

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

33 North Stone Avenue, Suite 700, Tucson, AZ 85701, Phone: (520) 724-7400

AIR QUALITY OPERATING PERMIT

(As required by Title 17.12, Article II, Pima County Code)

ISSUED TO

CENTRAL ARIZONA BLOCK COMPANY, INC.

**6030 SOUTH MANN AVENUE
TUCSON, ARIZONA 85706**

This air quality operating permit does not relieve applicant of responsibility for meeting all air pollution regulations

THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC CONDITIONS IDENTIFIED IN THIS PERMIT.

PDEQ PERMIT NUMBER 1758

PERMIT CLASS III

PERMIT ISSUED NOVEMBER 1, 2014

EXPIRES OCTOBER 31, 2019



Rupesh Patel, Air Permit Manager, PDEQ

SIGNATURE

TITLE

Table of Contents

Permit Summary	3
Specific Conditions	4
I. Applicability.....	4
II. Emission Limits and Standards.....	4
III. Monitoring Requirements.....	6
IV Recordkeeping Requirements.....	6
V. Reporting Requirements.....	6
VI. Testing Requirements.....	6
Additional Permit Requirements	8
Attachment 1: Applicable Regulations	9
Attachment 2: Equipment List	10

Permit Summary

This operating permit is the third 5 year air quality operating permit issued to Central Arizona Block Co. Inc., the Permittee, for their concrete masonry unit production plant located at 6030 South Mann Avenue, Tucson, Arizona.

This facility is a true minor stationary source. The facility manufactures concrete masonry products (namely blocks) from raw materials. The raw materials consist of sand, gravel, cinders as well as other suitable materials proportioned with Portland cement and water. After the concrete mix is formulated, it is poured into molds of varied shapes and sizes. A process diagram is provided as Attachment 1 of the Technical Support Document.

The facility operations have the potential to emit the following air pollutants PM₁₀, NO_x, CO, SO_x, VOC and HAPs.

Emissions control operations include five (5) baghouses to control particulate matter (PM) emissions from the Cement Silo, numerous spray bars for controlling PM emissions from the transfer points/conveyor belts and one (1) water truck for controlling potential fugitive dust emissions from the haul roads.

The source also uses gravel to provide a temporary cover on the ground to minimize the potential fugitive emissions caused by motorized traffic.

The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of this permit.

Emission Unit/s	Uncontrolled Emissions (tons/yr) ¹					
	NO _x	CO	SO _x	VOC	HAPs	PM ₁₀
Concrete Block Plant 1	-	-	-	-	-	12.55
Concrete Block Plant 2	-	-	-	-	-	12.55
Cement Bagging	-	-	-	-	-	6.25
12 Curing Rooms (Total)	1.80	1.52	0.02	0.10	<0.01	0.14
Total (tons/year)	1.80	1.52	0.02	0.10	<0.01	31.49²

¹ The emissions for the facility are estimated based on emission factor equations referenced in EPA AP 42 Ch 1.4-2 and Ch 11.12-2.

² Potential to emit does not include uncontrolled fugitive emissions, estimated at 23.81 tons/yr.

The process plant operating schedule is 10 hrs per day, 6 days per week, 52 weeks per year. (3120 hrs/yr)

The process rate of the plant is 30 tph.

The bagging equipment has a capacity to operate 6 hours per day / 5 days per week.

Annual process rate of the plant is 100,000 tons per yr

70 % of fugitive emissions are assumed to be controlled by means of the water truck.

Specific Conditions

[References are to Title 17 of the Pima County Code [PCC] unless otherwise noted]

I. Applicability

The facility covered by this permit constitutes a **Class III; True Minor Stationary Source** based on 8760 hours per year of operation and considering emissions from other emission units of the same SIC Code at this facility. The Specific Conditions are applicable facility wide.

II. Emission Limits & Standards

A. Opacity Standard

Except as otherwise specified in the Specific Conditions, the opacity of all plumes and effluents from all point and non-point sources shall not exceed 20% as determined by EPA Reference Method 9, Appendix A in 40 CFR 60. [PCC 17.16.050.B & PCC 17.16.130.B.1]

B. Visibility Limiting Standard

1. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.050.A]
2. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity of operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. [PCC 17.16.050.D]
 - a. The provisions of II.B of the Specific Conditions shall not apply when wind speeds exceed (25) miles per hour using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service. This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source. [PCC 17.16.050.D.2]
 - b. This subsection shall not apply to the generation of airborne particulate matter from undisturbed land. [PCC 17.16.050.D.3]

C. Pollution Control Requirement

1. The Permittee shall install and operate baghouses on all pneumatically loaded silos according to manufacturers' recommendations and specifications. [PCC 17.12.185.A.2]
[Material Permit Condition]
2. The Permittee shall not cause, suffer, allow, or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.100.A]

3. The facility shall utilize spray bar pollution controls in accordance with "EPA Control of Air Emissions From Process Operations In The Rock Crushing Industry" (EPA 340/1-79-002), "Wet Suppression System" (pages 15-34), amended as of January, 1979 (and no future amendments or editions), as incorporated herein by reference and on file with the Office of the Secretary of State, with placement of spray bars and nozzles as required by the Control Officer to minimize air pollution. [PCC 17.16.370.D]

[Material Permit Condition]

D. Fugitive Emissions Standards

1. The Permittee is responsible for controlling windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities, as applicable: [PCC 17.16.060.A]
2. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant. [PCC 17.16.060.A.1]
3. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate PCC 17.16.050. [PCC 17.16.060.A.2]
4. Dust emissions from the transportation of materials shall be effectively controlled by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls. [PCC 17.16.100.C]
5. The Permittee shall not cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.110.A]

E. Concealment of Emissions

No person shall construct, install, erect, use, replace, modify, or operate an emission source so as to conceal an emission which would otherwise be a violation of a control standard established herein. Concealment shall include: [PCC 17.20.040]

1. The use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere;
2. Operating in a piecemeal fashion to avoid compliance with a standard that would otherwise apply to the source on the basis of its size; and
3. Operating in a manner, under conditions, or during such times that emissions cannot be observed.
4. Local rules and standards - applicability of more than one standard

If more than one emission limit or emission standard is applicable to the same source, the more stringent standard or emission limit shall apply. [PCC 17.16.010.B]

F. Facility Changes

Before installing additional units or switching fuels, the Permittee shall apply for the appropriate revision pursuant to PCC 17.12.240, PCC 17.12.255 or PCC 17.12.260.

III. Monitoring Requirements

[PCC 17.12.185.A.3]

A. Opacity Standard

In order to demonstrate compliance with the emission limitations and standards in II.A and II.B of the Specific Conditions, the Permittee shall conduct a visible emissions check - once per shift - on all point and non-point sources when the block plant(s) is/are in operation. For the purposes of this permit, a visible emission check is verification that excessive emissions are not present during the operation of the block plant(s). If abnormal emissions are observed the Permittee shall take appropriate corrective action.

B. Baghouse Inspection

The Permittee shall examine the condition of the bags and baghouse each time maintenance is performed. Baghouse filters shall be checked to ensure they are maintained according to the manufacturers' recommendations and specifications.

IV. Recordkeeping Requirements

[PCC 17.12.185.A.4]

A. For the visible emissions check required in III.A of the Specific Conditions, the Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the corrective action taken (if required).

B. For the baghouse inspection check required in III.B of the Specific Conditions, the Permittee shall record all the results of the examinations of the bags and baghouse in a log including the date of the check, the name of the operator making the check, the condition of the filters, and any repairs or replacements made. Observational results of these checks shall be recorded by the Permittee in a log (an example of an inspection log is provided in Attachment 2 of the Technical Support Document).

C. All records required by this permit shall be retained for at least five years. [PCC 17.24.020.A]

V. Reporting Requirements

[PCC 17.12.185.A.5]

See Additional Permit Requirements

VI. Testing Requirements

[PCC 17.12.050 & PCC 17.20.010]

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed.

A. Opacity

When required, the Permittee shall perform EPA Method 9 visible emissions observations on the facility operations to demonstrate compliance with the opacity standard.

B. Alternative Test Method

The Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer.

[PCC 17.12.045.D]

Additional Permit Requirements

I. Compliance with Permit Conditions

[PCC 17.12.185.A.7.a & b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified below: [PCC 17.12.185.A.5 & PCC 17.12.040]
 - 1 Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information pursuant to PCC 17.12.040.B. To report excess emissions call **520-724-7400** or fax to **520-838-7432**.
 - 2 Detailed written notification by submission of an excess emissions report within 72 hours of the notification in I.B.1 above. **Send to PDEQ 33 N. Stone Ave, Ste 730, Tucson, Arizona 85701.**
- C. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.
- E. The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.510. [PCC 17.12.185.A.9 & PCC 17.12.510]

II. Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause

[PCC 17.12.185.A.7.c]

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.12.270. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

III. Duty to Provide Information

[PCC 17.12.165.G & PCC 17.12.185.A.7.e]

- A. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records to the Control Officer along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

IV. Severability Clause

[PCC 17.12.185.A.6]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

Attachment 1: Applicable Regulations

Pima County Code Title 17, Chapter 17.16:

- 17.16.010 Local rules and standards; Applicability of more than one standard
- 17.16.050 Visibility Limiting Standard
- 17.16.060 Fugitive Dust Producing Activities
- 17.16.100 Particulate Materials
- 17.16.110 Storage Piles
- 17.16.130 Applicability
- 17.16.165 Standards of Performance for Fossil Fuel Fired Industrial and Commercial Equipment
- 17.16.370 Standards of Performance for Gravel or Crushed Stone Processing Plants

- 17.20.010 Testing Requirements

- 17.24.020 Retention of Records

Attachment 2: Equipment List

Table I: Plant #1

Description	Max Capacity (Tons/hr)	Manufacturer	Model	Serial No.	Date of Manufacture
Cement Silo with 2 Baghouses	8	APM Custom 2C	550 BL	2C-550	3/1980
Drive Over Hopper Loading	30	APM Custom	28 T	28-8-00	8/2000
Enclosed Central Mixer Loading	30	Columbia	308-451-1-76	1-6000892	08/05/2005
Collector Belt Conveyor *	30	APM	30540	30-C1	1/2001
Material Feed Conveyor*	30	APM	30540	30-M1	1/2001
Transfer Belt Conveyor*	30	APM	30540	30-T1	1/2001
24" feed conveyer (fine sand)*	16	APM	2472	APM 24-1	2-2001
24" feed conveyer (coarse sand)*	16	APM	2472	APM 24-2	2-2001
24" feed conveyer (3/8 gravel)*	16	APM	2472	APM 24-3	2-2001
24" feed conveyer (cinder sand)*	16	APM	2472	APM 24-4	2-2001
24" feed conveyer (3/8 cinder)*	16	APM	2472	APM 24-5	2-2001

Table II: Plant #2

Description	Max Capacity (Tons/hr)	Manufacturer	Model	Serial No.	Date of Manufacture
Cement Silo with 2 Baghouses	8	APM Custom 2C	560 BL	2C-560	3/1982
Drive Over Hopper Loading	30	APM Custom 2C	28 T	28-9-01	8/2000
Enclosed Central Mixer Loading	30	Columbia	308-451-1-76	1-6000892	11/1998

* Conveyors are synonymous to both plants.

Table III: Bagging Plant

Description	Max Capacity (Tons/hr)	Manufacturer	Model	Serial No.	Date of Manufacture
Cement Silo and baghouse	80	Bates Packer	Unknown	Unknown	Unknown

Attachment 2 : Equipment List

Table IV: Curing Rooms

Description	Max Capacity (scf/hr) each	Manufacturer	Model	Serial No.	Date of Manufacture
Concrete Block Plant 1 (6) Curing Rooms	2058	Built On Site	N/A	Block Construction	10/2000
Concrete Block Plant 2 (6) Curing Rooms	2058	Built On Site	N/S	Block Construction	8/2005