



**TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 93236**

**I. INTRODUCTION**

This new Class II synthetic minor permit is for the continued operation of Vulcan Asphalt, LLC's Yuma Hot-Mix Asphalt Plant. The Yuma Hot-Mix Asphalt Plant was previously covered under a general permit but is now being converted to a Class II synthetic minor permit to allow for on-site crushing and screening operations. The crushing and screening will be performed on equipment owned and operated by a contractor. A Class II synthetic minor permit is required because the facility has a potential to emit greater than major source thresholds before voluntary throughput limits.

**A. Company Information**

Facility Name: Yuma Hot-Mix Asphalt Plant

Mailing Address: 2526 E University Dr, Phoenix, AZ 85034

Facility Location: 4744 Hwy-95, Yuma, AZ 85365

**B. Attainment Classification**

This area is designated as non-attainment for PM<sub>10</sub> and ozone and in attainment/unclassified for all other criteria pollutants.

**II. PROCESS DESCRIPTION**

**A. Process Equipment**

The Hot Mix Asphalt Plant equipment consists of four (4) conveyors, six (6) feeder bins, one (1) scalping screen, two (2) silos, one (1) diesel pump, one (1) mineral supplement auger, one (1) pug mill and one (1) drum dryer. In order to be a Class II synthetic minor, the HMA Plant has permitted throughput limits of 5,250 tons per day and 429,400 total tons per rolling 12-month period.

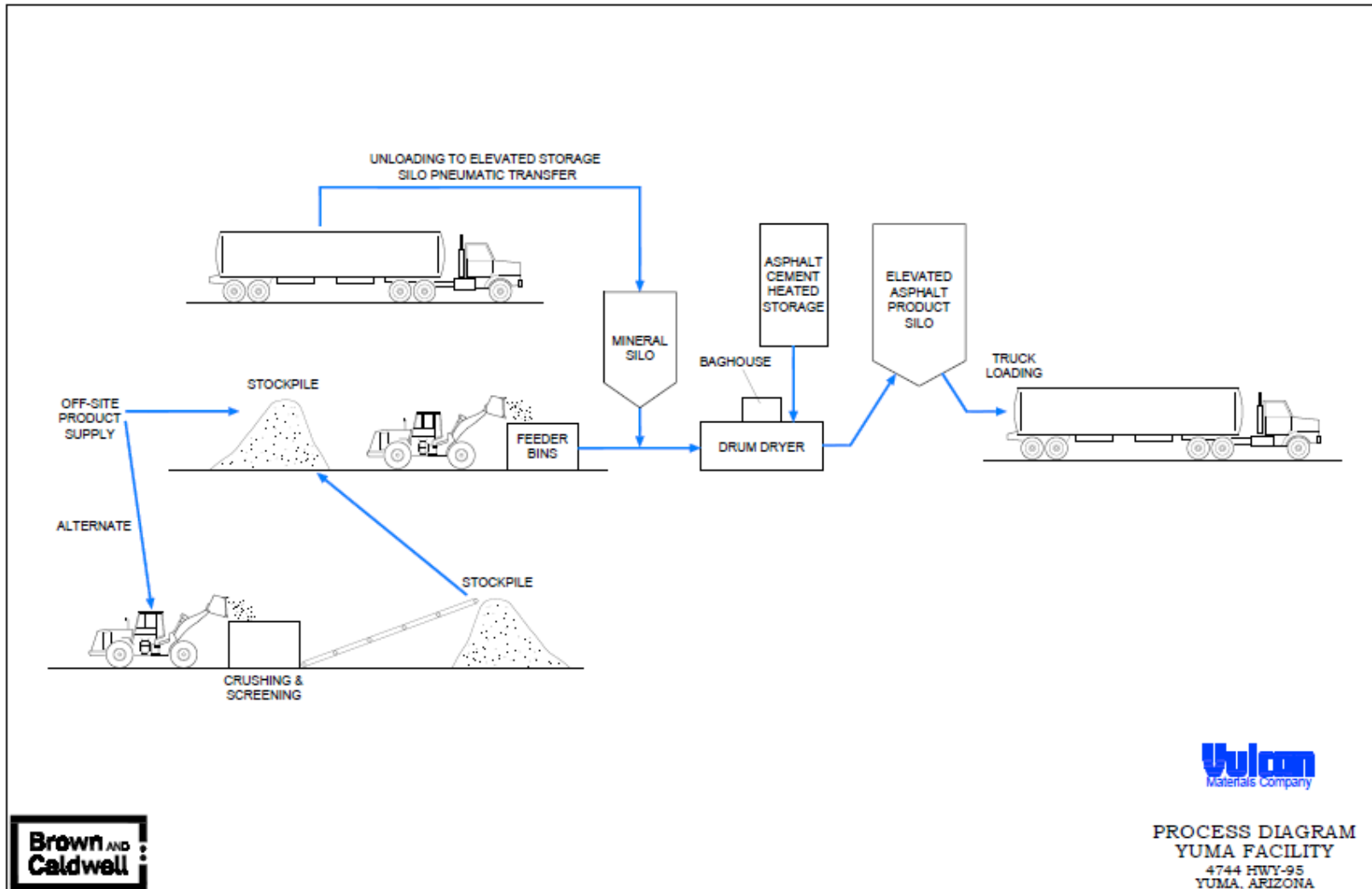
The recycled asphalt equipment consists of two (2) Rap feeder bins, four (4) conveyors, and a scalping screen.

Recycled asphalt crushing and screening equipment will be brought onsite and operated periodically throughout the year by a contractor. This equipment will consist of two (2) crusher, two (2) screens, and one (1) conveyor.

**B. Control Devices**

The drum dryer is controlled by a baghouse and the silos are controlled by a cyclone and baghouse.

C. Process Flow Diagram



### III. COMPLIANCE HISTORY

- A. During the previous permit term (Permit No. 80014), the Department conducted two compliance certification reviews and three on-site inspections. One of the on-site inspections resulted in the issuance of a Notice of Violation.
- B. Case Number 199255

A Notice of Violation was issued to Vulcan Asphalt, LLC on August 9, 2021, for violating material permit condition Attachment B - Section III.D.2. This permit condition prohibits operation of any crushing & screening and/or concrete batch facilities with the hot mix asphalt plant in any PM<sub>10</sub> nonattainment area.

During the ADEQ inspection, Ms. Cook stated Vulcan Asphalt previously contracted RTR to custom crush and screen Vulcan's asphalt millings stored at the site. The millings are owned by Vulcan and used by Vulcan. During the inspection, Ms. Cook inquired with several people about the project. Ms. Cook stated the project occurred in approximately September 2019, but was unable to obtain the specific dates and tonnage. The Vulcan Yuma Asphalt plant is located in the Yuma PM<sub>10</sub> non-attainment area.

The facility's deadline to achieve compliance was August 19, 2021. The facility responded to the NOV on August 16, 2021 by documenting compliance and the NOV was closed on October 21, 2021.

### IV. EMISSIONS

Table 1 below shows the facility's potential to emit (PTE), including fugitive emissions. Emission factors used to calculate the PTE were sourced from AP-42, WebFIRE, the Maricopa County Emissions Inventory Help Sheet for Sand and Gravel Plants and Appendix A of the CEIDARS Table. The hot mix asphalt plant is operating under a synthetic minor throughput limitation of 429,400 tons per year of asphalt. Crushing and screening operations have a voluntary daily throughput limit of 2,880 tons per day.

The facility has a potential-to-emit more than the permitting exemption thresholds of PM<sub>10</sub> and PM<sub>2.5</sub>. The facility's PTE is provided in Table 1 below:

**Table 1: Potential to Emit (tpy)**

Pollutant	PTE	Permitting Exemption Threshold	Minor NSR Triggered?
NO <sub>x</sub>	13.2	20	No
PM <sub>10</sub>	8.3	7.5	Yes
PM <sub>2.5</sub>	8.1	5	Yes
CO	28.8	50	No
SO <sub>2</sub>	12.7	20	No
VOC	10.7	20	No

Pb	0.0	0.3	No
HAPs	0.7 (Formaldehyde)/ 2.4 (combined)	N/A	No

## V. MINOR NEW SOURCE REVIEW (NSR)

Minor new source review is required if the emissions of a new source have the potential to emit any regulated air pollutant at an amount greater than or equal to the permitting exemption threshold (PET) in Table 2 above.

The facility has the option to either implement reasonably available control technology (RACT) or conduct screen modeling to satisfy the requirements of minor NSR. The facility elected to undergo screen modeling to demonstrate compliance with minor NSR Requirements. A detailed discussion of the screen modeling analysis can be found in Section XI below.

## VI. VOLUNTARILY ACCEPTED EMISSION LIMITATIONS AND STANDARDS

The permit contains the following voluntary emission limitations and standards:

### A. Hot Mix Asphalt Plant

The facility has accepted voluntary throughput limits of 5,250 tons per day and 429,400 total tons per rolling 12-month period for the Hot Mix Asphalt Plant to qualify as a synthetic minor.

### B. Crushing and Screening

The facility has accepted a voluntary throughput limit of 2,880 tons per day for crushing and screening operations in order to avoid exceedance of the NAAQs for particulate matter.

### C. Diesel Engine

The facility has voluntarily limited the guppy diesel engine's operating hours to 300 hours per year to qualify as a synthetic minor.

## VII. APPLICABLE REGULATIONS

Table 2 identifies applicable regulations and verification as to why that standard applies. The table also contains a discussion of any regulations the emission unit is exempt from.

**Table 2: Applicable Regulations**

Unit & year	Control Device	Rule	Discussion
Mineral Supplement Silo	Baghouse and Cyclone	40 CFR 60 Subpart I	This standard applies to systems for loading, transferring, and storing mineral filler that commenced construction after June 11, 1973.

Unit & year	Control Device	Rule	Discussion
Drum Dryer with baghouse	Baghouse	40 CFR 60 Subpart I	This standard applies to dryers that commenced construction after June 11, 1973.
Self Erecting Bin System	none	40 CFR 60 Subpart I	This standard applies to systems for handling, storing and weighing hot aggregate that commenced construction after June 11, 1973
Asphalt Heater	Fuel Limitations	A.A.C. R18-2-724	This standard applies to fossil-fuel fired industrial equipment.
Guppy Diesel Engine	Fuel Limitations	40 CFR 60 Subpart IIII	This standard applies to new diesel-fired RICE operating at an area source.
Jaw Crusher	Spray Bars	40 CFR 60 Subpart OOO	This standard applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
Horizontal Impact Crusher	Spray Bars	40 CFR 60 Subpart OOO	This standard applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
Screen 1	Spray Bars	40 CFR 60 Subpart OOO	This standard applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
Screen 2	Spray Bars	40 CFR 60 Subpart OOO	This standard applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

Unit & year	Control Device	Rule	Discussion
Stacking Conveyor	Spray Bars	40 CFR 60 Subpart OOO	This standard applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
Fugitive dust sources	Water Trucks, Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2- 702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2- 702 A.A.C. R-18-2- 726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2- 702 A.A.C. R-18-2- 727	These standards are applicable to any spray painting operation.
Demolition/renovation Operations	N/A	A.A.C. R18-2- 1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

**VIII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

Table 3 contains an inclusive but not an exhaustive list of the monitoring, recordkeeping and reporting requirements prescribed by the air quality permit. The table below is intended to provide insight to the public for how the Permittee is required to demonstrate compliance with the emission limits in the permit.

**Table 3: Permit No. 93236**

<b>Emission Unit</b>	<b>Pollutant</b>	<b>Emission Limit</b>	<b>Monitoring Requirements</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Requirements</b>
Hot Mix Asphalt Plant	N/A	Throughput of 5,250 tons per day and 429,400 total tons per rolling 12-month period	N/A	Daily and rolling 12-month production of material processed by the hot mix asphalt plant.	Report any exceedance of the throughput limits
	PM	20% opacity	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	Report all 6-minute periods during which the visible emissions exceed 20 percent opacity
Asphalt Heater	PM	15% opacity	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	Report all 6-minute periods during which the visible emissions exceed 15 percent opacity

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
	SO <sub>2</sub>	1.0 lb/MMBtu	N/A	Fuel supplier certifications	N/A
Drum Dryer	PM	0.04 grains per dry standard cubic foot	Annual performance test	N/A	N/A
	Opacity	Temperature lower than smoke point of processed material	Install and maintain a temperature monitoring device and continuously record the temperature of the hot aggregate	Maintain records of the temperature of the hot aggregate mixture	N/A
Drum Dryer Baghouse	PM	N/A	Annual black light inspection	Record the name of the inspector, the date, the time, and the results of the inspection and repairs.	N/A
Crushing and Screening	PM	12% Opacity	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Maintain inspection log book	Report all 6-minute periods during which the visible emissions exceed 12 percent opacity
Non-Emergency CI ICE	SO <sub>2</sub>	Maximum fuel sulfur content of 15 ppm	N/A	The Permittee shall keep records of fuel supplier specifications.	N/A
	PM	0.02 g/kW-hr	The diesel particulate filter must be installed with a backpressure	The Permittee shall keep records of any corrective action taken after the	N/A
	NO <sub>x</sub>	0.40 g/kW-hr			N/A



Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
	NMHC	0.19 g/kW-hr	monitor that notifies the Permittee when the high backpressure limit of the engine is approached.	backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached.	N/A
	CO	3.5 g/kW/hr			N/A
Fugitive Dust	PM	40% Opacity	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	N/A
Abrasive Blasting	PM	20% Opacity	N/A	Record the date, duration and pollution control measures of any abrasive blasting project.	N/A
Spray Painting	VOC	20% Opacity Control 96% of the overspray	N/A	Maintain records of the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.	N/A
Demolition/ Renovation	Asbestos	N/A	N/A	Maintain records of all asbestos related demolition or renovation projects including the "NESHAP Notification for Renovation	N/A

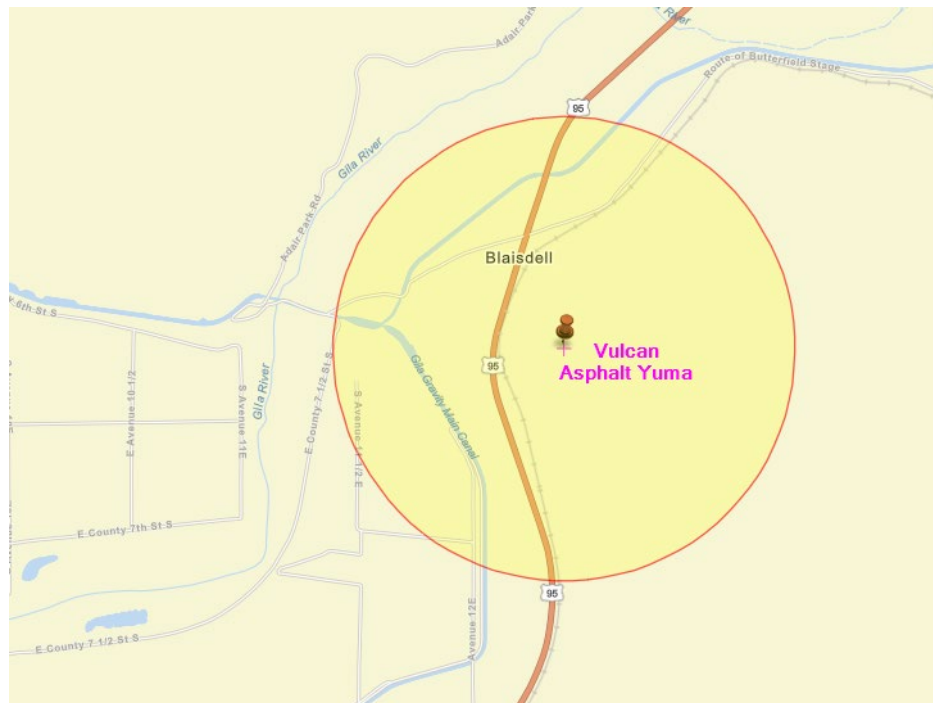
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Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
				and Demolition Activities” form and all supporting documents	

## IX. ENVIRONMENTAL JUSTICE ANALYSIS

The EPA (Environmental Protection Agency) defines Environmental Justice (EJ) to include the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The goal of completing an EJ assessment in permitting is to provide an opportunity for overburdened populations or communities to allow for meaningful participation in the permitting process. Overburdened is used to describe the minority, low-income, tribal and indigenous populations or communities that potentially experience disproportionate environmental harms and risks due to exposures or cumulative impacts or greater vulnerability to environmental hazards.

The EPA developed EJSCREEN, a publicly available tool that uses nationally consistent data, to produce maps and reports detailing environmental and demographic indicators that can be used to evaluate EJ concerns. The EPA selected an 90<sup>th</sup> percentile threshold for this action to evaluate the potential for EJ concerns in a community, meaning that if the area of interest exceeds the 90<sup>th</sup> percentile for one or more of the EJ indexes, the EPA considers that area to have a high potential for EJ concerns. The ADEQ mapped the location of the Vulcan Asphalt Yuma facility and reviewed a one-mile radius around the facility for potential environmental justice concerns (see Figure 1 below).



**Figure 1. One-mile radius of the Vulcan Asphalt Yuma facility**

### A. Demographics

The ADEQ relied on data from the EPA EJ Screen tool to assess the demographics of the communities near the initial location for this proposed facility. The EJSCREEN report shows that the Demographic Indicators; People of Color, Low Income Population, Unemployment Population, Linguistically Isolated Population, Population with Less than

High School Education, and Population over 64 years of age, are all below the 90<sup>th</sup> percentile threshold except Population under 5 years of age. ADEQ also performed air quality dispersion modeling to ensure that the emissions from the facility do not contribute to any exceedances of the National Ambient Air Quality Standards (NAAQS). Additionally, ADEQ posts a notice in two newspapers of general circulation within the surrounding community, as well as publishes the notice electronically to ensure that the community has ample opportunity to provide comments on the draft documents prior to a final permitting decision.

**B. Summary of Air Quality**

All air quality related environmental indicators within a one-mile radius of the facility were below the 90<sup>th</sup> percentile for both Arizona and the USA averages except Population under 5 years of age. Additionally, ADEQ conducted air quality dispersion modeling to determine if emissions from the Vulcan Asphalt Yuma facility will contribute to a NAAQS exceedance. A complete review of the air quality analysis can be found in Section XI below. Based on the modeling analysis results, ADEQ has determined that the issuance of the Vulcan Asphalt Yuma facility air quality permit will not interfere with attainment of the NAAQS, and will not have an adverse impact on the community.

**C. Conclusion**

The ADEQ concludes that the protections afforded by Arizona Revised Statutes (A.R.S.) § 49-426, which is imposed through the permit, ensure that the public health and environment in Arizona are protected and that the public notice and comment opportunities afforded to the community on this new permit application satisfy the public participation component of the EPA EJ Guidance. The dispersion modeling ADEQ conducted further concludes that the Vulcan Asphalt Yuma facility demonstrates compliance with the NAAQS and that the emissions from this facility will not result in any significant environmental or public health impacts.

**X. LEARNING SITE EVALUATION**

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, the Department is required to conduct an evaluation to determine if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

An analysis was conducted and the Department concluded there are no Impacted Learning Sites within 2.0 miles of the source's location.

**XI. AMBIENT AIR IMPACT ANALYSIS**

The Department performed a modeling analysis to determine throughput limits for the Vulcan Asphalt Yuma operations under which compliance with the National Ambient Air Quality Standards (NAAQS) can be demonstrated using regulatory air quality models. Because particulate matter (PM) is the primary pollutant emitted from the Vulcan Asphalt Yuma facility, the

Department has established the maximum daily throughputs for the hot mix asphalt plant (HMAP) and the crushing & screening plant (C&S) within the facility to protect the 24-hour standards for PM<sub>10</sub> and PM<sub>2.5</sub>. The department has determined that the emissions from the Vulcan Asphalt Yuma Operations will not cause or contribute to a violation of the NAAQS under the operational limits/conditions as proposed in the draft permit.

**A. Model Selection**

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) model is the EPA-preferred model for estimating impacts at receptors located in simple terrain and complex terrain (within 50 km of a source) due to emissions from industrial sources. The Department used AERMOD for the ambient impact analysis.

The AERMOD Modeling System consists of three major components: AERMAP, used to process terrain data and develop elevations for receptors; AERMET, used to process the meteorological data; and AERMOD, used to estimate the ambient pollutant concentrations. ADEQ used AERMAP version 18081; AERMET 21112; and AERMOD version 21112. These are the most recent versions of the AERMOD Modeling System.

**B. Source Inputs**

1. Sources of Emissions

The most significant emission source in the HMAP is the drum dryer. Other emission sources in the HMAP include storage piles, batch drop/material transfer points, unpaved roads, asphalt heater, and internal combustion engines. In the C&S, the emission sources include crushing & screening operations, batch drop/material transfer points, unpaved roads, and storage piles.

2. Modeled Emission Rates

The Department used the maximum 24-hour average emission rates to model 24-hour PM<sub>10</sub> and 24-hour PM<sub>2.5</sub>. Additionally, the Department used the annual average emission rates to model annual PM<sub>2.5</sub>. The Department developed the emission inventory based on the throughputs as listed in Table 4.

**Table 4: Throughputs for Emission Inventory**

	HMAP	C&S
24-hour Average	5,250 tons per day	2,880 tons per day
Annual Average	429,400 tons per year	100,800 tons per year

3. Source Configurations and Source Types

The emission sources, categorized by source type (release characteristics), are as follows:

Point Sources: drum dryer baghouse, asphalt heater, and diesel fired engines;

Area Sources: wind erosion from storage piles, and combined transfer points in the C&S;

Volume Sources: crushing & screening operations, batch drop operations in HMAP, truck/front-end loaders traveling on unpaved roads.

The Department used the dispersion parameters for emission sources based on the state general permits for HMAP and C&S.

#### 4. Urban/rural Determination

The rural/urban classification of an area is determined either by the dominance of a specific land use or by population data in the study area. The Department determined the project site area as “Rural” based on the land use method.

### C. Meteorological Data

The Department used the AERMET meteorological preprocessor (version 21112) to process five-years of surface data (2016-2020) collected from Yuma Marine Corps Air Station (MCAS) along with concurrent upper air radiosonde data obtained from the Tucson National Weather Service (NWS) radiosonde station. The Department also used the EPA’s AERSURFACE tool (version 20060) to calculate surface characteristic parameters (albedo, Bowen ratio and surface roughness) required by AERMET.

### D. Ambient Air Boundary and Receptor Network

To determine the ambient air boundary for modeling purposes, the Department considered two factors: the property controlled by Vulcan Asphalt Yuma and the circumstances under which the general public access unlikely occurs. The facility is located in a quarry-like setting. The Department used the quarry edge as the ambient air boundary because the edge is reasonably anticipated to preclude the general public access. The Department set up a nested grid receptor network to determine areas of maximum predicted concentrations. A denser receptor grid with 25-meter spacing was placed closer to the sources, and a less dense grid (100 or 200-meter spacing) was further from the sources. The receptor network covered an area of 5 kilometers by 5 kilometers. The Department used the AERMAP terrain processor (v18081) to process the National Elevation Data (NED) 1/3 arc second data to generate the receptor elevations and hill heights.

### E. Background Concentration

The Vulcan Asphalt Yuma facility is located in the Yuma PM<sub>10</sub> nonattainment area (NAA). The Yuma Supersite monitoring station, the only active PM<sub>10</sub> monitor in the NAA, is located in 12 miles from the Vulcan Asphalt Yuma facility. In general, the PM<sub>10</sub> background concentration for an area of interest is also strongly influenced by the degree of localized emissions of coarse particles. The Yuma Supersite is an urban monitor, which is influenced by a variety of emission sources, including industrial sources, roadways, construction activities, windblown dust, and emissions from across the border. Comparatively, the Vulcan Asphalt Yuma facility is located in a rural area, which is less impacted by these sources. Therefore, the Department determined that the Yuma Supersite

monitoring data were not representative of the PM<sub>10</sub> concentrations in the vicinity of the Vulcan Asphalt Yuma facility. The Department selected the Ajo monitor for determining the background concentration for PM<sub>10</sub>. The Department calculated the 24-hour PM<sub>10</sub> background value based on average of the 2<sup>nd</sup> highest yearly values from years 2018 through 2020, which was 80.7 µg/m<sup>3</sup>.

The spatial variations of PM<sub>2.5</sub> are typically smaller compared to PM<sub>10</sub> because the long atmospheric residence time of fine particles allows long-range transport and leads to more uniform mass concentrations. As such, the Department still selected the Yuma Supersite monitor for determining the background concentrations for PM<sub>2.5</sub>. The Department calculated the annual PM<sub>2.5</sub> background value based on the average of the most recent three years (2018-2020) of the annual average PM<sub>2.5</sub> concentrations, which was 8.6 µg/m<sup>3</sup>. To determine the background concentrations for 24-hour PM<sub>2.5</sub>, the Department removed the 24-hour average concentrations for days associated with unusual events or atypical conditions which were identified by the Department’s meteorologists. The Department then calculated the 24-hour background PM<sub>2.5</sub> value based on the average of the 98th percentile 24-hour values measured over the last three years, which was 19.3 µg/m<sup>3</sup>.

**F. Model Results**

Table 5 summaries the modeled results for PM<sub>10</sub> and PM<sub>2.5</sub>. Representative background concentrations were added to modeled impacts and the total concentrations were then compared to the NAAQS. As shown in Table 5, emissions from the Vulcan Asphalt Yuma Operations will not cause or contribute to a violation of the NAAQS under the operational limits/conditions as proposed in the draft permit. The AERMOD modeling analysis also revealed that the modeled design concentrations occurred in the ambient air boundary.

**Table 5: Modeled Results for PM<sub>10</sub> and PM<sub>2.5</sub>**

<b>Pollutant</b>	<b>Averaging Period</b>	<b>Modeled Concentration (µg/m<sup>3</sup>)</b>	<b>Background Concentration (µg/m<sup>3</sup>)</b>	<b>Maximum Ambient Concentration (µg/m<sup>3</sup>)</b>	<b>NAAQS (µg/m<sup>3</sup>)</b>
PM <sub>10</sub>	24-hour	63.9	80.7	141.6	150
PM <sub>2.5</sub>	24-hour	15.4	19.3	34.7	35
	Annual	0.83	8.6	9.43	12

**XII. LIST OF ABBREVIATIONS**

- AAB..... Ambient Air Boundary
- A.A.C..... Arizona Administrative Code
- ADEQ.....Arizona Department of Environmental Quality
- AERMAP.....Terrain data preprocessor for AERMOD
- AERMET..... AERMOD Meteorological Preprocessor
- AERMOD.....AMS/EPA Regulatory Model
- AERSURFACE..... Surface Characteristics Tool for Use in AERMET
- AMS..... American Meteorological Society

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A.R.S.	Arizona Revised Statutes
BACT	Best Available Control Technology
Btu/ft <sup>3</sup>	British Thermal Units per Cubic Foot
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
C&S	Crushing & Screening Plant
EJ	Environmental Justice
EPA	Environmental Protection Agency
g	Gram
HAP	Hazardous Air Pollutant
HMAP	Hot Mix Asphalt Plant
hp	Horsepower
IC	Internal Combustion
kW	Kilowatt
MCAS	Marine Corps Air Station
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standard
NED	National Elevation Dataset
NO <sub>x</sub>	Nitrogen Oxides
NO <sub>2</sub>	Nitrogen Dioxide
NSPS	New Source Performance Standards
NSR	New Source Review
NWS	National Weather Service
Pb	Lead
PET	Permitting exemption threshold
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter no larger than 10 µm nominal aerodynamic diameter
PM <sub>2.5</sub>	Particulate Matter no larger than 2.5 µm nominal aerodynamic diameter
PTE	Potential to Emit
SO <sub>2</sub>	Sulfur Dioxide Significant Impact Levels
TPY	Tons per Year
VOC	Volatile Organic Compound
yr	Year