DAQC-CI143660001-23
Site ID 14366 (B1)

MEMORANDUM

TO: **FILE – AMCOR MASONRY PRODUCTS – Concrete Masonry Products Manufacturing Plant**

THROUGH: Chad Gilgen, Minor Source Compliance Section Manager CG

FROM: Susan Weisenberg, Environmental Scientist SW

DATE: March 22, 2023

SUBJECT: **FULL COMPLIANCE EVALUATION**, Minor, Davis County

INSPECTION DATE:	February 27, 2023
SOURCE LOCATION:	333 South Redwood Road North Salt Lake, 84054
DIRECTIONS:	Take I-215 N to UT-68/S Redwood Rd in North Salt Lake. Take exit 27 from I-215 N. The facility is on the east side of Redwood Road.
SOURCE CONTACTS:	Jake Seiter, EHS Manager 801-936-7628 Jason Bailey, Operations Manager 602-568-7926
OPERATING STATUS:	Operating normally at the time of this inspection.
PROCESS DESCRIPTION:	Amcor is a facility consisting of two concrete batch plants that produce cement block and paver units using a wet material process. Amcor has requested to install a new pre-packaged cement bagging batch plant in their facility. The facility already includes a cement paver and cement block plant that previously qualified for a Small Source Exemption. The plants on site each have a mixer, a baghouse, silos, a curing chamber room, and conveyors. The concrete paver plant also includes a paver tumbler controlled by a baghouse. The new cement bagging plant includes two (2) mixers, one (1) screen, one (1) 50 MMBtu/hr aggregate dryer, three (3) baghouses, twelve (12) storage silos, and various material handling equipment.
APPLICABLE REGULATIONS:	Approval Order (AO) DAQE-AN143660002-21, dated July 16, 2021

DAQ-2023-003859

SOURCE EVALUATION:

Name of Permittee:

Amcor Masonry Products - Concrete Masonry Products Manufacturing Plant
333 South Redwood Road
North Salt Lake, UT 84054

Permitted Location:

333 South Redwood Road
North Salt Lake, 84054

SIC Code: 3272: (Concrete Products, Except Block & Brick)

Section I: GENERAL PROVISIONS

I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]

I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]

I.6 The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]

I.7 The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

I.8 The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

Status: In Compliance. Records were viewed on site or submitted upon request. All records are kept for at least two years. Maintenance on the permitted equipment is completed as per established procedures by in-house staff or by manufacturer contractors. The maintenance or the repairs are recorded by work tickets or by invoices. No UAC R307-107 applicable breakdowns have occurred. Emissions Inventories are not currently required for this site. An emailed status of construction notification was attached to the inspection memo DAQC-1026-22.

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 **Amcor Masonry Products**
Cement block, cement paver, and cement bagging batch plants.

II.A.2 **Concrete Paver Facility**

II.A.3 **One (1) Central Mix Concrete Batch Plant**
Capacity: 74 cubic yards per hour
Control: Baghouse (16,000 acfm)

II.A.4 **One (1) Mixer**
Capacity: 3 cubic yards

II.A.5 **Paver Facility Silos**
One (1) Elevated Fly Ash Silo
Two (2) Elevated Cement Storage Silo
Control: Bin Vents (Passive)

II.A.6 **Tumbler Unit**
Tumbler to distress pavers
Control: Baghouse (3,040 acfm)

II.A.7 **Paver Plant Conveyors**
Various conveyors
Control: Covered

II.A.8 **Curing Chamber Room**
Rating: Under 5 MMBtu/hr
Fuel: Natural Gas
For Informational Purposes only

II.A.9 **Concrete Block Facility**

II.A.10 **One (1) Central Mix Concrete Batch Plant**
Capacity: 100 cubic yards per hour
Control: One (1) Baghouse (20,000 acfm)

II.A.11 **One (1) Mixer**
Capacity: 2 cubic yards

II.A.12 **Block Facility Silos**
One (1) Elevated Fly Ash Silo
Two (2) Elevated Cement Storage Silo
Control: Bin Vents (Passive)

II.A.13 **Block Plant Conveyors**
Various Conveyors
Control: Covered

II.A.14 **Curing Chamber Room**
Rating: Under 5 MMBtu/hr
Fuel: Natural Gas
For Informational Purposes only

II.A.15 **Concrete, Mortar and Stucco Bagging Facility**

II.A.16 **One (1) Central Mix Concrete Batch Plant**
Capacity: 84.17 cubic yards per hour

II.A.17 **One (1) Dryer**
Rating: 50 MMBtu/hr
Fuel: Natural Gas
Control: Low NO_x Burner
Baghouse (36,000 acfm)

II.A.18 **Two (2) Mixers**
Capacity: 2 cubic yards, each
Various hoppers and packers.
Control: Two (2) Baghouses (20,000 acfm, each)

II.A.19 **Dry Sizing Screen**
Capacity: 150 tph
Control: Bin Vent (Powered, 2,655 acfm)

II.A.20 **Bagging Facility Silos**
Three (3) Fly Ash Storage Silos
Control: Bin Vents (Passive)
Five (5) Cement Storage Silos
Control: Bin Vents (Passive)
Four (4) Various Aggregate Storage Silos
Control: Bin Vents (Powered)

II.A.21 **Bagging Facility Conveyors**
Various conveyors
Control: Covered

II.A.22 **Two (2) Front End Loaders**
For Informational Purposes only

Status: In Compliance. The equipment listed within II.A has been installed as described and was operating. Item II.A.6, the Tumbler Unit may be replaced by a Replacement-In-Kind during the next year or two. The EHS Manager, Jake Seiter, stated that a Notice of Intent to Modify Amcor Masonry Products' current AO will be requested if the new Tumbler Unit's baghouse design capacity of 3,040 acfm is expected to be exceeded.

II.B Requirements and Limitations

II.B.1 **Amcor Masonry Products Requirements:**

II.B.1.a The owner/operator shall not allow visible emissions points to exceed the following values:

A. All conveyor transfer points - 7% opacity

B. All conveyor drop points - 20% opacity

C. All concrete batch plants - 7% opacity

D. All baghouses and fabric filter systems- 10% opacity

E. All other points - 20% opacity. [R307-305-3, R307-309-5, R307-312-4, R307-401-8]

Status: In Compliance. The facility manager provided a tour around the outside of the plant. All externally venting baghouse stacks were observed in operation. No visible emissions were detected from any stack or vent. In addition, no emissions were viewed from any conveyor transfer, drop, or material silo. See the attached VEO.

II.B.1.a.1 Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-305-3]

Status: In Compliance. The opacity observations were conducted in a manner consistent with 40 CFR 60, Method 9 requirements.

II.B.1.b The owner/operator shall not produce more than the following:

A. 627,000 tons of pre-packaged cement, concrete, and mortar/stucco material per rolling 12-month period.

B. 275,000 tons of concrete pavers per rolling 12-month period.

C. 101,500 tons of concrete blocks per rolling 12-month period. [R307-401-8]

Status: In Compliance. For the 12-month rolling period of February 2022 through January 2023, the submitted totals were as follows:

A. 156,265 tons for pre-packaged cement, concrete, and mortar/stucco,
B. 165,538 tons for concrete pavers,
C. 83,060 tons for concrete blocks.

See the attached spreadsheet summaries.

II.B.1.b.1 The owner/operator shall:

A. Determine production by production scales, scale house records, vendor receipts, and/or any other appropriate mechanism.

B. Record production on a daily basis.

C. Use the production data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months. [R307-401-8]

Status: In Compliance. Production is determined by scale house records. Records appear to be compiled by the 20th day of each month.

II.B.1.c The owner/operator shall cover all conveyors, transfer points and drop points that are located outside of a building. Conveyors, transfer points, and drop points located in a building may be covered or uncovered. [R307-401-8]

Status: In Compliance. On the day of this inspection, all operating conveyors, transfer points, and drop points were either covered or located inside of a building.

II.B.2 **Dryer Requirement**

II.B.2.a The owner/operator shall not operate the dryer more than 3900 hours per rolling 12-month period. [R307-401-8]

Status: In Compliance. The dryer was operated for 1,431 hours for the 12-month rolling period of February 2022 through January 2023. See the attached spreadsheet summary.

II.B.2.a.1 The owner/operator shall:

A. Determine hours of operation through a meter or monitoring and maintaining an operations log.

B. Record hours of operation daily.

C. Use the hours of operation to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months. [R307-401-8]

Status: In Compliance. Hourly dryer records are determined by a metered system that is recorded monthly.

II.B.2.b The owner/operator shall not emit more than the following rates and concentrations from the dryer stack:

Pollutant	lb/hr	grains/dscf	ppmv
Filterable PM_{10}	1.64	0.024	
Filterable $PM_{2.5}$	1.64	0.024	
NO_x	1.82		30. [R307-401-8]

Status: In Compliance. Tetco Contracting performed the most recent stack test on October 12, 2022. PM was measured at 0.014 gr/dscf and 1.21 lb/hr using testing method 5. All particulate captured was considered $PM_{2.5}$ and PM_{10}. NO_x was measured at 1.81 lb/hr and 24.7 ppm using testing method 7E. See the attached Tetco Summary of Results. A DAQ stack testing review memo was not available on the day of this inspection.

II.B.2.b.1 **Compliance Demonstrations**
To demonstrate compliance with the emission limitations above, the owner/operator shall perform stack testing on the emissions unit according to the stack testing conditions contained in this permit. [R307-165-2, R307-401-8]

II.B.2.b.2 **Initial Test**
The owner/operator shall conduct an initial stack test within 180 days after startup. [R307-165-2]

II.B.2.b.3 **Test Frequency**
The owner/operator shall conduct subsequent stack tests within 5 years after the date of the most recent stack test. The Director may require the owner/operator to perform a stack test at any time. [R307-165-2, R307-401-8]

II.B.3 **Stack Testing Requirements**

II.B.3.a **The owner/operator shall conduct any stack testing required by this AO according to the following conditions**. [R307-401-8]

II.B.3.a.1 **Notification**
At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference. [R307-165-3, R307-401-8]

Status: In Compliance. A stack testing protocol was submitted on September 21, 2022. For more information see the DAQ review memos of DAQC-1227-22 and DAQC-1228-22.

II.B.3.a.2 **Testing & Test Conditions**
The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-165-4, R307-401-8]

II.B.3.a.3 **Access**
The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location. [R307-401-8]

II.B.3.a.4 **Reporting**
No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information. [R307-165-5, R307-401-8]

II.B.3.a.5 **Possible Rejection of Test Results**
The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6. [R307-165-6, R307-401-8]

II.B.3.b **Test Methods**
When performing stack testing, the owner/operator shall use the appropriate EPA-approved test methods as acceptable to the Director. Acceptable test methods for pollutants are listed below. [R307-401-8]

II.B.3.b.1 **Standard Conditions**

A. Temperature - 68 degrees Fahrenheit (293 K)

B. Pressure - 29.92 in Hg (101.3 kPa)

C. Averaging Time - As specified in the applicable test method

[40 CFR 60 Subpart A, 40 CFR 63 Subpart A, R307-401-8]

II.B.3.b.2 **Filterable PM_{10}**
40 CFR 60, Appendix A, Method 5; 40 CFR 51, Appendix M, Method 201; Method 201A; or other EPA-approved testing method as acceptable to the Director. If other approved testing methods are used which cannot measure the PM_{10} fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM_{10}.

Condensable PM_{10}
40 CFR 51, Appendix M, Method 202 or other EPA-approved testing method as acceptable to the Director. The condensable particulate emissions shall not be used for compliance demonstration but shall be used for inventory purposes. [R307-401-8]

II.B.3.b.3 **Filterable $PM_{2.5}$**
40 CFR 60, Appendix A, Method 5; 40 CFR 51, Appendix M, Method 201A or other EPA-approved testing method as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{2.5}$.

Condensable $PM_{2.5}$
40 CFR 51, Appendix M, Method 202 or other EPA-approved testing method as acceptable to the Director. The condensable particulate emissions shall not be used for compliance demonstration but shall be used for inventory purposes. [R307-401-8]

II.B.3.b.4 **NO_x**
40 CFR 60, Appendix A, Method 7; Method 7E; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]

Status: In Compliance. A stack testing protocol was submitted on September 21, 2022. For more information see the DAQ review memos of DAQC-1227-22 and DAQC-1228-22 which indicated that the above conditions would be addressed. A completed DAQ stack testing review memo was pending on the day of this inspection.

II.B.4 **Baghouse Requirement**

II.B.4.a The owner/operator shall install a baghouse or baghouse systems to control emissions from the Paver Facility, the Paver Facility Tumbler, the Concrete Block Facility, the Concrete, Mortar and Stucco Facility and the dryer in the Concrete, Mortar and Stucco Facility. [R307-401-8]

Status: In Compliance. Baghouses were observed with all the emission points referenced. All baghouses and pressure gauges can be viewed from the ground outside of the various plant buildings.

II.B.4.a.1 The owner/operator shall install a manometer or magnehelic pressure gauges to measure the static pressure differential across each baghouse. [R307-401-8]

Status: In Compliance. Pressure gauges have been installed on each baghouse and appropriately measures the static pressure differential.

II.B.4.a.2 The pressure gauges shall measure the static pressure differential in 1-inch water column increments or less. [R307-401-8]

Status: In Compliance. The gauges have measurement markers that can indicate differential pressures as low as .25 inches of water column.

II.B.4.b The owner/operator shall maintain the static pressure differential of the baghouses between two (2) and seven (7) inches of water column as measured on the pressure gauge. [R307-401-8]

Status: In Compliance. The reviewed differential readings for the 12-month time period of February 2022 through January 2023 were all within the 2 inches to 7 inches required parameters. Readings of each baghouse observed on the day of the site inspection measured between 2 to 4 inches of water column.

II.B.4.b.1 The owner/operator shall record the static pressure differentials at least once per operating day while the baghouses are operating. [R307-401-8]

Status: In Compliance. Electronically recorded daily static pressure differentials were reviewed from a laptop computer during the site visit. An example daily reading log spreadsheet was submitted for the month of January. See the attached daily spreadsheet log.

II.B.4.b.2 The owner/operator shall maintain the following records of the static pressure differentials.

A. Unit identification;

B. Daily static pressure differential readings;

C. Date of reading. [R307-401-8]

Status: In Compliance. The unit identification, static pressure differential measured in inches of water column, and the date of the reading are recorded as required.

II.B.4.c At least once every 12 months, the owner/operator shall calibrate the baghouses' pressure gauges in accordance with the manufacturer's instructions or replace the pressure gauges. [R307-401-8]

Status: In Compliance. Gauges are reportedly calibrated at least once every 12 months. The gauges for all of the installed baghouses were last calibrated in November of 2022.

II.B.4.c.1 The owner/operator shall maintain records of the pressure gauges calibrations and replacements. [R307-401-8]

Status: In Compliance. The date of the last gauge calibration is recorded at the top of the daily reading spreadsheet log.

II.B.5 **Haul Roads and Fugitive Dust Requirement**

II.B.5.a The owner/operator shall comply with a Fugitive Dust Control Plan (FDCP) acceptable to the Director for the control of all fugitive dust associated with the Amcor Masonry Products site. [R307-309-6, R307-401-8]

Status: In Compliance. A copy of this site's current FDCP can be viewed as an attachment to the inspection memo DAQC-1026-22. The roads and operation areas appeared clean and well maintained at the time of this inspection.

II.B.5.b The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]

Status: In Compliance. Recent watering and sweeping records were available in the site's main office during this inspection. All operation areas and roads appeared well maintained at the time of this inspection.

II.B.5.c The owner operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20% opacity on site and 10% opacity at the property boundary. [R307-205-4, R307-309-5, R307-401-8]

Status: In Compliance. No fugitive dust was observed from the mobile equipment using the haul roads during this inspection.

II.B.5.c.1 Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-309-5, R307-401-8]

Status: In Compliance. Opacity observations taken during the inspection were consistent with Method 9 procedures.

II.B.5.d The owner/operator shall vacuum sweep and water all haul roads. The vacuum sweep and water shall be of sufficient frequency and quantity to maintain the opacity limit specified in the AO. [R307-401-8]

Status: In Compliance. Recent watering/sweeping records were viewed at the site's main office. No visible dust was observed during this inspection.

II.B.5.d.1 Records of vacuum sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items:

A. Date and time treatments were made

B. Number of treatments made and quantity of water applied

C. Rainfall amount received, if any. [R307-401-8]

Status: In Compliance. The records viewed at the main office included the date, amount, and a weather indicator column.

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

AREA SOURCE RULES EVALUATION:

The following Area Source Rules were evaluated during this inspection:

Nonattainment and Maintenance Areas for PM_{10}: Emission Standards [R307-305]

Status: In Compliance. Compliance with this area source rule is satisfied by Condition II.B.1.a. of this AO.

Nonattainment and Maintenance Areas for PM_{10}: Emissions and Fugitive Emissions and Fugitive Dust [R307-309]

Status: In Compliance. Compliance with this area source rule is satisfied by Conditions II.B.5.a through II.B.5.d.1 of this AO.

Degreasing and Solvent Cleaning Operations [R307-335]

Status: In Compliance. This facility occasionally operates one Safety-Kleen solvent-based parts washer. The parts washer was not in use during this inspection and the lid was closed.

EMISSION INVENTORY:
An Emissions Inventory has not been required for this site. The emissions listed below are an estimate of the total potential emissions (PTE) from Amcor Masonry Products- Concrete Masonry Products Manufacturing Plant on the Approval Order (AO) DAQE-AN143660002-21, dated July 16, 2021. *(PTE) are supplied for supplemental purposes only.*

Criteria Pollutant	PTE tons/yr
CO_2 Equivalent	13725.00
Carbon Monoxide	9.16
Nitrogen Oxides	5.42
Particulate Matter - PM_{10}	9.55
Particulate Matter - $PM_{2.5}$	2.86
Sulfur Dioxide	0.07
Volatile Organic Compounds	0.63

Hazardous Air Pollutant	PTE lbs/yr
Generic HAPs (CAS #GHAPS)	360

PREVIOUS ENFORCEMENT ACTIONS: No enforcement actions within the past five years.

COMPLIANCE STATUS & RECOMMENDATIONS: Amcor Masonry Products, site 14366, should be considered to be in compliance with the AO AN143660002-21, dated July 16, 2021, and the applicable UACR at the time of this inspection.

HPV STATUS: Not Applicable.

RECOMMENDATION FOR NEXT INSPECTION:	Inspect as usual returning to the original targeting frequency.
ATTACHMENTS:	VEO, Tetco supplied stack testing results, submitted production total spreadsheets, dryer hour totals and log, January 2023 example of the daily differential pressure reading spreadsheet, and the inspection report of the facility's baghouses.

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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EPA METHOD 9 – VISIBLE EMISSION OBSERVATION FORM

Source Name: AMCOR MASONRY PRODUCTS
Street Address: 333 SOUTH REDWOOD ROAD
City/County: NORTH SLC / DAVIS Co
Phone: 801-928-0178 - 801-936-7628
Site ID: 14366
Facility: Batch Plant - Pavers, blocks
Equipment/Process: Mixers, Silos, bagging, Conveyors
Control Equipment: Bin Vents, Covers

Emission Point:

OBSERVATION DATE: 2-27-23

Start time: 2:00 Stop time: 2:20

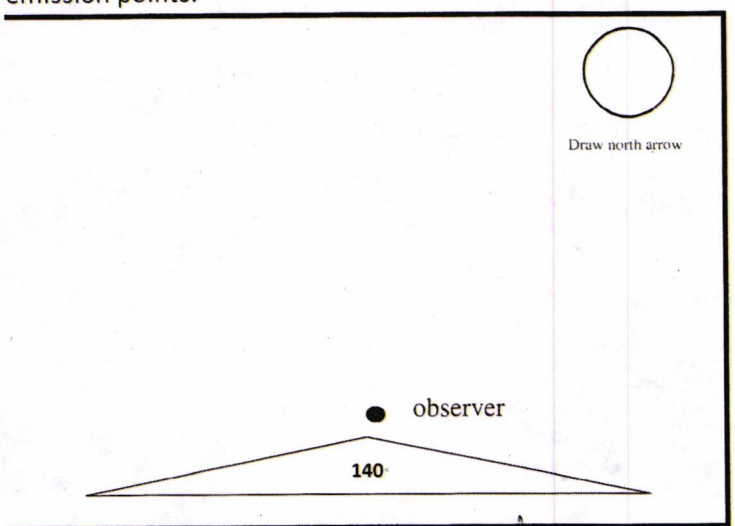
min \ sec	0	15	30	45
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Sky Conditions: Clear [ ] Partly Cloudy [ ] Overcast [ ]
Precipitation: No [ ] Yes [ ] _____
Wind: Direction: _____ Speed: _____ mph
Ambient Temp: _____ °F RH: _____ %
Height Relative to Observer: _____
Distance From Observer: _____
Condensed Water Vapor Present: No [ ] Yes [ ]
Attached [ ] Detached [ ]
Length of Condensed Water Vapor Plume: _____
Background: _____

COMMENTS: Point 3
- Noisome Dust Collector 0%
Brick PLANT 4" 0%
MIDWEST Brick PLANT 4/3 0%
~~EAST~~ DRYER BG 2 0%
EAST MIXER BA 28-32 0%

No Visible Emissions From Any Point

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.



Sun ⊕ Wind ▶ Emission Point with Plume
Observer Position ✖

Observer's Signature: [signature]

I have received a copy of these observations:
SIGNATURE: [signature]
Printed Name: Jake C. Seiter
Title: EHS Manager

Distrib: white-file; canary-inspector; pink-owner/operator

SUMMARY OF RESULTS

Emission Results

Table I summarizes the emission results of the test project. More detailed testing data and results can be found in Appendix A.

TABLE I. Summary of Measured Emission

Source	Test Method	Pollutant	Measured Emissions			Emission Limits		
			gr/dscf	lb/hr	ppm	gr/dscf	lb/hr	ppm
Dryer	5	PM (filterable)	0.014	1.21	--	0.024 [1]	1.64 [1]	--
	7E	NO_x	--	1.81	24.7	--	1.82	30

1 The test was for total particulate matter using Method 5. All particulate captured was considered $PM_{2.5}$ and PM_{10}. The dryer has the same $PM_{2.5}$ and PM_{10} emission limits.

Process Data

The process was at full production rate and was operated by Amcor personnel.

Description of Collected Samples

The front washes were all slightly cloudy in appearance. The cloudiness may have been due to portions of the test filter being collected in the front wash. There was a small amount of visible, light gray colored particulate on the test filters.

Isokinetics

The Method 5 test runs were isokinetic within the ±10% of 100% criterion specified in Method 5. Isokinetic values for each test run are presented in Table II.

Table II. Isokinetics

Run #	Percent Isokinetics
1	103
2	98
3	99

A. Cement Products Produced (Tons)

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
Monthly Production in Tons	14,332	12,757	7,574	12,618	15,123	13,236	16,896	14,093	19,031	11,298	7,587	11,720
Rolling 12 in Tons	67,320	80,077	87,651	100,269	115,392	127,877	137,690	144,916	154,464	155,919	154,955	156,265

B. Paver Products Produced (Tons)

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
Masa Paver Plant Production	15655	12396	15228	13274	15123	13236	16896	14093	19031	11298	7587	11720
Rolling 12 tons	155,032	167,429	182,657	195,931	195,266	191,438	187,795	183,650	182,185	176,558	168,730	165,538

Total Hours Dryers ran per Month

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
Dryer Operating Hours	187.5	140.8	97.5	146.3	133.5	73.3	164.8	124.3	165.5	124.3	114.5	146.5
Dryer Operating Hours Rolling 12	871	1,012	1,109	1,256	1,389	1,462	1,581	1,594	1,623	1,603	1,602	1,431

C. Block Products Produced (Tons)

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
Montly Production in Tons	6982.6	6485.0	6481.4	6690.1	7,629	7,770	8,108	7,682	7,175	6,120	5,818	6,120
Rolling 12 in Tons	41,213	47,281	53,146	56,460	62,351	66,897	72,532	77,022	79,397	80,665	83,018	83,060

Amcor #131 Dryer Log

Period **January** **2023**

Average Ton per Hour	**54.2**
Average Therm per ton	**1.16**

		7,946	In quarter hrs (0.25)		146.50			9,196.7			
Date	Material	Tons	Military Start Time	Military End Time	Run Time	Start Meter	End Meter	Therms	Tons Per Hour	Therms per Ton	Notes
1/3/2023	Blend	306.20	8.50	16.75	8.25	23131	23548	436.0	37.12	1.42	
1/4/2023	Blend	320.30	6.00	14.00	8.00	23548	23939	408.8	40.04	1.28	
1/5/2023	Blend	259.20	7.75	15.50	7.75	23939	24266	341.9	33.45	1.32	
1/9/2023	Blend	323.50	7.00	10.50	3.50	24266	24568	315.8	92.43	0.98	
1/9/2023	Concrete Sand	176.60	10.75	13.25	2.50	24568	24721	160.0	70.64	0.91	
1/9/2023	Blend	138.80	13.25	14.50	1.25	24721	24841	125.5	111.04	0.90	
1/9/2023	Fine Sand	97.40	14.75	16.25	1.50	24841	24930	93.1	64.93	0.96	
1/10/2023	Blend	538.90	6.50	15.00	8.50	24930	25490	585.5	63.40	1.09	
1/11/2023	Blend		8.75	15.50	6.75	25490	25865	392.1	0.00		TPH scale was not reading
1/12/2023	Blend	332.30	5.25	15.50	10.25	25865	26424	584.5	32.42	1.76	
1/16/2023	Blend	680.60	6.25	16.25	10.00	26424	27098	704.7	68.06	1.04	
1/17/2023	Blend	807.10	6.00	17.75	11.75	27098	27914	853.2	68.69	1.06	
1/18/2023	Blend	444.80	9.00	16.75	7.75	27914	28353	459.0	57.39	1.03	
1/19/2023	Blend	612.10	6.50	15.75	9.25	28353	28942	615.8	66.17	1.01	
1/23/2023	Blend	678.80	7.25	17.25	10.00	28942	29609	697.4	67.88	1.03	
1/24/2023	Blend	600.60	7.00	15.75	8.75	29609	30172	588.6	68.64	0.98	
1/25/2023	Blend	438.00	7.50	15.75	8.25	30172	30602	449.6	53.09	1.03	
1/26/2023	Blend	488.80	6.25	15.25	9.00	30602	31124	545.8	54.31	1.12	
1/30/2023	Blend	288.70	11.00	16.50	5.50	31124	31465	356.5	52.49	1.23	
1/31/2023	Blend	413.40	7.50	15.50	8.00	31465	31927	483.0	51.68	1.17	

Amcor NSL Differential Preasure Readings

Janruary 2023

	Common Name	Dryer Bag House	Coarse Line Baghouse	Fine Line Baghouse	Masa Baghouse	Tumbler Baghouse	Besser Baghouse
	Plant	Bag Plant	Bag Plant	Bag Plant	Paver Plant	Tumbler	Block Plant
	Last Calibration Date	11/2022	11/2022	11/2022	11/2022	11/2022	11/2022
Time_Stamp	**Day of Week**	**DP1**	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**
01-Jan-23	Sunday				2.5		
02-Jan-23	Monday				3.2		
03-Jan-23	Tuesday	2.8	3.2	4.1	2.9	4.9	3.5
04-Jan-23	Wednesday	2.6	3.6	4.2	2.6	5.2	3.5
05-Jan-23	Thursday	2.9	3.3	3.8	3.0	5.2	3.5
06-Jan-23	Friday				3.0	5.1	3.4
07-Jan-23	Saturday				3.0		
08-Jan-23	Sunday				2.4		
09-Jan-23	Monday	3.3	3.4	4.1	2.6	5.1	3.4
10-Jan-23	Tuesday	3.2	3.3	5.0	2.7	5.1	3.6
11-Jan-23	Wednesday	3.5	3.1	4.0	3.6	5.2	3.4
12-Jan-23	Thursday	3.4	3.2	4.4	4.5	5.2	3.4
13-Jan-23	Friday				2.9	5.2	3.4
14-Jan-23	Saturday				3.5		
15-Jan-23	Sunday				2.9		
16-Jan-23	Monday	2.5	3.0	5.0	2.3	5.1	3.5
17-Jan-23	Tuesday	2.2	3.2	4.6	3.5	5.1	3.5
18-Jan-23	Wednesday	3.2	3.3	4.4	3.0	5.2	3.5
19-Jan-23	Thursday	2.6	3.1	4.5	2.6	5.2	3.8
20-Jan-23	Friday				3.2	5.1	4.1
21-Jan-23	Saturday				4.5		
22-Jan-23	Sunday				2.9		
23-Jan-23	Monday	2.6	2.9	4.4	2.7	5.2	4.0
24-Jan-23	Tuesday	2.7	3.1	4.1	3.5	5.2	4.1
25-Jan-23	Wednesday	3.3	3.0	4.2	2.6	5.2	3.6
26-Jan-23	Thursday	2.5	3.2	4.5	4.3	5.1	3.5
27-Jan-23	Friday				2.9	5.1	3.7
28-Jan-23	Saturday				3.0		
29-Jan-23	Sunday				2.4		
30-Jan-23	Monday	3.7	3.4	4.6	4.5	5.1	DNR
31-Jan-23	Tuesday	4.1	3.1	4.8	3.5	5.1	3.4

To: Jason Bailey - Operations Manager
Jake Seiter, CSP - EHS Manager
Oldcastle Amcor Masonry
North Salt Lake City, Utah Operations

Date: November 1, 2022

From: Reed C. Finch
APC Specialist
IAC – Industrial Accessories Company
Field Service Team

Subject: 4th Quarterly Inspection 2022 - North Salt Lake Operations Dust Collectors.
Last Quarterly inspection performed – 07/27/22

Scope: Inspect/evaluate the listed Baghouses & Bin Vents for proper condition and functionality.
Provide a written report showing our findings and recommendations.

Gentlemen,
The following is a summary of our findings and recommendations relative to your baghouses at the North Salt Lake City Plant Operations.

Q-4 – 2022 Air Pollution Control Equipment Inspection Report
Page 1

EQUIPMENT: - Dust Collectors Inspected:

	Equipment Name	OEM	Model #	S/N	# of Filters
1	**MASA DC**	ACT – Dust Collectors	ACT 4-32	16033	32 cartridges ACT#22611 – Paper – Horizontal double stacked.
2	**Gray Cement – South BV**	WAM Group	Silo Top Zero 7	? no tag	7 Cartridges
3	**White Cement – Middle BV**	WAM Group	Silo Top Zero 7	11-SI-17-0010164	7 Cartridges
4	**Flyash North BV**	WAM Group	Silo Top Zero 7	11-SI-17-0010169	7 Cartridges
5	**BESSER DC**	Donaldson Torit Downflo	DFE 3-24	11004716-1-1	24 cartridges – Paper – Horizontal double stacked.
6	**Flyash South BV**	WAM Group	Silo Top	2705-00S1.00000602	7 Cartridges – KFEW300
7	**White Cement BV Middle**	WAM Group	Silo Top	2705-00S1.00000602	7 Cartridges – KFEW300
8	**Grey Cement BV North**	WAM Group	Silo Top Zero 7	11-SI-0010441 build in 2018	7 Cartridges
9	**TUMBLER**	Donaldson Torit	DF02-8	2221346-1	8 cartridges – Paper – Horizontal double stacked.
10	**Dryer Baghouse**	Tarmac International	24X15X15	TI 424 – BH1073	360 ea. 16 oz. aramid fiber – top load/SB top Disc bottom
11	**Nuisance/bagger – west side**	ACT – Dust Collector – West Side	5-40	16666	40 cartridge filters – horizontal double stacked.
12	**Nuisance/bagger – east side**	ACT – Dust Collector – Easts Side	5-40	16667	40 cartridge filters – horizontal double stacked
13	**Bin 1 Concrete sand**	WAMGROUP	FNS2J12PV22A	11-FN-20-20197	8 pleated elements bottom load
14	**Bin 2 Mason Sand**	WAMGROUP	FNS2J12PV22A	11-FN-20-20200	8 pleated elements bottom load
15	**Bin 3 GRAVEL**	WAMGROUP	FNS2J12PV22A	11-FN-20-20198	8 pleated elements bottom load
16	**Bin 4 Concrete**	WAMGROUP	FNS2J12PV22A	11-FN-20-20199	8 pleated elements bottom load
17	**Bin 1 – Port cement**	WAMGROUP	Silo Top Zero 7	? not tag	7 cartridges
18	**Bin 2 – Flyash**	WAMGROUP	Silo Top Zero 7	11-SI-21-0010184	7 cartridges
19	**Bin 3 – Lime**	WAMGROUP	Silo Top Zero 7	11-SI-21-0010087	7 cartridges
20	**Bin 4 – White Cement**	WAMGROUP	Silo Top Zero 7	11-SI-20-0010549	7 cartridges
21	**Bin 5 – Port. Cement**	WAMGROUP	Silo Top Zero 7	11-SI-21-0010181	7 cartridges
22	**Bin 6 – Port. Cement**	WAMGROUP	Silo Top Zero 7	11-SI-21-0010172	7 cartridges
23	**Bin 7 – Flyash**	WAMGROUP	Silo Top Zero 7	Not legible	7 cartridges
24	**Bin 8 – East**	WAMGROUP	Silo Top Zero 7	11-SI-20-0010537	7 cartridges
25	**Screener Baghouse**	WAMGROUP	FNS4J44PV40	11-FN-20-20198	28 bottom load pleated elements