



**DRAFT TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 99642**

**I. INTRODUCTION**

This Class II air quality permit is issued to Hanson Aggregates, LLC, the Permittee, for the continued operation of its wash plant, concrete batch plant, and crushing and screening plants. The facility is located at 5899 Wilkinson Drive, Prescott, Arizona 86301. This permit renews and supersedes Permit No. 73446.

The wash and concrete batch plant have a maximum throughput rate of 300 and 400 tons per hour, respectively. The crushing and screening plants have a maximum throughput rate of 500 and 200 tons per hour, respectively. The facility has the potential to emit (PTE) particulate matter with a diameter of less than 10 microns (PM10) above major source thresholds as defined in the Arizona Administrative Code (A.A.C.) R18-2-101(75). Therefore, the facility has voluntarily accepted to install air pollution control equipment and thus, a synthetic minor permit is required under A.A.C. R18-2-101.24.

**A. Company Information**

Facility Name: Hanson Aggregates - Crusher Screener

Mailing Address: 4129 E Van Buren St, Suite 200  
Phoenix, AZ 85008

Facility Location: 5899 Wilkinson Drive  
Prescott, AZ 86301

**B. Attainment Classification**

This facility is located in Yavapai County which is an attainment area for all criteria air pollutants.

**II. PROCESS DESCRIPTION**

**A. Process Equipment**

The facility consists of a wash and concrete batch plant with a maximum throughput rate of 300 and 400 tons per hour, respectively. In addition, the crushing and screening plants have a maximum throughput rate of 500 and 200 tons per hour, respectively. The concrete batch plant combines aggregate with water and cement. Each of these constitutes are feed into weigh hoppers which combine the proper amounts of material. The crushing and screening plants produce aggregate by processing large rocks through various size crushers to reduce them to smaller sizes.

The crushed rocks are sent through a series of screens and are sorted out based on size. The resulting rock aggregate is then sent to the concrete batch plant.

#### B. Control Devices

The facility is required to maintain and operate spray bars to an extent that is practical to control visible emissions from the crushing and screening plants. Also, it is required to operate and maintain a baghouse to control emissions vented by the cement storage silo, fly ash storage silo, lime silo as well as the loading of product mix into the mixer trucks.

### III. COMPLIANCE HISTORY

The facility was inspected fourteen (14) times during the previous permit term: four (4) full inspection and three (3) partial inspections. Seven (7) compliance certifications were reviewed. No violations were noted.

### IV. EMISSIONS

Emissions calculations were compiled using the EPA's Compilation of Air Pollution Emissions Factors (AP-42), ADEQ's Annual Emission Inventory and Maricopa's Emissions Inventory Help Sheet.

The facility's PTE is provided in Table 1:

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

Pollutant	Previous PTE	Change in PTE	Updated PTE	Permitting Exemption Threshold	Minor NSR Triggered?
PM	38.2	-1.66	36.54	20	No
PM <sub>10</sub>	18.2	-2.48	15.72	7.5	No
PM <sub>2.5</sub>	3.4	-0.01	3.39	5	No
NO <sub>x</sub>	0.28	0.00	0.28	50	No
CO	0.05	0.00	0.05	20	No
SO <sub>2</sub>	0.0	0.00	0.00	20	No
VOCs	0.40	0.00	0.40	0.3	No
HAPs	0.0	0.00	0.00	N/A	No

### V. APPLICABLE REGULATIONS

Table 2 identifies applicable regulations and why each one applies. The table also contains a discussion of any exemptions.

**Table 2: Applicable Regulations**

Unit	Controls	Rule	Discussion
Crushing and Screening Plants	Spray Bars	40 CFR 60.672(b)	The crushing and screening plants are subject 40 CFR Part 60 Subpart OOO Facilities since the capacity of the primary crusher is greater than 150 tons per hour and date of manufacture is post August 1983..
Lime Silo	Baghouse	A.A.C.R-18-2-702.B A.A.C.R-18-2-702.C A.A.C.R-18-2-730.A	These standards are applicable to unclassified sources.
Fuel-Burning Equipment	N/A	A.A.C.R-18-2-724. C.1 A.A.C.R-18-2-724.J	These standards are applicable to fossil fuel-fired industrial and commercial equipment.
Gasoline Dispensing Facility	Seals	A.A.C. R18-2-710.B A.A.C. R18-2-710.D A.A.C. R18-2-710.E.1 40 CFR 60.11113 40 CFR 60.11116	The gasoline dispensing facility is subject to 40 CFR Part 63 Subpart CCCCCC for National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing, since the gasoline storage tanks are used for dispensing gasoline into motor vehicles on-site.
Fugitive Dust	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 Collectors, 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 operations.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	These standards are applicable to any spray painting operations.

Unit	Controls	Rule	Discussion
Demolition/Renovation	N/A	A.A.C. R18-2-1101.A.12	This standard is applicable to any asbestos related demolition or renovation operations.

## VI. PREVIOUS PERMIT REVISIONS AND CONDITIONS

### A. Previous Permit Revision

No permit revisions were made during the previous permit term.

### B. Changes to Current Renewal

Table 3 addresses the changes made to the sections and conditions from Permit No. 73446:

**Table 3: Previous Permit Conditions**

Section No.	Determination			Comments
	Added	Revised	Deleted	
Att. "A"		X		General Provisions: Revised to represent the most recent template language.
Att. "B" Section I		X		Facility Wide Requirements: Revised to represent the most recent template language.
Section VII		X		Revised to represent the most recent template language.
Section VIII		X		Revised to represent the most recent template language.
Att. "C"		X		Equipment List: Revised to reflect the most recent equipment list.

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

Table 4 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 facility is required to demonstrate compliance with the emission limits in the permit. Records are required be kept for a minimum of 5 years as outlined in Section XII of Attachment “A” of the permit.

**Table 4: Permit No. 99642**

<b>Unit</b>	<b>Pollutant</b>	<b>Emission Limitation</b>	<b>Monitoring Requirements</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Requirements</b>
Crushing and Screening Plants	PM	10% Opacity (Transfer Points) 15% Opacity	Conduct a monthly survey of visible emissions emanating from the crusher plant #1, crusher plant #2 and the wash plant.	Keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.	In accordance with Condition I.B of Attachment “B”.
Lime Silo	PM	20% Opacity	Conduct a monthly survey of visible emissions emanating from the lime silo.	Keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.	In accordance with Condition I.B of Attachment “B”.
Concrete Batch Plant	PM	20% Opacity	Conduct a monthly survey of visible emissions emanating from the concrete batch plant.	Keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.	In accordance with Condition I.B of Attachment “B”.

Unit	Pollutant	Emission Limitation	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
				Maintain records which demonstrate compliance with the activities listed in Conditions IV.B.3.b of Attachment "B".	
Fuel-Burning Equipment	PM	15% Opacity	Conduct opacity monitoring of the stack of the heater.	Record the fuel used in the heater.	Report all 6-minute periods during which the visible emissions exceed 15 percent opacity, as required under Section XII of Attachment "A".
Gasoline Dispensing Facility	VOCs	N/A	N/A	Maintain a record of the typical Reid vapor pressure, dates of storage and dates when the storage tanks are empty. Keep throughput records available within 24 hours of a request by the ADEQ or EPA Administrator.	N/A
Fugitive Dust	PM	40% Opacity	Conduct a monthly survey of visible emissions.	Record the dates and types of dust control measures employed, and if applicable, the results	N/A

Unit	Pollutant	Emission Limitation	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
				of any observations, and any corrective action taken to lower the opacity of any excess emissions.	
Abrasive Blasting	PM	20% Opacity	N/A	Record the date, duration and pollution control measures of any abrasive blasting project.	N/A
Spray Painting	VOCs	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

<b>Unit</b>	<b>Pollutant</b>	<b>Emission Limitation</b>	<b>Monitoring Requirements</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Requirements</b>
Demolition/ Renovation	Asbestos	N/A	N/A	Maintain records of all asbestos related demolition or renovation projects including the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.	N/A

DRAFT



**VIII. ENVIRONMENTAL JUSTICE ANALYSIS**

The Environmental Protection Agency (EPA) 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.

This renewal does not allow or permit an increase in emissions and thus, it will not result in any additional impacts.

**IX. LEARNING SITE EVALUATION**

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, ADEQ 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 in 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.

This renewal will not result in an increase in emissions above permitting exemption thresholds and thus, it is exempt from a learning sites evaluation.

**X. LIST OF ABBREVIATIONS**

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AQD	Air Quality Division
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPA	Environmental Protection Agency
HAP	Hazardous Air Pollutant
NAAQS	National Ambient Air Quality Standard
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 µm nominal aerodynamic diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 µm nominal aerodynamic diameter
PTE	Potential to Emit
TPY	Tons per Year
VOC	Volatile Organic Compound