

State of Utah

SPENCER J. COX Governor

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> Kimberly D. Shelley Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird Director

DAQE-IN143660003-24

December 5, 2024

Jay Seeley Amcor Masonry Products 333 South Redwood Road North Salt Lake, UT 84054 jay.seeley@oldcastle.com

Dear Mr. Seeley:

Re: Intent to Approve: Modification to Approval Order DAQE-AN143660002-21 to Increase Production and Add a Wet Processing Line Project Number: N143660003

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Mr. Enqiang He**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Enqiang He, can be reached at (801) 556-1580 or ehe@utah.gov, if you have any questions.

Sincerely,

alm D. Hugher

Alan D. Humpherys, Manager New Source Review Section

ADH:EH:jg

cc: Davis County Health Department

# STATE OF UTAH Department of Environmental Quality Division of Air Quality

# INTENT TO APPROVE DAQE-IN143660003-24 Modification to Approval Order DAQE-AN143660002-21 to Increase Production and Add a Wet Processing Line

Prepared By Mr. Enqiang He, Engineer (801) 556-1580 ehe@utah.gov

Issued to Amcor Masonry Products - Concrete Masonry Products Manufacturing Plant

> Issued On December 5, 2024

alm D. Hugher

New Source Review Section Manager Alan D. Humpherys

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## **GENERAL INFORMATION**

#### **CONTACT/LOCATION INFORMATION**

**Owner Name** Amcor Masonry Products Source Name Amcor Masonry Products - Concrete Masonry Products Manufacturing Plant

Mailing Address 333 South Redwood Road North Salt Lake, UT 84054 **Physical Address** 333 South Redwood Road North Salt Lake, UT 84054

Source Contact Name: Jay Seeley Phone: (801) 936-7628 Email: jay.seeley@oldcastle.com **UTM Coordinates** 

421,268 m Easting 4,521,145 m Northing Datum NAD83 UTM Zone 12

SIC code 3271 (Concrete Block & Brick)

#### **SOURCE INFORMATION**

General Description

Amcor Masonry Products (Amcor) is a facility consisting of a concrete paver plant, a concrete block plant, and a pre-packaged cement bagging plant. Operations include silo loading, material drying, mixing, and packaging materials. The plants will produce up to 300,000 tons of concrete paver, 120,000 tons of concrete blocks, and 627,000 tons of pre-packaged cement, concrete, and mortar/stucco materials per rolling 12-month period.

<u>NSR Classification</u> Minor Modification at Minor Source

Source Classification Located in Northern Wasatch Front O3 NAA, Salt Lake City UT PM<sub>2.5</sub> NAA Davis County Airs Source Size: B

Applicable Federal Standards None DAQE-IN143660003-24 Page 4

Project Description

Amcor has requested to make the following changes:

1. To increase dry ingredient throughput at the paver and block plants. The paver plant throughput will increase from 275,000 to 300,000 tpy; the block plant throughput will increase from 101,500 to 120,000 tpy.

2. To add a new wet processing line in the bagging plant.

The site-wide emissions will be updated to reflect these changes.

#### SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
Ammonia	0	0.37
CO <sub>2</sub> Equivalent	0	13725.00
Carbon Monoxide	0.45	9.61
Nitrogen Oxides	0	5.42
Particulate Matter - PM <sub>10</sub>	3.01	12.56
Particulate Matter - PM <sub>2.5</sub>	1.21	4.07
Sulfur Dioxide	0	0.07
Volatile Organic Compounds	0	0.63

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Generic HAPs (CAS #GHAPS)	0	360
	Change (TPY)	Total (TPY)
Total HAPs	0	0.18

## PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on December 8, 2024. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

## SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

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]
1.5	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]
1.8	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]

## SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

#### II.A <u>THE APPROVED EQUIPMENT</u>

IIA1	Ameor Masonry Products
11.1 1.1	Thirder Musching Troudeds
	Compart block compart never and compart begging betch plants
	Cement block, cement pavel, 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 Silos Control: Bin Vents (passive) One (1) Portable Tanker Silo Control: Bin Vent (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 Control: Bin Vent (passive) Two (2) Elevated Cement Storage Silos Control: Bin Vent (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
	Baghouse (36.000 acfm)
	Dughouse (50,000 uerni)
II.A.18	Two (2) Mixers
	Capacity: 2 cubic yards each
	Various hoppers and packers.
	Control: Two (2) Baghouses (20,000 actm, each)
II.A.19	Dry Sizing Screen
	Capacity: 150 tph
	Control: Bin Vent (Powered, 2,655 acfm)
II.A.20	Bagging Plant Silos
	Three (3) Fly Ash Storage Silos
	Control: Bin Vents (passive)
	Five (5) Cement Storage Silos
	Control: Bill Verious Aggragate Storage Siles
	Control: Bin Vents (powered)
	control. Dir Vents (powered)
II.A.21	Bagging Facility Conveyors
	Various conveyors
	Control: Covered
II.A.22	Wet Processing Line - New
	Including a conveyor
	Control: Covered
II.A.23	Two (2) Front End Loaders
	For Informational Purposes only

# SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B	<b>REQUIREMENTS AND LIMITATIONS</b>

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]					
II.B.1.a.1	Opacity CFR 60	observations of emissions from stationary sources shall be conducted according to 40 , Appendix A, Method 9. [R307-305-3]				
II.B.1.b	The own	ner/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.	300,000 tons of concrete pavers per rolling 12-month period				
	C.	120,000 tons of concrete blocks per rolling 12-month period.				
	[R307-4	307-401-8]				
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.				
	[R307-4	401-8]				
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 or in the wet processing line may be covered or uncovered. [R307-401-8]					
II.B.2	Dryer Requirements					
II.B.2.a	The own period.	ner/operator shall not operate the dryer more than 3900 hours per rolling 12-month [R307-401-8]				

II.B.2.a.1	The owner/operator shall:			
	A. Determine hours of operation through a meter or monitoring and maintaining of an operations log			
	B. Record hours of operation daily			
	C. Use the hours of op each month using c	peration to cal data from the	lculate a new rolling 12 previous 12 months.	e-month total by the 20th day of
	[R307-401-8]			
II.B.2.b	The owner/operator shall no dryer stack:	not emit more	than the following rates	s and concentrations from the
	Pollutant lb/	/hr	grains/dscf	ppmv
	Filterable $PM_{10}$ 1.6Filterable $PM_{2.5}$ 1.6 $NO_x$ 1.8	64 64 82	0.024 0.024	30
	[R307-401-8]			
II.B.2.b.1	<b>Compliance Demonstrations</b> 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	<b>Initial Test</b> The owner/operator shall conduct an initial stack test within 180 days after startup. [R307-165-2]			
II.B.2.b.3	<b>Test Frequency</b> The owner/operator shall conduct subsequent stack tests within five (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 following conditions. [R30	<b>l conduct any</b> 07-401-8]	stack testing require	d by this AO according to the
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]			
II.B.3.a.2	<b>Testing &amp; Test Conditions</b> 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	<b>Reporting</b> 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	<b>Possible Rejection of Test Results</b> 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	<b>Test Methods</b> 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	<ul> <li>Filterable PM<sub>10</sub></li> <li>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<sub>10</sub> fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM<sub>10</sub>.</li> <li>Condensable PM<sub>10</sub></li> <li>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.</li> <li>[R307-401-8]</li> </ul>			
II.B.3.b.3	<ul> <li>Filterable PM<sub>2.5</sub></li> <li>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<sub>2.5</sub> fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM<sub>2.5</sub>.</li> <li>Condensable PM<sub>2.5</sub></li> <li>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.</li> <li>[R307-401-8]</li> </ul>			
II.B.3.b.4	NO <sub>x</sub> 40 CFR 60, Appendix A, Method 7; Method 7E; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]			

II.B.4	Baghouse Requirements
II.B.4.a	The owner/operator shall install baghouses or filters 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]
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]
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]
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]
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]
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]
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]
II.B.4.c.1	The owner/operator shall maintain records of the pressure gauges calibrations and replacements. [R307-401-8]
II.B.5	Haul Roads and Fugitive Dust Requirements
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]
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]
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]
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]
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]

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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:		
	А.	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]	

# **PERMIT HISTORY**

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes	AO DAQE-AN143660002-21 dated July 16, 2021
Incorporates	NOI dated April 27, 2024
Incorporates	Additional information dated July 18, 2024
Incorporates	Additional information dated August 12, 2024
Incorporates	Additional information dated August 29, 2024
Incorporates	DAQE-MN143660003-24 dated November 26, 2024

## ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify
	sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
0	Carbon monoxide
$CO_2$	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818- 12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
I R/VR	Pounds per year
MACT	Maximum Achievable Control Technology
MMRTU	Million British Thermal Units
ΝΔΔ	Nonattainment Area
NAAOS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO	Oxides of nitrogen
NSPS	New Source Performance Standard
NCD	New Source Period
PM <sub>10</sub>	Particulate matter less than 10 microns in size
DM.	Particulate matter less than 25 microns in size
	Provention of Significant Deterioration
	Prevention of Significant Deterioration
PIE D207	Potential to Emit
K307	Rules Series 507
R307-401	Rules Series 307 - Section 401
$SU_2$	Title IV of the Close Air Ast
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds