State of Utah

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Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN162330001-24

December 26, 2024

Kirk Arens
Utah Flour Milling LLC
730 17th Street, Suite 600
Denver, CO 80202
kirk.arens@phmbrands.com

Dear Mr. Arens:

Re: Intent to Approve: New Richmond Flour Mill
Project Number: N162330001

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, **Dungan Adams,** as well as the DAQE number as shown on the upper right-hand corner of this letter. Dungan Adams, can be reached at (385) 290-2474 or dunganadams@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:DA:jg

cc: Bear River Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN162330001-24
New Richmond Flour Mill

Prepared By
Dungan Adams, Engineer
(385) 290-2474
dunganadams@utah.gov

Issued to
Utah Flour Milling LLC - Richmond Flour Mill

Issued On
December 26, 2024

New Source Review Section Manager
Alan D. Humpherys

TABLE OF CONTENTS

GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Utah Flour Milling LLC

Source Name
Utah Flour Milling LLC - Richmond Flour Mill

Mailing Address
730 17th Street, Suite 600
Denver, CO 80202

Physical Address
11595 North US 91 Highway
Richmond, UT 84333

Source Contact
Name: Kirk Arens
Phone: (402) 516-6166
Email: kirk.arens@phmbrands.com

UTM Coordinates
432,439 m Easting
4,643,738 m Northing
Datum NAD83
UTM Zone 12

SIC code 2041 (Flour & Other Grain Mill Products)

SOURCE INFORMATION

General Description
Utah Flour Milling LLC has requested an AO for a new flour mill located in Richmond, Cache County. Raw wheat will be received at the facility by truck and rail and conveyed to storage bins. The raw wheat will then be processed into flour through cleaning, tempering, and milling operations. Whole wheat will be produced through hammer milling. Animal feed will be produced as a byproduct. The flour, whole wheat, and animal feed will be kept in storage bins until loadout. Particulate matter emissions at the facility will be controlled using baghouses, cyclones, dust filters, and bin vents. The facility will be powered exclusively by line power.

NSR Classification
New Minor Source

Source Classification
Located in Attainment Area
Cache County
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), DD: Standards of Performance for Grain Elevators
Title V (Part 70) Area Source

Project Description
The facility will operate eight (8) baghouses to control particulate emissions from grain receiving, handling, cleaning, tempering, milling, and flour loadout. Parallel cyclones will also be used to filter larger particles from the cleaning and milling processes. Flour, whole wheat, and feed storage bins will be controlled with bin vent filters. Dust filters will be used to control the hammer mill and the truck and packaging loadouts.

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)
CO_2 Equivalent		0.00
Carbon Monoxide		0.00
Nitrogen Oxides		0.00
Particulate Matter - PM_{10}		9.85
Particulate Matter - $PM_{2.5}$		5.06
Sulfur Dioxide		0.00
Volatile Organic Compounds		0.00

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Generic HAPs (CAS #GHAPS)		0
	Change (TPY)	**Total (TPY)**
Total HAPs		0.00

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 Herald Journal on December 28, 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]
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]

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 THE APPROVED EQUIPMENT

II.A.1	**Richmond Flour Mill**

II.A.2	**One (1) Grain Receiving and Handling Baghouse** Exhaust Flow Rate: 10,000 acfm
II.A.3	**One (1) Grain Cleaning Baghouse** Exhaust Flow Rate: 16,046 acfm
II.A.4	**One (1) Grain Tempering Baghouse** Exhaust Flow Rate: 3,527 acfm
II.A.5	**Three (3) Grain Milling Baghouses** Exhaust Flow Rate: 12,867 acfm each Operated in parallel
II.A.6	**Two (2) Plansifter Baghouses** Exhaust Flow Rate: Variable
II.A.7	**Three (3) Grain Cleaning Cyclones** Operated in parallel before the Grain Cleaning Baghouse
II.A.8	**Three (3) Grain Milling Cyclones** Operated in parallel before the Grain Milling Baghouses
II.A.9	**One (1) Hammer Mill Dust Filter**
II.A.10	**Two (2) Flour/Whole Wheat Loadout Dust Filters** Controls truck and packaging loadouts
II.A.11	**Twelve (12) Grain Elevator Bins**
II.A.12	**Twelve (12) Grain Storage Bins**
II.A.13	**Nine (9) Flour/Whole Wheat Storage Bins** Each controlled with bin vent
II.A.14	**One (1) Feed Storage Bin** Controlled with bin vent

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 REQUIREMENTS AND LIMITATIONS

II.B.1	**Site-wide Requirements**
II.B.1.a	The owner/operator shall not allow visible emissions from the following emission points to exceed the following values: A. All baghouse exhaust stacks - 10% opacity B. All dust filters - 7% opacity C. All bin vents - 7% opacity D. Flour loadout by rail - 5% opacity E. Feed loadout by truck - 10% opacity F. All other points - 20% opacity. [40 CFR 60 Subpart DD, R307-205-4, R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3]
II.B.1.b	The owner/operator shall pave all haul roads at the facility. [R307-401-8]
II.B.1.c	The owner/operator shall only use line power to provide electricity to stationary equipment at the facility. [R307-401-8]
II.B.2	**Production Requirements**
II.B.2.a	The owner/operator shall not store more than 240,000 tons of raw wheat per rolling 12-month period. [R307-401-8]
II.B.2.b	The owner/operator shall not produce more than 174,000 tons of processed flour and whole wheat combined per rolling 12-month period. [R307-401-8]
II.B.2.c	The owner/operator shall not loadout more than 60,000 tons per year of processed flour and whole wheat combined per rolling 12-month period from the rail loadout, the truck loadout, or the packaging loadout. [R307-401-8]
II.B.2.d	The owner/operator shall not produce more than 64,200 tons of feed by-product per rolling 12-month period. [R307-401-8]

II.B.2.e	To determine compliance with conditions II.B.2.a through II.B.2.d, the owner/operator shall: A. Determine production for each process with equipment scales B. Record production for each process on a daily basis C. Use the production data to calculate a new rolling 12-month total for each process by the 20th day of each month using data from the previous 12 months D. Keep production records for each process for all periods the plant is in production. [R307-401-8]
II.B.3	**Baghouse Requirements**
II.B.3.a	The owner/operator shall install one (1) baghouse to control particulate emissions from each of the following activities and equipment: grain receiving and handling, grain cleaning, grain tempering, and each plansifter. Each baghouse shall meet a particulate matter emission rate of 0.01 gr/dscf. [R307-401-8]
II.B.3.a.1	To demonstrate compliance with the above condition, the owner/operator shall maintain records of the manufacturer's emission guarantee for each baghouse. The records shall be kept for the life of each baghouse. [R307-401-8]
II.B.3.b	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the static pressure drop across the baghouse. [R307-401-8]
II.B.3.b.1	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. [R307-401-8]
II.B.3.b.2	The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. [R307-401-8]
II.B.3.c	During operation of the baghouse, the owner/operator shall maintain the static pressure drop within the range recommended by the manufacturer for normal operations. [R307-401-8]
II.B.3.c.1	The owner/operator shall record the pressure drop at least once per operating day while the baghouse is operating. [R307-401-8]
II.B.3.c.2	The owner/operator shall maintain the following records of the pressure drop readings: A. Unit identification B. Manufacturer recommended static pressure drop for the unit C. Date of reading D. Daily static pressure drop readings. [R307-401-8]
II.B.3.d	At least once every 12 months, the owner/operator shall calibrate the pressure gauges in accordance with the manufacturer's instructions or replace the gauges. [R307-401-8]
II.B.3.d.1	The owner/operator shall maintain records of the pressure gauge calibrations and replacements. [R307-401-8]

II.B.4	**Grain Milling Baghouse Stack Testing Requirements**
II.B.4.a	**The owner/operator shall conduct any stack testing required by this AO according to the following conditions**. [R307-401-8]
II.B.4.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.4.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.4.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.4.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.4.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.4.a.6	**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.4.b	**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.4.b.1	**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}. [R307-401-8]
II.B.4.c	The owner/operator shall not emit more than the following rates and concentrations from the **Two (2) Grain Milling Baghouse Stacks**: Pollutant — grains/dscf Filterable PM_{10} — 0.01 Filterable $PM_{2.5}$ — 0.01 [R307-401-8]

II.B.4.c.1	**Compliance Demonstration** 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 AO. [R307-165-2, R307-401-8]
II.B.4.c.2	**Initial Test** The owner/operator shall conduct an initial stack test on the emission unit within 180 days after startup of the emission unit. [R307-165-2]
II.B.4.c.3	**Test Frequency** The owner/operator shall conduct a stack test on the emission unit within five (5) years after the date of the most recent stack test of the emission unit. The Director may require the owner/operator to perform a stack test at any time. [R307-165-2, R307-401-8]

PERMIT HISTORY

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

Is Derived From	NOI dated August 21, 2024
Incorporates	Additional Information dated October 1, 2024
Incorporates	Additional Information dated October 30, 2024
Incorporates	Additional Information dated November 6, 2024
Incorporates	Additional Information dated November 13, 2024
Incorporates	Additional Information dated December 4, 2024
Incorporates	Additional Information dated December 11, 2024
Incorporates	Additional Information dated December 18, 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
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	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
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
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