



**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 73446**

Hanson Aggregates LLC

I. INTRODUCTION

This Class II renewal permit is issued to Hanson Aggregates LLC, the Permittee, for the continued operation of a concrete batch plant with co-located crushing and screening plant and was plant located at 5899 Wilkinson Drive, Prescott, in Yavapai County. This is a renewal of Permit No. 59753

A. Company Information

1. Facility Name: Hanson Aggregates, LLC
Plant 22 - Prescott
2. Facility Location: 5899 Wilkinson Drive
Prescott, AZ 86301
3. Mailing Address: 4025 S McClintock Dr. Suite 202,
Tempe, AZ 85282

B. Attainment Classification

This facility is located in an attainment area for all criteria pollutants.

II. PROCESS DESCRIPTION

- A.** The facility consists of a concrete batch plant with a rated capacity of 400 tons per hour, two crushing and screening plants with a maximum capacity of 400 tons per hour and 200 tons per hour, respectively, and a wash plant with a maximum capacity of 300 tons per hour. The process of the concrete batching involves combining 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 a smaller size. 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 Permittee is required to maintain and operate spray bars at all times to control visible emissions from concrete batch plant, handling, transporting, and conveying of materials. Also, the Permittee is required to operate and maintain a baghouse to control emissions vented by the cement storage silo, fly ash storage silo, lime silo, and emissions vented by the loading of product mix into the mixer trucks.



III. EMISSIONS

The emissions calculations for the permit review process relied upon emission factors drawn from the EPA's Compilation of Air Pollution Emission Factors (AP-42), ADEQ Annual Emission Report Forms and Maricopa Emission Inventory Help Sheet.

Table 1: Potential Emissions

Pollutant	Emissions (tons per year)			Minor NSR Threshold
	Proposed	Current	Change	
PM	38.2	36.1	2.1	-
PM ₁₀	18.2	15.6	2.6	7.5
PM _{2.5}	3.4	3.34	0.06	5
NO _x	0.28	0.28	0.0	20
CO	0.05	0.05	0.0	50
SO ₂	0.0	0.0	0.0	20
VOC	0.40	0.40	0.0	20
HAPs	0.0	0.0	0.0	-

IV. MINOR NEW SOURCE REVIEW

The renewal permit adds three conveyors to Crushing Plant #1 and removes two conveyors from Crushing Plant #2. This results in an increase in emissions that are less than the permitting exemption threshold, and therefore are not subject to minor NSR.

V. APPLICABLE REGULATIONS

Table 2 displays the applicable requirements for each permitted piece of equipment along with an explanation of why the requirement is applicable.

Table 2: Verification of Applicable Regulations

Unit	Control Device	Rule	Discussion
Crushing and Screening Plant	Water spray bars	40 CFR 60.672(b)	The crushing and screening plant is subject to Subpart OOO since the capacity of the primary crusher is greater than 150 tons per hour and date of manufacture is post August 1983.



Unit	Control Device	Rule	Discussion
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 for unclassified sources.
Concrete Batch Plant	Baghouse	A.A.C.R-18-2-702 A.A.C.R-18-2-723	These standards are applicable to existing concrete batch plants.
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; Submerged filing device	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(a)1 40 CFR 60.11113(a)2 40 CFR 60.11113(b) 40 CFR 60.11116(a)(1) 40 CFR 60.11116(a)(2) 40 CFR 60.11116(a)(3) 40 CFR 60.11116(a)(4) 40 CFR 60.11116(b)	The gasoline dispensing facility is subject to Subpart CCCCCC and are applicable to the petroleum liquid storage tanks which are used for dispensing gasoline into motor vehicles on site.
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	This standard is 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.

VI. PREVIOUS PERMIT CONDITIONS

Permit No. 59753 was issued on September 25, 2014, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 59753 was revised or deleted.

Table 3: Permit No. 73446

Section No.	Determination		Comments
	Revised	Delete	
Att. A.	X		General Provisions - Revised to represent most recent template language.
Att. B			



Section I	X		Added facility wide opacity requirements and specific permit conditions for pollution control devices for permit deviations.
Condition VI.2.a		X	Condition for keeping records of the fuel certifications was removed.
Section VII	X		The fugitive dust requirements were updated.
Section IX		X	Mobile source requirements were removed from the permit.

VII. MONITORING REQUIREMENTS

A. Crushing and Screening Plants

Hanson Aggregates is required to conduct monthly surveys of visible emissions for Crusher Plants #1 and #2 and the Wash Plant.

B. Lime Silo

Hanson Aggregates is required to conduct monthly surveys of visible emissions emanating from the lime silo.

C. Concrete Batch Plant

Hanson Aggregates is required to conduct monthly surveys of visible emissions emanating from the concrete batch plant.

D. Gasoline Dispensing Facility

1. Hanson Aggregates is required to maintain a record of the typical Reid vapor pressure, dates of storage and dates when the storage tanks are empty.
2. Keep records of the throughput of gasoline.

E. Fugitive Dust

1. The Permittee is required to keep record of the dates and types of dust control measures employed.
2. The Permittee is required to show compliance with the opacity standards by having a Method 9 certified observer perform monthly surveys of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

F. Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.



- 2. The Permittee is required to record the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.
- 3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

VIII. COMPLIANCE HISTORY

During the five year permit term that Hanson Aggregates of Arizona, Inc. operated under Permit No. 59753, the facility was inspected thirteen (13) times; those include compliance certification reviews and a routine inspection of the facility. No violations were found.

IX. LIST OF ABBREVIATIONS

A.A.C.	.....	Arizona Administrative Code
ADEQ	.....	Arizona Department of Environmental Quality
CO	.....	Carbon Monoxide
HAP	.....	Hazardous Air Pollutant
NO _x	.....	Nitrogen Oxide
PM	.....	Particulate Matter
PM ₁₀	.....	Particulate Matter Nominally less than 10 Micrometers
PTE	.....	Potential-to-Emit
SO ₂	.....	Sulfur Dioxide
TPY	.....	Tons per Year
VOC	.....	Volatile Organic Compound

