



**TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 96134**

**I. INTRODUCTION**

This Class II synthetic minor permit is issued to Coffman Specialties, Inc., the Permittee, for the continued operation of a portable concrete batch plant.

The portable concrete batch plant is capable of producing 300 cubic yards of concrete per hour. Without the operational limits specified in this permit, the portable concrete batch plant has the potential to emit criteria pollutant emissions in excess of major source thresholds. Hence, a baghouse has been installed to control particulate matter emissions. Therefore, the portable concrete batch plant qualifies for a Class II synthetic minor permit as allowed under Arizona Administrative Code (A.A.C.) R18-2-306.01.A.

This permit renews and supersedes Permit No. 66684.

**A. Company Information**

Facility Name: Coffman Specialties – Concrete Batch Plant

Mailing Address: 9865 Via Excelencia, Suite 200

San Diego, CA 92126

Facility Location: The portable concrete batch plant will be located at different sites within the State of Arizona.

**B. Attainment Classification**

Since the portable concrete batch plant will be located at different sites within the State of Arizona, the facility may be located within an area classified as attainment or nonattainment for all or some criteria pollutants.

**II. PROCESS DESCRIPTION**

**A. Process Equipment**

The portable concrete batch plant mixes finished aggregate with cement powder, water and additives to produce ready mix concrete. There are two (2) compression ignition (CI) internal combustion engines (ICEs) on-site. The ready mix concrete is weighed and fed into trucks for delivery.

**B. Control Device**

A baghouse with a maximum capacity of 4,000 cubic feet per minute (CFM) is used to control particulate matter emissions from the loading and unloading of the silo and drum mixer. Particulate matter emissions from storage piles, roadways and other various sources

are controlled by water trucks, chemical dust suppressants or equivalent methods as needed.

### III. COMPLIANCE HISTORY

Since the issuance of Permit No. 66684, the facility has submitted three (3) annual compliance certifications. In addition, one (1) Notice of Violation (NOV) has been issued to the facility.

#### Case No. 202883

On February 3, 2022, the Permittee submitted four (4) permit deviation reports. The portable concrete batch plant had operated for more than 12 hours per day. On February 11, 2022, ADEQ issued an NOV to the Permittee. The Permittee was asked to develop a corrective action plan with measures on how to avoid future permit deviations. No additional violations have been submitted since then.

### IV. EMISSIONS

The facility's potential to emit (PTE) was calculated using AP-42 emission factors as well as voluntarily accepted emission limitations as illustrated in Table 1 below:

**Table 1: PTE (typ)**

Pollutant	PTE
PM <sub>10</sub>	3.77
PM <sub>2.5</sub>	1.31
NO <sub>x</sub>	36.07
CO	11.25
SO <sub>2</sub>	1.27
VOCs	1.90
HAPs	0.04

### V. VOLUNTARILY ACCEPTED EMISSION LIMITS AND STANDARDS

The permit contains the following voluntary emission limits and standards:

#### A. Throughput

The facility accepted a voluntary emission limit of 3,600 cubic yards of concrete per day. The throughput limit was incorporated into Permit No. 52974 issued back in 2013.

#### B. Hours of Operation

The facility accepted a voluntary emission limit of 12 hours per day. The hours of operation limit was incorporated into Permit No. 52974 issued back in 2013.

## VI. 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
All Concrete Batch Plant Equipment (Varies)	Baghouse	A.A.C. R18-2-702; A.A.C. R18-2-723	All concrete batch plant equipment is subject to these rules as identified in Attachment "F" of the permit.
		Maricopa County Rule 312; 316; 320	
		Pima County Code 17.16.010; 17.16.020; 17.16.030; 17.16.040; 17.16.050; 17.16.060; 17.16.070; 17.16.080; 17.16.090; 17.16.100; 17.16.110; 17.16.380; 17.24.020	
		Pinal County Code §2-8-300; §4-2-040; §4-2-050; §4-2-222; §5-5-190	
CI ICEs Subject to NSPS Requirements (2006, 2007)	N/A	NSPS 40 CFR Part 60 Subpart III	The CI ICEs are subject to NSPS 40 CFR Part 60 Subpart III for Stationary Compression Ignition Internal Combustion Engines as identified in Attachment "F" of the permit.
Fugitive Dust	Water Trucks; Dust Suppressants; Other Approved Methods	A.A.C. R18-2-Article 6	Any non-point source of fugitive dust is subject to A.A.C. R18-2-Article 6.
Abrasive Blasting	Wet Blasting; Dust Collecting Equipment; Other Approved Methods	A.A.C. R-18-2-702; A.A.C. R-18-2-726	Any abrasive blasting operation is subject to these rules.
Use of Paints	Enclosures	A.A.C. R18-2-702; A.A.C. R-18-2-727	Any spray painting operation is subject to these rules.
Demolition/Renovation	N/A	A.A.C. R18-2-1101.A.12	Any asbestos related demolition or renovation is subject to these rules.

## VII. PREVIOUS PERMIT REVISIONS AND CONDITIONS

### A. Previous Permit Revisions

No permit revisions were made to Permit No. 66684 during the previous permit term.

### B. Changes to Current Renewal

Table 3 addresses the changes made to the sections and conditions from Permit No. 66684:

**Table 3: Previous Permit Conditions**

Section No.	Determination			Comments
	Added	Revised	Deleted	
Att. "A"		X		General Provisions – Updated emissions inventory questionnaire and facility change without a permit revision requirements.
Att. "B", Section I		X		Facility-Wide Requirements – Added applicability statement and maintenance requirements. Updated EPA Reference Method 9 requirements. Included permit deviations language.
Att. "B", Section II		X		Concrete Batch Plant Requirements – Revised applicability statement and survey of visible emissions. Updated cross-references and citations.
Att. "B", Section III		X		ICE Requirements – Updated conditions to reflect latest federal rule changes.
Att. "B", Section IV		X		Fugitive Dust Requirements – Revised survey of visible emissions and permit shield. Updated cross-references and citations.
Att. "B", Section V		X		Portable Source Requirements – Updated citations. Included permit shield.
Att. "B", Section VI			X	Mobile Source Requirements – Deleted section. No longer applicable.
Att. "B", Section VII		X		Other Periodic Activities – Added survey of visible emissions requirements. Updated cross-references and permit shields.
Att. "C"		X		Equipment List – Added "A.A.C. / NSPS / NESHAP" column. Moved attachment to the bottom of the permit.
Att. "D"		X		Additional Conditions for Operations Inside Maricopa County – Updated conditions to reflect latest county rule changes.
Att. "E"		X		Additional Conditions for Operations Inside Pima County – Updated conditions to reflect latest county rule changes.
Att. "F"		X		Additional Conditions for Operations Inside Pinal County – Updated conditions to reflect latest county rule changes.

**VIII. 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 Permittee is required to demonstrate compliance with the emission limits and standards in the permit.

**Table 4: Permit No. 96134**

<b>Emission Unit</b>	<b>Pollutant</b>	<b>Emission Limit</b>	<b>Monitoring Requirements</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Requirements</b>
All Concrete Batch Plant Equipment	PM	<3,600 cubic yards of concrete per day <12 hours per day 20% opacity	Conduct a weekly survey of visible emissions.	Maintain records of the total daily production of concrete in cubic yards per day.  Maintain records of the total daily hours of operation of the concrete batch plant.  Maintain records of all maintenance activities performed on the baghouse.	N/A
CI ICES Subject to NSPS Requirements		Emission limitations and standards in NSPS 40 CFR Part 60 Subpart III.	N/A	Keep records of any corrective action taken from backpressure monitor notifications (if applicable).	N/A
Fugitive Dust	PM	40% opacity	Conduct a weekly survey of visible emissions.	Record the dates and types of dust control measures employed.	N/A

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Abrasive Blasting	PM	20% opacity	Conduct a quarterly survey of visible emissions (if applicable).	Record the date, duration and type of control measures employed for any abrasive blasting project.	N/A
Use of Paints	VOCs	20% opacity	Conduct a quarterly survey of visible emissions (if applicable).	Record the date, duration and type of control measures employed, Safety Data Sheets for all paints and solvents used and the amount of paint consumed for any spray painting operation.	N/A
Demolition/ Renovation	Asbestos	N/A	N/A	Maintain records of all asbestos related demolition/renovation including the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.	N/A

**IX. 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 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 permitting action does not increase emissions and thus, the portable concrete batch plant is exempt from a learning sites evaluation.

**X. AMBIENT AIR IMPACT ANALYSIS**

The AERMOD model was used to complete an ambient air impact analysis for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO. Table 5 below compares the modeling analysis results with the National Ambient Air Quality Standards (NAAQS). It demonstrates that all pollutants are below the standards based on the voluntary emission limit of 12 hours per day.

**Table 5: NAAQS Modeling Analysis Results**

Pollutant	Averaging Period	Modeled Concentration (µg/m <sup>3</sup> )	Background Concentration (µg/m <sup>3</sup> )	Modeled + Background Concentration (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	Percentage of NAAQS	Exceeds NAAQS?
PM <sub>10</sub>	24-hr	35.92	93	128.92	150	86.0%	No
PM <sub>2.5</sub>	Annual	3.39	8.38	11.77	15	78.5%	No
	24-hr	15.78	18	33.78	35	93.5%	No
SO <sub>2</sub>	3-hr	0.376	369	0.434	196	6%	No
	1-hr	0.434	*	369.376	1,300	6%	No
NO <sub>x</sub>	Annual	5.2	30.58	35.78	100	33.9%	No
CO	8-hr	58.45	2,512	2,549.70	10,000	6.4%	No
	1-hr	37.70	5,389	5,447.45	40,000	54.5%	No

**Note:** Additional details regarding this NAAQS modeling analysis results, such as modeling methodology and background concentrations can be found in the 2012 permit application.

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**XI. LIST OF ABBREVIATIONS**

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AERMOD	AMS/EPA Regulatory Model
CFM	Cubic Feet Per Minute
CFR	Code of Federal Regulations
CFR	Compression Ignition
CO	Carbon Monoxide
EPA	Environmental Protection Agency
HAPs	Hazardous Air Pollutants
NAAQS	National Ambient Air Quality Standards
ICEs	Internal Combustion Engines
NOV	Notice of Violation
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
SO <sub>2</sub>	Sulfur Dioxide
tpy	Tons per Year
VOCs	Volatile Organic Compounds