



1302 W Drivers Way | Tempe, AZ 85284-1048
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Fisher Sand & Gravel Co.

Arizona Drilling & Blasting
Fisher Grading & Excavation
Fisher Ready Mix
Southwest Asphalt
Southwest Asphalt Paving

Fisher Sand & Gravel - New Mexico, Inc.
General Steel and Supply Company

November 29, 2023

Arizona Department of Environmental Quality
Air Quality Division
1110 West Washington
Phoenix, AZ 85007

**RE: Portable Class II Permit Application
Fisher Sand & Gravel Co.**

A Portable Class II Permit application is attached for your review. Fisher Sand & Gravel Co. requests the following additions as part of this Portable Class II Permit application:

1. The addition of a new crushing and screening (C&S) plant. The requested production limitation for the new C&S plant is 1,400,000 tons of aggregate per any consecutive 12 months. All emissions from the C&S plant will be controlled via water sprays to demonstrate compliance with federal and local opacity standards. The plant will be subject to the applicable requirements of 40 CFR 60 Subpart 000.
2. The addition of a new wash plant. The requested production limitation for the new wash plant is 500,000 tons of aggregate per any consecutive 12 months. There are no emissions associated with the wash plant as all material will be wet.
3. The addition of a new hot mix asphalt (HMA) plant. The requested production limitation for the new HMA plant is 250,000 tons of asphalt concrete per any consecutive 12 months. The HMA drum dryer will combust on-specification used oil. The plant will be subject to the applicable requirements of 40 CFR 60 Subpart I, and cold aggregate screens and conveyors associated with the plant will be subject to 40 CFR 60 Subpart 000.
4. The addition of a new lime marination (lime) plant. The requested production limitation for the new lime plant is 250,000 tons of lime per any consecutive 12 months. All emissions from the lime plant will be controlled via water sprays to demonstrate compliance with federal and local opacity standards. The plant will be subject to the applicable requirements of 40 CFR 60 Subpart 000.

Fisher anticipates the aforementioned plants to operate at various locations throughout the state. As such, Fisher requests that a portable Class II permit be issued for these plants. Additionally, it should be noted that prior to moving to a new location, Fisher will submit a Portable Source Notice of Equipment Transfer form.

Should you have any questions or concerns regarding this submittal, please do not hesitate to contact me at (480) 730-1033 or tmack@fisherind.com.

Sincerely,
Fisher Sand & Gravel Co.



Todd Mack
Chief Business Officer

Attachments: Application Form
Process Description
Site Map
Process Flow Diagrams
Potential to Emit Calculations
Equipment List

SECTION 3.1
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338

STANDARD CLASS II PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and Chapter 2, Article 3, Arizona Administrative Code)

1. Permit to be issued to (Business license name of organization that is to receive permit):
Fisher Sand & Gravel Co.
2. Mailing Address: 1302 W Drivers Way
City: Tempe State: AZ ZIP: 85284
3. Name (or names) of Responsible Official: Todd Mack
Phone: 480-730-1033 Fax: 480-730-1264 Email: tmack@fisherind.com
4. Facility Manager/Contact Person and Title: Ben Schoonover, COO
Phone: 480-730-1033 Fax: 480-730-1264 Email: bschoonover@fisherind.com
5. Facility Name: Portable Permit
Facility Location/Address (Current/Proposed): 14875 E 31st Street
City: Yuma County: Yuma ZIP: 85367
Indian Reservation (if applicable, which one): Not Applicable
Latitude/Longitude, Elevation: 32.672187, -114.380432
6. General Nature of Business: Sand, Gravel, Asphalt
7. Type of Organization:
 Corporation Individual Owner Partnership Government Entity LLC
 Other _____
8. Permit Application Basis: New Source Revision Renewal of Existing Permit
For renewal or modification, include existing permit number (and exp. date): _____
Date of Commencement of Construction or Modification: TBD
Primary Standard Industrial Classification Code: 1442
9. I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the Permit. I will present a certification of compliance to ADEQ no less than annually and more frequently if specified by ADEQ. I further state that

I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.

Signature of Responsible Official:  _____

Printed Name of Signer/Official Title: Todd Mack, Chief Business Officer

Date: 11/29/23 Telephone Number: 480-730-1033

Process Description – Crushing & Screening and Wash Plants:

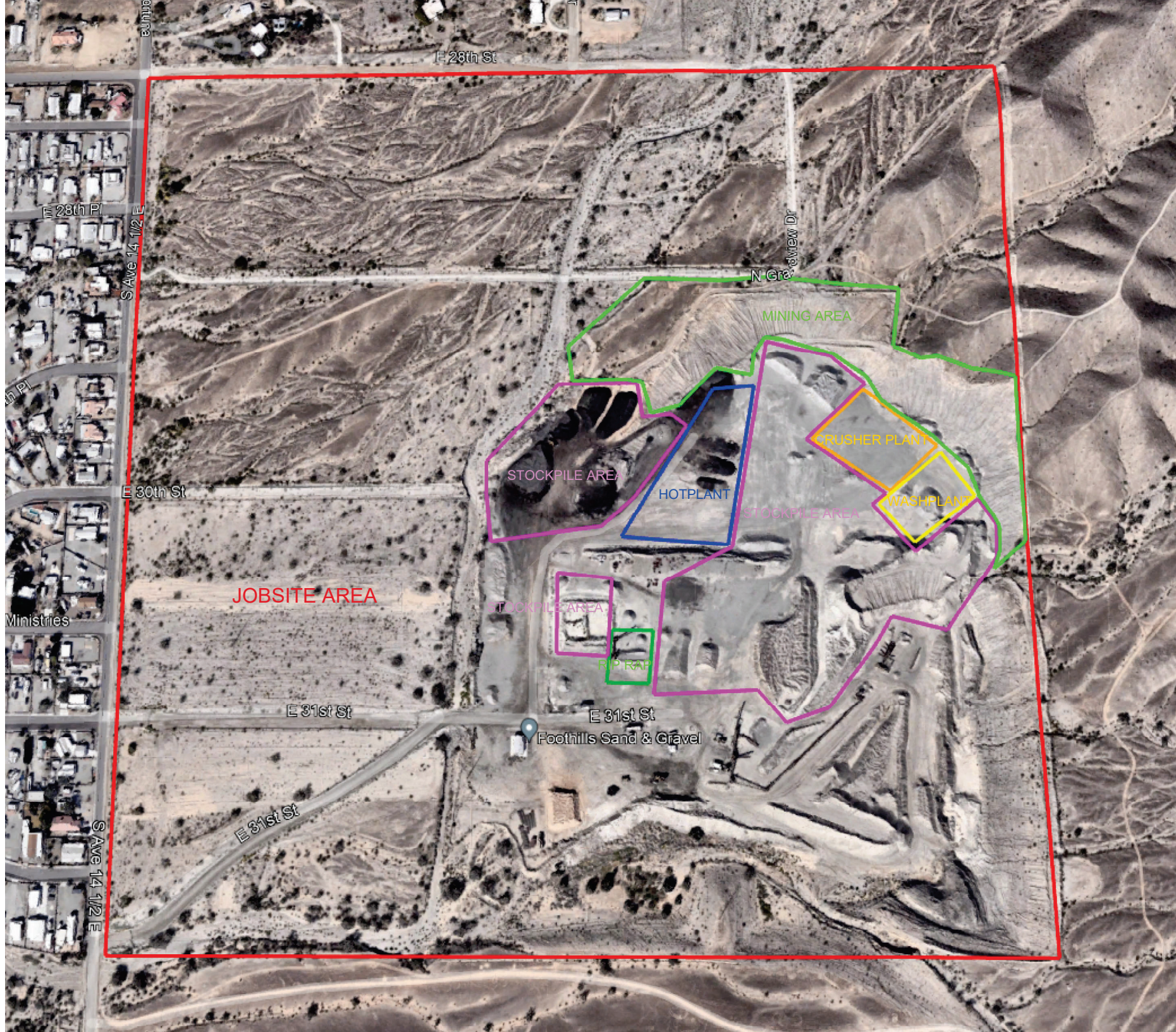
Material from mining operations gets fed to the feed hopper by a loader. The material is then transferred via several conveyor belts to either a stacker or a jaw crusher. Material from the stacker is collected in a stockpile. From the jaw crusher, material is conveyed to a screen. From the screen, material is conveyed to the cone crusher via two conveyor belts and then conveyed to another screen via two conveyor belts. From the screen, material is then conveyed via several conveyor belts to either the $\frac{3}{4}$ " , $\frac{3}{8}$ " , or ASCF stockpiles. The material is then loaded and hauled off via truck or dropped onto a conveyor belt and then conveyed to the wash plant. From the wash plant material is conveyed to one of three stockpiles prior to being hauled off via truck.

Process Description – Hot Mix Asphalt Plant:

The hot mix asphalt plant consists of bin feeders, a scalping screen, a counter flow drum dryer, drum burner, pug mill, conveyors, asphalt storage bins, an asphalt heater, and asphalt and lime silos. Heat in the drum mixer is generated by the combustion of on-specification used oil. A baghouse will control emissions from the drum dryer and the asphalt and lime silos. Weigh hoppers under each bin feeder meter the appropriate amount of aggregate needed for each specific mix. After the metered material is conveyed to the scalping screen, it is conveyed to the pugmill where mineral filler is added and conveyed to the drum mixer. The produced hot mix asphalt is then stored in the asphalt storage silos and eventually loaded and hauled off via truck. Occasionally, the hot mix asphalt plant may also receive reclaimed asphalt pavement (RAP) for processing into the hot mix asphalt plant. When needed, RAP will be transferred to a bin feeder, which feeds a conveyor belt that transports the RAP to the drum mixer as needed.

Process Description – Lime Marination Plant:

To reduce the occurrence of moisture damage in the asphalt, hydrated lime is sometimes added to the mix. The lime marination plant consists of bin feeders, a pugmill, conveyors, and a lime silo. Material is loaded into the bin feeders and then conveyed to a pugmill where lime is added to the mixture. The lime is then stored in the lime silo prior to use.



E 28th St

E 28th Pl

S Ave 14 1/2 E

N Cr...view Dr

MINING AREA

STOCKPILE AREA

HOTPLANT

CRUSHER PLANT

WASHPLANT

STOCKPILE AREA

JOBSITE AREA

STOCKPILE AREA

RIP RAP

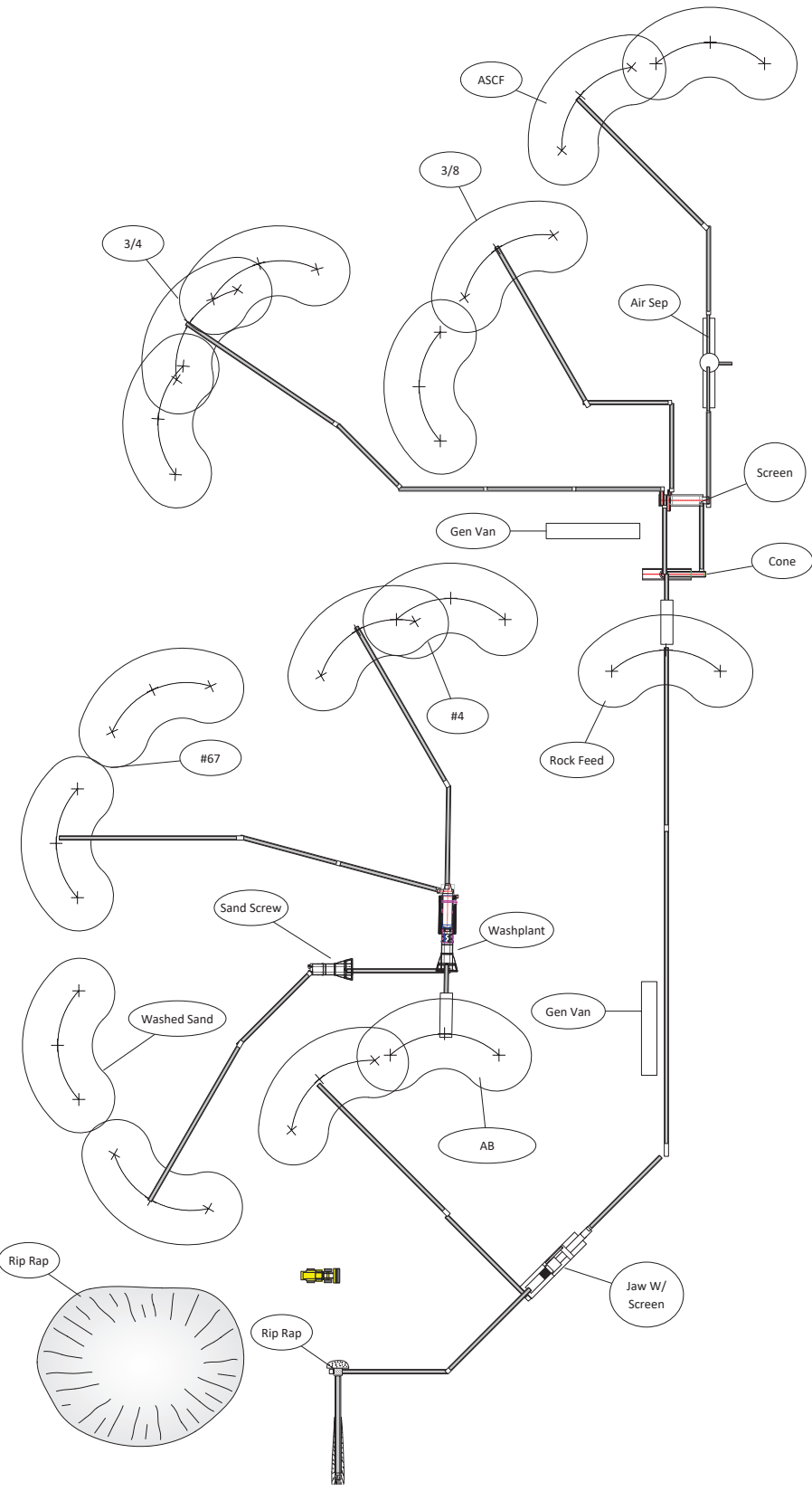
E 31st St
Foothills Sand & Gravel

E 31st St

E 31st St

S Ave 14 1/2 E

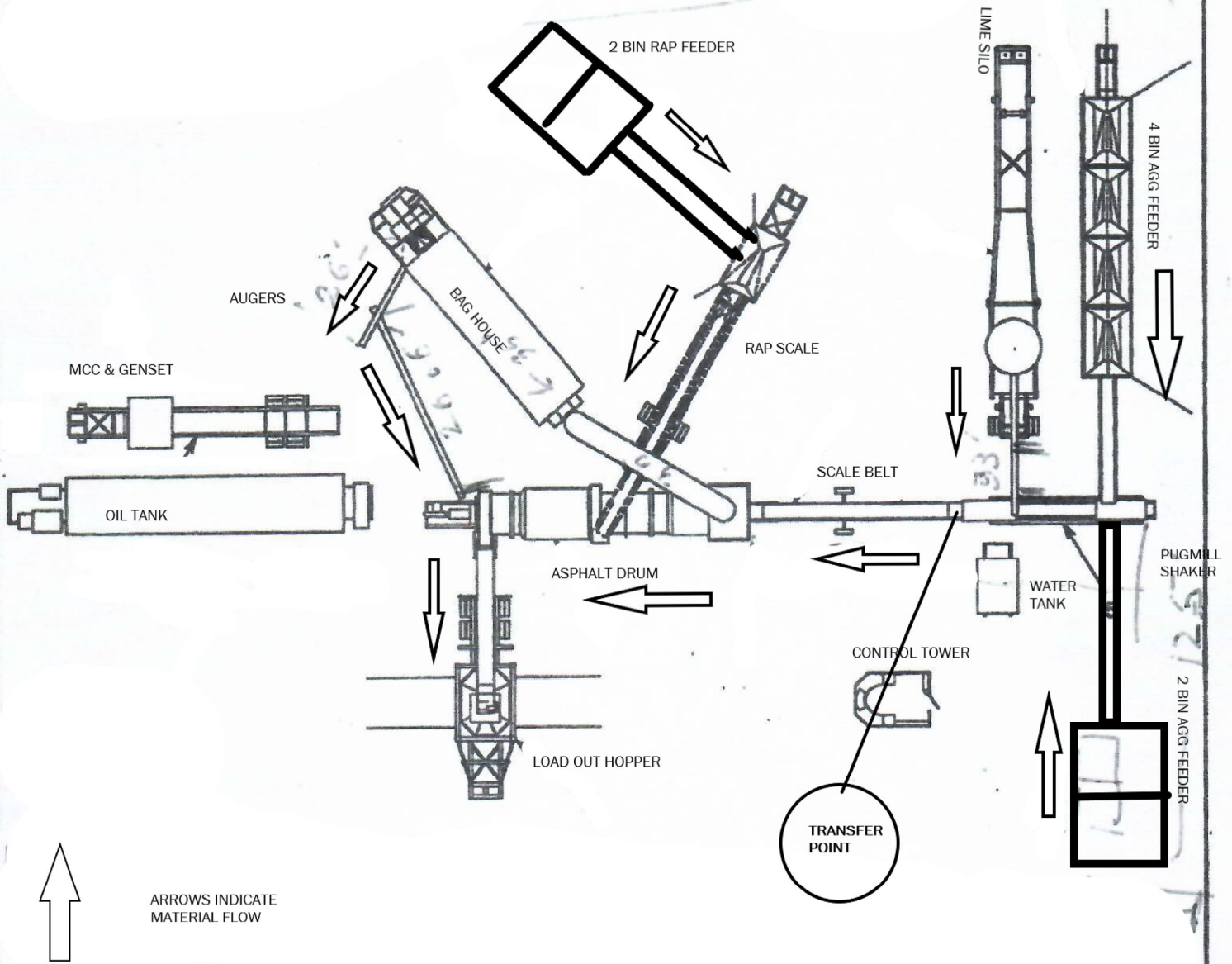
Ministries



Crushing & Screening Plant

Wash Plant

CMI HOT PLANT 400TPH MAX 200TPH MIN



Facility-Wide Potential to Emit

Fisher Sand & Gravel Co.

Crushing & Screening Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^A	PM ₁₀ EF ^A	PM _{2.5} EF ^A	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
A00	Mining	1	1,400	12,264,000	NA	NA	NA	8.07	35.36	1.58	6.93	0.85	3.71
A01	Feed Hopper (C&S Plant)	1	1,400	12,264,000	0.0013	0.0006	0.0001	1.89	8.27	0.89	3.91	0.14	0.59
A02	Feed Hopper (Wash Plant)	1	500	4,380,000	0.0013	0.0006	0.0001	0.67	2.95	0.32	1.40	0.05	0.21
A03	Crushers	3	350	3,066,000	0.0012	0.00054	0.0001	1.26	5.52	0.57	2.48	0.11	0.46
A03	Crusher	1	300	2,628,000	0.0012	0.00054	0.0001	0.36	1.58	0.16	0.71	0.03	0.13
A04	Screens	2	600	5,256,000	0.0022	0.00074	0.00005	2.64	11.56	0.89	3.89	0.06	0.26
A04	Screen	1	300	2,628,000	0.0022	0.00074	0.00005	0.66	2.89	0.22	0.97	0.02	0.07
A05	Transfer Points	2	1,350	11,826,000	0.00014	0.000046	0.000013	0.38	1.66	0.12	0.54	0.04	0.15
A06	Transfer Points	2	1,000	8,760,000	0.00014	0.000046	0.000013	0.28	1.23	0.09	0.40	0.03	0.11
A07	Transfer Points	1	500	4,380,000	0.00014	0.000046	0.000013	0.07	0.31	0.02	0.10	0.01	0.03
A08	Transfer Points	7	350	3,066,000	0.00014	0.000046	0.000013	0.34	1.50	0.11	0.49	0.03	0.14
A09	Transfer Points	7	125	1,095,000	0.00014	0.000046	0.000013	0.12	0.54	0.04	0.18	0.01	0.05
A10	Transfer Points	2	100	876,000	0.00014	0.000046	0.000013	0.03	0.12	0.01	0.04	0.003	0.01
A11	Stackers	2	1,000	8,760,000	0.0013	0.0006	0.0001	2.70	11.82	1.28	5.59	0.19	0.85
A12	Stackers	2	125	1,095,000	0.0013	0.0006	0.0001	0.34	1.48	0.16	0.70	0.02	0.11
A13	Stackers	1	100	876,000	0.0013	0.0006	0.0001	0.13	0.59	0.06	0.28	0.01	0.04
Subtotal:								19.95	87.36	6.53	28.62	1.58	6.93
Hot Mix Asphalt Plant Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^B	PM ₁₀ EF ^B	PM _{2.5} EF ^B	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
B01	Feed Hopper (Hot Plant)	2	300	2,628,000	0.0013	0.0006	0.0001	0.81	3.54	0.38	1.68	0.06	0.25
B02	Feed Hopper (RAP)	1	100	876,000	0.0013	0.0006	0.0001	0.13	0.59	0.06	0.28	0.01	0.04
B03	Screen (Hot Plant)	1	300	2,628,000	0.0022	0.00074	0.00005	0.66	2.89	0.22	0.97	0.02	0.07
B04	Screen (RAP)	1	100	876,000	0.0022	0.00074	0.00005	0.22	0.96	0.07	0.32	0.01	0.02
B05	Transfer Points	8	300	2,628,000	0.00014	0.000046	0.000013	0.34	1.47	0.11	0.48	0.03	0.14
B06	Transfer Points	4	100	876,000	0.00014	0.000046	0.000013	0.06	0.25	0.02	0.08	0.01	0.02
B07	Pugmill	1	300	2,628,000	0.00014	0.000046	0.000013	0.04	0.18	0.01	0.06	0.004	0.02
B08	Lime Silo	1	75	657,000	0.0049	0.0049	0.00078	0.37	1.61	0.37	1.61	0.06	0.26
Subtotal:								2.63	11.50	1.25	5.49	0.19	0.82
Lime Marination Plant Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^B	PM ₁₀ EF ^B	PM _{2.5} EF ^B	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
C01	Feed Hopper (Lime Plant)	2	300	2,628,000	0.0013	0.0006	0.0001	0.81	3.54	0.38	1.68	0.06	0.25
C02	Transfer Points	2	300	2,628,000	0.00014	0.000046	0.000013	0.08	0.37	0.03	0.12	0.01	0.03
C03	Pugmill	1	300	2,628,000	0.00014	0.000046	0.000013	0.04	0.18	0.01	0.06	0.004	0.02
C04	Lime Silo	1	5	43,800	0.0049	0.0049	0.00078	0.02	0.11	0.02	0.11	0.004	0.02
Subtotal:								0.96	4.20	0.45	1.97	0.07	0.32
Fugitive Emission Sources													
ID	Description	Quantity	Annual Operation	PM EF ^C	PM ₁₀ EF ^C	PM _{2.5} EF ^C	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE		
			hours	lbs/pile-hr	lbs/pile-hr	lbs/pile-hr	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year	
D01	Storage Piles	5	8,760	0.0001	0.00005	0.00005	0.0005	0.0022	0.0003	0.0011	0.0003	0.0011	
ID	Description	Quantity	Annual Operation	PM EF ^C	PM ₁₀ EF ^C	PM _{2.5} EF ^C	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE		
			VMT	lbs/VMT-hr	lbs/VMT-hr	lbs/VMT-hr	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year	
D02	Vehicular Traffic	1	186,150	0.67	0.17	0.02	14.24	62.36	3.61	15.82	0.43	1.86	
Subtotal:								14.24	62.36	3.61	15.82	0.43	1.86

^ACrushing & screening emission factors for crushers, screens, and transfer points were obtained from AP-42 Table 11.19.2-2. Emission factors for feed hoppers and stackers were obtained from the ADEQ hot mix asphalt general permit guidance document.

^BHot mix asphalt emission factors for screens and transfer points were obtained from AP-42 Table 11.19.2-2. Emission factors for feed hoppers were obtained from the ADEQ hot mix asphalt general permit guidance document.

^CStorage pile & vehicular traffic emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

Facility-Wide Potential to Emit						
Pollutant	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
C&S, HMA & Lime Plant Totals	23.53	103.07	8.24	36.07	1.84	8.07
Fugitive Source Totals	14.24	62.36	3.61	15.82	0.43	1.86
Totals	37.77	165.43	11.85	51.90	2.27	9.93

Facility-Wide Potential to Emit

Fisher Sand & Gravel Co.

Hot Mix Asphalt Plant Drum Dryer & Silo Filling/Plant Load-Out Emissions								
ID	Description	Quantity	Throughput		Pollutant	EF ^A	PTE	
			tons/hour	tons/year		lbs/ton	lbs/hour	tons/year
B09	Drum Dryer	1	400	3,504,000	PM	0.033	13.20	57.82
					PM ₁₀	0.023	9.20	40.30
					PM _{2.5}	0.023	9.20	40.30
					NO _x	0.055	22.00	96.36
					CO	0.13	52.00	227.76
					SO _x	0.058	23.20	101.62
					VOC	0.032	12.80	56.06
					HAP	0.01	4.00	17.52
B10	Silo Filling & Plant Load-Out	2	400	3,504,000	PM	0.0013	1.08	4.73
					PM ₁₀	0.0013	1.08	4.73
					PM _{2.5}	0.0013	1.08	4.73
					CO	0.0025	2.02	8.86
					VOC	0.0163	13.08	57.28

Hot Mix Asphalt Plant Asphalt Heater Emissions								
ID	Description	Quantity	Throughput		Pollutant	EF ^B	PTE	
			gal/hour	gal/year		lbs/gal	lbs/hour	tons/year
B11	Asphalt Heater	1	400	3,504,000	PM	0.002	0.80	3.50
					PM ₁₀	0.002	0.80	3.50
					PM _{2.5}	0.002	0.80	3.50
					NO _x	0.02	8.00	35.04
					CO	0.0012	0.48	2.10
					SO _x	0.0002	0.08	0.35
					VOC	0.00056	0.22	0.98
					HAP	0.0000792	0.03	0.14

^AAsphalt drum mixer emission factors were obtained from AP-42 Tables 11.1-3, 11.1-7, 11.1-8 & 11.1-10 for a waste oil-fired dryer. Silo filling & plant load-out emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

^BAsphalt heater emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

Facility-Wide Potential to Emit								
Pollutant	PM	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
Totals (lb/hr)	15.08	11.08	11.08	30.00	52.48	23.28	26.10	4.03
Totals (tons/yr)	66.05	48.53	48.53	131.40	238.72	101.97	114.32	17.66

Crushing & Screening Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^A	PM ₁₀ EF ^A	PM _{2.5} EF ^A	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
A00	Mining	1	1,400	1,400,000	NA	NA	NA	8.07	4.04	1.58	0.79	0.85	0.42
A01	Feed Hopper (C&S Plant)	1	1,400	1,400,000	0.0013	0.0006	0.0001	1.89	0.94	0.89	0.45	0.14	0.07
A02	Feed Hopper (Wash Plant)	1	500	500,000	0.0013	0.0006	0.0001	0.67	0.34	0.32	0.16	0.05	0.02
A03	Crushers	3	350	350,000	0.0012	0.00054	0.0001	1.26	0.63	0.57	0.28	0.11	0.05
A03	Crusher	1	300	300,000	0.0012	0.00054	0.0001	0.36	0.18	0.16	0.08	0.03	0.02
A04	Screens	2	600	600,000	0.0022	0.00074	0.00005	2.64	1.32	0.89	0.44	0.06	0.03
A04	Screen	1	300	300,000	0.0022	0.00074	0.00005	0.66	0.33	0.22	0.11	0.02	0.01
A05	Transfer Points	2	1,350	1,350,000	0.00014	0.000046	0.000013	0.38	0.19	0.12	0.06	0.04	0.02
A06	Transfer Points	2	1,000	1,000,000	0.00014	0.000046	0.000013	0.28	0.14	0.09	0.05	0.03	0.01
A07	Transfer Points	1	500	500,000	0.00014	0.000046	0.000013	0.07	0.04	0.02	0.01	0.01	0.00
A08	Transfer Points	7	350	350,000	0.00014	0.000046	0.000013	0.34	0.17	0.11	0.06	0.03	0.02
A09	Transfer Points	7	125	125,000	0.00014	0.000046	0.000013	0.12	0.06	0.04	0.02	0.01	0.01
A10	Transfer Points	2	100	100,000	0.00014	0.000046	0.000013	0.03	0.01	0.01	0.00	0.003	0.00
A11	Stackers	2	1,000	1,000,000	0.0013	0.0006	0.0001	2.70	1.35	1.28	0.64	0.19	0.10
A12	Stackers	2	125	125,000	0.0013	0.0006	0.0001	0.34	0.17	0.16	0.08	0.02	0.01
A13	Stackers	1	100	100,000	0.0013	0.0006	0.0001	0.13	0.07	0.06	0.03	0.01	0.00
Subtotal:								19.95	9.97	6.53	3.27	1.58	0.79
Hot Mix Asphalt Plant Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^B	PM ₁₀ EF ^B	PM _{2.5} EF ^B	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
B01	Feed Hopper (Hot Plant)	2	300	250,000	0.0013	0.0006	0.0001	0.81	0.34	0.38	0.16	0.06	0.02
B02	Feed Hopper (RAP)	1	100	83,333	0.0013	0.0006	0.0001	0.13	0.06	0.06	0.03	0.01	0.00
B03	Screen (Hot Plant)	1	300	250,000	0.0022	0.00074	0.00005	0.66	0.27	0.22	0.09	0.02	0.01
B04	Screen (RAP)	1	100	83,333	0.0022	0.00074	0.00005	0.22	0.09	0.07	0.03	0.01	0.00
B05	Transfer Points	8	300	250,000	0.00014	0.000046	0.000013	0.34	0.14	0.11	0.05	0.03	0.01
B06	Transfer Points	4	100	83,333	0.00014	0.000046	0.000013	0.06	0.02	0.02	0.01	0.01	0.002
B07	Pugmill	1	300	250,000	0.00014	0.000046	0.000013	0.04	0.02	0.01	0.01	0.004	0.002
B08	Lime Silo	1	75	62,500	0.0049	0.0049	0.00078	0.37	0.15	0.37	0.15	0.06	0.02
Subtotal:								2.63	1.09	1.25	0.52	0.19	0.08
Lime Marination Plant Particulate Emissions													
ID	Description	Quantity	Throughput		PM EF ^B	PM ₁₀ EF ^B	PM _{2.5} EF ^B	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			tons/hour	tons/year	lbs/ton	lbs/ton	lbs/ton	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
C01	Feed Hopper (Lime Plant)	2	300	250,000	0.0013	0.0006	0.0001	0.81	0.34	0.38	0.16	0.06	0.02
C02	Transfer Points	2	300	250,000	0.00014	0.000046	0.000013	0.08	0.03	0.03	0.01	0.01	0.00
C03	Pugmill	1	300	250,000	0.00014	0.000046	0.000013	0.04	0.02	0.01	0.01	0.004	0.002
C04	Lime Silo	1	5	4,167	0.0049	0.0049	0.00078	0.02	0.01	0.02	0.01	0.004	0.002
Subtotal:								0.96	0.40	0.45	0.19	0.07	0.03
Fugitive Emission Sources													
ID	Description	Quantity	Annual Operation		PM EF ^C	PM ₁₀ EF ^C	PM _{2.5} EF ^C	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			hours	lbs/pile-hr	lbs/pile-hr	lbs/pile-hr	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year	
D01	Storage Piles	5	8,760	0.0001	0.00005	0.00005	0.0005	0.0022	0.0003	0.0011	0.0003	0.0011	
ID	Description	Quantity	Annual Operation		PM EF ^C	PM ₁₀ EF ^C	PM _{2.5} EF ^C	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
			VMT	lbs/VMT-hr	lbs/VMT-hr	lbs/VMT-hr	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year	
D02	Vehicular Traffic	1	20,625	0.67	0.17	0.02	1.58	6.91	0.40	1.75	0.05	0.21	
Subtotal:								1.58	6.91	0.40	1.75	0.05	0.21

^ACrushing & screening emission factors for crushers, screens, and transfer points were obtained from AP-42 Table 11.19.2-2. Emission factors for feed hoppers and stackers were obtained from the ADEQ hot mix asphalt general permit guidance document.

^BHot mix asphalt emission factors for screens and transfer points were obtained from AP-42 Table 11.19.2-2. Emission factors for feed hoppers were obtained from the ADEQ hot mix asphalt general permit guidance document.

^CStorage pile & vehicular traffic emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

Proposed Facility-Wide Emissions						
Pollutant	PM PTE		PM ₁₀ PTE		PM _{2.5} PTE	
	lbs/hour	tons/year	lbs/hour	tons/year	lbs/hour	tons/year
C&S, HMA & Lime Plant Totals						
	23.53	11.47	8.24	3.98	1.84	0.90
Fugitive Source Totals						
	1.58	6.91	0.40	1.75	0.05	0.21
Totals						
	25.11	18.38	8.64	5.73	1.89	1.11

Proposed Facility-Wide Emissions

Fisher Sand & Gravel Co.

Hot Mix Asphalt Plant Drum Dryer & Silo Filling/Plant Load-Out Emissions								
ID	Description	Quantity	Throughput		Pollutant	EF ^A	PTE	
			tons/hour	tons/year		lbs/ton	lbs/hour	tons/year
B09	Drum Dryer	1	400	250,000	PM	0.033	13.20	4.13
					PM ₁₀	0.023	9.20	2.88
					PM _{2.5}	0.023	9.20	2.88
					NO _x	0.055	22.00	6.88
					CO	0.13	52.00	16.25
					SO _x	0.058	23.20	7.25
					VOC	0.032	12.80	4.00
					HAP	0.01	4.00	1.25
B10	Silo Filling & Plant Load-Out	2	400	250,000	PM	0.0013	1.08	0.34
					PM ₁₀	0.0013	1.08	0.34
					PM _{2.5}	0.0013	1.08	0.34
					CO	0.0025	2.02	0.63
					VOC	0.0163	13.08	4.09

Hot Mix Asphalt Plant Asphalt Heater Emissions								
ID	Description	Quantity	Throughput		Pollutant	EF ^B	PTE	
			gal/hour	gal/year		lbs/gal	lbs/hour	tons/year
B11	Asphalt Heater	1	400	250,000	PM	0.002	0.80	0.25
					PM ₁₀	0.002	0.80	0.25
					PM _{2.5}	0.002	0.80	0.25
					NO _x	0.02	8.00	2.50
					CO	0.0012	0.48	0.15
					SO _x	0.0002	0.08	0.03
					VOC	0.00056	0.22	0.07
					HAP	0.0000792	0.03	0.01

^AAsphalt drum mixer emission factors were obtained from AP-42 Tables 11.1-3, 11.1-7, 11.1-8 & 11.1-10 for a waste oil-fired dryer. Silo filling & plant load-out emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

^BAsphalt heater emission factors were obtained from the ADEQ hot mix asphalt plant general permit guidance document.

Facility-Wide Potential to Emit								
Pollutant	PM	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
Totals (lb/hr)	15.08	11.08	11.08	30.00	52.48	23.28	26.10	4.03
Totals (tons/yr)	4.71	3.46	3.46	9.38	17.03	7.28	8.16	1.26

**Facility-Wide Potential to Emit
(PTE)**

Fisher Sand & Gravel Co.

Facility-Wide PTE

Pollutant	PM	PM₁₀	PM_{2.5}	NO_x	CO	SO_x	VOC	HAP
PTE for C&S, HMA and Lime Plants (TPY)	103.07	36.07	8.07	0.00	0.00	0.00	0.00	0.00
PTE for Fugitive Sources (TPY)	62.36	15.82	1.86	0.00	0.00	0.00	0.00	0.00
PTE for Ancillary Emissions (TPY)	66.05	48.53	48.53	131.40	238.72	101.97	114.32	17.66
PTE (TPY)	231.48	100.42	58.46	131.40	238.72	101.97	114.32	17.66
Proposed C&S, HMA and Lime Plant Emissions (TPY)	11.47	3.98	0.90	0.00	0.00	0.00	0.00	0.00
Proposed Fugitive Source Emissions (TPY)	6.91	1.75	0.21	0.00	0.00	0.00	0.00	0.00
Proposed Ancillary Emissions (TPY)	4.71	3.46	3.46	9.38	17.03	7.28	8.16	1.26
Proposed Emissions (not including fugitives)(TPY)	16.18	7.44	4.36	9.38	17.03	7.28	8.16	1.26
Permit Exemption Threshold (TPY)	NA	7.5	5	20	50	20	20	25
Minor NSR Triggered? (Y/N)	NA	No	No	No	No	No	No	No

Equipment List

Fisher Sand & Gravel Co.

EU	Description	Manufacturer	Model No.	Serial No.	Capacity/ Rating	D.O.M.
Crushing & Screening Plant						
A00	Mining	~	~	~	~	~
A01	Feed Hopper (C&S Plant)	~	~	~	~	~
A02	Feed Hopper (Wash Plant)	~	~	~	~	~
A03	Crusher (Jaw)	~	~	~	≤350 TPH	~
A03	Crusher (Cone)	~	~	~	≤350 TPH	~
A03	Crusher (VSI)	~	~	~	≤350 TPH	~
A03	Crusher (Jaw)	~	~	~	≤300 TPH	~
A04	Screen	~	~	~	≤600 TPH	~
A04	Screen	~	~	~	≤600 TPH	~
A04	Screen	~	~	~	≤300 TPH	~
A05	Transfer Points	~	~	~	~	~
A06	Transfer Points	~	~	~	~	~
A07	Transfer Points	~	~	~	~	~
A08	Transfer Points	~	~	~	~	~
A09	Transfer Points	~	~	~	~	~
A10	Transfer Points	~	~	~	~	~
A11	Stackers	~	~	~	~	~
A12	Stackers	~	~	~	~	~
A13	Stackers	~	~	~	~	~
Hot Mix Asphalt Plant						
B01	Feed Hopper (Hot Plant)	~	~	~	~	~
B02	Feed Hopper (RAP)	~	~	~	~	~
B03	Screen (Hot Plant)	~	~	~	~	~
B04	Screen (RAP)	~	~	~	~	~
B05	Transfer Points	~	~	~	~	~
B06	Transfer Points	~	~	~	~	~
B07	Pugmill	~	~	~	≤300 TPH	~
B08	Lime Silo	~	~	~	≤75 TPH	~
B09	Drum Dryer	CMI	PTD-400	132	≤400 TPH	1996
B10	Silo Filling & Plant Load-Out	~	~	~	~	~
B11	Diesel-Fired Hot Oil Heater	CEI	1500A	H119296	1.84 MMBtu/hr	~
Lime Marination Plant						
C01	Feed Hopper (Lime Plant)	~	~	~	~	~
C02	Transfer Points	~	~	~	~	~
C03	Pugmill	~	~	~	≤300 TPH	~
C04	Lime Silo	~	~	~	~	~
Fugitive Emission Sources						
D01	Storage Piles	~	~	~	~	~
D02	Vehicular Traffic	~	~	~	~	~
List of Insignificant Activities						
EU	Description	Manufacturer	Model	Serial	Capacity/Rating	D.O.M.
IA	Diesel Storage Tank	~	~	~	10,000 gal	~
IA	Burner Fuel Tank	~	~	~	15,000 gal	~
IA	Diesel Tank	~	~	~	15,000 gal	~