-37. [40 CFR 60 Subpart 000]

**Table IV-A-37: 000 Applicable Emission Units, post April 22, 2008**

EU	Description
<b>Secondary Aggregate Plant</b>	
A038c	Belt 64 at H.S.I. oversize reject (alt ops)
<b>Wash Plant #1</b>	
A103	Belt 37 to VSI Crusher 6a
A106a	VSI 6a to Belt BC59
A106b	Belt BC59 to Belt BC39
<b>Wash Plant #2 and Canica VSI Circuit</b>	
A120e	Belt 73 to Size Screen
A120a	Size Screen 3 Deck
A120f	Size Screen to Ubelt and Belt 79
A120b	Belt 79 to Belt 80
A120g	Belt 80 Recirc to Belt 72
A121a	Belt 77 to Dewater Screen
A121	Dewatering Screen
A121b	Dewater Screen to Belt 73
A122	Screen Ubelt to Stacker
A122b	Belt 74 to Belt 81
A122c	Belt 81 to Belt 82
A122d	Belt 82 to BC12
A124	Belt (Spare)
<b>Rip Rap/Miscellaneous Screening</b>	
H08	Trommel Screen Hircules HT182
H02	Oversize Reject #1 - #4
H05	Fines Transfer Belt
<b>West Screen Plant</b>	
B016	Belt 16 to Stacker 2
B054	Belt 13a to Washer or Stacker 1
B055	Overland Belt Conveyor Transfer to Belt (to BC10 Tert. feed)
B047	7 x 20 Dewater Screen (spare)
B046	Belt Conveyor Transfer to Belt (spare)
B046a	Loader to Aux Refeed Hopper w/Feeder (alt)
<b>Type 2 Plant (Virgin and Recycle)</b>	
A010	Belt 2a to VGF Feeder or SP

EU	Description
C009	Screen 2 Cedar Rapids
C008a	Belt 7 to Screen 2
C026	Belt 21 to Belt 20
<b>Road Runner Portable Screen</b>	
RS01	Loader to Hopper
RS03	Road Runner Incline Screen
RS02	Conveyor to Screen
RS04	Screen to Stacker 1
RS06	Screen to Stacker 2
RS08	Underbelt Transfer to Stacker 3
<b>Blending System</b>	
BS02	Belt Feeders to Belt
BS03	Splitter to Alt Stacker (pugmill bypass)
D013d	Pugmill Mixer (mixes supplement, water, and aggregate)
BS05A	Belt to Pugmill
D013e	Belt Conveyor to Stacker
<b>Cyclone Sand Loadout System</b>	
CS01	Loader to Masterscreen Feed Hopper w/ Static Grizzle

43. The Permittee shall not allow visible emissions from crushers that commenced construction modification, or reconstruction after April 22, 2008, not connected to baghouses, in excess of an average opacity of 12 percent. These units are listed in Table IV-A-38. *[40 CFR 60 Subpart 000]*

**Table IV-A-38: 000 Applicable Emission Units, post April 22, 2008**

EU	Description
<b>Wash Plant #1</b>	
A103a	VSI CR-7a and associated transfers
A106a	VSI Crusher 6a and associated transfers
A120	VSI Crusher CR-9 and associated transfers

44. The Permittee shall not allow visible emissions from baghouses at the crushing and screening plants in excess of an average of 7 percent opacity. *[40 CFR 60 Subpart 000]*
45. The Permittee shall not discharge into the atmosphere emissions from any stack subject to 40 CFR 60 Subpart 000 which contains particulate matter in excess of 0.05 g/dscm. *[40 CFR 60 Subpart 000]*
46. The Permittee shall not discharge from any source whatsoever quantities of air contaminants or other material which cause a nuisance. *[AQR 40.1]*

**B. Production Limitations**

Aggregate/Asphalt Processing

1. The Permittee shall limit the amount of material mined and processed through the primary feed at this source to 5,000,000 tons per year.

2. The Permittee shall limit the amount of material processed at the secondary plant to 5,000,000 tons per year.
3. The Permittee shall limit the blasting to area to 1,109,836 square feet per year.
4. The Permittee shall limit the amount of blasting agent used to 1,500 tons per year.
5. The Permittee shall limit the throughput of Wash Plant 1 to 2,000,000 tons per year.
6. The Permittee shall limit the throughput of Wash Plant 2 plant to 1,500,000 tons per year.
7. The Permittee shall limit the throughput of the Canica VSI Circuit to 200,000 tons per year.
8. The Permittee shall limit the throughput of the Rip Rap Plant and Trommel Screen System to 150,000 tons per year.
9. The Permittee shall limit the throughput of the West Screen Plant to 1,500,000 tons per year.
10. The Permittee shall limit the throughput of material mined and processed through the Type II Plant (Virgin and Recycle) to 700,000 tons per year.
11. The Permittee shall limit the amount of material mined for the Type II Plant to 500,000 tons per year.
12. The Permittee shall limit the throughput in the Asphalt Plant to 660,000 tons per year.
13. The Permittee shall limit the throughput in the Road Runner Portable Screen Plant to 50,000 tons per year.
14. The Permittee shall limit the throughput in the Blending System to 500,000 tons per year.
15. The Permittee shall limit the throughput of washed cyclone sand to 15,000 tons per year in the cyclone sand loadout system.
16. The Permittee shall limit the hauling to the limits in Table IV-A-23 (EU: H06).
17. The Permittee shall limit the stockpile area to 45.0 acres (EU: G01).

#### Southern Nevada Ready Mix Plant

18. The Permittee shall limit the throughput in the Southern Nevada Ready Mix Plant to 411,625 tons per year.
19. The Permittee shall limit the operation of the Fire-Storm water heater to 1,200 hours per year (EU: F023)

#### Con-E-Co Concrete Batch Plant

20. The Permittee shall limit the amount of concrete processed through the Con-E-Co Concrete Batch Plant to 50,000 yards per year. Washed aggregate and rock usage shall be limited to 80,850 tons per year.

Precast Management Mobile Mixer

21. The Permittee shall limit the throughput of material processed at the Precast Management Mobile Mixer to 23,700 tons per year.

CalPortland Plant One

22. The Permittee shall limit the throughput of material processed at CalPortland Plant One 725,000 tons per year.

CalPortland Plant Three

23. The Permittee shall limit the production of concrete products to 600,000 tons per year.

Aggregate/Cement Products Wet-Cast

24. The Permittee shall limit the production of wet cast pavers to 133,560 tons per year.

Diesel-Powered Units

25. The Permittee shall limit the operation of the diesel-powered units (EUs: A123, STM39, GW01, RS10, MM06, MM08, and STM68) as specified in Table IV-B-1:

**Table IV-B-1: Maximum Allowable Operational Limits**

EU	Hours/Year
A123 Caterpillar Diesel Generator, 306 hp	2,000
STM39 Caterpillar Generator, 306 hp	2,187
GW01, MultiQuip 75 hp	2,560
RS10, Duetz 63 hp	500
MM06 Perkins Diesel Genset 21 hp	500
MM08 MQ Power Genset 30 hp	1,200
STM68 490 hp Genset	2,000

**C. Emission Controls**

Aggregate, Concrete, and Asphalt Processing:

1. The Permittee shall install, maintain, and operate baghouses on equipment specified in Table IV-C-1 at all times the affiliated equipment is operating. (For clarification purposes, Table IV-C-1 identifies applicable baghouse control devices at the Aggregate Processing and Asphalt plants) [AQR 12.4.3.1(e)]:

**Table IV-C-1: List of Emission Units with Baghouse Control**

EU	Description	Baghouse ID
A015	Jaw Crusher CR-1 (Nordberg)	DC1
A016	VGF drop to Belt 4	DC1

EU	Description	Baghouse ID
A018	Belt 4 to Screen S-1 Screen S-1 (Simplicity)	DC1
A020	Screen to Crusher CR-2 Crusher CR-2 (Hazemag) Crusher CR-2 to Belt 6	DC1
A025	Belt 45 to Screen S-2 Screen S-2 (JCI 8x20) Screen S-2 to Belt 46	DC1
A026	Belt 45 to Screen S-3 Screen S-3 (JCI 8x20) Screen S-3 to Belt 47	DC1
A029	Belt 46 to Belt 8 Belt 47 to Belt 8	DC1
A032	Belt 8 to Crusher CR-3 Crusher CR-3 (Canica VSI) Crusher CR-3 to Belt 6	DC1
A040	Stacker 9 to Surge pile 2	DC1
A041	Belt 10 to Overland Belt 48 Belt 48 to Belts 11 and 50	LMC West 2 hp model 5x4 VSD6
B001	Belt 3 to Splitter Splitter to Belt 4 Splitter to Belt 5	DC2
B006	Screen 1 (EIJay)	DC2
B008	Screen 2 (EIJay)	DC2
B013	Screen 3 (JCI)	DC2
B035	Cone Crusher	DC2
D009	Screen to Conveyor 8	Astec 200 hp (twin) Pulsejet
D014	Drum Mixer	Astec 200 hp (twin) Pulsejet
F014a	Batcher 18 to Truck	Donaldson 10 hp
F031	Transit Truck Loading	Donaldson 10 hp

DC1 – Fabric Filter Air Systems 200 hp Pulsejet SN5316

DC2 – Fabric Filter Systems 125 hp Pulsejet SN 5315

2. The Permittee shall ensure that an effective seal is installed around the baghouses and binvents, and the pressure drop across each baghouse cell and binvents shall be maintained within the limits specified by the manufacturer. [AQR 12.4.3.1(e)]
3. The Permittee shall operate fly ash silo loading, cement silo loading, and weigh batcher loading associated with the concrete batch plant, with a bin vent dust filter with a manufacturer's control efficiency of 99.5 percent [AQR 12.4.3.1(e)]
4. The Permittee shall utilize an automated air-to-fuel ratio control system that optimizes burner performance in the asphalt plant drum mixer. The system shall be maintained and calibrated according to the specifications of the manufacturer and be employed at all times the drum mixer is operated (EU: D014).
5. The Permittee shall maintain a water spray system in good operating condition, as verified by a daily inspection, and be used at all times during the processing of the material as need to mitigate fugitive emissions. This shall include but not be limited to

crushing, screening, transfer points, drop points and stacker points excluding washed product processing. The Permittee shall investigate and correct any problems with the control equipment before resuming operations. The Control Officer at any time may require additional watersprays at pertinent locations if an inspection by the Control Officer indicates that the opacity limit is being exceeded. [AQR 12.4.3.1(e)]

Fugitive Emissions:

6. The Permittee shall take continual measures to control fugitive dust (e.g. wet, chemical or organic suppression, enclosures, etc.) at all mining and aggregate processing operations, material transfer points, stockpiles, truck loading stations and haul roads throughout the source. The Control Officer may at any time require additional water sprays or other controls at pertinent locations if an inspection indicates that opacity limits are being exceeded. [AQR 12.4.3.1(e)]
7. The Permittee shall sweep and/or rinse roads accessing or located on the site as necessary to remove all observable deposits and so as not to exhibit an average opacity in excess of 20 percent [AQR 12.4.3.1(e)]
8. The Permittee shall control fugitive emissions on unpaved roads accessing or located on the site by treating with chemical or organic dust suppressant and watered as necessary, or paved, or graveled, or have an alternate, Control Officer approved, control measure applied, so as not to exhibit an average opacity in excess of 20 percent. [AQR 12.4.3.1(e)]
9. The Permittee shall control fugitive dust emissions from screens, crushers, conveyors, storage piles, transfer points, and nonmetallic mineral processing equipment not connected to baghouse controls or part of the wet process by operational water sprays as needed to prevent exceeding opacity standards. [AQR 12.4.3.1(e)]
10. The Permittee shall not cause or allow controllable fugitive dust to become airborne without taking reasonable precautions. [AQR 12.4.3.1(e)]
11. The Permittee shall not cause or allow the discharge of controllable fugitive dust in excess of 100 yards from the point of origin or beyond the lot line of the property on which the emissions originate, whichever is less. [AQR 12.4.3.1(e)]
12. The Permittee shall control fugitive dust emissions from any disturbed open area or disturbed vacant lot that are owned or operated by the Permittee by paving, applying gravel, applying a dust palliative or applying water to form a crust. [AQR 12.4.3.1(e)]
13. The Permittee shall control particulate matter emissions from any unpaved parking lot owned or operated by the Permittee by paving, applying a dust palliative or by an alternate method approved by the Control Officer regardless of the number of days of use. [AQR 12.4.3.1(e)]
14. Where a stationary source, or a portion thereof, is to be closed or idled for a period of 30 days or more, long-term stabilization of disturbed areas shall be implemented within 10 days following the cessation of active operations. Long-term stabilization includes, but is not limited to one or more of the following: applying water to form a crust, applying palliatives, applying gravel, paving, denying unauthorized access or other

effective control measure to prevent fugitive dust from becoming airborne. [AQR 12.4.3.1(e)]

Water Heaters:

15. The Permittee shall maintain and operate the propane-fired water heater (EU: F023) with burners rated for emission rates of 30 ppm NO<sub>x</sub>, corrected to 3 percent oxygen.
16. The Permittee shall maintain and operate the propane-fired water heater (EU: F023) with burners rated for emission rates of 100 ppm CO, corrected to 3 percent oxygen.

Diesel Engines:

17. The Permittee shall operate each of the Caterpillar diesel generators with turbochargers and aftercoolers (EUs: A123, STM39, and STM68).
18. The Permittee shall use only low sulfur diesel fuel (0.05 percent or less sulfur by weight) in any diesel engine (EUs: A123, MM06, MM08, STM39, STM68, GW01, and RS10).
19. The Permittee shall use only diesel fuel with a maximum sulfur content of 500 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume in diesel engines subject to 40 CFR 60 Subpart IIII (EUs: A123, MM06, and MM08). [40 CFR 60 Subpart IIII]
20. The Permittee shall maintain each generator (EUs: A123, MM06, MM08, STM39, STM68, GW01, and RS10) as follows, unless the manufacturer's specifications are more stringent: [40 CFR 63 Subpart ZZZZ]
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - b. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first; and
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Media Blasting Unit

21. The Permittee shall control media blasting operations by performing all media blasting in an enclosure and venting the enclosure to a dust collector. [AQR 12.4.3.1(e)]

Gasoline Dispensing/Storage

22. The Permittee shall implement control technology requirements pursuant to 40 CFR 63 Subpart CCCCCC as follows:
  - a. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Preventative measures to be taken include, but are not limited to, the following: [40 CFR 63.11116]
    - i. Minimize gasoline spills;
    - ii. Clean up spills as expeditiously as practicable;

- iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
- iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

General Emission Controls:

23. The Permittee must comply with control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. [AQR 12.4.3.1(e)]

**D. Monitoring**

Water Heater:

1. The Permittee shall conduct burner efficiency tests in accordance with the manufacturer's specifications and specifications for good combustion practices at least once per calendar year (EU: F023). [AQR 12.4.3.1(e)]
2. The Permittee shall operate the boiler with a nonresettable hour meter, or other device approved in advance by the Control Officer, and monitor its hours of operation (EU: F023). [AQR 12.4.3.1(e)]
3. The Permittee shall not be required to perform a burner efficiency test if the actual hours of operation are zero. This requires that an hour meter be installed and written records must begin to be kept prior to the beginning of the calendar year for which the option is to be exercised. (EU: F023). [AQR 12.4.3.1(e)]

Aggregate, Concrete, and Asphalt Processing:

4. The Permittee is required to comply with the compliance demonstration requirements of 40 CFR 60, Subpart OOO and Subpart I. [40 CFR 60 Subpart OOO and Subpart I]
5. The Permittee shall maintain a weigh belt immediately after the primary crusher (EU: A015) to monitor throughput. This weigh belt shall conform to ASTM standards and be operated, maintained and calibrated according to the specifications of the manufacturer.
6. Permittee shall monitor the material throughput of each process that has a production limit identified in Section III-B of this permit. The throughput shall be monitored and recorded at least monthly. [AQR 12.4.3.1(e)]
7. The Permittee shall operate a continuous automated particle sampler (Beta Attenuation or EPA approved equivalent) pursuant to 40 CFR Part 53. The automated particle sampler shall be capable of speciation and located in a site approved by the Control Officer. [AQR 12.4.3.1(e)]

8. The Permittee shall conduct daily monitoring of the pressure drop across each baghouse cell and each binvent with the installation and operation of a pressure differential (Magnehelic) gauge per manufacturer's specifications. [AQR 12.4.3.1(e)]
9. The Permittee shall conduct daily visual observations of binvents, baghouse and/or stack discharges to verify that visible emissions are not present. If there are visual emissions, the Permittee shall cease operations producing the emissions until the problem is corrected. [AQR 12.4.3.1(e)]
10. The Permittee shall conduct monthly visual inspection of the baghouse and binvent interior for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within 5 working days of the discovery of the malfunction. Should the malfunction cause the baghouse to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed. [AQR 12.4.3.1(e)]
11. The Permittee shall conduct a daily visual emissions check for visible emissions from emissions units while they are in operation. [AQR 12.4.3.1(e)]
12. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check. [AQR 12.4.3.1(e)]
13. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall: [AQR 12.4.3.1(e)]
  - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
  - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
14. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. [AQR 12.4.3.1(e)]
15. The Permittee shall conduct daily inspections on all water spray systems used during the processing of the material to verify good working condition. [AQR 12.4.3.1(e)]
16. Postconstruction monitoring activities shall be subject to DAQ Ambient Monitoring Policy, the EPA interim document for continuous PM10 monitoring and the relevant provisions of 40 CFR, Parts 50, 51, 52, 53 and 58. [AQR 12.4.3.1(e)]

## **E. Testing**

1. Performance testing is subject to 40 CFR 60 (as amended) and DAQ Guideline on Performance Testing (as revised). Performance testing shall be the instrument for

determining compliance with emission limitations set forth in this ATC. [AQR 12.4.3.1(e)]

2. Compliance with the PM<sub>10</sub>, NO<sub>x</sub> and CO emissions standards specified in this permit for the asphalt plant drum mixer shall be demonstrated at least once every 5 years for PM<sub>10</sub>, NO<sub>x</sub>, and CO with the EPA methods referenced in Table IV-E-1 (EU: D014). The automated burner optimizing system shall be calibrated at least during every performance test. [AQR 12.4.3.1(e) and 40 CFR 60 Subpart I]

**Table IV-E-1: Asphalt Drum Mixer Performance Testing Requirements (EU: D014)**

Test Point	Pollutant	Method	Frequency
Exhaust Outlet Stack	PM	EPA Method 5	Every 5 Years
Exhaust Outlet Stack	NO <sub>x</sub>	EPA Method 7E	Every 5 Years
Exhaust Outlet Stack	CO	EPA Method 10 analyzer	Every 5 Years
Stack Gas Parameters	-	EPA Methods 1, 2, 3 or 3A, and 4	Every 5 Years

Refer to Table IV-C-1 for baghouse identification.

3. Compliance with the opacity and particulate matter standards specified in Table IV-E-3 for baghouse stacks shall be demonstrated in accordance with 40 CFR 60 Appendix A: Method 9 (Standards for Opacity) conducted and recorded every 5 years and 40 CFR 60 Appendix A: Reference Method 5 or 17 (concentration) conducted and recorded initially and at least once every 5 years. [AQR 12.4.3.1(e) and 40 CFR 60 Subpart I and Subpart OOO]

**Table IV-E-2: Baghouse Performance Testing Methods**

Test Point	Pollutant	Test Type	Frequency
Exhaust Outlet Stack	PM	EPA Method 5 or 17	Every 5 Years
Stack Gas Parameters	-	EPA Methods 1, 2, 3 or 3A, and 4	Every 5 Years

Refer to Table IV-C-1 for baghouse identification.

**Table IV-E-3: Opacity and PM Testing Standards and Frequencies**

Baghouse ID	Applicable Limits		Stack Test Frequency
	Opacity	PM Limit	
DC1	7% Subpart OOO	0.05 g/dscm Subpart OOO	Every 5 Years
LMC West 2 hp model 5x4 VSD6	7% Subpart OOO	0.05 g/dscm Subpart OOO	Every 5 Years
DC2	7% Subpart OOO	0.05 g/dscm Subpart OOO	Every 5 Years
Astec 200 hp (twin) Pulsejet	20% Subpart I	0.04gr/dscf Subpart I	Every 5 Years
Donaldson 10 hp	20%	(not subject to NSPS)	Every 5 Years

Refer to Table IV-C-1 for baghouse identification.

4. The Permittee shall conduct additional performance tests when any emission unit increases its hourly production rate beyond the rate permitted and at which

performance testing was conducted, or when any equipment addition or modification increases the potential to emit. [AQR 12.4.3.1(e)]

5. The Permittee shall conduct initial performance tests 60 days after achieving the maximum production rate at which the source will be operated but no later than 180 days after initial start-up. [AQR 12.4.3.1(e)]
6. The Permittee shall conduct subsequent performance testing on or before the five-year anniversary date of the initial performance test. [AQR 12.4.3.1(e)]
7. The Permittee shall submit all required compliance and performance testing protocols for prior approval from DAQ Control Officer no earlier than 90 days prior to, and no later than 45 days prior to, the proposed dates of performance testing. [AQR 12.4.3.1(e)]
8. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA. [40 CFR 60.8(b)]
9. The Permittee shall submit a report describing the results of the performance test to DAQ Control Officer within 60 days from the end of the performance test. [AQR 12.4.3.1(e)]
10. The Permittee that fails to demonstrate compliance with the emissions standard or limitations during any subsequent performance test shall submit a compliance plan to DAQ Control Officer within 90 days from the end of the performance test. [AQR Section 10]
11. The Control Officer may require additional or more frequent performance testing. [AQR 4.5]

#### **F. Record Keeping**

1. All records and logs required by this document shall be kept by the Permittee and made available to the Control Officer for inspection immediately upon request.
2. All records and logs, or a copy thereof, shall be kept on site for a minimum of 5 years from the date the measurement or data was entered.
3. The Permittee shall maintain onsite the following records for reporting [AQR 12.5.2.6(d)]:
  - a. monthly and rolling 12 months total production of materials by each process/plant as listed in Section IV-A of this permit;
  - b. hours of operation of each engine/generator in a daily log with monthly summations (EUs: A123, MM06, MM08, STM39, STM68, GW01, and RS10);
  - c. amount of blasting agent used per year and the square feet per year of area blasted as listed in Tables IV-A-4 and IV-A-5;
  - d. hours of operation of the propane-fired water heater (EU: F023);
  - e. hours of operation of the diesel-powered units (EUs: A123, STM39, STM68, GW01, RS10, MM06, and MM08) with monthly summations;

- f. length of on-site haul roads as listed in Table IV-A-22;
  - g. area of stockpiles as listed in Table IV-A-23;
  - h. hours of operation of the media blasting unit (EU: MB01);
  - i. monthly throughput of gasoline (EUs: FT01 and FT02); and
  - j. annual emissions for each unit and for each plant in tons per year (consecutive 12-month total).
4. The Permittee shall maintain records on-site that include, at a minimum [AQR 12.5.2.6(d)]:
- a. sulfur content of diesel fuel;
  - b. inspection logs from Method 9 observations;
  - c. logs from daily water spray inspections;
  - d. log of dust control measures applied to roads, surfaces, lots, etc.;
  - e. cetane index or aromatic content (in percent by volume) of diesel fuel;
  - f. manufacturer's engine data showing compliance with the emission standards;
  - g. daily readings of pressure drop across each baghouse;
  - h. monthly baghouse and binvent inspections;
  - i. instances of the required daily opacity readings on bin vents, baghouses and/or stack discharges where visible emissions were observed and description of any action taken;
  - j. a minimum of hourly readings of the automated air-to-fuel ratio control system that optimizes burner performance on the asphalt plant drum mixer (EU: D014) during operation;
  - k. maintenance on all emission control devices;
  - l. ambient air monitoring station data;
  - m. records of burner efficiency tests;
  - n. monthly throughput on the weighbelt after the primary crusher (EU: A015);
  - o. annual emissions for each emission unit in tons per year; and
  - p. results of performance testing.
5. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). [AQR 12.5.2.6(d)]
6. The Permittee is required to comply with the record keeping requirements of 40 CFR 60, Subpart 000. [40 CFR 60, Subpart 000]
7. Records and data required by this permit and maintained by Permittee may be audited, at the Permittee's expense, at any time by a third party selected by the Control Officer. [AQR 4.4]

**G. Reporting**

1. All report submissions shall be addressed to the attention of the Control Officer. [AQR 14.3, 21.4, and 22.4]
2. All reports shall contain the following [AQR 12.5.2.6(d)]:
  - a. a certification statement on the first page, i.e., “I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete.” (A sample form is available from DAQ); and
  - b. a certification signature from a responsible official of the company and the date certification.
3. The Permittee shall submit semi-annual reports to the Control Officer. [AQR 12.5.2.6(d)]
4. The following requirements apply to semi-annual reports [AQR 12.5.2.6(d)]:
  - a. The report shall include a semi-annual summary of each item listed in Section IV-F-3.
  - b. The report shall include semi-annual summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.
5. The Permittee shall report to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) any upset, breakdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below [AQR 25.6.1 and AQR 12.1.4.1(d)(3)(B)]:
  - a. within twenty-four (24) hours of the time the Permittee learns of the event, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email.
  - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
6. The Permittee shall report to the Control Officer deviations that do not result in excess emission, with the semi-annual reports. Such reports shall include the probable cause of deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)4(B)]
7. Regardless of the date of issuance of this permit, the schedule for the submittal of reports to the Control Officer, shall be as outlined in Table IV-G-1 [AQR 12.5.2.6(d)]:

**Table IV-G-1: Reporting Schedule**

Required Report	Applicable Period	Due Date <sup>1</sup>
Semi-annual Report for 1st half of the year.	January, February, March, April, May, June	July 30 each year

Required Report	Applicable Period	Due Date <sup>1</sup>
Semi-annual Report for 2nd half of the year. Any additional annual records required.	July, August, September, October, November, December	January 30 each year
Annual Emission Inventory Report	Calendar Year	March 31 each year
Excess Emission Notification	As Required	Within 24 hours of the onset of the event
Excess Emission Report	As Required	Within 72 hours of the notification
Deviation Report	As Required	Along with semi-annual reports
Performance Testing	As Required	Within 60 days from the end of the test

<sup>1</sup> Each report shall be received by DAQ on or before the due date listed. If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

8. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. *[AQR 4.4 and AQR 12.5.2.6(d)]*
9. This source is required to comply with the reporting and notification requirements of 40 CFR 60, Subpart OOO.

**H. Mitigation**

1. The source has no federal offset requirements associated with this permitting action. *[AQR 12.7]*