DES
DEPARTMENT OF ENVIRONMENT AND SUSTAINABILITY
air quality desert conservation PROGRAM sustainability

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PART 70 OPERATING PERMIT
TECHNICAL SUPPORT DOCUMENT
(STATEMENT of BASIS)

APPLICATION FOR:
Renewal to Operating Permit

PREPARED BY:
Amrize Southwest Incorporated

FOR:
Amrize Southwest Incorporated

Source Name: Amrize Southwest Incorporated
Source ID: 00372

SOURCE LOCATION:
5300 Sloan Road
Las Vegas, Nevada 89124

Primary SIC 2951: Asphalt Paving Mixtures and Blocks
Primary NAICS 324121: Asphalt Paving Mixture and Block Manufacturing

Secondary SIC 1442: Construction Sand and Gravel
Secondary NAICS 212321: Construction Sand and Gravel

Application Received: August 22, 2023

TSD Date: **September 9, 2025**

William Johnson

EXECUTIVE SUMMARY

Amrize Southwest Incorporated is a hot mix asphalt plant, operating in the Hydrographic Area of 212 – Las Vegas Valley. Hydrographic Area 212 is currently designated as an attainment area for all regulated air pollutants except ozone, for which it was classified as a serious nonattainment area on January 21, 2025.

Amrize Southwest Incorporated is not a categorical source, as defined in AQR 12.2.2(j), but instead, belongs to a source category which, as of August 7, 1980, is being regulated under Section 111 or Section 112 of the Clean Air Act (Asphalt Plants). As a result, the fugitive emissions from stockpiles, haul roads, drilling, blasting, and mining will be taken into account, when calculating and/or determining the emissions for source status.

With the fugitive emissions taken into account, Amrize Southwest Incorporated is a major Part 70 source of PM_{10}, a synthetic minor source of $PM_{2.5}$, NO_x, CO, and VOC, and a minor source of SO_2, and HAP.

Amrize Southwest Incorporated is also a source of greenhouse gases (GHG). The Division of Air Quality (DAQ) will continue to require Amrize Southwest Incorporated to estimate their GHG potential to emit in terms of each individual pollutant (CO_2, CH_4, N_2O, SF_6 etc). The TSD includes these PTEs for informational purposes.

After a technical review of the application (submitted by Amrize Southwest Incorporated), DAQ is issuing a Renewal to the Part 70 Operating Permit. This will include modifications to the West Screen Plant, the Secondary Feed Plant, and the Asphalt System Plant.

Amrize Southwest Incorporated will continue to be subject to the federal requirements of 40 CFR Part 60 Subpart OOO, 40 CFR Part 60 Subpart I, 40 CFR Part 60 Subpart IIII, and 40 CFR Part 63 Subpart ZZZZ.

Amrize Southwest Incorporated will continue to be designated as an existing Part 70 stationary source because the Source PTE (with fugitives) is above the major source (Title V) threshold of 100 tons per year for PM_{10}, but below the major stationary source threshold of 250 tons year for a major PSD source. The Source PTE provided below in Table 1.

Table 1. Source PTE – Summary (tons per year)

Pollutants	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S	GHG
PTE (without fugitives)	100.64	21.75	36.40	47.68	1.33	14.65	1.88	5.99	15,453.18
PTE (with fugitives)	175.31	32.44	42.34	78.40	1.33	14.65	1.88	5.99	15,453.18

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I. ACRONYMS

Table I-1. List of Acronyms

Acronym	Term
ANFO	ammonium nitrate-fuel oil
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
BLM	Bureau of Land Management
CF	control factor
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CD	control device
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
EF	emissions factor
EPA	U.S. Environmental Protection Agency
EU	emission unit
g/dscm	gram per dry standard cubic meter
gr/dscf	grains per dry standard cubic feet
GHG	greenhouse gas
HA	Hydrographic Area
HAP	hazardous air pollutant
hp	horsepower
kW	kilowatts
MMBtu/hr	Million British Thermal Units per Hour
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NO_X	nitrogen oxide(s)
$PM_{2.5}$	particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10}	particulate matter less than 10 microns in aerodynamic diameter
PSD	prevention of significant deterioration
PTE	potential to emit
RACT	Reasonably Achievable Control Technology
SCC	Source Classification Code
SIC	Standard Industrial Classification
SIP	State Implementation Plan

Acronym	Term
SO_2	sulfur dioxide
SOP	standard operating procedure
TDS	Total Dissolved Solids
TPH	tons per hour
UTM	Universal Transverse Mercator
VGF	vibrating grizzly feeder
VMT	vehicle miles traveled
VOC	volatile organic compound

II. SOURCE DESCRIPTION

A. GENERAL

Permittee:	Amrize Southwest Incorporated
Mailing Address:	4675 West Teco Avenue, Suite 140
	Las Vegas, Nevada 89118
Responsible Official:	Ahmed Hamadi
Phone Number:	(702) 649-6250

B. SOURCE DESCRIPTION

Amrize Southwest Incorporated is a hot mix asphalt plant, which will consist of the following operations:

- Primary Feed Plant
- Secondary Feed Plant
- Overland Feed System
- Wash Plant 1
- Wash Plant 2
- Rip Rap / Miscellaneous Screening Plant
- West Screen Plant
- Auxiliary Refeed System
- Type II Plant – Alternate Operating Scenario
- Type II Plant – Virgin and Recycle
- Asphalt System Plant
- Road Runner Portable Screen Plant
- Blending System Plant
- Coyote Portable Plant
- Portable Crushing Plant
- Continuous-Duty Generators
- Media Blasting
- Gasoline Dispensing Operation
- Mining
- Drilling and Blasting
- Haul Roads
- Stockpiles

The source also has two aboveground storage tanks (diesel) and three natural gas water heaters (each rated at 0.900 MMBtu/hr), which will all be designated as insignificant activities.

The two lights stands (rated at 12.1 hp and 13.0 hp), which were previously listed as insignificant activities, will now be considered and designated as nonroad engines.

When Amrize Southwest Incorporated initially applied for an air quality permit, the facility was operating in an area that was (at the time) designated as an area of nonattainment. Because of this designation, Amrize Southwest Incorporated was classified as a Title V source for PM.

However, after the area of nonattainment was reclassified to an area of attainment, Amrize Southwest Incorporated was eligible to be reclassified from a major Title V source for PM to a synthetic minor source for PM_{10} and $PM_{2.5}$.

On August 22, 2023, Amrize Southwest Incorporated submitted an application to renew their existing Title V operating permit and to reclassify it to synthetic minor permit (for PM_{10} and $PM_{2.5}$). The application also included the removal of the following five plants:

- Silver Star Ready Mix Plant
- Con-E-Co Concrete Batch Plant
- Western Pacific Precast Ready Mix Plant
- Cal Portland 1
- Cal Portland 3

However, the removal of these plants did not establish Amrize South Incorporated as a synthetic minor source for PM_{10} and $PM_{2.5}$. Reason being, Amrize South Incorporated operates a hot mix asphalt plant, which belongs to a source category that is regulated under Section 111 or Section 112 of the Clean Air Act. As a result, the fugitive emissions from stockpiles, haul roads, drilling, blasting, and mining are taken into account when calculating and/or determining the emissions for source status. With this condition in place, Amrize Southwest Incorporated exceeds the major source threshold for PM_{10} and will remain as a major Part 70 source of PM_{10}.

C. PERMITTING HISTORY

This is a Renewal to the Part 70 Operating Permit. Table II-C-1 shows the permitting history for Amrize Southwest Incorporated, with a sequential list of all issued permitting actions.

Table II-C-1. Permit History

Issuance Date	Description
November 30, 2012	Part 70 OP Initial
June 20, 2013	Part 70 OP Minor Revision
January 31, 2014	Part 70 ATC Significant Revision
November 25, 2014	Part 70 OP Minor Revision
March 6, 2015	Part 70 OP Administrative Revision
February 18, 2016	Part 70 OP Minor Revision
October 10, 2016	Part 70 OP Minor Revision
November 6, 2019	Part 70 OP Renewal
April 16, 2020	Part 70 Minor Revision
November 24, 2021	Part 70 OP Reopen for Cause
July 13, 2022	Part 70 OP Administrative Revision
August 3, 2023	Authority to Construct Permit

Table II-C-2 shows the Prior Notification Forms (PNF) that have been processed since the issuance of the last operating permit.

Table II-C-2. Prior Notification Forms

Issuance Date	Description
June 22, 2022	Approval of utilizing temporary equipment in place of the permitted Gyro system (EUs: A02, A02a, A02b, A012).
July 25, 2022	Approval of temporarily replacement of the existing wash plant crusher CR-5 and associated conveyor belt (EUs: A059 and A060) with a Cemco AEV-80 Portable VSI - max 275 TPH crusher and conveyor.
August 22, 2022	Approval of temporary equipment that will operate in place of currently authorized equipment. • Current Authorization Crusher 6a - Fully saturated wet process, Associated Conveyor Belt • Temporary Authorization Request: Temp Wet Plant Crusher - with an associated conveyor Cemco AEV-80 Portable VSI - max 275 TPH and Superior 36" x 60' stackable conveyor
September 19, 2022	To replace the current temporary equipment (approved on June 22, 2022) with another set of temporary equipment: Temp Primary Crusher - with an under belt and return belt, KPI Model VS4450 Portable Pioneer Jaw Plant with VGF, Temporary diesel non-road engine for power - CAT Model C15 Tier 4 certified engine, 540 HP and Temporary stacker
April 4, 2024	like-in-kind replacement of existing continuous-duty generator
July 11, 2024	temporary replacement of crusher (EU: A02)
February 10, 2025	date of manufacture provided for replacement generator (from PNF submitted on April 4, 2024) to validate generator is subject to 40 CFR Part 60 Subpart IIII and not 40 CFR Part 60 Subpart ZZZZ as a result, no change in applicable requirements and/or reduction in generator's potential to emit

D. PERMITTING ACTION

The permitting action for Amrize Southwest Incorporated is a Part 70 Operating Permit Renewal, which will include the following revisions:

Miscellaneous – External Request by Source

- adding a screen (EU: B100), as an emission unit
- the new screen (EU: B100) will be located at the West Screen Plant, but the exact purpose and/or operation of the new screen has yet to be determined
- removing a continuous-duty generator (EU: A123d), from ATC issued on August 3, 2023

Miscellaneous – Internal Request by Compliance

- Compliance submitted a pending file on July 8, 2021, requesting an update to the operating permit to correct the visible emission condition for 40 CFR Part 60 Subpart I and the Method 9 observation time. The pending file request has been approved and the revisions have been applied to the permit.

- Compliance submitted a pending file on April 12, 2022, requesting verification of the Source PTE. Because this current permitting action (Renewal) consists of numerous changes to the source, the Source PTE will be recalculated. This pending file request has been approved and the revisions have been applied to the permit.

- Compliance submitted a pending file on June 9, 2022, requesting the following:

  – updating the emission unit information (make, model number, serial number, etc) for the continuous-duty generators, operating at the facility

  – updating various CAM conditions in the operating permit

  – updating various baghouse conditions in the operating permit

  This pending file request has been approved and the revisions have been applied to the permit.

- Compliance submitted a pending file on May 4, 2023, requesting verification of the source PTE for the drum mixer (EU: D014) and the hot oil heater (EU: D026a-c), using a worst-case scenario for each emission. This permitting action recalculated the source PTE of the drum mixer (EU: D014) and the hot oil heater (EU: D024a-c), using updated emission factors as well as the worst-case PTE. This pending file request has been approved and the revisions have been applied to the permit.

- Compliance submitted a pending file on August 5, 2024, requesting an update to the operating permit to correct the drilling and blasting conditions. This pending file request has been approved and the revisions have been applied to the permit.

Miscellaneous – Internal Action by Permitting

- updating the operating permit with current conditions for drilling and blasting

- updating the source name, from Holcim SWR Incorporated Sloan Quarry, to Amrize Southwest Incorporated

Secondary Feed Plant

- removing a screen (EU: A018)

- adding a screen (EU: A129a)

Asphalt System Plant

- adding truck loadout (EU: D027) as an emission unit, which is an internal change (initiated by DAQ) to account for the emissions coming out of the asphalt silos and into the loading trucks.

E. ALTERNATIVE OPERATING SCENARIO

Amrize Southwest Incorporated operates a Type II Plant – Virgin and Recycle. The Type II Plant – Virgin and Recycle has an alternate operating scenario and consists of the following emission units:

- Screen (EU: B064)
- Conveyor System (EU: B045)
- Splitter (EU: B020)
- Cone Crusher (EU: B035)
- Conveyor (EU: B037)

III. EMISSIONS INFORMATION

A. LIST OF EMISSION UNITS

Table III-A-1 is a comprehensive list of the emission units at this stationary source and covered by this Part 70 Operating Permit.

Table III-A-1. Summary of Emission Units

EU	Rating	Description	Make	MN	SN
Primary Feed Plant					
A02	2,100 TPH	Gyratory Crusher		54 x 88	7207618003
A012		Stacker 3 to Stockpile			
Secondary Feed Plant					
A013a		VGF 1 (baghouse)			
A013b		VGF 2 (baghouse)			
A013c		VGF 3 (baghouse)			
A013d		VGF 4 (baghouse)			
A130		Upper Tunnel Belt (1 drop point)(baghouse)	To Simplicity Feed Belt		
A129a	2,600 TPH	Screen (baghouse) [1]	TBD	TBD	TBD
A129b		Conveyor System (2 drop points)(baghouse)	to simplicility cross belt and free run belt		
A020	975 TPH	Crusher (with under canica belt)(baghouse)	Hazmag	APS1430KN	HU1789
A022		Splitter (3 drop points)			

A025a	682 TPH	Screen (baghouse)	Terex	8 x 20	TRXV8203 EDUFF2079
A026a	682 TPH	Screen (baghouse)	Terex	8 x 20	TRXV8203 EDUFF2080
A029		Canica Feed Belt (2 drop points)(baghouse)			
A030		Cross Collect Belt (3 drop points)(baghouse)			
A032	420 TPH	Crusher (with simplicity cross belt)(baghouse)	Canica	155	15513399
A040		Conveyor System (1 belt, 1 stacker)(baghouse)			
Overland Feed System					
A041a		VGF 1 (baghouse)			
A041b		VGF 2 (baghouse)			
A041c		VGF 3 (baghouse)			
A042		Overland Belt (1 drop point)(baghouse)	from Tunnel Belt		
A043		Splitter (3 drop points)(baghouse)			
A045		Stacker	to Wash Plant 1 Surge		
A046		Stacker	to Wash Plant 2 Surge		
Wash Plant 1					
A138		VGF 1			
A139		VGF 2			
A140		VGF 3			
A081		Splitter Feed Belt (1 drop point)			
A081b	640 TPH	Screen	Cedarapids	6 x 20	049950
A093a	350 TPH	South Screen	wet process		
A093b	350 TPH	Middle Screen	wet process		
A093c	350 TPH	North Screen	wet process		
A143		Canica Feed Belt (2 drop points)(wet process)	from Top Deck and Dewatering Screen		
A144		Splitter (1 drop point)(wet process)	From Canica Feed Belt		
A106	197 TPH	VSI Crusher (wet process)	Canica	100	10026992S
A103	197 TPH	VSI Crusher (wet process)	Canica	100	10026993S
A081e		Canica Return Belt (2 drop points)(wet process)	from Cemco Underbelt and to Splitter Feed Belt		
A085		Top Deck Belt (with alternate)	wet process		
A099		Middle Deck Belt (with alternate)	wet process		
A092		Finish Screen Feed Belt	wet process		
A092b	270 TPH	Finish Screen	wet process		
A110d		Rock Stacker to Rock Bin	wet process		
A092c		Rock Stacker Belt	wet process		

A106a		Splitter (with alternate)	wet process		
A098		Rock Stacker to Rock Bin	wet process		
A115		Conveyor System (1 belt, 1 stacker)(alternate)	wet process		
A091		Bottom Deck Belt (with alternate)	wet process		
A075		Chip DS Feed Belt	wet process		
A076	200 TPH	Dewatering Screen (with alternate)	wet process		
A111a		Waste Bin (2 drop points)	wet process		
A109		Sand Screw	wet process		
A113	330 TPH	Dewatering Screen	wet process		
A115		Stacker	wet process		
Wash Plant 2					
A048a	400 TPH	VGF 1			
A048b	400 TPH	VGF 2			
A049		Splitter (3 drop points)			
A051		West Under Splitter Belt (1 drop point)	Belt 22 to Belt 17		
A053		East Under Splitter Belt (1 drop point)	Belt 20 to Belt 21		
A055		East Screen	wet process		
A055a		Splitter	wet process		
A062		Chevron Belt	wet process		
A121		Dewatering Screen	wet process		
A057		Canica Belt	wet process		
A059		Crusher	wet process		
A060		Under Canica Belt	wet process		
A120e		JCI Conveyor System (2 belts)	wet process		
A120		JCI Crusher	wet process		
A120b		Conveyor System (2 belts, 1 splitter, 1 stacker)	wet process		
A068b		Alternate Stacker	wet process		
A125b		Conveyor System (1 belt, 1 stacker)	wet process		
A056		West Screen	wet process		
A056a		Splitter	wet process		
A070		West Screen Underbelt	wet process		
A078		Conveyor System (2 belts, 1 stacker)	wet process		
A074		Screw Washer (from dewatering screen)	wet process		
A127		Dewatering Screen	wet process		
A121b		Waste Belt (from dewatering screen / cyclones)	wet process		
A122a		Sand Stacker Belt	wet process		

A128		Splitter	wet process		
A122		Mason Sand Stacker	wet process		
A129		Alternate Stacker	wet process		
Rip Rap / Miscellaneous Screening Plant					
H05c		Feeder			
H08	250 TPH	Screen			
H02		Conveyor	Reject Oversize		
H02a	250 TPH	Screen			
H10		Stacker	Reject		
H05		Conveyor	Fines		
H05a		Stacker	Reject Fines		
H09		Conveyor	Belt R1 to Belt R2		
H11	250 TPH	3 Deck Screen			
H12		Conveyor System (1 belt, 1 stacker)			
H13		Conveyor System (1 belt, 1 stacker)			
H14		Conveyor System (1 belt, 1 stacker)	alternate		
West Screen Plant					
B001a		Feeder 1 (alternate)			
B101		Feeder 2 (alternate)			
B001		Conveyor System (2 belts)	Tunnel Belt and Splitter Feed Belt		
B004		Splitter (4 drop points)(baghouse)			
B006	220 TPH	West Screen (with underbelt)	JCI	6 x 20	98H02B32
B008	220 TPH	Middle Screen (with underbelt)	JCI	6 x 20	409440
B013	220 TPH	East Screen (with underbelt)	JCI	6 x 20	50681
B051	220 TPH	Screen 4	JCI	6 x 20	34A0995
B100	220 TPH	Screen 5 (baghouse) [1]	TBD	TBD	TBD
B043a		Stacker 5			
B053a		Stacker 6			
B053		Stacker 7			
B037a		Conveyor Recirc 1	To Cone Crusher		
B033a		Top Deck Belt (1 drop point)			
B035	110 TPH	Cone Crusher (baghouse)	Sanvick	H6800	125892
B057a		Conveyor Recirc 2	To Cone Crusher		
B038		Middle Deck Belt			
B026a		Lower Deck Belt			

B031		Stacker			
B057b		Conveyor (alternate)	West Screen Underbelt to Lower Deck Belt		
B026b		Conveyor (alternate)	Middle Screen Underbelt to Lower Deck Belt		
B040		Conveyor (alternate)	East Screen Underbelt to Lower Deck Belt		
B102		Fines Cross Belt (3 drop points)			
B027		Conveyor System (2 belts, 1 stacker)			
Auxiliary Refeed System					
B046a		Reject Stacker (alternate)			
B056		Belt 9 (alternate)			
B003a		Reject Stacker (alternate)			
B016		Belt 16 (alternate)			
Alternate Type II Plant (alternate)					
B064		Screen SC5			
B045		Conveyor System (1 belt, 1 stacker)			
B020		Splitter	Belt 15 recirc to Splitter		
B035	110 TPH	Cone Crusher (baghouse)	Sanvick	H6800	125892
B037b		Conveyor	Belt 12 to Belt 9		
Type II Plant – Virgin and Recycle					
A012b	200 TPH	Jaw Crusher	Cedarapids	3054	47015
A012e		Conveyor	Belt 70 to Belt 2a Overland		
C001		VGF			
C004		Conveyor	Belt 3 to Belt 4		
C002	400 TPH	Jaw Crusher	Telesmith	5263HIS	232M255
C005a	400 TPH	Screen 3	Cedarapids	6 x 20	
C005b		Conveyor	Belt 4 to Belt 5		
C003b		Stacker			
C010b		Stacker			
C036		Conveyor System (1 belt, 1 stacker)			
C006a		Conveyor System (3 belts)			
C006b		Splitter			
C008	275 TPH	Screen 1	Cedarapids		46980
C009	350 TPH	Screen 2	Cedarapids		46979
C012	200 TPH	HSI Crusher	Telesmith		232M255
C013		Conveyor	Belt 11 to Belt 12		
C013a		Conveyor System (3 belts)			

C013b		Splitter			
C020		Conveyor System (2 belts, 1 stacker)			
C028		Conveyor System (3 belts, 1 stacker)			
C033		Stacker	alternate		
C034		Stacker	alternate		
C011		Conveyor	Spare Belt 9		
C035		Conveyor	Spare Belt 19		
Asphalt System Plant					
D001		10 Bin Hopper			
D011		2 RAP Hoppers			
D007		Conveyor	Conveyor 5e to Conveyor 6		
D008	360 TPH	Scalping Screen (baghouse)			
D012		Conveyor System (3 belts)	Belt 9 and 10 to Conveyor 11		
D014		Drum Mixer (baghouse)			
D010		Conveyor	Conveyor 8 to Drum Mixer		
D013		Conveyor	Conveyor 11 to Drum Mixer		
D015		Conveyor	From Drum Mixer		
D016		Asphalt Silo 1			
D017		Asphalt Silo 2			
D019a		Asphalt Silo 3			
D019b		Asphalt Silo 4			
D019c		Asphalt Silo 5			
D019i		Asphalt Silo 6			
D027		Truck Loadout (silo system) [1]			
D026a	2.10 MMBtu/hr	Hot Oil Heater 16/17 (propane)			
D026b		Hot Oil Heater 16/17 (diesel)			
D026c		Hot Oil Heater 16/17 (natural gas)			
Road Runner Portable Screen Plant					
RS01		Hopper			
RS03	150 TPH	Screen	Road Runner	5 x 12	
RS05		Stacker			
RS07		Stacker			
RS09		Stacker			
Blending System Plant					
BS01		5 Bin Hopper			

BS02		Conveyor	Belt Feeder to Belt		
BS03		Splitter	pugmill bypass		
BS03a		Stacker	bypass		
D013d		Pugmill Mixer	Davis	1500 Dase	10691500
BS08		Conveyor System (1 belt, 1 stacker)			
BS05a		Conveyor	Belt to Pugmill		
D013a		Lime Silo (bin vent)			
BS06a		Auxiliary Silo (cement / lime)(bin vent)			
BS06		Guppy Silo (bin vent)			
Coyote Portable Plant					
CY01		Grizzly Feeder			
CY02		Conveyor			
CY03	250 TPH	Screen	Cedarapids	6 x 20	49499
CY04		Conveyor System (1 belt, 1 stacker)			
CY05		Conveyor System (1 belt, 1 stacker)			
CY07		Conveyor System (1 belt, 1 stacker)			
Portable Crushing Plant					
PC00		VGF	Cedarapids	3054	4826
PC01	500 TPH	Jaw Crusher			
PC02	500 TPH	3 Deck Screen	Cedarapids	1316	41682204787
PC03	500 TPH	Cone Crusher			41682204787
PC04		Conveyor (recirc)			41682204787
PC05	500 TPH	Conveyor System (1 belt, 1 stacker)			
PC06		Conveyor System (1 belt, 1 stacker)			
PC07		Truck Loadout			
Miscellaneous					
MB01		Media Blasting Operations			
FT01	500 gallons	Aboveground Storage Tank – Regular			
FT02	500 gallons	Aboveground Storage Tank – Regular			
Power Generation					
A123	306 hp	Continuous-Duty Generator Diesel Engine DOM Pre 2006	Caterpillar	3306	8JJ00309
A123b	605 hp	Continuous-Duty Generator Diesel Engine DOM 2008	Cummins	QSX15G9	J080217074F

A123c	300 kW	Continuous-Duty Generator	Caterpillar	WQ300	0GHJ00464
	480 hp	Diesel Engine DOM 2005	Caterpillar	C9	0GHJ00464
CY09	680 hp	Continuous-Duty Generator	Cummins	QSX15G9	79346685
		Diesel Engine DOM 2008			
RS10	58 hp	Continuous-Duty Generator	Deutz	n/a	n/a
		Diesel Engine DOM Pre 2006			
PC09	410 kW	Continuous-Duty Generator	Cummins	450DFEJ	H0802170744
	605 hp	Diesel Engine DOM 2008			
Fugitives					
A001		Mining – Primary Feed Plant			
C001a		Mining – Type II Plant (Virgin / Recycle)			
A001b		Drilling			
A001a		Blasting			
H06		Paved Haul Road			
PC08		Unpaved Haul Road			
G01	51.0 acres	Stockpiles			

[1] new emission unit

The following units or activities listed in in Table III-A-2 are present at this source, but are deemed insignificant.

Table III-A-2. List of Insignificant Activities

Capacity	Description
20,402 gallons	Aboveground Storage Tank – Diesel
10,000 gallons	Aboveground Storage Tank – Diesel
0.900 MMBtu/hr	Natural Gas Water Heater
0.900 MMBtu/hr	Natural Gas Water Heater
0.900 MMBtu/hr	Natural Gas Water Heater

B. EMISSIONS FOR PERMIT APPLICABILITY

Major source (Title V) permitting applicability is determined by calculating the emissions for all proposed emission units using 8,760 hours of operation, including the new emission units added in this permitting action. The fugitive emissions from drilling, blasting, stockpiles, paved haul roads, unpaved haul roads, and mining are included in the emissions for permit applicability because Amrize Southwest Incorporated belongs to a source category which, as of August 7, 1980, is being regulated under Section 111 or Section 112 of the Clean Air Act (Asphalt Plants) – see

Table III-B-1. As shown in the table, the applicability PTE exceeds the minor source threshold in AQR 12.1 for all pollutants.

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

Process	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H2S	GHG
Primary Feed	32.20	6.90	0	0	0	0	0	0	0
Secondary Feed	357.67	31.46	0	0	0	0	0	0	0
Overland Feed	93.22	13.02	0	0	0	0	0	0	0
Wash 1	51.86	4.17	0	0	0	0	0	0	0
Wash 2	21.01	2.65	0	0	0	0	0	0	0
Rip Rap / Misc	27.04	2.88	0	0	0	0	0	0	0
West Screen	59.52	7.74	0	0	0	0	0	0	0
Aux Feed System	2.54	0.70	0	0	0	0	0	0	0
Alternate Type II	0	0	0	0	0	0	0	0	0
Type II	72.57	11.04	0	0	0	0	0	0	0
Asphalt System	12,833.82	12,815.86	52.27	261.88	6.85	106.16	1.05	35.74	67,094.15
Road Runner	6.05	0.48	0	0	0	0	0	0	0
Blending System	339.18	55.23	0	0	0	0	0	0	0
Coyote Portable	9.69	0.73	0	0	0	0	0	0	0
Portable Crushing	33.64	4.33	0	0	0	0	0	0	0
Media Blasting	0.25	0.25	0	0	0	0	0	0	0
GDO	0	0	0	0	0	0.52	0.03	0	0
Generators	5.67	5.67	147.99	24.12	0.16	12.95	0.20	0	13,506.18
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Total	13,946.02	12,963.20	201.43	286.96	7.04	119.69	1.31	5.99	80,600.33

C. SOURCE PTE

The source PTE was calculated using the operational limits, proposed by the source. In addition, the source PTE will include fugitive emissions from drilling, blasting, stockpiles, paved haul roads, unpaved haul roads, and mining. See Table III-C-1.

Table III-C-1. Source PTE – Summary (tons per year)

Process	Condition	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S
Primary Feed	5,000,000 tons	8.75	1.88	0	0	0	0	0	0
Secondary Feed	5,000,000 tons	6.38	0.67	0	0	0	0	0	0
Overland Feed	3,500,000 tons	3.53	0.70	0	0	0	0	0	0
Wash 1	2,000,000 tons	22.85	1.79	0	0	0	0	0	0
Wash 2	1,500,000 tons	9.40	1.23	0	0	0	0	0	0
Rip Rap / Misc	150,000 tons	1.67	0.20	0	0	0	0	0	0
West Screen	1,500,000 tons	15.47	1.85	0	0	0	0	0	0
Aux Feed System	100,000 tons	0.51	0.15	0	0	0	0	0	0
Type II	700,000 tons	14.27	2.13	0	0	0	0	0	0
Asphalt System	660,000 tons	9.45	8.25	9.9	43.79	1.27	11.86	1.79	5.99
Road Runner	50,000 tons	0.29	0.19	0	0	0	0	0	0
Blending System	500,000 tons	3.42	0.79	0	0	0	0	0	0
Coyote Portable	15,000 tons	0.15	0.09	0	0	0	0	0	0
Portable Crushing	350,000 tons	3.16	0.49	0	0	0	0	0	0
Media Blasting	1,000 hours	0.25	0.25	0	0	0	0	0	0
Gasoline Dispensing	12,000 gallons	0	0	0	0	0	0.52	0.03	0
Generator – A123	2,000 hours	0.67	0.67	3.34	0.29	0.01	0.77	0.01	0
Generator – A123b	1,250 hours	0.07	0.07	4.27	0.42	0.01	0.17	0.01	0
Generator – A123c	1,250 hours	0.10	0.10	4.56	1.72	0.01	0.75	0.01	0
Generator – CY09	2,500 hours	0.15	0.15	9.61	0.94	0.01	0.37	0.01	0
Generator – RS10	500 hours	0.03	0.03	0.45	0.10	0.01	0.04	0.01	0
Generator – PC09	1,250 hours	0.07	0.07	4.27	0.42	0.01	0.17	0.01	0
Mining – A001	5,000,000 tons	21.75	3.00	0	0	0	0	0	0
Mining – C001a	500,000 tons	2.18	0.30	0	0	0	0	0	0
Blasting	175 detonations	4.17	0.63	5.94	30.72	0	0	0	0
Blasting	1,500 tons ANFO								
Drilling	7,500 holes	2.55	0.15	0	0	0	0	0	0

Process	Condition	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S
Haul Road – Mine	6,666 miles	0.5	0.08	0	0	0	0	0	0
Haul Road – Agg In	32.866 miles	2.49	0.37	0	0	0	0	0	0
Haul Road – Agg out	29,822 miles	2.26	0.34	0	0	0	0	0	0
Haul Road – Rip Rap	18,000 miles	1.36	0.20	0	0	0	0	0	0
Haul Road – Type II	10,889 miles	0.82	0.12	0	0	0	0	0	0
Haul Road - Asphalt	25,080 miles	1.90	0.29	0	0	0	0	0	0
Haul Road – RR	1,100 miles	0.08	0.01	0	0	0	0	0	0
Haul Road – Blend	2,000 miles	0.15	0.02	0	0	0	0	0	0
Haul Road – Coyote	48,667 miles	18.42	2.76	0	0	0	0	0	0
Haul Road – Portable	1,556 miles	0.59	0.09	0	0	0	0	0	0
Stockpile	51 acres	15.45	2.33	0	0	0	0	0	0
Total (without fugitives)		100.64	21.75	36.40	47.68	1.33	14.65	1.88	5.99
Total (with fugitives)		175.31	32.44	42.34	78.40	1.33	14.65	1.88	5.99

The updated PTE for this permitting action is being compared with various major source thresholds in Table III-C-2. Amrize's PTE does not exceed PSD or nonattainment major stationary source thresholds. However, the PTE exceeds the Part 70 major source threshold for PM_{10}. Therefore, the source will maintain its designation as a major Part 70 source of PM_{10} and a synthetic minor source of $PM_{2.5}$, NO_x, CO, and VOC. As a result, Amrize will not be subject to AQR 12.2 or 12.3.

Table III-C-2. Emissions for Permit Applicability – Summary (tons per year)

Pollutant	PM_{10}	$PM_{2.5}$	NO_X	CO	SO_2	VOC	HAP[1]
Major Source Thresholds (Part 70/Title V)	100	100	100	100	100	100	10/25
Nonattainment Major Source Thresholds	-	-	50	-	-	50	-
PSD Thresholds	250	250	-	250	250	-	-
Applicability Emissions Total	175.31	32.44	42.34	78.40	1.33	14.65	1.88

[1]10 tons for any single HAP, or 25 tons for any combination of HAP pollutants.

D. EMISSIONS INCREASE

For this renewal action - incorporating both modifications and revisions - to the Part 70 Operating Permit, there is an apparent emission increase of 82.63 tons per year of $PM_{10,}$ based on PTE to PTE calculation. However, this emission increase is not solely attributed to the changes proposed in this permitting action. The previous operating permit (issued on April 16, 2020) incorrectly

calculated the source PTE using AP-42 controlled emission factors for the mineral processing equipment.

To correct this error, this renewal action recalculates the PTE, using AP-42 uncontrolled emission factors for the mineral processing equipment. In addition, emissions from mining operations (EUs: A001 and C001a), haul roads (EU: H06 and PC08), and continuous-duty generators (EUs: A123, A123b, A123c, CY09, RS10, and PC09) are also recalculated, using more representative emission factors.

For the purpose of assessing emissions increases related to the proposed modifications, any changes resulting solely from the updated emission factors have been excluded from the analysis. Therefore, the actual emission increase attributed to this permitting action is calculated as the difference between the PTE of the new emission units (EUs: B100, A129a, and D027) and the PTE of the removed emission units (EUs: A018 and A123d), as detailed in Table III-D-1.

As per Table III-D-1, the emission increase for each pollutant remains below the minor NSR significance. As a result, AQR 12.4 RACT analysis is not triggered for this permitting action.

Table III-D-1. Emissions Increase (including fugitives)

	PM_{10} tpy	$PM_{2.5}$ tpy	NO_x tpy	CO tpy	SO_2 tpy	VOC tpy	HAP tpy
Minor NSR Significance (AQR 12.4)	7.5	5.0	20	50	20	20	10/25
PTE from Current Action Renewal with Revisions to Operating Permit	175.31	32.44	42.34	78.40	1.33	14.65	1.88
PTE from Existing Permit	92.68	33.13	52.31	68.27	19.15	15.41	2.67
Total Δ PTE (based on revised emission factors)	82.63	-0.69	-9.97	10.13	-17.82	-0.76	-0.79
Emissions Increase (disregarding emission factor changes)	-3.65	-5.37	-0.62	-2.93	-0.02	0.51	-0.01
Minor NSR Significant Threshold Exceeded	No	No	No	No	No	No	No

E. OPERATIONAL LIMITS

The permittee shall not exceed the operational limits, provided below in Table III-E-1.

Table III-E-1. Operational Limits

EU	Description	Throughput	Frequency
A Series	Primary Feed Plant	5,000,000 tons	in any consecutive 12 months
A Series	Secondary Feed Plant	5,000,000 tons	in any consecutive 12 months
A Series	Overland Feed System	3,500,000 tons	in any consecutive 12 months
A Series	Wash Plant 1	2,000,000 tons	in any consecutive 12 months
A Series	Wash Plant 2	1,500,000 tons	in any consecutive 12 months
H Series	Rip Rap / Miscellaneous Screenng Plant	150,000 tons	in any consecutive 12 months
B Series	West Screen Plant	1,500,000 tons	in any consecutive 12 months

B Series	Auxiliary Refeed System	100,000 tons	in any consecutive 12 months
C Series	Type II Plant – Virgin and Recycle	700,000 tons	in any consecutive 12 months
D Series	Asphalt System Plant	660,000 tons	in any consecutive 12 months
RS Series	Road Runner Portable Screen Plant	50,000 tons	in any consecutive 12 months
BS Series	Blending System Plant	500,000 tons	in any consecutive 12 months
CY Series	Coyote Portable Plant	15,000 tons	in any consecutive 12 months
PC Series	Portable Crushing Plant	350,000 tons	in any consecutive 12 months
A123	Continuous-Duty Generator	2,000 hours	in any consecutive 12 months
A123b	Continuous-Duty Generator	1,250 hours	in any consecutive 12 months
A123c	Continuous-Duty Generator	1,250 hours	in any consecutive 12 months
CY09	Continuous-Duty Generator	2,500 hours	in any consecutive 12 months
RS10	Continuous-Duty Generator	500 hours	in any consecutive 12 months
PC09	Continuous-Duty Generator	1,250 hours	in any consecutive 12 months
MB01	Media Blasting	1,000 hours	in any consecutive 12 months
FT01 / FT02	Gasoline Dispensing Operation	12,000 gallons	in any consecutive 12 months
A001	Mining	5,000,000 tons	in any consecutive 12 months
C001a	Mining	500,000 tons	in any consecutive 12 months
A001a	Blasting	175 detonations	in any consecutive 12 months
A001a	Blasting	1,500 tons of ANFO	in any consecutive 12 months
A001b	Drilling	7,500 holes	in any consecutive 12 months
D01	Stockpiles	51 acres	at any given time
H06	Paved Haul Road	126,423 miles	in any consecutive 12 months
PC08	Unpaved Haul Road	50,223 miles	in any consecutive 12 months

F. CONTROL TECHNOLOGY

The source shall maintain all existing BACT and/or RACT requirements.

Baghouse

EUs: A013(a-d), A130, A129a, A129b, A020, A025a, A026a, A029, A030, A032, A040, A041(a-c), A042, and A043 are each equipped with a baghouse, controlling particulate emissions while the respective emission units are in operation (see Table III-F-1). The baghouse will maintain a particulate control efficiency of at least 99.0 percent.

EUs: B004, B035, and B100 are each equipped with a baghouse, controlling particulate emissions while the respective emission units are in operation (see Table III-F-1). The baghouse will maintain a particulate control efficiency of at least 99 percent.

EUs: D008 and D014 are each equipped with a baghouse, controlling particulate emissions while the respective emission units are in operation (see Table III-F-1). The baghouse will maintain a particulate control efficiency of at least 99 percent.

Table III-F-1. Summary of Add-On Control Devices

EU	Device Type	Equipment	Pollutant
A013 (a-d)	Baghouse 1	VGF 1-4	PM_{10} / $PM_{2.5}$
A130		Upper Tunnel Belt	
A129a		Screen	
A129b		Conveyor System	
A020		Crusher	
A022		Splitter	
A025a		Screen	
A026a		Screen	
A029		Conveyor	
A030		Conveyor	
A032		Crusher	
A040		Conveyor System	
A041 (a-c)		VGF 1-3	
A042		Overland Belt	
A043		Splitter	
B004	Baghouse 2	Splitter	PM_{10} / $PM_{2.5}$
B004a		Conveyor	
B006a		Conveyor	
B012a		Conveyor	
B035		Cone Crusher	
B100		Screen	
D008	Baghouse 3	Scalping Screen	PM_{10} / $PM_{2.5}$
D014		Drum Mixer	

Section 94 of the Clark County AQR lists the current Best Management Practices (BMP) developed and approved for use in Clark County to mitigate dust during construction activities. Section 94 Table 1 provides the required control measures to be implemented for each soil type based on PEP. The PEP of the soil at the Amrize Southwest Incorporated is "Moderate Low, Low, and Slight." The required control measures for this soil type is "Apply water and mix moist soil with dry soil until optimum moisture content is reached to meet emissions and soil stabilization

standards" or "Apply and mix water into soil and/or material until optimum moisture content is reached to meet emissions and soil stabilization standards." The BMPs from Section 94 are listed below in Table III-F-2 as well as source applicability. The source is required to follow pertinent control measures to demonstrate compliance with all emissions limitations and standards identified in the operating permit.

Table III-F-2. BMP from AQR Section 94

BMP	Description	Applicability
BMP 01	Backfilling	Not Applicable for Affected Emission Units
BMP 02	Blasting – Abrasive	Not Applicable for Affected Emission Units
BMP 03	Blasting – Soil and Rock	Not Applicable for Affected Emission Units
BMP 04	Clearing and Grubbing	Not Applicable for Affected Emission Units
BMP 05	Clearing forms, Foundations, and Slabs	Not Applicable for Affected Emission Units
BMP 06	Crushing	Not Applicable for Affected Emission Units
BMP 07	Cut and Fill	Not Applicable for Affected Emission Units
BMP 08	Demolition – Implosion	Not Applicable for Affected Emission Units
BMP 09	Demolition – Mechanical / Manual	Not Applicable for Affected Emission Units
BMP 10	Disturbed Soil	Not Applicable for Affected Emission Units
BMP 11	Long-Term Stabilization	Not Applicable for Affected Emission Units
BMP 12	Dust Palliative	Not Applicable for Affected Emission Units
BMP 13	Importing / Exporting of Bulk Material	Not Applicable for Affected Emission Units
BMP 14	Landscaping	Not Applicable for Affected Emission Units
BMP 15	Subgrade Preparation for Paving	Not Applicable for Affected Emission Units
BMP 16	Sawing / Cutting Materials	Not Applicable for Affected Emission Units
BMP 17	Screening	Not Applicable for Affected Emission Units
BMP 18	Staging Areas	Not Applicable for Affected Emission Units
BMP 19	Stockpiling	Not Applicable for Affected Emission Units
BMP 20	Trackout Prevention and Cleanup	Not Applicable for Affected Emission Units
BMP 21	Traffic	Not Applicable for Affected Emission Units
BMP 22	Trenching	Not Applicable for Affected Emission Units
BMP 23	Truck Loading	Not Applicable for Affected Emission Units

Bin Vent

(EUs: D013a, BS06a, and BS06) will each be equipped with a bin vent, controlling particulate emissions while the respective emission units are in operation.

Unpaved Haul Roads

Amrize Southwest Incorporated will apply sufficient water on unpaved haul roads, to control fugitive dust emissions at least 90%.

G. MONITORING

Standard monitoring requirements for opacity, mineral processing equipment, engines, a hot mix asphalt plant (baghouse / bin vent), media blasting, and a gasoline dispensing operation will be included in the air quality permit.

The drum mixer (EU: D014) will also be subject to Compliance Assurance Monitoring (CAM) because this emission unit has uncontrolled emissions that exceed 100 tons per year of PM_{10}. The drum mixer (EU: D014) has an uncontrolled PTE of 12,811.50 tons per year of PM_{10}.

Compliance Assurance Monitoring (CAM) is a monitoring requirement that was established in a previous permitting action and is being carried over in this Title V Renewal. The CAM requirements for the drum mixer (EU: D014) will consist of two parameters – the baghouse pressure drop and results from Method 9 testing.

In addition, Amrize Southwest Incorporated will monitor the throughput for the following:

- Primary Feed Plant
- Secondary Feed Plant
- Overland Feed System
- Wash Plant 1
- Wash Plant 2
- Rip Rap / Miscellaneous Screening Plant
- West Screen Plant
- Auxiliary Refeed System
- Type II Plant – Virgin and Recycle
- Asphalt System Plant
- Road Runner Portable Screen Plant
- Blending System Plant
- Coyote Portable Plant
- Portable Crushing Plant
- Media Blasting
- Gasoline Dispensing Operation
- Continuous-Duty Generators
- Mining
- Drilling
- Blasting
- Haul Roads
- Stockpiles

H. PERFORMANCE TESTING

Mineral Processing Equipment

Amrize Southwest Incorporated will be subject to the performance testing requirements, outlined in the federal requirements of 40 CFR Part 60 Subpart OOO. This includes initial (Method 9) performance testing on (EUs: A129 and B100) and subsequent (Method 5) performance testing on (EUs: A013(a-d), A130, A129a, A129b, A020, A025a, A026a, A029, A030, A032, A040, A041(a-c), A042, A043, B004, B035, B100, D008, and D014).

Hot Mix Asphalt Plant

Amrize Southwest Incorporated will be subject to the performance testing requirements (EU: D014), outlined in the federal requirements of 40 CFR Part 60 Subpart I.

Continuous-Duty Generators

The continuous-duty generators (EUs: A123 and A123c) will be subject to the performance testing requirements, outlined in the federal requirements of 40 CFR Part 63 Subpart ZZZZ.

IV. REGULATORY REVIEW

A. LOCAL REGULATORY REQUIREMENTS

DAQ has determined that the following public laws, statutes, and associated regulations are applicable:

1. The Clean Air Act, as amended (42 U.S.C. § 7401, et seq.);
2. Title 40 of the CFRs, including 40 CFR Part 70 and others;
3. Chapter 445 of the Nevada Revised Statutes, Sections 401 through 601;
4. Portions of the AQRs included in the state implementation plan (SIP) for Clark County Nevada. SIP requirements are federally enforceable. All requirements from ATC permits issued by DAQ are federally enforceable because these permits were issued pursuant to SIP-included sections of the AQR; and
5. Portions of the AQRs not included in the SIP. These locally applicable requirements are locally enforceable only.

B. FEDERALLY APPLICABLE REGULATIONS

1. Amrize Southwest Incorporated will be subject to the federal requirements of 40 CFR Part 60 Subpart I because the source meets the following criteria:
    a. The hot mix asphalt plant (EUs: D001, D011, D007, D008, D012, D014, D010, D013, D015, D016, D017, D019a, D019b, D019i, D027, D026a, D026b, and D026c) was installed and/or modified after the date of applicability – June 11, 1973.

2. Amrize Southwest Incorporated will be subject to the federal requirements of 40 CFR Part 63 Subpart CCCCCC (§63.11116) because the source meets the following criteria:

    a. The gasoline dispensing operation (EUs: FT01 and FT02) is located at an area source of HAP emissions.

    b. The gasoline dispensing operation (EUs: FT01 and FT02) has a monthly throughput of less than 10,000 gallons of gasoline.

3. Amrize Southwest Incorporated will be subject to the federal requirements of 40 CFR Part 60 Subpart OOO (EUs: A02, A020, A106, A103, B035, A012b, C012, PC01, and PC03) because the source meets the following criteria:

    a. Amrize Southwest Incorporated is a fixed sand and gravel plant and/or crushed stone plant with a capacity, as defined in §60.671, of 25 tons per hour or more.

4. Amrize Southwest Incorporated will be subject the federal requirements of 40 CFR Part 60 Subpart IIII because the continuous-duty generators (EUs: A123b, CY09, and PC09) were each manufactured after the date of applicability – April 1, 2006.

    a. Amrize Southwest Incorporated shall comply with the emissions standards in 40 CFR Part 89.112–113 for the applicable compression ignition engines (EUs: A123b, CY09, and PC09) for the same model year and maximum engine power, provided in Table IV-B-1 and Table IV-B-2.

Table IV-B-1. Emissions Standards for Continuous-Duty Generator

EU	Power	PM (g/kW-hr)	NOx (g/kW-hr)	CO (g/kW-hr)	VOC (g/kW-hr)
CY09	kW > 560	0.54	9.20	11.40	1.30

Table IV-B-2. Emission Standards for Continuous-Duty Generators

EU	Power	PM (g/kW-hr)	NMHC + NOx (g/kW-hr)	CO (g/kW-hr)
A123b	450 ≤ kW ≤ 560	0.20	6.40	3.50
PC09	450 ≤ kW ≤ 560	0.20	6.40	3.50

5. Amrize Southwest Incorporated will be subject to the federal requirements of 40 CFR Part 63 Subpart ZZZZ because the continuous-duty generators (EUs: A123, A123b, A123c, CY09, PC-09, and RS10) constitute a stationary RICE, located at an area source of HAP emissions.

    a. The continuous-duty generators (EUs: A123, A123c, and RS10) will meet all of the federal requirements of 40 CFR Part 60 Subpart ZZZZ, by adhering to the federal requirements of 40 CFR Part 60 Subpart IIII.

6. Amrize Southwest Incorporated will not be subject to the federal requirements of 40 CFR Part 60 Subpart JJJJ because the continuous-duty generators (EUs: A123, A123b, A123c, CY09, PC-09, and RS10) are not spark ignition stationary RICE (reciprocating internal combustion engines).

V. COMPLIANCE

A. COMPLIANCE CERTIFICATION

Monitoring, recordkeeping, and reporting requirements for the Primary Feed Plant, the Secondary Feed Plant, the Overland Feed System, Wash Plant 1, Wash Plant 2, Rip Rap / Miscellaneous Screening Plant, West Screen Plant, Auxiliary Refeed System, Type II Plant (Virgin and Recycle), Asphalt System Plant, Road Runner Portable Screen Plant, Blending System Plant, Coyote Portable Plant, Portable Crushing Plant, Media Blasting, Gasoline Dispensing Operation, Continuous-Duty Generators, Mining, Drilling, Blasting, Haul Roads, and Stockpiles will be included in the Part 70 Operating Permit and are summarized below in Section V-B.

B. SUMMARY OF MONITORING FOR COMPLIANCE

Amrize Southwest Incorporated will monitor, record, and report the following items in the Part 70 Operating Permit:

Opacity

- opacity of the entire facility while it is in operation

Daily, Monthly, and Annual Throughput

- Primary Feed Plant
- Secondary Feed Plant
- Overland Feed System
- Wash Plant 1
- Wash Plant 2
- Rip Rap / Miscellaneous Screening Plant
- West Screen Plant
- Auxiliary Refeed System
- Type II Plant – Virgin and Recycle
- Asphalt System Plant
- Road Runner Portable Screen Plant
- Blending System Plant
- Coyote Portable Plant
- Portable Crushing Plant
- Media Blasting
- Gasoline Dispensing Operation
- Continuous-Duty Generators
- Mining
- Drilling
- Blasting
- Haul Roads
- Stockpiles

Baghouse

- pressure differential on baghouse, controlling (EUs: EUs: A013(a-d), A130, A129a, A129b, A020, A025a, A026a, A029, A030, A032, A040, A041(a-c), A042, and A043)
- pressure differential on baghouse, controlling (EUs: B004, B035, and B100)
- pressure differential on baghouse, controlling (EUs: D008 and D014)

Engines

- sulfur content of the diesel fuel, used in the continuous-duty generators (EUs: C01, C06, C12, C13, C14, and C15)

Drum Mixer

- The drum mixer (EU: D014) will be subject to Compliance Assurance Monitoring (CAM) because this emission unit has uncontrolled emissions that exceed 100 tons per year of PM_{10}. The drum mixer (EU: D014) has an uncontrolled PTE of 12,811.50 tons per year of PM_{10}.

Any stationary source that actually emits a total of 25 tons or more of NO_x and/or 25 tons or more of VOCs is required to submit an annual emissions statement for both pollutants. The statement must provide actual annual NO_x and VOC emissions from all activities, including emission units, insignificant activities, and exempt activities, and will be separate from the emissions inventory (i.e., calculated annual emissions) report permittees submit each year. This requirement shall be a permit condition for any minor source with the potential to emit at least 20 tons of NO_x and/or VOCs, since those sources are the most likely to trigger it.

VI. EMISSION REDUCTION CREDITS (OFFSETS)

The source has no federal offset requirements. *[AQR 12.7]*

VII. MODELING

Facility Location: 661030, 3979710 (Universal Transverse Mercator (UTM) NAD83)

Amrize Southwest Incorporated is a Title V source in Hydrographic Area 212 (the Las Vegas Valley). Permitted emission units include one drum mixer, one heater, seven generators and mineral processing. Since minor source baseline dates for NO_x (October 21, 1988) and SO_2 (June 29, 1979) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ modeled the source using AERMOD to track the increment consumption. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table VII-A-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

Table VII-A-1. PSD Increment Consumption

Pollutant	Averaging Period	Source's PSD Increment Consumption (µg/m^3)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO_2	3-hour	6.25[1]	661662	3979155
SO_2	24-hour	1.91[1]	661167	3979042
SO_2	Annual	0.22	661500	3980500
NO_X	Annual	2.50	661400	3980500

[1] Highest Second High Concentration

VIII. ENVIRONMENTAL JUSTICE

An analysis of environmental justice is not currently required and will be reevaluated during the next permitting action and/or application submittal.

IX. PERMIT SHIELD

Amrize Southwest Incorporated did not request a permit shield for this permitting action.

X. STREAMLINING

The hot mix asphalt plant and the mineral processing equipment at Amrize Southwest Incorporated will be subject to the federal requirements of 40 CFR Part 60 Subpart I and 40 CFR Part 60 Subpart OOO, respectively.

Table X-1. Analysis of 40 CFR Part 60 Subpart OOO – Mineral Processing

EU	Subpart OOO	Regulatory Standard	Regulatory Averaging Period	Streamlining Statement
A05	60.672(b) & 60.675(c)(3)	(Opacity) ≤ 12%	30 minutes (five 6-minute averages)	The permit requirements (opacity and averaging period) will be identical and as stringent to the federal standards of OOO
A34				
A06	60.672(b) & 60.675(c)(3)	(Opacity) ≤ 7%	30 minutes (five 6-minute averages)	The permit requirements (opacity and averaging period) will be identical and as stringent to the federal standards of OOO
A07				
A11				
A08				
A12				
A48				
A35				
A40				
A36a				

EU	Subpart OOO	Regulatory Standard	Regulatory Averaging Period	Streamlining Statement
A36b				
A41a				
A41b				

Table X-2. Analysis of 40 CFR Part 60 Subpart OOO – Baghouse 1

EU	Subpart OOO	Regulatory Standard	Regulatory Averaging Period	Streamlining Statement
A01	60.672(b) & 60.675(c)(3)	(Opacity) ≤ 7%	30 minutes (five 6 minute averages)	The permit requirements (opacity and averaging period) will be identical and as stringent to the federal standard of OOO
A39		0.032 g/dscm	Not Applicable	The permit requirement (emission standard) will be identical and as stringent to the federal standard of OOO

Table X-3. Analysis of 40 CFR Part 60 Subpart OOO – Baghouse 2

EU	Subpart OOO	Regulatory Standard	Regulatory Averaging Period	Streamlining Statement
A05	60.672(b) & 60.675(c)(3)	(Opacity) ≤ 7%	30 minutes (five 6 minute averages)	The permit requirements (opacity and averaging period) will be identical and as stringent to the federal standard of OOO
A07				
A08				
A34				
A83				

Table X-4. Analysis of 40 CFR Part 60 Subpart I – Baghouse 3

EU	Subpart I	Regulatory Standard	Regulatory Averaging Period	Streamlining Statement
D008	60.672(b) & 60.675(c)(3)	(Opacity) ≤ 7%	3 hours (thirty 6 minute averages)	The permit requirements (opacity and averaging period) will be identical and as stringent to the federal standard of I
D014				

Table X-5. Analysis of 40 CFR Part 63 Subpart ZZZZ

EU	Subpart ZZZZ	Regulatory Standard	Streamlining Statement
C07	63.6603 & 63.6640	1. Change oil and filter every 1,000 hours of operation or annually, whichever comes first	The permit requirements will be identical and as stringent to the federal standards of ZZZZ
		1. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first	
		2. Inspect all hose and belts every 500 hours of operation or annually, whichever comes first	

Table X-6. Analysis of 40 CFR Part 60 Subpart IIII

EU	Subpart IIII	Regulatory Standard	Streamlining Statement
C01	60.4205(a) & 60.4211	Compliance with emission standards for various criteria pollutants, based on model year and engine rating Compliance demonstrated by keeping records of manufacture specification sheets and logs of maintenance and/or repair	The permit requirements will be identical and as stringent to the federal standards of IIII
C06			
C12			
C13			
C14			
C15			

XI. PUBLIC PARTICIPATION

This permitting action will be published in the local newspaper for the general public to view and comment, pursuant to AQR 12.5.2.17 – renewals.

XII. ATTACHMENTS

See calculation sheets as attachments on next page.

Attachment 1. Emissions for Permit Applicability – Summary

Process	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S	GHG
Primary Feed	32.20	6.90	0	0	0	0	0	0	0
Secondary Feed	357.67	31.46	0	0	0	0	0	0	0
Overland Feed	93.22	13.02	0	0	0	0	0	0	0
Wash 1	51.86	4.17	0	0	0	0	0	0	0
Wash 2	21.01	2.65	0	0	0	0	0	0	0
Rip Rap / Misc	27.04	2.88	0	0	0	0	0	0	0
West Screen	59.52	7.74	0	0	0	0	0	0	0
Aux Feed System	2.54	0.70	0	0	0	0	0	0	0
Alternate Type II	0	0	0	0	0	0	0	0	0
Type II	72.57	11.04	0	0	0	0	0	0	0
Asphalt System	12,833.82	12,815.86	52.27	261.88	6.85	106.16	1.05	35.74	67,094.15
Road Runner	6.05	0.48	0	0	0	0	0	0	0
Blending System	339.18	55.23	0	0	0	0	0	0	0
Coyote Portable	9.69	0.73	0	0	0	0	0	0	0
Portable Crushing	33.64	4.33	0	0	0	0	0	0	0
Media Blasting	0.25	0.25	0	0	0	0	0	0	0
GDO	0	0	0	0	0	0.52	0.03	0	0
Generators	5.67	5.67	147.99	24.12	0.16	12.95	0.20	0	13,506.18
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Insignificant	0.03	0.03	0.39	0.32	0.01	0.02	0.01	0	0
Total	13,946.02	12,963.20	201.43	286.96	7.04	119.69	1.31	35.74	80,600.33

Attachment 2. Source PTE – Summary

Process	Condition	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S
Primary Feed	5,000,000 tons	8.75	1.88	0	0	0	0	0	0
Secondary Feed	5,000,000 tons	6.38	0.67	0	0	0	0	0	0
Overland Feed	3,500,000 tons	3.53	0.70	0	0	0	0	0	0
Wash 1	2,000,000 tons	22.85	1.79	0	0	0	0	0	0
Wash 2	1,500,000 tons	9.40	1.23	0	0	0	0	0	0
Rip Rap / Misc	150,000 tons	1.67	0.20	0	0	0	0	0	0
West Screen	1,500,000 tons	15.47	1.85	0	0	0	0	0	0
Aux Feed System	100,000 tons	0.51	0.15	0	0	0	0	0	0
Type II	700,000 tons	14.27	2.13	0	0	0	0	0	0
Asphalt System	660,000 tons	9.45	8.25	9.9	43.79	1.27	11.86	1.79	5.99
Road Runner	50,000 tons	0.29	0.19	0	0	0	0	0	0
Blending System	500,000 tons	3.42	0.79	0	0	0	0	0	0
Coyote Portable	15,000 tons	0.15	0.09	0	0	0	0	0	0
Portable Crushing	350,000 tons	3.16	0.49	0	0	0	0	0	0
Media Blasting	1,000 hours	0.25	0.25	0	0	0	0	0	0
Gasoline Dispensing	12,000 gallons	0	0	0	0	0	0.52	0.03	0
Generator – A123	2,000 hours	0.67	0.67	3.34	0.29	0.01	0.77	0.01	0
Generator – A123b	1,250 hours	0.07	0.07	4.27	0.42	0.01	0.17	0.01	0
Generator – A123c	1,250 hours	0.10	0.10	4.56	1.72	0.01	0.75	0.01	0
Generator – CY09	2,500 hours	0.15	0.15	9.61	0.94	0.01	0.37	0.01	0
Generator – RS10	500 hours	0.03	0.03	0.45	0.10	0.01	0.04	0.01	0
Generator – PC09	1,250 hours	0.07	0.07	4.27	0.42	0.01	0.17	0.01	0
Mining – A001	5,000,000 tons	21.75	3.00	0	0	0	0	0	0
Mining – C001a	500,000 tons	2.18	0.30	0	0	0	0	0	0
Blasting	175 detonations	4.17	0.63	5.94	30.72	0	0	0	0
Blasting	1,500 tons ANFO								
Drilling	7,500 holes	2.55	0.15	0	0	0	0	0	0

Process	Condition	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S
Haul Road – Mine	6,666 miles	0.5	0.08	0	0	0	0	0	0
Haul Road – Agg In	32.866 miles	2.49	0.37	0	0	0	0	0	0
Haul Road – Agg out	29,822 miles	2.26	0.34	0	0	0	0	0	0
Haul Road – Rip Rap	18,000 miles	1.36	0.20	0	0	0	0	0	0
Haul Road – Type II	10,889 miles	0.82	0.12	0	0	0	0	0	0
Haul Road - Asphalt	25,080 miles	1.90	0.29	0	0	0	0	0	0
Haul Road – RR	1,100 miles	0.08	0.01	0	0	0	0	0	0
Haul Road – Blend	2,000 miles	0.15	0.02	0	0	0	0	0	0
Haul Road – Coyote	48,667 miles	18.42	2.76	0	0	0	0	0	0
Haul Road – Portable	1,556 miles	0.59	0.09	0	0	0	0	0	0
Stockpile	51 acres	15.45	2.33	0	0	0	0	0	0
Total (without fugitives)		100.64	21.75	36.40	47.68	1.33	14.65	1.88	5.99
Total (with fugitives)		175.31	32.44	42.34	78.40	1.33	14.65	1.88	5.99

Attachment 3. Emissions for Permit Applicability (Various)

EU	Description	Throughput	Pollutant	EF	PTE
D Series	Asphalt System (6 silos)	3,942,000 tons	PM_{10}	5.86E-04	1.16
			$PM_{2.5}$	5.86E-04	1.16
			CO	1.18E-03	2.33
			VOC	1.22E-02	24.05
			HAP	1.59E-05	0.03
*emission factors are from AP-42 Table 11.1-14 and are measured in lb/ton					
D027	Truck Loadout (silo system)	3,942,000 tons	PM_{10}	5.00E-04	0.10
			$PM_{2.5}$	5.00E-04	0.10
			CO	1.30E-03	2.56
			VOC	9.61E-03	18.94
			HAP	6.24E-06	0.01
*emission factors are from AP-42 Table 11.1-14 and are measured in lb/ton					
D014	Natural Gas Drum Dryer	3,942,000 tons or 8,760 hours	PM_{10}	6.50E-00	12,811.50
			$PM_{2.5}$	6.50E-00	12,811.50
			NO_X	2.60E-02	51.25
			CO	1.30E-01	256.23
			SO_2	3.40E-03	6.70
			VOC	3.20E-02	63.07
			HAP	5.30E-03	0.99
			H_2S	8.16E-00	35.74
*emission factors are from AP-42 Table 11.1-3, Table 11.1-7, Table 11.1-8 and are measured in lb/ton, except for H_2S (lb/hr)					
D013d	Pugmill Mixer (baghouse)	4,161,000 tons	PM_{10}	1.56E-01	324.56
			$PM_{2.5}$	2.50E-02	52.01
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
D013a	Lime Silo (bin vent)	1,095,000 tons	PM_{10}	4.90E-03	2.68
			$PM_{2.5}$	7.80E-04	0.43
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
BS06a	Auxiliary Silo (bin vent)	1,095,000 tons	PM_{10}	3.40E-04	1.86
			$PM_{2.5}$	5.00E-05	0.03
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
BS06	Guppy Silo (bin vent)	219,000 tons.	PM_{10}	3.40E-04	0.04
			$PM_{2.5}$	5.00E-05	0.01
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					

Attachment 4. Source PTE (Various)

EU	Description	Throughput	Pollutant	EF	PTE
D Series	Asphalt System (6 silos)	110,000 tons	PM_{10}	5.86E-04	0.03
			$PM_{2.5}$	5.86E-04	0.03
			CO	1.18E-03	0.06
			VOC	1.22E-02	0.67
			HAP	1.59E-05	0.01
*emission factors are from AP-42 Table 11.1-14 and are measured in lb/ton					
D027	Truck Loadout (silo system)	110,000 tons	PM_{10}	5.00E-04	0.03
			$PM_{2.5}$	5.00E-04	0.03
			CO	1.30E-03	0.07
			VOC	9.61E-03	0.53
			HAP	6.24E-06	0.01
*emission factors are from AP-42 Table 11.1-14 and are measured in lb/ton					
D014	Natural Gas Drum Dryer (baghouse)	660,000 tons or 1,467 hours	PM_{10}	2.30E-02	7.59
			$PM_{2.5}$	2.30E-02	7.59
			NO_X	2.60E-02	8.58
			CO	1.30E-01	42.90
			SO_2	3.40E-03	1.12
			VOC	3.20E-02	10.56
			HAP	5.30E-03	1.75
			H_2S	8.16E-00	5.99
*emission factors are from AP-42 Table 11.1-3, Table 11.1-7, Table 11.1-8 and are measured in lb/ton, except for H_2S (lb/hr)					
D013d	Pugmill Mixer (baghouse)	517,833	PM_{10}	5.50E-03	1.42
			$PM_{2.5}$	5.50E-03	1.42
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
D013a	Lime Silo (bin vent)	9,000	PM_{10}	4.90E-03	0.02
			$PM_{2.5}$	7.80E-04	0.01
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
BS06a	Auxiliary Silo (bin vent)	9,000	PM_{10}	3.40E-04	0.01
			$PM_{2.5}$	5.00E-05	0.01
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					
BS06	Guppy Silo (bin vent)	8,333	PM_{10}	3.40E-04	0.01
			$PM_{2.5}$	5.00E-05	0.01
*emission factors are from AP-42 Table 11.12-2 and are measured in lb/ton					

Attachment 5. Emissions for Permit Applicability and Source PTE (EU: D026a)

EU#:	D026a			Emission Factor (lb/mmBtu)	Potential Emissions lb/hr	lb/day	ton/yr
Make:							
Model:			PM10	0.0236	0.05	1.20	0.22
S/N:			PM2.5	0.0152	0.03	0.77	0.14
			NOx	0.1429	0.30	7.25	1.32
2.1	mmBtu/hr		CO	0.0357	0.08	1.81	0.33
24.0	hr/day		SO_2	1.50E-03	0.01	0.08	0.01
8760	hr/yr		VOC	0.0024	0.01	0.12	0.02
			HAP	6.00E-04	0.01	0.03	0.01
Concetrations:		%O2	Lead	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	ppm NOx	3.0					
	ppm CO	3.0					
Fuel:	Diesel						

Attachment 6. Emissions for Permit Applicability and Source PTE (EU: D026b)

EU#:	D026b			Emission Factor (lb/mmBtu)	Potential Emissions lb/hr	lb/day	ton/yr
Make:							
Model:			PM10	0.0077	0.02	0.39	0.07
S/N:			PM2.5	0.0077	0.02	0.39	0.07
			NOx	0.1421	0.30	7.16	1.31
2.1	mmBtu/hr		CO	0.082	0.17	4.13	0.75
24.0	hr/day		SO_2	1.61E-02	0.03	0.81	0.15
8760	hr/yr		VOC	0.0109	0.02	0.55	0.10
			HAP	3.016E-05	0.01	0.01	0.01
Concetrations:		%O2	Lead	7.31E-10	1.53E-09	3.68E-08	6.72E-09
	ppm NOx	3.0					
	ppm CO	3.0					
	Propane						
Fuel:	3						

Attachment 7. Emissions for Permit Applicability and Source PTE (EU: D026c)

EU#:	D026c			Emission Factor (lb/mmBtu)	Potential Emissions lb/hr	lb/day	ton/yr
Make:							
Model:			PM10	0.0075	0.02	0.38	0.07
S/N:			PM2.5	0.0075	0.02	0.38	0.07
			NOx	0.098	0.21	4.94	0.90
2.1	mmBtu/hr		CO	0.0824	0.17	4.15	0.76
24.0	hr/day		SO_2	6.00E-04	0.01	0.03	0.01
8760	hr/yr		VOC	0.0054	0.01	0.27	0.05
			HAP	1.900E-03	0.01	0.10	0.02
Concetrations:		%O2	Lead	4.90E-07	1.03E-06	2.47E-05	4.51E-06
	ppm NOx	3.0					
	ppm CO	3.0					
	Natural Gas						
Fuel:	2						

Attachment 8. Emissions for Permit Applicability (EU: A123)

EU#	A123		Horsepower:	306		Emission Factor (lb/hp-hr)	Control Efficiency	Potential Emissions lb/hr	lb/day	ton/yr
Make:			Hours/Day:	24.0						
Model:			Hours/Year	8760	PM10	2.20E-03	0.00%	0.67	16.16	2.95
S/N:					NOx	1.09E-02	0.00%	3.34	80.05	14.61
					CO	9.48E-04	0.00%	0.29	6.96	1.27
Manufacturer Guarantees					SO_2	1.21E-05	0.00%	0.01	0.09	0.02
PM10		g/hp-hr			VOC	2.51E-03	0.00%	0.77	18.46	3.37
NOx	0.0109	lb/hp-hr			HAP	2.71E-05	0.00%	0.01	0.20	0.04
CO	0.000948	lb/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:	Diesel				Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 9. Source (EU: A123)

						Emission Factor	Control	Potential Emissions		
EU#	A123		**Horsepower:**	306		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	2.20E-03	0.00%	0.67	16.16	0.67
Model:			**Hours/Year**	2000	**NOx**	1.09E-02	0.00%	3.34	80.05	3.34
S/N:					**CO**	9.48E-04	0.00%	0.29	6.96	0.29
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.09	0.01
PM10		g/hp-hr			**VOC**	2.51E-03	0.00%	0.77	18.46	0.77
NOx	0.0109	lb/hp-hr			**HAP**	2.71E-05	0.00%	0.01	0.20	0.01
CO	0.000948	lb/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:		Diesel	2		Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 10. Emissions for Permit Applicability (EU: A123b)

						Emission Factor	Control	Potential Emissions		
EU#	A123b		**Horsepower:**	605		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.11	2.56	0.47
Model:			**Hours/Year**	8760	**NOx**	1.13E-02	0.00%	6.84	164.08	29.94
S/N:					**CO**	1.10E-03	0.00%	0.67	15.97	2.91
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.18	0.03
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.27	6.40	1.17
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.16	0.03
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	lb/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 11. Source PTE (EU: A123b)

						Emission Factor	Control	Potential Emissions		
EU#	A123b		**Horsepower:**	605		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.11	2.56	0.07
Model:			**Hours/Year**	1250	**NOx**	1.13E-02	0.00%	6.84	164.08	4.27
S/N:					**CO**	1.10E-03	0.00%	0.67	15.97	0.42
Manufacturer Guarantees		lb/hp-hr			**SO_2**	1.21E-05	0.00%	0.01	0.18	0.01
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.27	6.40	0.17
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.16	0.01
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	2								
		Diesel								
Engine Type:		2			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 12. Emissions for Permit Applicability (EU: A123c)

						Emission Factor	Control	Potential Emissions		
EU#	A123c		**Horsepower:**	480		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	3.31E-04	0.00%	0.16	3.81	0.70
Model:			**Hours/Year**	8760	**NOx**	1.52E-02	0.00%	7.30	175.10	31.96
S/N:					**CO**	5.73E-03	0.00%	2.75	66.01	12.05
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.14	0.03
PM10	0.000331	lb/hp-hr			**VOC**	2.51E-03	0.00%	1.21	28.96	5.29
NOx	0.0152	lb/hp-hr			**HAP**	2.71E-05	0.00%	0.01	0.31	0.06
CO	0.00573	lb/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 13. Source PTE (EU: A123c)

						Emission Factor	Control	Potential Emissions		
EU#	A123c		**Horsepower:**	480		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	3.31E-04	0.00%	0.16	3.81	0.10
Model:			**Hours/Year**	1250	**NOx**	1.52E-02	0.00%	7.30	175.10	4.56
S/N:					**CO**	5.73E-03	0.00%	2.75	66.01	1.72
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.14	0.01
PM10	0.000331	lb/hp-hr			**VOC**	2.51E-03	0.00%	1.21	28.96	0.75
NOx	0.0152	lb/hp-hr			**HAP**	2.71E-05	0.00%	0.01	0.31	0.01
CO	0.00573	lb/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 14. Emissions for Permit Applicability (EU: CY09)

						Emission Factor	Control	Potential Emissions		
EU#	CY09		**Horsepower:**	680		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.12	2.87	0.52
Model:			**Hours/Year**	8760	**NOx**	1.13E-02	0.00%	7.68	184.42	33.66
S/N:					**CO**	1.10E-03	0.00%	0.75	17.95	3.28
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.20	0.04
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.30	7.20	1.31
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.18	0.03
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	lb/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 15. Source PTE (EU: CY09)

						Emission Factor	Control	Potential Emissions		
EU#	CY09		**Horsepower:**	680		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.12	2.87	0.15
Model:			**Hours/Year**	2500	**NOx**	1.13E-02	0.00%	7.68	184.42	9.61
S/N:					**CO**	1.10E-03	0.00%	0.75	17.95	0.94
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.20	0.01
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.30	7.20	0.37
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.18	0.01
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	lb/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 16. Emissions for Permit Applicability (EU: RS10)

						Emission Factor	Control	Potential Emissions		
EU#	RS10		**Horsepower:**	58		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	2.20E-03	0.00%	0.13	3.06	0.56
Model:			**Hours/Year**	8760	**NOx**	3.10E-02	0.00%	1.80	43.15	7.88
S/N:					**CO**	6.68E-03	0.00%	0.39	9.30	1.70
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.02	0.01
PM10		g/hp-hr			**VOC**	2.51E-03	0.00%	0.15	3.50	0.64
NOx		g/hp-hr			**HAP**	2.71E-05	0.00%	0.01	0.04	0.01
CO		g/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:		Diesel			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 17. Source PTE (EU: RS10)

						Emission Factor	Control	Potential Emissions		
EU#	RS10		**Horsepower:**	58		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	2.20E-03	0.00%	0.13	3.06	0.03
Model:			**Hours/Year**	500	**NOx**	3.10E-02	0.00%	1.80	43.15	0.45
S/N:					**CO**	6.68E-03	0.00%	0.39	9.30	0.10
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.02	0.01
PM10		g/hp-hr			**VOC**	2.51E-03	0.00%	0.15	3.50	0.04
NOx		g/hp-hr			**HAP**	2.71E-05	0.00%	0.01	0.04	0.01
CO		g/hp-hr								
SO_2		g/hp-hr								
VOC		g/hp-hr								
Engine Type:	Diesel				Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 18. Emissions for Permit Applicability (EU: PC09)

						Emission Factor	Control	Potential Emissions		
EU#	PC09		**Horsepower:**	605		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.11	2.56	0.47
Model:			**Hours/Year**	8760	**NOx**	1.13E-02	0.00%	6.84	164.08	29.94
S/N:					**CO**	1.10E-03	0.00%	0.67	15.97	2.91
Manufacturer Guarantees					**SO_2**	1.21E-05	0.00%	0.01	0.18	0.03
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.27	6.40	1.17
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.16	0.03
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	lb/hp-hr								
Engine Type:	Diesel				Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 19. Source PTE (EU: PC09)

						Emission Factor	Control	Potential Emissions		
EU#	PC09		**Horsepower:**	605		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	1.76E-04	0.00%	0.11	2.56	0.07
Model:			**Hours/Year**	1250	**NOx**	1.13E-02	0.00%	6.84	164.08	4.27
S/N:					**CO**	1.10E-03	0.00%	0.67	15.97	0.42
Manufacturer Guarantees		lb/hp-hr			**SO_2**	1.21E-05	0.00%	0.01	0.18	0.01
PM10	0.000176	lb/hp-hr			**VOC**	4.41E-04	0.00%	0.27	6.40	0.17
NOx	0.0113	lb/hp-hr			**HAP**	1.10E-05	0.00%	0.01	0.16	0.01
CO	0.0011	lb/hp-hr								
SO_2		lb/hp-hr								
VOC	0.000441	2								
	Diesel									
Engine Type:	2				Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

Attachment 20. Emissions for Permit Applicability (Insignificant)

						Emission Factor	Potential Emissions		
EU#	Insignificant		**Horsepower:**	12		(lb/hp-hr)	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	2.20E-03	0.03	0.64	0.12
Model:			**Hours/Year**	8760	**NOx**	3.10E-02	0.38	9.00	1.64
S/N:					**CO**	6.68E-03	0.08	1.94	0.35
Manufacturer Guarantees					**SO_2**	1.21E-05	0.01	0.01	0.01
PM10		g/hp-hr			**VOC**	2.51E-03	0.03	0.73	0.13
NOx		g/hp-hr			**HAP**	2.71E-05	0.01	0.01	0.01
CO		g/hp-hr							
SO_2		g/hp-hr							
VOC		g/hp-hr							
Engine Type:	Diesel		2		Diesel Fuel Sulfur Content is 15 ppm (0.0015%)				

Attachment 21. Emissions for Permit Applicability (Insignificant)

						Emission Factor	Potential Emissions		
EU#	Insignificant		**Horsepower:**	13.0		(lb/hp-hr)	lb/hr	lb/day	ton/yr
Make:			**Hours/Day:**	24.0	**PM10**	2.20E-03	0.03	0.69	0.13
Model:			**Hours/Year**	8760	**NOx**	3.10E-02	0.40	9.67	1.77
S/N:					**CO**	6.68E-03	0.09	2.08	0.38
					SO_2	1.21E-05	0.01	0.01	0.01
Manufacturer Guarantees		g/hp-hr			**VOC**	2.51E-03	0.03	0.78	0.14
PM10		g/hp-hr			**HAP**	2.71E-05	0.01	0.01	0.01
NOx		g/hp-hr							
CO		g/hp-hr							
SO_2		g/hp-hr							
VOC		1							
	Diesel								
Engine Type:		2			Diesel Fuel Sulfur Content is 15 ppm (0.0015%)				

Attachment 22. Source PTE (Drilling and Blasting)

Blasting - $PM_{2.5}$ and PM_{10} [1]

EU	Description	Area (ft^2/blast)	Blast/Yr	Area (ft^2/yr)	PM_{10} PTE (tons/blast)	$PM_{2.5}$ PTE (tons/yr)	PM_{10} PTE (tons/yr)
A001a	Blasting	35,000	175	6,125,000	0.02	0.63	4.17

PM2.5 calculated at 15% of PM10

[1]Emission values are based on the AP-42 formula for blasting overburden found in Section 11.9-1 dated July 1998: PM_{10} (lbs/yr) = 0.000014 (A)$^{1.5}$ x 0.52 scaling factor. Where A = area blasted in square feet.

Emissions from blasting have been revised on a "tons/blast" basis as intended in the abovementioned formula. The number of blasts per year is derived from total area proposed by source

Drilling - $PM_{2.5}$ and PM_{10}

EU	Description	Area ft^2/hole	Holes/yr	CF	$PM_{2.5}$ EF (lbs/hole)	PM_{10} EF (lbs/hole)	$PM_{2.5}$ PTE (tons/yr)	PM_{10} PTE (tons/yr)
A001b (new)	Drilling	25	7,500	1	0.04	0.68	0.15	2.55

Blasting - NOx and CO [1]

EU	Description	ANFO Usage		NO_x		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

[1]Emission factors for NO_x = 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."

Blasting Summary - PTE

EU	Pollutant	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	Bill Code
A001b	Drilling	2.55	0.15	0	0	0	0	0	P1
A001a	Blasting	4.17	0.63	5.94	30.72	0	0	0	P1
	Blasting Subtotals	**6.72**	**0.78**	**5.94**	**30.72**	**0.00**	**0.00**	**0.00**	

Attachment 23. Source PTE of Haul Roads

	VMT/yr	EF	CF	tpy				tpy
Mine Haul	6666	7.57	0.02	0.5	Mine Haul	0.5	0.15	0.08
Aggregate In	32866	7.57	0.02	2.49	Aggregate In	2.49	0.15	0.37
Aggregate Out	29822	7.57	0.02	2.26	Aggregate Out	2.26	0.15	0.34
Rip Rap	18000	7.57	0.02	1.36	Rip Rap	1.36	0.15	0.2
Type II	10889	7.57	0.02	0.82	Type II	0.82	0.15	0.12
Asphalt	25080	7.57	0.02	1.9	Asphalt	1.9	0.15	0.29
Road Runner	1100	7.57	0.02	0.08	Road Runner	0.08	0.15	0.01
Blending	2000	7.57	0.02	0.15	Blending	0.15	0.15	0.02
Coyote	48667	7.57	0.1	18.42	Coyote	18.42	0.15	2.76
Portable	1556	7.57	0.1	0.59	Portable	0.59	0.15	0.09

Attachment 24. Source PTE of Media Blasting

EU	Description	Conditions	$PM_{2.5}$	PM_{10}
MB01	Media Blasting Operations, 48"x28"x28" [2]	1,000 hrs/year	0.25	0.25

[1]Based on a sand mass flow rate of 721.7 lbs/hr and controlled $PM_{2.5}$ / PM_{10} EF = 0.69 lb/1,000 lb abrasive.
[2]Enclosure vented to a dust collector.

Attachment 25. Source PTE of Gasoline Dispensing

EU	Description	Throughput	VOC PTE
FT01	500-gallon aboveground gasoline storage tank	12,000 gal/year	0.52
FT02	500-gallon aboveground gasoline storage tank		

Attachment 26. Source PTE of Stockpiles

Stockpiles

(51.0 acres) * (1.66 lb/acre-day) * (365 days) * (1 ton / 2,000 pounds) =

15.45 tons per year of PM_{10}

(51.0 acres) * (0.25 lb/acre-day) * (365 days) * (1 ton / 2,000 pounds) =

2.33 tons per year of $PM_{2.5}$

Attachment 27. Source PTE of Mining (EU: A001)

(5,000,000 tons) * (0.0087) * (1 ton / 2,000 pounds) =

21.75 tons per year of PM_{10}

(21.75 tons per year of PM_{10}) * (.1375) * (1 ton / 2,000 pounds) =

3.00 tons per year of $PM_{2.5}$

Attachment 28. Source PTE of Mining (EU: C001a)

(500,000 tons) * (0.0087) * (1 ton / 2,000 pounds) =

2.18 tons per year of PM_{10}

(2.18 tons per year of PM_{10}) * (.1375) * (1 ton / 2,000 pounds) =

0.30 tons per year of $PM_{2.5}$

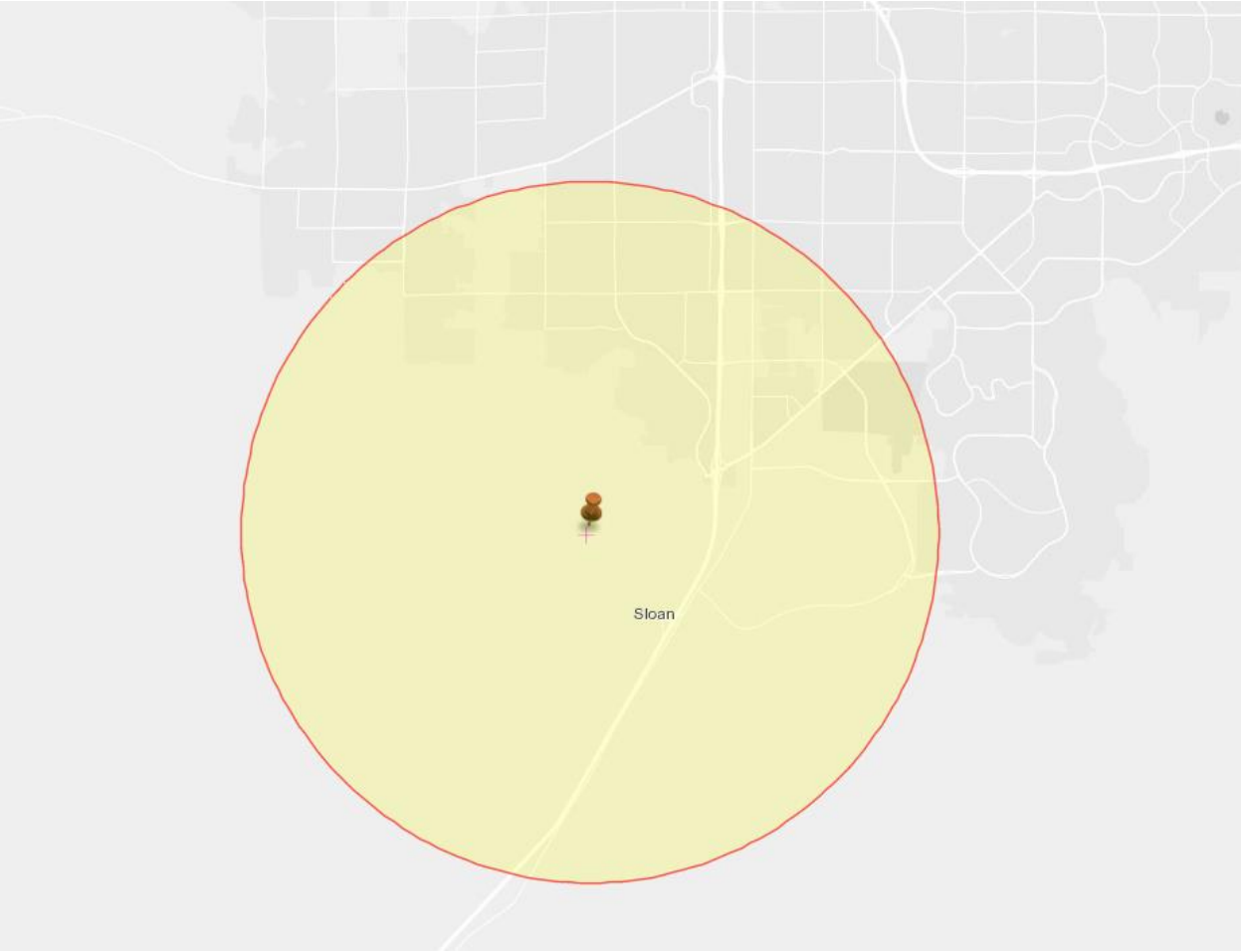
Attachment 29. Source PTE

	tpy	PM10 EF	PM2.5 EF	tpy PM10	tpy PM2.5	Nox	CO	SO2	VOC	HAP	H2S
	Primary Feed										
A02	5000000	0.0024	0.00044	6	1.1						
A012	5000000	0.0011	0.00031	2.75	0.78						
				8.75	1.88						
	Secondary Feed										
A013a-d	5000000	0.00074	0.00005	1.85	0.13						
A130	5000000	0.00005	0.00001	0.13	0.03						
A129a	5000000	0.00074	0.00005	1.85	0.13						
A129b	3125000	0.00005	0.00001	0.08	0.01						
A129b	3125000	0.00005	0.00001	0.08	0.01						
A020	1875000	0.00054	0.0001	0.51	0.09						
A022	2625000	0.00005	0.00001	0.07	0.01						
A022	1312500	0.00005	0.00001	0.03	0.01						
A022	1312500	0.00005	0.00001	0.03	0.01						
A025a	1312500	0.00074	0.00005	0.49	0.03						
A026a	1312500	0.00074	0.00005	0.49	0.03						
A029	656250	0.00005	0.00001	0.02	0.01						
A029	656250	0.00005	0.00001	0.02	0.01						
A030	656250	0.00005	0.00001	0.02	0.01						
A030	656250	0.00005	0.00001	0.02	0.01						
A030	3125000	0.00005	0.00001	0.08	0.01						
A032	1312500	0.00054	0.0001	0.35	0.07						
A040	5000000	0.00005	0.00001	0.13	0.03						
A040	5000000	0.00005	0.00001	0.13	0.03						
				6.38	0.67						
	Overland Feed										
A041a-c	3500000	0.00074	0.00005	1.3	0.09						
A042	3500000	0.00005	0.00001	0.09	0.02						
A043	3500000	0.00005	0.00001	0.09	0.02						
A043	3500000	0.00005	0.00001	0.09	0.02						
A043	1750000	0.00005	0.00001	0.04	0.01						
A045	1750000	0.0011	0.00031	0.96	0.27						
A046	1750000	0.0011	0.00031	0.96	0.27						
				3.53	0.7						
	Wash 1										
A138-A140	2000000	0.0087	0.00059	8.7	0.59						
A081	2000000	0.0011	0.00031	1.1	0.31						
A081b	3000000	0.0087	0.00059	13.05	0.89						
				22.85	1.79						
	Wash 2										
A048a-A048b	1500000	0.0087	0.00059	6.53	0.44						
A049	1500000	0.0011	0.00031	0.83	0.23						
A049	923077	0.0011	0.00031	0.51	0.14						
A049	923077	0.0011	0.00031	0.51	0.14						
A051	923077	0.0011	0.00031	0.51	0.14						
A053	923077	0.0011	0.00031	0.51	0.14						
				9.4	1.23						
	Rip Rap										
H05c	150000	0.0011	0.00031	0.08	0.02						
H08	150000	0.0087	0.00059	0.65	0.04						
H02	150000	0.0011	0.00031	0.08	0.02						
H02a	75000	0.0087	0.00059	0.33	0.02						
H10	75000	0.0011	0.00031	0.04	0.01						
H05	32500	0.0011	0.00031	0.02	0.01						
H05a	32500	0.0011	0.00031	0.02	0.01						
H09	75000	0.0011	0.00031	0.04	0.01						
H11	75000	0.0087	0.00059	0.33	0.02						
H12	32500	0.0011	0.00031	0.02	0.01						
H12	32500	0.0011	0.00031	0.02	0.01						
H13	32500	0.0011	0.00031	0.02	0.01						
H13	32500	0.0011	0.00031	0.02	0.01						
				1.67	0.2						

	West Screen				
B001	1500000	0.0011	0.00031	0.83	0.23
B001	1500000	0.0011	0.00031	0.83	0.23
B004	1800000	0.00005	0.00001	0.05	0.01
B004	600000	0.00005	0.00001	0.02	0.01
B004	600000	0.00005	0.00001	0.02	0.01
B004	600000	0.00005	0.00001	0.02	0.01
B006	600000	0.0087	0.00059	2.61	0.18
B008	600000	0.0087	0.00059	2.61	0.18
B013	600000	0.0087	0.00059	2.61	0.18
B051	600000	0.0087	0.00059	2.61	0.18
B043a	600000	0.0011	0.00031	0.33	0.09
B053a					
B053					
B037a	300000	0.0011	0.00031	0.17	0.05
B033a	300000	0.0011	0.00031	0.17	0.05
B035	300000	0.00054	0.0001	0.08	0.02
B057a	300000	0.0087	0.00059	1.31	0.09
B031	600000	0.0011	0.00031	0.33	0.09
B102	133334	0.0011	0.00031	0.07	0.02
B102	133334	0.0011	0.00031	0.07	0.02
B102	133334	0.0011	0.00031	0.07	0.02
B027	400000	0.0011	0.00031	0.22	0.06
B027	400000	0.0011	0.00031	0.22	0.06
B027	400000	0.0011	0.00031	0.22	0.06
				15.47	1.85
	Aux Feed				
B046a	100000	0.0011	0.00031	0.06	0.02
B056	100000	0.0011	0.00031	0.06	0.02
B003a	400000	0.0011	0.00031	0.22	0.06
B016	300000	0.0011	0.00031	0.17	0.05
				0.51	0.15
	Type II				
A012b	250000	0.0024	0.00044	0.3	0.06
A012e	500000	0.0011	0.00031	0.28	0.08
C001	500000	0.0011	0.00031	0.28	0.08
C004	700000	0.0011	0.00031	0.39	0.11
C002	700000	0.0024	0.00044	0.84	0.15
C005a	700000	0.0087	0.00059	3.05	0.21
C005b	700000	0.0011	0.00031	0.39	0.11
C003b	350000	0.0011	0.00031	0.19	0.05
C010b	262500	0.0011	0.00031	0.14	0.04
C036	87500	0.0011	0.00031	0.05	0.01
C036	87500	0.0011	0.00031	0.05	0.01
C006a	612500	0.0011	0.00031	0.34	0.09
C006b	612500	0.0011	0.00031	0.34	0.09
C008	481250	0.0087	0.00059	2.09	0.14
C009	612500	0.0087	0.00059	2.66	0.18
C012	350000	0.0024	0.00044	0.42	0.08
C013	350000	0.0011	0.00031	0.19	0.05
C013a	350000	0.0011	0.00031	0.19	0.05
C013b	350000	0.0011	0.00031	0.19	0.05
C020	87500	0.0011	0.00031	0.05	0.01
C020	87500	0.0011	0.00031	0.05	0.01
C020	87500	0.0011	0.00031	0.05	0.01
C028	612500	0.0011	0.00031	0.34	0.09
C028	612500	0.0011	0.00031	0.34	0.09
C028	612500	0.0011	0.00031	0.34	0.09
C028	612500	0.0011	0.00031	0.34	0.09
C011	350000	0.0011	0.00031	0.19	0.05
C035	350000	0.0011	0.00031	0.19	0.05
				14.27	2.13

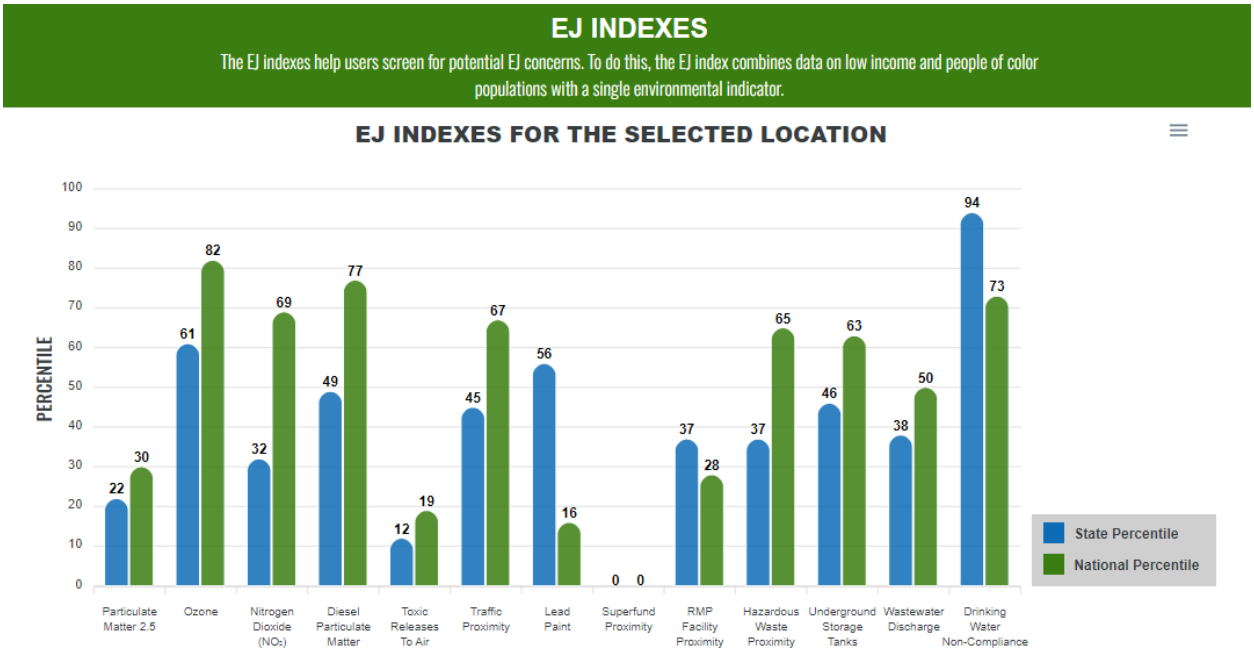
	Asphalt System										
D01	527340	0.0011	0.00031	0.29	0.08						
D011	93060	0.0011	0.00031	0.05	0.01						
D007	527340	0.0011	0.00031	0.29	0.08						
D008	527340	0.00074	0.00005	0.2	0.01						
D012	93060	0.0011	0.00031	0.05	0.01						
D010	527340	0.0011	0.00031	0.29	0.08						
D013	93060	0.0011	0.00031	0.05	0.01						
D015	660000	0.0011	0.00031	0.36	0.1						
D Series				0.03	0.03	0	0.06	0	0.67	0.01	
D027				0.03	0.03	0	0.07	0	0.53	0.01	
D026a-c				0.22	0.22	1.32	0.76	0.15	0.1	0.02	
D014				7.59	7.59	8.58	42.9	1.12	10.56	1.75	5.99
				9.45	8.25	9.9	43.79	1.27	11.86	1.79	5.99
	Road Runner										
RS01	50000	0.0011	0.00031	0.03	0.01						
RS03	50000	0.0087	0.0059	0.22	0.15						
RS05	16667	0.0011	0.00031	0.01	0.01						
RS07	16667	0.0011	0.00031	0.01	0.01						
RS09	33333	0.0011	0.00031	0.02	0.01						
				0.29	0.19						
	Blending System										
BS01	500000	0.0011	0.00031	0.28	0.08						
BS02	500000	0.0011	0.00031	0.28	0.08						
BS03	500000	0.0011	0.00031	0.28	0.08						
BS03a	500000	0.0011	0.00031	0.28	0.08						
BS05a	500000	0.0011	0.00031	0.28	0.08						
BS08	517833	0.0011	0.00031	0.28	0.08						
BS08	517833	0.0011	0.00031	0.28	0.08						
D013d				1.42	0.2						
D013a				0.02	0.01						
BS06a				0.01	0.01						
BS06				0.01	0.01						
				3.42	0.79						
	Coyote										
CY01	15000	0.0011	0.00031	0.01	0.01						
CY02	15000	0.0011	0.00031	0.01	0.01						
CY03	15000	0.0087	0.00059	0.07	0.01						
CY04	3750	0.0011	0.00031	0.01	0.01						
CY04	3750	0.0011	0.00031	0.01	0.01						
CY05	3750	0.0011	0.00031	0.01	0.01						
CY05	3750	0.0011	0.00031	0.01	0.01						
CY07	7500	0.0011	0.00031	0.01	0.01						
CY07	7500	0.0011	0.00031	0.01	0.01						
				0.15	0.09						
	Portable										
PC00	350000	0.0011	0.00031	0.19	0.05						
PC01	350000	0.0024	0.00044	0.42	0.08						
PC02	350000	0.0087	0.00059	1.52	0.1						
PC03	350000	0.0024	0.00044	0.42	0.08						
PC04	350000	0.0011	0.00031	0.19	0.05						
PC05	175000	0.0011	0.00031	0.1	0.03						
PC05	175000	0.0011	0.00031	0.1	0.03						
PC06	175000	0.0011	0.00031	0.1	0.03						
PC06	175000	0.0011	0.00031	0.1	0.03						
PC07	350000	0.0001	0.00002	0.02	0.01						
				3.16	0.49						

Attachment 30. EJScreen (Demographic Index)



The pin in the center of the shaded circle is the source location of Amrize Southwest Incorporated. To the Northeast of the Amrize Southwest Incorporated is the Southwest Region of the city of Las Vegas, which consists of residential areas.

Attachment 31. EJScreen (Environmental Justice Indexes)



Attachment 32. Source PTE of Greenhouse Gases

	rating	hours/year	HHV	gallons/year	pollutant	EF	GHG
						kg/MMBtu	tons/year
D014	450	660000				33	10890
D026a-c	2.1	18396		183960		22.3	2051.15
A123	306	2000	0.138	30600	CO2	73.96	345.11
			0.138	134028	CH4	0.003	0.06
			0.138	134028	N2O	0.0006	0.01
A123b	605	1250	0.138	37812.5	CO2	73.96	426.46
			0.138	264990	CH4	0.003	0.12
			0.138	264990	N2O	0.0006	0.02
A123c	480	1250	0.138	30000	CO2	73.96	338.34
			0.138	210240	CH4	0.003	0.1
			0.138	210240	N2O	0.0006	0.02
CY09	680	2500	0.138	85000	CO2	73.96	958.64
			0.138	330690	CH4	0.003	0.15
			0.138	330690	N2O	0.0006	0.03
RS10	58	500	0.138	1450	CO2	73.96	16.35
			0.138	29346	CH4	0.003	0.01
			0.138	29346	N2O	0.0006	0.01
PC09	605	1250	0.138	37812.5	CO2	73.96	426.46
			0.138	264990	CH4	0.003	0.12
			0.138	264990	N2O	0.0006	0.02
							15453.18
D014 rating is in tons/hour and emission factor is in pounds per ton (from AP-42 Section 11.1)							
D026a-c rating is in MMBtu/hr and emission factor is in pounds per gallon (from AP-42 Section 1.3)							

Attachment 33. Emission Factors for PM_{10} and $PM_{2.5}$

EU	Process	PM_{10} EF (lb/ton) [1]	$PM_{2.5}$ EF (lb/ton) [1]	Source of EF
A001	Mining [3]	0.008	0.0012 [2]	DAQ Default
C001a				
H06	Haul Roads	7.57 (lbs/VMT)	1.14 (lbs/VMT) [2]	DAQ Default
PC08				
G01	Stockpiles	1.66 (lbs/acre-day)	0.249 (lbs/acre-day) [2]	DAQ Default
A001b	Drilling [3, 4]	0.68 lb/hole	0.04 lb/hole	AP-42 § 11.9.1
A001a	Blasting [3]	47.67 lb/hr	7.15 lb/hr	AP-42 § 11.9.1
Various	Crusher (uncontrolled)	2.40E-03	4.40E-04	AP-42 § 11.19.2
Various	Crusher (controlled)	5.40E-03	1.00E-04	AP-42 § 11.19.2
Various	Screen (uncontrolled)	8.70E-03	5.90E-04	AP-42 § 11.19.2
Various	Screen (controlled)	7.40E-04	5.00E-05	AP-42 § 11.19.2
Various	Stacker (uncontrolled)	1.10E-03	3.10E-04	AP-42 § 11.19.2
Various	Stacker (controlled)	5.00E-05	1.00E-05	AP-42 § 11.19.2
Various	Conveyor (uncontrolled)	1.10E-03	3.10E-04	AP-42 § 11.19.2
Various	Conveyor (controlled)	5.00E-05	1.00E-05	AP-42 § 11.19.2
D013a	Lime Silo (bin vent)	4.90E-03	7.80E-04	AP-42 § 11.1.2
BS06a	Auxiliary Silo (bin vent)	3.40E-04	5.00E-05	AP-42 § 11.1.2
BS06	Guppy Silo (bin vent)	3.40E-04	5.00E-05	AP-42 § 11.1.2
D013d	Pugmill Mixer (baghouse)	1.53E-01	1.56E-01	AP-42 § 11.1.2
D013d	Pugmill Mixer (baghouse)	1.56E-01	2.50E-02	AP-42 § 11.1.2
D Series	Asphalt Silo Loading (bin vent)	5.86E-04	5.86E-04	AP-42 § 11.1.14
D027	Truck Loadout – Silo System	5.00E-04	5.00E-04	AP-42 § 11.1.14
PC07	Truck Loadout (uncontrolled)	1.00E-04	2.00E-05	AP-42 § 11.1.2
PC07	Truck Loadout (controlled)	1.00E-04	2.00E-05	AP-42 § 11.1.2
D014	Drum Mixer (no baghouse) uncontrolled	6.50E-00	6.50E-00	AP-42 § 11.1.3
				AP-42 § 11.1.7
				AP-42 § 11.1.8
D014	Drum Mixer (baghouse) controlled	2.30E-02	2.30E-02	AP-42 § 11.1.3
				AP-42 § 11.1.7
				AP-42 § 11.1.8

[1] DAQ default emission factors are based on a level of control that will result in the process not exceeding opacity standards under normal operations.

[2] $PM_{2.5}$ emission factors not listed in AP-42 are estimated at 15% of the PM_{10} emission factor as suggested by the EPA document "Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Dust Emissions Factors" (2/06).

[3] The mined material at Sloan Quarry comes from chemical grade limestone or dolomite, which are both recognized as major rock types applicable to stone processing emission factors.

[4] Overburden drilling operations at western surface coal mines presented in AP-42 §11.9 (January 1995 reformatted version)