June 25, 2025

Jade Stokke
Magris Talc USA, Inc.
Three Forks Mill
2150 Bench Road
Three Forks, MT 59752

RE: Department Decision on MAQP Application #2282-17

Sent via email: jade.stokke@magristalc.com

Dear Mr. Stokke,

The Montana Department of Environmental Quality (DEQ) has issued a Decision, with conditions, on Montana Air Quality Permit (MAQP) application #2282-17 for the above-named permittee.

The Decision may be appealed to the Board of Environmental Review (Board). A request for a hearing must be filed by July 10, 2025. This permit shall become final on July 11, 2025, unless the Board orders a stay on the permit.

Procedures for Appeal: Any person who is directly and adversely affected by the Decision may request a hearing before the Board. The appeal must be filed before the final date stated above. The request for a hearing must contain an affidavit setting forth the grounds for the request. The hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620 or the Board Secretary: DEQBERSecretary@mt.gov.

Conditions: See attached Decision on MAQP #2282-17.

For DEQ,

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Air Quality Permitting Services Section
Air Quality Bureau
Air, Energy, and Mining Division
(406) 444-3626
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MONTANA AIR QUALITY PERMIT

Issued to: Magris Talc USA, Inc.
Three Forks Mill
1209 Orange Street
Wilmington, DE 19801

MAQP: #2282-17
Application Complete: 05/01/2025
Preliminary Determination Issued: 06/05/2025
DEQ's Decision Issued: 06/25/2025
Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Magris Talc USA, Inc. – Three Forks Mill (Magris Talc), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

The talc processing plant, including milling, refining, and packaging of talc, is located in Section 36, Township 2 North, Range 1 East, Gallatin County, Montana. A complete list of permitted equipment is included in Section I.A. of the permit analysis.

B. Current Permit Action

On February 28, 2025, the Department of Environmental Quality (DEQ) received an application from Magris Talc to modify their MAQP. The modification requests the removal and replacement of three (3) emitting units from EU03 with one (1) new natural gas-fired pellet dryer. The three dryers replaced are identified as C307, C313 and C315. The new natural gas pellet dryer is rated for a maximum of 14 million British thermal units (MMBtu) per hour and established as EU023.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Stack emissions from each grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, and storage bin constructed after August 31, 1983 are limited to 0.05 grams per dry standard cubic meter (g/dscm) (0.022 grains per dry standard cubic foot (gr/dscf)) of particulate and 7% opacity. This includes, but is not limited to, the following equipment (40 CFR 60, Subpart OOO and ARM 17.8.340):

Emitting Unit ID	Equipment Name – ID	Pollution Control Device	NSPS
EU004	66" Roller mill – M504	Fabric filter baghouse	OOO
EU004	66" Roller mill feed bin – V580	Fabric filter baghouse	OOO
EU004	(3) Roller mill packers - PK1554A,B,C	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 1 – V1551	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 2 – V1552	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 3 – V1553	Fabric filter baghouse	OOO
EU004	Roller mill packer bin – V1554	Fabric filter baghouse	OOO
EU004	Coarse powder conveying collector – V	Fabric filter baghouse	OOO
EU004	Coarse powder bulk bag packer bin – V	Fabric filter baghouse	OOO
EU004	ACM 3 – V1140	Fabric filter baghouse	OOO
EU004	ACM 3 feed bin – V1180	Fabric filter baghouse	OOO
EU004	(4) MV packers – PK1504 A,B,C,D	Fabric filter baghouse	OOO
EU004	MV storage bin 1 – V1501	Fabric filter baghouse	OOO
EU004	MV storage bin 2 – V1502	Fabric filter baghouse	OOO
EU004	MV storage bin 3 – V1503	Fabric filter baghouse	OOO
EU004	MV packer bin – V1504	Fabric filter baghouse	OOO
EU004	CMV packer bin – V1594	Fabric filter baghouse	OOO
EU004	(3) CMV packers – PK1596 A,B,C	Fabric filter baghouse	OOO
EU004	Silo 4 – V404	Fabric filter baghouse	OOO
EU004	Silo 5 – V405 (Including Vacuum Syste V1374)	Fabric filter baghouse	OOO
EU004	Silo 6 – V406	Fabric filter baghouse	OOO
EU004	Silo 7 – V407	Fabric filter baghouse	OOO
EU004	Packing room fugitive collector – V158	Fabric filter baghouse	OOO
EU004	Crude load-out crusher – RC062	Fabric filter baghouse	OOO
EU004	Crude load-out conveyors – C061, C063, C065, C076, C077	Fabric filter baghouse	OOO
EU004	Crude load-out bucket elevator – E064	Fabric filter baghouse	OOO
EU004	Crude load-out spout – H066	Fabric filter baghouse	OOO
EU004	Product classifier – F1760	Fabric filter baghouse	OOO
EU004	FEM holding tank – V412	Fabric filter baghouse	OOO
EU004	ZSC holding tank – V414	Fabric filter baghouse	OOO
EU004	Coated holding tank – V413	Fabric filter baghouse	OOO
EU004	Coated packer bin – V1900	Fabric filter baghouse	OOO
EU004	Coating system feed bin – V1880	Fabric filter baghouse	OOO
EU004	(3) Coated packers – PKR1904A,B,C	Fabric filter baghouse	OOO
EU004	Coated densifier feed bin – V1980	Fabric filter baghouse	OOO
EU004	Coated product conveying collector – V	Fabric filter baghouse	OOO
EU004	Coated Packaging Recovery Collector – V1990	Fabric filter baghouse	OOO
EU004	Portable railcar feeder/conveyor	None	OOO
EU004	Crude load-out feed hoppers & convey – SF060, SF073, C074	None	OOO
EU004	Crude load-out crusher hopper baghou	Fabric filter baghouse	OOO
EU004	Jet Mill product collector	Fabric filter baghouse	OOO
EU004	Jet Mill feed bin	Fabric filter baghouse	OOO

When any of the above sources are exhausted into the packaging building, instead of to the atmosphere, Magris Talc shall not cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility, any visible fugitive emissions except emissions from a vent as defined in 40 CFR Part 60.671 (40 CFR 60, Subpart OOO and ARM 17.8.340).

2. Magris Talc shall not cause or authorize to be discharged into the outdoor atmosphere, from any affected equipment, any visible fugitive emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

3. The following stack emissions are limited to 0.02 gr/dscf of particulate and 20% opacity for all sources previously covered by Permits #1519, #1703, and #282, including, but not limited to, the following (ARM 17.8.749):

   a. ACM Mill #1
   b. ACM Mill #2
   c. ACM 50-Ton Feed Bin #1
   d. ACM 50-Ton Feed Bin #2
   e. CMV Silo #1
   f. CMV Silo #2
   g. FEM Classifier #1
   h. FEM Classifier #2
   i. Reclaiming Material Dust Collector
   j. Bulk Loading – Trucks
   k. Bulk Loading – Rail Cars

4. Stack emissions from the Rotary Dryer (crude load-out dryer) are limited to 10% opacity and 0.057 g/dscm (0.025 gr/dscf) of particulate matter (40 CFR 60, Subpart UUU and ARM 17.8.340).

5. All visible fugitive emissions from any non-New Source Performance Standards (NSPS) affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. This includes, but is not limited to, the following sources of fugitive emissions (ARM 17.8.304):

   a. Haul Roads
   b. Ore Handling
   c. Ore Storage-Outdoor
   d. Waste Stockpile-Outdoor
   e. Topsoil Stockpiles
   f. Access roads or general plant property

6. Magris Talc shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

7. Magris Talc shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.6 (ARM 17.8.749).

8. Magris Talc shall operate their control equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.752).

9. Magris Talc shall install, operate, and maintain baghouses to control emissions from the following equipment (ARM 17.8.752):

    a. FEM Holding Tank

    b. ZSC Holding Tank

    c. Coating System, including the Coating System Feed Bin, Feeder, Turbulizer, and Ward Mill

    d. Coated Holding Tank

    e. Packaging System, including Coated Densifier Feed Bin, Densifier #1, Densifier #2, Packer Bin, and Impeller Packers

    f. Vacuum System #4

    g. Product Classifier

10. Magris Talc shall not cause or authorize to be discharged into the atmosphere, from the Vacuum System #4:

    a. Particulate matter (PM) in excess of 0.02 gr/dscf (ARM 17.8.752)

    b. Visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.752)

11. Magris Talc shall not cause or authorize to be discharged into the atmosphere, from the Warehouse Product Airwall:

    a. Particulate matter in excess of 0.0044 gr/dscf (ARM 17.8.752 and ARM 17.8.749)

    b. Visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.752 and ARM 17.8.749)

12. Silane-compound use at the facility shall be limited to 62.45 tons during any rolling 12-month time period (ARM 17.8.752).

13. Magris shall utilize good combustion practices and pipeline quality natural gas for control of oxides of nitrogen (NO_X), carbon monoxide (CO), volatile organic compounds (VOC), and oxides of sulphur (SO_X) from EU023, Natural Gas Pellet Dryer (ARM 17.8.752).

14. All emissions from EU023, Natural Gas Pellet Dryer, shall be routed to the fabric filter baghouse (ARM 17.8.749 and ARM 17.8.752).

15. Magris Talc shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* and Subpart UUU, *Standards of Performance for Calciners and Dryers in Mineral Industries* for the plant, and Subpart Dc *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* for the Jet Mill natural gas boiler (ARM 17.8.340, 40 CFR 60, Subpart(s) OOO, UUU and Dc).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. All NSPS-affected equipment, as defined in 40 CFR Part 60, shall be initially tested and compliance demonstrated with the applicable emission limitations within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start up, unless otherwise approved by the Department in writing (40 CFR Part 60.8 and ARM 17.8.105).

3. Process rates during testing must be at specific conditions that are representative of maximum operating capacity or maximum permitted capacity, unless otherwise agreed upon in writing by the Department and Magris Talc (ARM 17.8.106).

4. The tests shall be performed according to EPA methods as specified in 40 CFR Part 60, Appendix A (ARM 17.8.106).

5. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Magris Talc shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Magris Talc shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit,*** change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation.

The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by Magris Talc as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

4. Magris Talc shall document, by month, the amount of Silane-compound used at the facility. By the 25th day of each month, Magris Talc shall total the amount of Silane-compound used for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

1. Magris Talc shall comply with the notification requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. Magris Talc shall comply with the notification requirements contained in 40 CFR Part 60.7, as required by 40 CFR Part 60.48c (ARM 17.8.340 and 40 CFR 60, Subpart Dc).

SECTION III: General Conditions

A. Inspection – Magris Talc shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system (CERMS)), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Magris Talc fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Magris Talc of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of DEQ's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, DEQ's decision on the application is final 16 days after DEQ's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by DEQ at the location of the permitted source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Magris Talc may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Magris Talc USA, Inc.
Three Forks Mill
MAQP #2282-17

I. Introduction/Process Description

Magris Talc USA, Inc. (Magris Talc), owns and operates a talc processing plant including milling, refining, and packaging of talc. The facility known as the Three Forks Mill and is located in Section 36, Township 2 North, Range 1 East, in Gallatin County, Montana.

A. Permitted Facility

Emitting Unit ID	Emitting Unit	Pollution control device	NSPS
EU001	Boiler 1	None	NA
EU002	Boiler 2	None	NA
EU003	Primary crusher – RC025	Fabric filter baghouse	NA
EU003	Secondary crusher – RC035	Fabric filter baghouse	NA
EU003	Belt conveyors – C030, C040, C050, C060	Fabric filter baghouse	NA
EU003	Bucket elevator – E045	Fabric filter baghouse	NA
EU003	60" Roller mill – M104	Fabric filter baghouse	NA
EU003	60" Roller mill feed bin – V180	Fabric filter baghouse	NA
EU003	54" Roller mill – M204	Fabric filter baghouse	NA
EU003	54" Roller mill feed bin – V280	Fabric filter baghouse	NA
EU003	FEM 1 – F807	Fabric filter baghouse	NA
EU003	FEM 1 feed bin – V880	Fabric filter baghouse	NA
EU003	FEM 1 cooling collector – F811	Fabric filter baghouse	NA
EU003	FEM 2 – F907	Fabric filter baghouse	NA
EU003	FEM 2 feed bin – V980	Fabric filter baghouse	NA
EU003	FEM 2 cooling collector – F911	Fabric filter baghouse	NA
EU003	Powder bulk bag packer bin – V1380	Fabric filter baghouse	NA
EU003	Powder bulk bag storage bin – V1390	Fabric filter baghouse	NA
EU003	Pellet mill feed bin – V380	Fabric filter baghouse	NA
EU003	CMV packer bin – V384	Fabric filter baghouse	NA
EU003	CMV direct bulk bag packers – C319	Fabric filter baghouse	NA
EU003	Silo 1 – V401	Fabric filter baghouse	NA
EU003	Silo 2 – V402	Fabric filter baghouse	NA
EU003	Silo 3 – V403	Fabric filter baghouse	NA
EU003	Silo 8 – V408	Fabric filter baghouse	NA
EU003	Silo 9 – V409	Fabric filter baghouse	NA
EU003	Silo 10 – V410	Fabric filter baghouse	NA
EU003	Silo 11 – V411	Fabric filter baghouse	NA
EU003	Vacuum system 2 – V1576	Fabric filter baghouse	NA
EU003	Plant feed hopper baghouse	Fabric filter baghouse	NA
EU003	Plant feed hopper & conveyor – SF015, C020	None	NA
EU003	Product classifier feed bin – F1701, F1702	Fabric filter baghouse	NA
EU004	66" Roller mill – M504	Fabric filter baghouse	OOO
EU004	66" Roller mill feed bin – V580	Fabric filter baghouse	OOO

Emitting Unit ID	Emitting Unit	Pollution control device	NSPS
EU004	(3) Roller mill packers - PK1554A,B,C	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 1 – V1551	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 2 – V1552	Fabric filter baghouse	OOO
EU004	Roller mill storage bin 3 – V1553	Fabric filter baghouse	OOO
EU004	Roller mill packer bin – V1554	Fabric filter baghouse	OOO
EU004	Coarse powder conveying collector – V2015	Fabric filter baghouse	OOO
EU004	Coarse powder bulk bag packer bin – V2080	Fabric filter baghouse	OOO
EU004	ACM 3 – V1140	Fabric filter baghouse	OOO
EU004	ACM 3 feed bin – V1180	Fabric filter baghouse	OOO
EU004	(4) MV packers – PK1504A,B,C,D	Fabric filter baghouse	OOO
EU004	MV storage bin 1 – V1501	Fabric filter baghouse	OOO
EU004	MV storage bin 2 – V1502	Fabric filter baghouse	OOO
EU004	MV storage bin 3 – V1503	Fabric filter baghouse	OOO
EU004	MV packer bin – V1504	Fabric filter baghouse	OOO
EU004	CMV packer bin – V1594	Fabric filter baghouse	OOO
EU004	(3) CMV packers – PK1596A,B,C	Fabric filter baghouse	OOO
EU004	Silo 4 – V404	Fabric filter baghouse	OOO
EU004	Silo 5 – V405 (Including Vacuum System 3 – V1374)	Fabric filter baghouse	OOO
EU004	Silo 6 – V406	Fabric filter baghouse	OOO
EU004	Silo 7 – V407	Fabric filter baghouse	OOO
EU004	Packing room fugitive collector – V1584	Fabric filter baghouse	OOO
EU004	Crude load-out crusher – RC062	Fabric filter baghouse	OOO
EU004	Crude load-out conveyors – C061, C063, C065, C076, C077	Fabric filter baghouse	OOO
EU004	Crude load-out bucket elevator – E064	Fabric filter baghouse	OOO
EU004	Crude load-out spout – H066	Fabric filter baghouse	OOO
EU004	Product classifier – F1760	Fabric filter baghouse	OOO
EU004	FEM holding tank – V412	Fabric filter baghouse	OOO
EU004	ZSC holding tank – V414	Fabric filter baghouse	OOO
EU004	Coated holding tank – V413	Fabric filter baghouse	OOO
EU004	Coated packer bin – V1900	Fabric filter baghouse	OOO
EU004	Coating system feed bin – V1880	Fabric filter baghouse	OOO
EU004	(3) Coated packers – PKR1904A,B,C	Fabric filter baghouse	OOO
EU004	Coated densifier feed bin – V1980	Fabric filter baghouse	OOO
EU004	Coated product conveying collector – V1850	Fabric filter baghouse	OOO
EU004	Coated Packaging Recovery Collector – V1990	Fabric filter baghouse	OOO
EU004	Portable railcar feeder/conveyor	None	OOO
EU004	Crude load-out feed hoppers & conveyor – SF060, SF073, C074	None	OOO
EU004	Crude load-out crusher hopper baghouse	Fabric filter baghouse	OOO
EU004	Jet Mill product collector	Fabric filter baghouse	OOO
EU004	Jet Mill feed bin	Fabric filter baghouse	OOO
EU005	ACM 1 – V640	Fabric filter baghouse	NA
EU006	ACM 1 feed bin – V680	Fabric filter baghouse	NA
EU007	ACM 2 – V740	Fabric filter baghouse	NA

Emitting Unit ID	Emitting Unit	Pollution control device	NSPS
EU008	ACM 2 feed bin – V780	Fabric filter baghouse	NA
EU009	CMV product silo 1 – V382	Fabric filter baghouse	NA
EU010	CMV product silo 2 – V383	Fabric filter baghouse	NA
EU011	FEM 1 classifier – F817	Fabric filter baghouse	NA
EU012	FEM 2 classifier – F917	Fabric filter baghouse	NA
EU013	Reclaim collector – V1354	Fabric filter baghouse	NA
EU014	RM/CMV truck load-out bin/spout – V1304	Fabric filter baghouse	NA
EU015	RM rail load-out bin – V1305	Fabric filter baghouse	NA
EU015	CMV rail load-out surge bin/spout – V381	Fabric filter baghouse	NA
EU016	Vacuum system 4 – V2110	Fabric filter baghouse	NA
EU017	Crude load-out dryer – C075	Fabric filter baghouse	UUU
EU018	Haul roads	Water/Chemical	NA
EU018	Ore storage (outdoor)	Water/Chemical	NA
EU018	Ore storage (indoor)	Water/Chemical	NA
EU018	Access roads or general plant property	Water/Chemical	NA
EU018	LPG Exhaust	None	NA
EU018	Diesel exhaust	None	NA
EU018	Truck Unloading	None	NA
EU018	Ore Handling (plant)	None	NA
EU018	Ore Handling (load-out), including stationary railcar load-out facility	None	NA
EU018	Haul trucks	None	NA
EU018	Light vehicles	None	NA
EU018	Loaders	None	NA
EU019	Warehouse product airwall – AW1926	Airwall	NA
EU020	Silane-Compound	NA	NA
EU021	Coating System Baghouse Control	Fabric Filter Baghouse	OOO
EU022	Jet Mill Boiler & Superheater (Natural Gas)	None	Dc
EU023	Natural Gas Pellet Dryer	Fabric Filter Baghouse	NA

B. Source Description

The Magris Talc-Three Forks Mill Talc Processing Plant includes milling, refining, and packaging of talc.

C. Permit History

Permit #142-080270 was issued to United Sierra Division, Cyprus Mines Corporation on June 3, 1970, for two bag-type dust collectors.

Permit #188-090670 was issued to United Sierra Division on June 8, 1970, for the reject processing Bauer Mill with Flex-Kleen Model 84FK-80 dust collector.

Permit #673-121973 was issued to United Sierra Division on September 19, 1973, for the talc plant modernization and expansion.

Permit #1519 was issued on November 13, 1980, to Cyprus Industrial Minerals Company for a Mikro Pulsaire Dust Collector and Bin Vent Collector. The permit also covered CMV Silo #1, CMV Silo #2, JS-30 Classifier #1, JS-30 Classifier #2, Reclaiming Material Dust Collector, Bulk Loading Trucks and Bulk Loading-Rail Cars. This permit application identified information on three dust collectors (letter dated August 21, 1980). Review indicated a number of these dust collectors were constructed in 1974 as part of the plant modernization and expansion. Some of the dust collectors were constructed prior to 1974.

Permit #1703 was issued on August 3, 1982, and modified on November 22, 1983. The permit was issued to Cyprus Industrial Minerals Company for the #1 and #2 ACM Mills, ACM 50 Ton Feed Bin #1, ACM 50 Ton Feed Bin #2, and one major dust collector. The original permit application included nine Vertical Mills, plus related dust collectors, bin vents, and silos; but, on December 14, 1982, the Department of Environmental Quality (DEQ) was notified by Cyprus that the construction project had changed.

MAQP #2282 was issued on June 19, 1986, to Cyprus Industrial Minerals Company for a new Rail Loadout and Rotary Dryer.

On January 22, 1993, Luzenac requested a name change. On July 1, 1992, Luzenac America, Inc. purchased all properties in Montana previously owned by Cyprus Minerals Company.

MAQP #2282-01 was issued on September 13, 1994, to allow Luzenac to construct and operate the following equipment:

a. Roller Mill Storage Bin #1 – V1551
b. Roller Mill Storage Bin #2 – V1552
c. Roller Mill Storage Bin #3 – V1553
d. MV Storage Bin #1 – V1501
e. MV Storage Bin #2 – V1502
f. MV Storage Bin #3 – V1503
g. Roller Mill Packer Bin – V1554
h. Roller Mill Packers (3)
i. CMV Packer Bin – V1594
j. CMV Packers (3)
k. MV Packer Bin – V1504
l. MV Packers (4)
m. CMV Transfer Conveyor and Bucket Elevator
n. Packaging Room Fugitive Dust Control
o. Packaging Conveyors
p. Pelletizer

This new automated packaging equipment, related feed bins, dust collectors, and fans were used for the filling and palletizing of 50-pound bags of talc. This equipment was to be used instead of the existing packaging equipment, which had been in operation since the early 1970s. The existing equipment was not removed, but Luzenac did not plan to use it on a regular basis at that time. The change to the packaging system did not affect the production capacity of the plant.

The new automated packaging equipment handled three types of products: Mistron Vapor (fine grind), Compacted Mistron Vapor (pelletized), and Roller Mill (coarse grind). Only one system, or product type, can be operated at a given time with the automatic palletizing line. The emissions from the automatic packaging equipment were calculated at 14.26 tons per year (TPY). The permit review was based on all the equipment operating at the same time for modeling purposes.

The discharge from DC #1520, DC #1590, DC #1584, and DC #1570 is directed back into the packaging room during the winter months to help conserve heating costs. The discharge is ducted to the atmosphere during the summer months. The stack emission limitations apply at all times and the method of compliance remained the same. The method of compliance with the visible emissions is Method 9 (7% opacity) when the discharge is to atmosphere and a Method 22 (0% opacity) when the discharge is directed back into the packaging room. The other discharges are to the atmosphere at all times.

The material collected from all the baghouses will be put back into the process at various points.

MAQP #2282-02 was issued on October 16, 1994, to construct and install a new 66-inch Roller Mill Feed Bin and 66" Roller Mill System, along with associated fabric filters. Silos #4, #5, #6, and #7, which were installed in 1983, 1986, 1986, and 1986, respectively, were also permitted.

MAQP#2282-03 was issued on July 3, 1995. Luzenac proposed to add a third ACM mill, feed bin, and related fabric filter controls to the operation to increase the process rate through the Roller Mill System. Also included in this permitting action was the replacement of existing equipment on the #3 Vacuum Cleanup System. Specifically, a portable HiVac unit was replaced with a MikroPul Reverse Pulse Jet dust collector. This system collects spillage throughout the plant.

MAQP#2282-04 was issued on September 5, 1998. Luzenac proposed a Product Classifier Circuit that consists of a 30-inch air classifier, dust collection system, and two pneumatic conveying systems to transport coarse and fine-cut powder from the classifier to existing packaging or processing systems. The project also included converting the existing Semi-bulk Bag Fill Bin into the Classifier Feed Bin and changing the baghouse used for the primary and secondary crushers into the baghouse for the Product Classifier. A new baghouse was proposed to be installed to control emissions from the primary and secondary crusher.

This permit alteration was required because the potential to emit (PTE) for the new Product Classifier was greater than 15 TPY.

The activities involving the conversion of the Semi-bulk Bag Fill Bin and using a new baghouse on the crusher did not require a permit. The Semi-bulk Bag Fill Bin conversion would not result in an increase in emissions. A baghouse is not required by permit on the crushers; therefore, changing the control equipment on the crushers did not trigger permitting requirements.

The allowable emissions from the Product Classifier will result in an emission increase of 3.82 TPY of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}). The Product Classifier is a 40 CFR 60, Subpart OOO, affected facility. Testing and reporting requirements for Subpart OOO were included in the permit. MAQP#2282-04 replaced MAQP#2282-03.

MAQP#2282-05 was issued on April 14, 1999. Luzenac proposed installation of a new coating system, new storage facilities, and new packaging system. The new coating and packaging systems were to be installed in the former old packaging area of the mill. The new silos were to be constructed immediately to the south of the existing silos.

Talc will be coated with Silane-compound in the coating system. Equipment in the coating system included the FEM Holding Tank, Coating System Feed Bin, Loss-in-Weight Feeder, Turbulizer, and Ward Mill. Particulate emissions from the coating system are to be controlled by a baghouse. Silane-compound will be pumped into the turbulizer and mixed with talc. After the coating process, the material will be pneumatically conveyed to storage silo's CB Tank #1 (now referred to as the Coated Holding Tank) and CB Tank #2. Particulate emissions will be controlled by a baghouse on each tank. Volatile organic compounds (VOC) emissions from the coating process will occur primarily in the CB Tanks. Section II.A.14 limits the facility's use of Silane-compound to 62.45 TPY. This process limit results in VOC emissions of 39.0 TPY.

Talc is pneumatically conveyed to the new coated product packaging system directly from the existing FEM 1 and 2 systems, from CB Tank #1 (now referred to as the Coated Holding Tank) and CB Tank #2, or from the New ZSC Holding Tank. The ZSC Holding Tank will store talc that has been coated with Zinc Stearate in the FEM system. Particulate emissions from the ZSC Holding Tank will be controlled by a baghouse.

Equipment in the coated product packaging system included a Coated Product Packaging Feed Bin (now referred to as the Coated Densifier Feed Bin), two Densifiers, a Packer Bin, and three Packers. Particulate emissions from the coated product packaging system are to be controlled by a baghouse on the Coated Product Packaging Feed Bin. For industrial hygiene purposes, two Airwalls will be installed. One will be installed at the packers and the other near the bag cleaning area to filter ambient air in the immediate area. In addition, a new vacuum system will be installed. Particulate emissions from the Vacuum System #4 will be controlled by a vacuum-rated baghouse. The changes proposed in MAQP Application #2282-05 will result in an increase in allowable emissions of approximately 10.8 TPY of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) and 39.0 TPY of VOCs. The testing requirements were also clarified to specifically state that testing included both opacity and particulate matter (PM).

On March 22, 1999, Luzenac submitted written comments on the preliminary determination. Luzenac commented that 40 CFR 60, Subpart OOO, states that a 7% opacity limit is the only emission limit set for a baghouse that controls emissions from only an individual, enclosed storage bin (40 CFR Part 60.672(f)). DEQ removed the particulate testing requirements for the FEM Holding Tank, ZSC Tank, and CB Tanks #1 and #2 prior to issuing the final permit. Luzenac was still required to conduct opacity testing.

DEQ retained the particulate matter limit of 0.02 grains per dry standard cubic foot (gr/dscf) for the FEM Holding Tank, ZSC Holding Tank, and CB Tanks #1 and #2; however, initial testing was not required.

On July 21, 1999, DEQ received a request from Luzenac to remove testing requirements for:

a. The 66- inch Roller Mill System
b. The three Roller Mill Storage Bins (#1-V1551, #2-V1552, and #3-V1553)
c. The three MV Storage Bins (#1-V1501, #2-V1502, and #3-V1503)
d. The four Product Silos (#4-V404, #5-V405, #6-V406, and #7-V407)

Because the units are all considered process equipment, all have very low emissions, and some have successfully demonstrated compliance in the past, DEQ agreed to remove the testing for these units. The permitting action was done as a modification because the emissions will not change or increase as a result of this action.

This modification incorporated the newly submitted information concerning the design modifications for the new coating, storage, and packaging system. The design modifications included:

a. CB Tank #1 is now referred to as the Coated Holding Tank;

b. CB Tank #2 will not be constructed as part of the project, but Luzenac would like to leave it in the permit, as it may be constructed at a later date;

c. Coated Product Packaging Feed Bin, now referred to as the Coated Densifier Feed Bin. This baghouse will not be used to control emissions from the packer bin and packers as originally permitted. The Coated Packer Bin will, instead, be vented by the existing Re-run Fugitive Collector, which will be refurbished and relocated. This baghouse will also provide primary dust control for the bagging operations through pick-up points near the packer spouts, and will provide dust control for a reject bag rerun hopper; and

d. Spillage from the packaging operation will be collected and returned to the plant's existing Central Reclaim System, as will material recycled through the reject bag rerun hopper.

The design changes resulted in overall reduced emissions from the new processes. The reduction in emissions as a result of the design modifications will reduce the emissions by 1.8 TPY.

The modification also included the addition of the 20-ton semi-bulk bag fill bin #4 for improved material handling of the semi-bulk bag fill system. This additional bin was added under the Administrative Rules of Montana (ARM) 17.8.705(1)(r) (currently ARM 17.8.745) and therefore, did not require a permit, but was added to the permit at this time for clarification purposes. **MAQP#2282-06** replaced MAQP#2282-05.

On September 21, 1999, DEQ received a request from Luzenac to remove testing requirements for the Roller Mill Packers. DEQ agreed with this change because the Roller Mill Packers are vented inside the mill building. **MAQP#2282-07** replaced MAQP#2282-06.

On November 18, 1999, DEQ received a request for a de minimis determination for the installation of a vacuum-rated baghouse, which would be used to move coated talc from the Ward Mill under negative pressure to the Coated Holding Tank. Originally, Luzenac had planned to use a rotary airlock feeder and positive pressure to convey the coated talc from the Ward Mill; however, this system proved to be inadequate upon startup.

As a result of this new system, it was no longer necessary to vent the Ward Mill back to the coating system feed bin as proposed in the original design. The new vacuum-rated baghouse, referred to as the Coated Product Conveying Collector, was an IAC Model No. 54TB-FRIP-21:S6 Pulse Jet Filter, venting approximately 750 actual cubic feet per minute (acfm) of air through 21 bags at a 5.2:1 air-to-cloth ratio. The increase in emissions resulting from this new baghouse, which was ultimately used as process equipment for conveying purposes, was 0.56 TPY of PM_{10}. Because the increase in emissions was below the threshold for de minimis, and the change did not conflict with existing limitations within the permit, DEQ agreed that this change at the facility was a de minimis change. **MAQP#2282-08** replaced MAQP#2282-07.

On February 4, 2000, DEQ received, from Luzenac, a revised request for a de minimis determination and modification of MAQP#2282-08 for the installation of a new vacuum-rated baghouse referred to as the Coarse Powder Conveying Collector (IAC Model No. 54TB-FRI-14:S6 pulse jet filter). The request was revised from a previous permit modification request, containing incorrect information, submitted to DEQ on January 26, 2000. The Coarse Powder Conveying Collector would have the capacity to vent up to 700 acfm of air through 14 bags at a 7.8:1 air-to-cloth ratio.

The Coarse Powder Conveying Collector would be utilized as a process application (pneumatic conveyor) to convey talc from the Coarse Powder Bulk Bag Packing Bin (V2080) under negative pressure. Because the Coarse Powder Conveying Collector would be utilized as a process application and not as a pollution control device, the de minimis determination was made using maximum uncontrolled emission calculations with the baghouse in place. The potential emissions from the proposed Coarse Powder Conveying Collector are less than 15 TPY. Therefore, the addition of the baghouse complied with ARM 17.8.705(1)(r) (currently ARM 17.8.745) and this permit action was considered a permit modification.

The Coarse Powder Conveying Collector was subject to new source performance standards (NSPS) under 40 CFR 60, Subpart OOO.
Because the baghouse would vent exclusively inside the mill building, Luzenac requested that DEQ evaluate and remove the requirement for initial Method 5 and Method 9 source testing, for the purpose of demonstrating compliance.

Further, on February 8, 2000, DEQ received a separate request for modification of MAQP #2282-08. The modification request involved the removal of testing requirements for other process equipment subject to 40 CFR 60, Subpart OOO.

During a review of construction progress at the Three Forks Mill, Luzenac discovered that several stacks requiring initial Method 5 and or Method 9 source testing vent exclusively within the mill with no associated outdoor emissions. As with the Coarse Powder Conveying Collector described previously, because the affected equipment vents exclusively to the indoor mill environment, Luzenac requested that the initial source testing requirements be removed from the following list of NSPS-affected process equipment:

a. Coated Densifier Feed Bin (V1980)
b. Coarse Powder Bulk Bag Packer Bin (V2080, Formerly the 20 ton Semi-Bulk Bag Fill Bin #4)
c. Coating System Feed Bin (V1880)
d. Coated Packer Bin (V1900)
e. Coated Product Conveyor Collector

40 CFR 60, Subpart OOO, does not contain any provisions to exempt a source from initial source testing requirements. Further, 40 CFR Part 60 does not contain provisions to waive performance source testing on the sole basis of indoor venting of emissions. However, the "Administrator" or administrative authority, as defined in 40 CFR Part 60.8, can waive the requirement for initial performance source testing on a case-by-case basis. Through source testing, Luzenac has demonstrated to DEQ's satisfaction that similar emission sources within the talc mill have been consistently in compliance and, thus, at the "Administrator's" discretion, met the criteria for initial source testing waiver under 40 CFR Part 60.8(b)(4).

Therefore, the question was whether DEQ is the "Administrator" and has administrative authority to waive the initial source testing requirements for the above-cited equipment under 40 CFR Part 60.8. In accordance with current Department guidance regarding this issue, DEQ must acquire formal EPA approval prior to issuance of the waiver.

Therefore, in a letter dated March 6, 2000, DEQ requested a formal determination from EPA regarding this issue. DEQ did not waive the initial source testing requirement for the above-cited NSPS affected sources, pending EPA's response and formal determination regarding this issue. In a letter to EPA, DEQ requested administrative authority and included that if DEQ did not receive a determination from EPA, it would be assumed that EPA agrees with the source testing waiver and has given the state of Montana administrative authority to formally waive the initial source testing as described above. DEQ did not receive a response from EPA and thus assumed administrative authority and waived NSPS testing as described above.

As defined in Section II.A.15 and II.A.16 of this permit, because the Coated Product Conveying Collector (baghouse) and the Coarse Powder Conveying Collector (baghouse) are utilized to convey talc from individual enclosed storage bins, the sources are subject to opacity limits, but not particulate limits as defined in 40 CFR 60, Subpart OOO.

Finally, the current permit action changed the name of the 20-ton Semi-Bulk Bag Fill Bin #4 to the Coarse Powder Bulk Bag Packer Bin (V2080). **MAQP#2282-09** replaced MAQP#2282-08.

On April 18, 2000, DEQ received a request for a de minimis determination and modification of MAQP#2282-09. The proposed action involved utilizing the baghouse venting the Powder Bulk Bag Storage Bin (V1390) to recover talc lost during packaging in the Coated Product portion of the Luzenac plant. To facilitate this, Luzenac utilized an existing (unused) duct, extended from the Powder Bulk Bag Storage Bin baghouse (V1390) to the Coated Product Packaging hopper. Previously, talc spilled during bag filling operations was collected in the hopper and removed by an educator.

In a previous permit action, Luzenac permitted a Coated Product Packaging Airwall to recover secondary fugitive dust in the packaging area. However, to minimize noise and other industrial hygiene related concerns, the changes under MAQP#2282-10 replaced the previously permitted Coated Product Packaging Airwall and eliminated the need for the educator on the hopper. Finally, because the baghouse previously utilized to vent the Powder Bulk Bag Storage Bin (V1390) now vents the Coated Product Packaging operation, Luzenac re-furbished and re-installed the Twin Bin Vent baghouse, which was removed from service in 1999, to vent the Powder Bulk Bag Storage Bin. In addition, the name of the former Powder Bulk Bag Storage Bin (V1390) baghouse was changed to the Coated Product Packaging baghouse and the name of the former Twin Bin Vent baghouse was changed to the Powder Bulk Bag Storage Bin baghouse.

In addition to the above-cited request, the permit action also involved stack modifications for the Coated Product Packaging baghouse and the new Powder Bulk Bag Storage Bin Baghouse. These stacks, initially installed to vent within the mill building, were extended through the walls to vent to the outdoor atmosphere. Again, this change was made to reduce industrial hygiene and other safety concerns.

Further, on July 1, 2000, DEQ received a separate de minimis determination and request for the modification of MAQP#2282-09. This request involved installing a baghouse (product collector) on one of the Crude Load-Out hoppers and the Plant Feed hopper, which were previously uncontrolled emission points. The Crude Load-Out baghouse controls emissions from two sources, including the Crude Load-Out Hopper and stockpiling in the Dry Bay, and the Plant Feed baghouse controls emissions from the Plant Feed Hopper only.

Potential emissions from the project, as a whole, were less than 15 TPY. Therefore, addition of the Coated Product Packaging baghouse, the new Powder Bulk Bag Storage Bin baghouse, the Crude Load-Out baghouse, and the Plant Feed baghouse were accomplished in accordance with ARM 17.8.705(1)(r) (currently ARM 17.8.745) and the permit action was considered a permit modification. Potential emission calculations for this permitting action are contained in the emission inventory in Section III of the permit analysis for MAQP#2282-10.

It was determined that the Coated Packaging Recovery Collector (baghouse) is subject to 40 CFR 60, Subpart OOO. Further, it was determined that the Powder Bulk Bag Storage bin collector (baghouse) is not an affected facility and therefore, is not subject to 40 CFR 60, Subpart OOO.

Finally, the baghouses controlling fugitive emissions from the Crude Load-Out and Plant Feed hoppers are not subject to NSPS, as they are exempt pursuant to 40 CFR Part 60.672(d). **MAQP#2282-10** replaced MAQP#2282-09.

On June 7, 2002, DEQ received notification of the installation and operation of a portable feeder/conveyor to be used for railcar talc ore unloading operations at the Luzenac facility. Potential uncontrolled emissions from the portable feeder/conveyor were determined to be less than 15 TPY; therefore, the equipment was added to the permitted equipment list in accordance with ARM 17.8.705(1)(r) (currently ARM 17.8.745). An emission inventory demonstrating compliance with ARM 17.8.705(1)(r) was included in Section IV of the permit analysis for this permit.

Further, the June 7, 2002, submittal from Luzenac indicated that railcar unloading operations, such as that proposed, were not subject to the requirements of 40 CFR 60, Subpart OOO. DEQ disagreed with this determination, in part. In accordance with 40 CFR 60, Subpart OOO, the material transfer points between the railcar and the portable feeder and the material transfer point between the portable conveyor and the talc ore stock pile were not subject to NSPS requirements. However, the material transfer point between the portable feeder and conveyor was determined to be subject to NSPS requirements.

In addition, on September 23, 2002, during permit processing, DEQ received a request to change the existing testing schedule for NSPS affected sources from an every 4-year test schedule to an every 5-year test schedule. In accordance with DEQ's "Revised Testing Schedule" guidance (December 4, 1998), after the required initial compliance source test, NSPS-affected sources with the PTE less than 50 TPY shall be tested, "as required by DEQ".

Because numerous baghouses and bin vents at the Luzenac facility are considered process equipment rather than control equipment, calculation and determination of the potential to emit from these sources is based on the grain loading control factor of the process baghouse or bin vent associated with the NSPS affected source. Using the grain loading control factor of 0.02 gr/dscf (NSPS Limit) resulted in a calculated potential to emit of less than 50 TPY for each NSPS-affected process baghouse and/or bin vent at the Luzenac facility. Therefore, in accordance with DEQ's "Revised Testing Schedule" DEQ modified Luzenac's testing schedule for affected sources from required testing on an every 4-year schedule to testing "as required by DEQ" for all affected units. The affected units remained subject to initial source testing requirements, unless otherwise noted. **MAQP#2282-11** replaced MAQP#2282-10. Finally, various sections of the permit were updated to reflect current Department permitting language and format.

On May 2, 2003, DEQ received a request from Luzenac for an administrative amendment to MAQP#2282-11. Specifically, Luzenac requested a change to the emitting unit (EU) identification numbers in the permit to correspond with the proposed EU identification numbers under an ongoing Title V operating permit modification (#OP2282-01).

In addition, Luzenac proposed the removal of condition II.A.4 of the existing permit to allow for additional product type packaging operations. The condition previously limited Luzenac to packaging only one type of product at any given time in the automated packaging system as established under MAQP#2282-01. Based on review of the permit action and analysis conducted for MAQP#2282-01, DEQ determined that the condition was inappropriately included in the permit.

Further, the proposed packaging line changes included the installation and operation of 2 additional new pick-up points for the existing packaging room fugitive collector (V1584). Since these pick-up points vent directly to the packaging room fugitive collector (V1584), which is permitted for capacity operations, the installation and operation of the new pick-up points did not increase potential emissions. Finally, DEQ updated all rule references to reflect the recent ARM Chapter 17.8, Subchapter 7, rule revisions. **MAQP#2282-12** replaced MAQP#2282-11.

In accordance with the provisions contained in the de minimis rule, on June 1, 2007, DEQ received notification of a changed condition of operation that did not result in any increase in potential emissions from the Luzenac facility and a request for an administrative amendment to MAQP#2282-12 in accordance with ARM 17.8.764. Specifically, Luzenac requested clarification and re-characterization of the requirement contained in Section II.A.11 of MAQP#2282-12, which limited Amino-Silane coating throughput in the talc product coating system. Luzenac is proposing to maintain the applicable throughput limit but change the condition specifically limiting Amino-Silane coating throughput to a more general requirement limiting Silane-compound throughput. The current permit action amends the condition as requested.

Further, in accordance with the de minimis rule, on January 22, 2007, Luzenac provided DEQ with written notification for the addition of a stationary ore unloading pit and associated equipment. This permit action updated the list of facility equipment and the emission inventory contained in the Permit Analysis to include the stationary ore unloading pit and associated equipment. **MAQP#2282-13** replaced MAQP#2282-12.

On November 13, 2007, DEQ received a de minimis notification for Luzenac from Rio Tinto Minerals. The notification was for a project involving the addition of a Jet Mill and an associated natural gas boiler and super heater. The Jet Mill is subject to 40 CFR 60, Subpart OOO and the boiler is subject to 40 CFR 60, Subpart Dc. In addition, on December 21, 2007, DEQ received notification from Rio Tinto that the Pallet conveyor airwall had been relocated and the name changed to the Warehouse product airwall.

DEQ also made some administrative corrections, including to remove EU021 "Packaging Systems" and reassign the number EU021 to the fabric filter baghouse control (renamed "Coating System Baghouse Control") to align with the Title V operating permit; remove Vacuum System #1 which was removed from the facility; and correct the limitation under Section II.A.1 to read "0.022" rather than "0.02"gr/dscf. **MAQP#2282-14** replaced MAQP#2282-13.

On October 31, 2011, DEQ received a request to transfer ownership of the Three Forks Mill from Rio Tinto Minerals/Luzenac America, Inc. to Imerys Talc America, Inc. Authorization to make the change was received from the responsible official on November 14, 2011.

The permit action was an administrative amendment pursuant to ARM 17.8.764 that transferred ownership of the Three Forks Mill as requested. In addition to accounting for this transfer of ownership, the permit updated rule references along with the permit format. **MAQP #2282-15** replaced MAQP #2282-14.

On January 15, 2021, DEQ received a request to transfer ownership of Imerys Talc America, Inc. – Three Forks Mill to Magris Talc USA, Inc. The permit action was an administrative amendment pursuant to the ARM 17.8.764 that transferred ownership of Imerys Talc America, Inc., as requested. **MAQP #2282-16** replaced MAQP #2282-15.

D. Current Permit Action

On February 28, 2025, DEQ received an application from Magris to modify their MAQP. Magris had submitted an application and permit fee for the current permit action on March 13, 2023, however, due to issues associated with permit application tracking, the application was not processed.

The modification removes and replaces three (3) emitting units identified under EU03 with one (1) new natural gas-fired pellet dryer identified as EU023. More specifically, the three dryers being removed and replaced are identified as Natural Gas Pellet Dryer 1 – C307, Natural Gas Pellet Dryer 2 – C313, and Air Pellet Dryer 3 – C315. The new natural gas-fired pellet dryer is identified as EU023 and is rated for a maximum heat input capacity of 14 million British thermal units (MMBtu) per hour.

On March 27, 2025, DEQ sent an application deficiency letter to Magris Talc requesting that Margis provide DEQ with an Affidavit of Publication. Magris Talc provided the affidavit of publication on April 2, 2025. Further, on April 10, 2025, DEQ sent an application deficiency letter to Magris Talc requesting a complete Best Available Control Technology (BACT) analysis and determination for the proposed new natural gas fired pellet dryer identified as EU023. DEQ received the BACT analysis and determination on May 1, 2025. **MAQP #2282-17** replaces MAQP 2282-16.

E. Response to Public Comment

Person/Group Commenting	Permit Reference	Comment	DEQ Response
No Comments Received			

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from DEQ. Upon request, DEQ will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1, General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of DEQ, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by DEQ.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by DEQ, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

   Magris Talc shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from DEQ upon request.

4. ARM 17.8.110 Malfunctions. (2) DEQ must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2, Ambient Air Quality. The following ambient air quality standards or requirements apply, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Magris Talc must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3, Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

   Some of the equipment installed at this facility is subject to an opacity limit pursuant to the NSPS. ARM 17.8.304(4)(d) exempts NSPS sources from the 20% opacity limit if the applicable subpart has a visible emission standard.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emissions sources and that reasonable precautions are taken to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere, particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanently submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, NSPS. Magris Talc is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts:

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The natural gas Jet Mill boiler is subject to this NSPS since the heat input capacity is greater than 10 million British units per hour (MMBtu/hr) and was constructed after June 9, 1989.

   c. 40 CFR 60, Subpart OOO – Standards of Performance for Non-Metallic Mineral Processing Plants. Magris Talc sources subject to NSPS include, but are not limited to, the facilities identified in Section II.A of the permit.

d. 40 CFR 60, Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries. This subpart is applicable to dryers at mineral processing plants, such as that used at the Magris Talc facility, which were constructed or reconstructed after April 23, 1986. Since the Crude Rotary Dryer was constructed after April 23, 1986, Subpart UUU is applicable to this source at the Magris Talc facility.

D. ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to DEQ. Magris submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to DEQ by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by DEQ. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. DEQ may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the PTE greater than 15 TPY of any pollutant. Magris Talc has the PTE greater than 15 TPY of PM_{10}; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation,

modification, or use of a source. Magris Talc submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Magris submitted an affidavit of publication of public notice for the March 15, 2025, issue of the *Three Forks Voice*, a newspaper of general circulation in the Town of Three Forks, in Gallatin County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by DEQ must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by DEQ at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Magris Talc of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes DEQ's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions.

The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10. The current permit is an administrative amendment.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to DEQ.

F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

Talc processing is not a listed source. Magris Talc does have the PTE more than 250 TPY of particulate; however, the current permit action will not increase emissions at the plant to a level which exceeds any applicable significant emission threshold as defined in ARM 17.8, Subchapter 8. Therefore, the current permit action does not trigger major New Source Review.

G. ARM 17.8, Subchapter 10 – Preconstruction Permit Requirements for Major Stationary Sources or Major Modifications Located Within Attainment or Unclassified Areas, including, but not limited to:

ARM 17.8.1004 When Air Quality Preconstruction Permit Required. The current permit action is not a major modification. Therefore, the requirements of this subchapter do not apply to the current permit action.

H. ARM 17.8, Subchapter 12, Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the Federal Clean Air Act (FCAA) is defined as any stationary source having:

a. PTE > 100 TPY of any pollutant;

b. PTE > 10 TPY of any one Hazardous Air Pollutant (HAP), PTE >25 TPY of a combination of all HAPs, or a lesser quantity as DEQ may establish by rule; or

c. PTE > 70 TPY of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2282-17 for Magris Talc, the following conclusions were made:

   a. The facility's PTE is greater than 100 TPY for PM_{10}.

   b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 tons/year for all HAPs.

   c. This source is not located in a serious PM_{10} nonattainment area.

   d. This facility is subject to 40 CFR 60, Subpart OOO, *Standards of Performance for Non-Metallic Mineral Processing*, 40 CFR 60, Subpart UUU, Standards of Performance for Calciners and Dryers in Mineral Industries and 40 CFR 60, Subpart Dc *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.

   e. This facility is not subject to any current NESHAP.

   f. This source is not a Title IV affected source, nor a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Based on these facts, DEQ determined that Magris Talc is subject to the Title V operating permit program.

III. BACT Analysis and Determination

A BACT analysis and determination is required for each new or modified source. Magris Talc shall install on the new or modified source the maximum air pollution control capability, which is technically practicable and economically feasible. BACT shall be utilized to determine the controls that are feasible to be installed.

A top-down BACT analysis was submitted by Magris Talc in permit application #2282-17, addressing available methods of controlling for NO_X, CO, VOC, SO_X, and $PM/PM_{10}/PM_{2.5}$ emissions from the new natural gas-fired Pellet Mill Dryer.

The BACT analysis follows the traditional 1990 draft New Source Review (NSR) five step BACT methodology. The analysis will be presented using the following steps for each pollutant and emitting unit.

Step 1: Identify All Available Control Technologies
Step 2: Eliminate Technically Infeasible Control Options
Step 3: Rank Remaining Control Technologies by Control Effectiveness
Step 4: Evaluate Most Effective Controls and Document Results
Step 5: Select BACT

Step 1 – Identify Control Options

Good Combustion Practices/Pipeline Quality Natural Gas - Good combustion practices (GCP) and pipeline quality natural gas (PQNG) are associated with Magris Talc's sustainability policy and are the baseline emission control for NO_X, CO, VOCs, SO_X, and $PM/PM_{10}/PM_{2.5}$.

Filter Fabric Baghouse – Filter fabric baghouse (FFB) is used to filter out particulates before the exhaust is introduced into the environment. Filter Fabric Baghouse is a main control for $PM/PM_{10}/PM_{2.5}$ with an average control efficiency of 95% to 99%.

Selective Non-catalytic Reduction – SNCR is a post-combustion emissions control technology for reducing NO_X by injecting an ammonia (NH_3) type reactant into the combustion device at a properly determined location. This technology is often used for mitigating NO_X emissions since it requires relatively low capital expense for installation, albeit with relatively higher operating costs. The conventional SNCR process occurs within the combustion unit, which acts as the combustion chamber. The reactions typically take place between 1,550°F and 1,950°F, because a catalyst is not used to drive the reaction.

The efficiency of the conversion process diminishes quickly when operated outside the optimum temperature band and additional ammonia slip or excess NO_X emissions may result. The median reductions for urea based SNCR systems in various industry source categories range from 25 to 60 percent.

Selective Catalytic Reduction – SCR is also a post-combustion gas treatment technique for reduction of nitric oxide (NO) and nitrogen oxide (NO_2) in an exhaust stream to molecular nitrogen, water, and oxygen. NH_3 or urea is used as the reducing agent. SCR is typically implemented on stationary source combustion units requiring a higher level of NO_X reduction than may be achievable by SNCR or combustion controls. In practice, commercial coal-, oil-, and natural gas–fired SCR systems are often designed to meet control targets of over 90 percent. Actual control efficiency rates may vary based on configuration and unit type.

Step 2 – Eliminate Technically Infeasible Options

Good Combustion Practices/Pipeline Quality Natural Gas – Good combustion practices and pipeline quality natural gas are technically feasible for control of NO_X, CO, VOC, SO_X, and $PM/PM_{10}/PM_{2.5}$.

Filter Fabric Baghouse – is technically feasible for control of $PM/PM_{10}/PM_{2.5}$.

SNCR - While SNCR is commonly considered for other fuel combustion devices, such as boilers, it is not technically feasible on dryers. Dryer operation temperatures (725 to 750˚F) are far below the temperatures needed for SNCR to effectively operate (1,550 to 1,950˚F) per the EPA Cost Control Manual (Seventh Edition), Section 4 – NO_X Controls, Chapter 1 - SNCR (updated on June 12, 2019). Therefore, SNCR is eliminated based on technical infeasibility.

SCR – SCR require specific exhaust temperatures for optimal destruction efficiency for VOCs. The exhaust temperatures for SCR's optimal effectiveness are between 600 degrees Fahrenheit (deg F) and 700 deg F. Magris Talc's Dryer has an exhaust temperature ranging

from 725 deg F to 750 deg F, outside the temperature range for SCRs to control VOCs. Therefore, the SCR is technically infeasible.

Step 3 – Rank Remaining Options by Control Effectiveness

Available control technology options deemed technically feasible from Step 2 are ranked in order of pollutant removal effectiveness. The control option that results in the highest pollutant removal value is considered the "top" control.

Step 4 – Evaluate Most Cost-Effective Controls and Document Results

Good Combustion Practices - Good combustion practices are currently required for the Pellet Mill Dryer and have no negative energy, environmental, or economic impacts.

Filter Fabric Baghouse – Filter Fabric Baghouse is currently required for the Pellet Mill Dryer and have no negative energy, environmental, or economic impacts to the business. Currently there are three trained visual opacity inspectors on site for inspections.
Monthly baghouse inspections are required for all sources and the baghouse is on a preventative maintenance schedule.

Step 5 – Select BACT

Based on this analysis, Magris Talc determined that Good Combustion Practices/Pipeline Quality Natural Gas constitute BACT for the control of NOx, CO, VOC, SOx, and the use of Filter Fabric Baghouse constitute BACT for the control of PM/PM_{10}/$PM_{2.5}$.

The control options selected have controls and control costs comparable to other similar permitted sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Uncontrolled Emissions	tons/year						
Emission Source	**PM_{Tot}**	**PM_{Cond}**	**$PM_{Filt.}$**	**NO_X**	**CO**	**VOC**	**SO_X**
14 MMBtu Natural Gas Fired Dryer	0.46	0.34	0.11	6.01	5.05	0.66	0.04
Pellet Dryer	**PM**	**PM_{10}**	**$PM_{2.5}$**				
	17.17	2.21	0.20	--	--	--	--
Total Emissions	17.63	2.55	0.31	6.01	5.05	0.66	0.04

Calculation:

14 MMBtu Natural Gas Fired Dryer

Note: Emissions are based on the btu rating of the burner		
Operational Capacity = 14 MMBtu/hr	14	**MMBtu/hr**
Pounds per ton	0.0005	**ton/lb**
Hours of Operation = 8,760.00 hr/yr	8760	**hr/yr**
Standard cubic foot per British thermal unit	0.0009804	**scf/btu**
PM_{Tot} Emissions:		
Emission Factor = 7.600 lb/mmscf	7.6	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (8 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 0.46 ton/yr	0.46	**ton/yr**

PM_{Cond}

Emission Factor = 5.700 lb/mmscf	5.7	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (6 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 0.34 ton/yr	0.34	**ton/yr**

PM_{Fil} Emissions

Emission Factor = 1.900 lb/mmscf	1.9	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (2 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 0.11 ton/yr	0.11	**ton/yr**

NOx Emissions:

Emission Factor = 100.00 lb/mmscf	100	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (100 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 6.01 ton/yr	6.01	**ton/yr**

CO Emissions:

Emission Factor = 84.00 lb/mmscf	84	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (84 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 5.05 ton/yr	5.05	**ton/yr**

VOC Emissions:

Emission Factor = 11.000 lb/mmscf	11	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (11 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 0.66 ton/yr	0.66	**ton/yr**

SO_X Emissions:

Emission Factor = 0.60 lb/mmscf	0.6	**lb/mmscf**
Calculation: ((14 MMBtu/hr) * (0.00098 scf/btu) * (1 lb/mmscf) * (8,760 hr/yr) *(ton/2000 lb) = 0.04 ton/yr	0.04	**ton/yr**

Pellet Dryer

Note: Emissions are based on the power output of the engine.

Operational Capacity = 14 ton/hr	14	**ton/hr**
Pounds per ton	0.0005	**ton/lb**
Hours of Operation = 8,760 hr/yr	8760	**hr/yr**

PM_{Tot} Emissions:

Emission Factor = 0.280 lb/ton	0.28	**lb/ton**
Calculation: ((0.28 lb/ton) * (14 ton/hr) * (8,760 hr/yr) * (ton/2000 lb) = 17.17 ton/yr	17.17	**ton/yr**

PM_{10}

Emission Factor = 0.036 lb/ton	0.036	**lb/ton**
Calculation: ((0.036 lb/ton) * (14 ton/hr) * (8,760 hr/yr) * (ton/2000 lb) = 2.21 ton/yr	2.21	**ton/yr**

$PM_{2.5t}$ Emissions

Emission Factor = 0.0032 lb/ton	0.0032	**lb/ton**
Calculation: ((0.0032 lb/ton) * (14 ton/hr) * (8,760 hr/yr) * (ton/2000 lb) = 0.20 ton/yr	0.20	**ton/yr**

Facility-Wide PM_{10} Emission Inventory		
EU Number	**Emitting Unit Name and Number**	**PM_{10} Emissions (TPY)**
EU001	Boiler 1	1.51
EU002	Boiler 2	1.80
EU003	EU003 - Primary and Secondary crushers – RC025 and RC035;	146.04

Facility-Wide PM_{10} Emission Inventory		
EU Number	**Emitting Unit Name and Number**	**PM_{10} Emissions (TPY)**
	Belt conveyors – C030, C040, C050, C060; Bucket elevator – E045	
EU003	60" Roller mill – M104	94.91
EU003	60" Roller mill feed bin – V180	94.91
EU003	54" Roller mill – M204	57.69
EU003	54" Roller mill feed bin – V280	57.69
EU003	FEM 1 – F807	36.26
EU003	FEM 1 feed bin – V880	36.26
EU003	FEM 1 cooling collector – F811	36.26
EU003	FEM 2 – F907	36.26
EU003	FEM 2 feed bin – V980	36.26
EU003	FEM 2 cooling collector – F911	36.26
EU003	Powder bulk bag packer bin – V1380	94.91
EU003	Powder bulk bag storage bin – V1390	57.69
EU003	Pellet mill feed bin – V380	120.44
EU003	CMV packer bin – V384	120.44
EU003	CMV direct bulk bag packers – C319	Ventilated by Pellet Dryers
EU003	Silo 1 – V401	31.22
EU003	Silo 2 – V402	31.22
EU003	Silo 3 – V403	57.69
EU003	Silo 8 – V408	57.69
EU003	Silo 9 – V409	57.69
EU003	Silo 10 – V410	57.69
EU003	Silo 11 – V411	46.29
EU003	Vacuum system 2 – V1576	17.96
EU003	Product classifier feed bin – F1701, F1702	57.69
EU003	Plant feed hopper baghouse	0.72
EU003	Plant feed hopper & conveyor – SF015, C020	0.72
EU004	66" Roller mill – M504	2.15
EU004	66" Roller mill feed bin – V580	1.04
EU004	(3) Roller mill packers - PK1554A,B,C	Ventilated by Roller Mill Packer Bin (V1554)
EU004	Roller mill storage bin 1 – V1551	1.13
EU004	Roller mill storage bin 2 – V1552	1.13
EU004	Roller mill storage bin 3 – V1553	1.13
EU004	Roller mill packer bin – V1554	2.67
EU004	Coarse powder conveying collector – V2015	0.44
EU004	Coarse powder bulk bag packer bin – V2080	0.78
EU004	ACM 3 – V1140	7.23
EU004	ACM 3 feed bin – V1180	1.50

Facility-Wide PM_{10} Emission Inventory		
EU Number	**Emitting Unit Name and Number**	**PM_{10} Emissions (TPY)**
EU004	(4) MV packers – PK1504A,B,C,D	Ventilated by MV Packer Bin (V1504)
EU004	MV storage bin 1 – V1501	1.13
EU004	MV storage bin 2 – V1502	1.13
EU004	MV storage bin 3 – V1503	1.13
EU004	MV packer bin – V1504	3.20
EU004	CMV packer bin – V1594	2.67
EU004	(3) CMV packers – PK1596A,B,C	Ventilated by CMV Packer Bin (V1594)
EU004	Silo 4 – V404	1.35
EU004	Silo 5 – V405 (including Vacuum System 3 – V1374)	1.71
EU004	Silo 6 – V406	1.35
EU004	Silo 7 – V407	1.35
EU004	Packing room fugitive collector – V1584	9.93
EU004	Crude load-out crusher – RC062; Crude load-out conveyors – C061, C063, C065, C076, C077; Crude load-out bucket elevator – E064	3.44
EU004	Crude load-out spout – H066	1.51
EU004	Product classifier – F1760	6.68
EU004	FEM holding tank – V412	0.78
EU004	ZSC holding tank – V414	0.78
EU004	Coated holding tank – V413	0.78
EU004	Coated packer bin – V1900	1.91
EU004	Coating system feed bin – V1880	0.78
EU004	(3) Coated packers – PKR1904A,B,C	Ventilated by Coated Packer Bin (V1900)
EU004	Coated densifier feed bin – V1980	0.78
EU004	Coated product conveying collector – V1850	0.47
EU004	Coated packaging recovery collector – V1990	3.34
EU004	Portable railcar feeder/conveyor	4.60
EU004	Crude load-out crusher hopper baghouse	0.72
EU004	Crude load-out feed hoppers & conveyor – SF060, SF073, C074	0.72
EU004	Jet Mill product collector	5.98
EU004	Jet Mill feed bin	0.77
EU005	ACM 1 – V640	7.23
EU006	ACM 1 feed bin – V680	1.04
EU007	ACM 2 – V740	7.23

Facility-Wide PM_{10} Emission Inventory		
EU Number	**Emitting Unit Name and Number**	**PM_{10} Emissions (TPY)**
EU008	ACM 2 feed bin – V780	1.04
EU009	CMV product silo 1 – V382	1.04
EU010	CMV product silo 2 – V383	1.04
EU011	FEM 1 classifier – F817	4.91
EU012	FEM 2 classifier – F917	4.91
EU013	Reclaim collector – V1354	10.02
EU014	RM/CMV truck load-out bin/spout – V1304	110.21
EU015	RM rail load-out bin – V1305	1.50
EU015	CMV rail load-out surge bin/spout – V381	7.49
EU016	Vacuum system 4 – V2110	0.31
EU017	Crude load-out dryer – C075	22.97
EU018	Haul roads; Haul trucks; Light vehicles; Loaders; Forklifts; Dump Trucks; Stationary Railcar Load-Out Facility; Access roads or gener plant property	10.47
EU018	Ore storage (Indoor and Outdoor)	0.24
EU018	Diesel exhaust	0.54
EU018	Gasoline fuel combustion	0.04
EU018	LPG fuel	0.006
EU018	Truck Unloading	0.004
EU018	Ore Handling (plant)	0.08
EU018	Ore Handling (load-out)	0.08
EU018	Building Vents	2.75
EU019	Warehouse product airwall – AW1926	0.99
EU020	Silane Compound	1.06
EU021	Coating System Baghouse Control	6.37
EU022	Jet Mill Boiler & Superheater (Natural Gas)	0.47
EU023	Natural Gas Pellet Dryer	17.63
Total Potential PM_{10} Emissions		**1782.03**

- A complete emission inventory is on file with DEQ.

V. Existing Air Quality

The Magris Talc - Three Forks Mill talc processing plant is located in Section 36, Township 2 North, Range 1 East, Gallatin County, Montana. The air quality of this area is classified as either better than national standards or unclassifiable attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

DEQ determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, DEQ believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, DEQ conducted a private property taking and damaging assessment. See *Item 21, Private Property Assessment*, on page 18 of the attached Environmental Assessment.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

FINAL ENVIRONMENTAL ASSESSMENT

June 25, 2025

Air Quality Permitting Services Section
Air Quality Bureau
Air, Energy and Mining Division
Montana Department of Environmental Quality

PROJECT/SITE NAME: Three Forks Mill

APPLICANT/COMPANY NAME: Magris Talc USA, Inc.

MAQP #2282-17

LOCATION: The facility location is 45.88088°N, latitude and – 111.55526°W, longitude.
NE 1/4, NE 1/4, Section 36, Township 2N, Range 1E

COUNTY: Gallatin

PROPERTY OWNERSHIP: FEDERAL STATE PRIVATE X

Table of Contents

Authorizing Action

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the Montana environment. The Proposed Action is a state action that may have an impact on the Montana environment; therefore, the Montana Department of Environmental Quality (DEQ) must prepare an environmental review. This EA will examine the proposed action and alternatives to the proposed action and disclose potential and proximate impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

Description of DEQ Regulatory Oversight

DEQ implements the Clean Air Act of Montana, §§ 75-2-101, et seq., (CAA) Montana Code Annotated (MCA), overseeing the development of sources of regulated pollutants and associated facilities. DEQ has authority to analyze proposed emitting units subject to rule established in ARM 17.8.743.

Proposed Action

Magris Talc USA, Inc. – Three Forks Mill (Magris Talc) has applied for a Montana Air Quality Permit (MAQP) under the CAA. The MAQP regulates a natural gas compressor station, and this action would add an additional compressor engine to the existing MAQP. DEQ may not approve a proposed project contained in an application for an air quality permit unless the project complies with the requirements set forth in the CAA of Montana and the administrative rules adopted thereunder, ARMs 17.8.101 et. seq. The proposed action would be located on privately owned land, in Roosevelt County, Montana. All information included in this EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

Table 1. Summary of Proposed Action

General Overview	**The action is for the removal and replacement of three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.**
Duration & Hours of Operation	**Construction: The action has already taken place.** **Operation: Continuous operation depending upon talc processing throughput.**
Estimated Disturbance	**There will be no disturbances associated with the proposed action.**
Construction Equipment	**There will be no equipment used associated with the proposed action.**
Personnel Onsite	**Construction: None.** **Operation: No new permanent employees would be anticipated as the facility is normally unstaffed.**
Location and Analysis Area	**Location: The facility location is for 45.88088°N, latitude and – 111.5526°W, longitude. Section 36, Township 2N, Range 1E** **Analysis Area: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.**

Table 2. The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.

Air Quality	**Gallatin County is designated as unclassified/attainment**
Water Quality	**This permitting action would not affect water quality. Magris is required to comply with the applicable local, county, state and federal requirements pertaining to water quality.**
Erosion Control and Sediment Transport	**This permitting action would not affect erosion control and sediment transport. Magris is required to comply with the applicable local, county, state and federal requirements pertaining to erosion control and sediment transport.**
Solid Waste	**This permitting action would not affect solid waste in the area. Magris is required to comply with the applicable local, county, state and federal requirements pertaining to solid waste.**
Cultural Resources	**This permitting action would not affect cultural resources. Magris is required to comply with the applicable local, county, state and federal requirements pertaining to cultural resources.**
Hazardous Substances	**This permitting action would not contribute to any hazardous substances. Magris is required to comply with the applicable local, county, state and federal requirements pertaining to hazardous substances.**
Reclamation	**This permitting action would not require any reclamation.**

Table 3. Cumulative Impacts

Past Actions	**There are no recent similar permitting actions at this site.**
Present Actions	**This permitting action regulates a new natural gas-fired pellet dryer located in an existing permitted facility. The new natural gas-fired dryer is subject to a regulatory review as well as a Best Available Control Technology (BACT) review.**
Related Future Actions	**DEQ is not currently aware of any future projects from Magris for this facility. Any future projects would be subject to a new permit application.**

Figure 1. Approximate Location of the Three Forks Mill

Other Governmental Agencies and Programs with Jurisdiction

The proposed action would be located on private land leased by the applicant. All applicable local, state, and federal rules must be adhered to, which may include other local, state, federal, or tribal agency jurisdiction. Other governmental agencies which may have overlapped, or additional jurisdiction include but may not be limited to: Montana Board of Oil and Gas, and Montana Public Service Commissions.

EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE:

The impact analysis will identify and evaluate the proximate direct and secondary impacts TO THE PHYSICAL ENVIRONMENT AND POPULATION IN THE AREA TO BE AFFECTED BY THE PROPOSED PROJECT. *Direct impacts* occur at the same time and place as the action that causes the impact. *Secondary impacts* are a further impact to Montana's environment that may be stimulated, induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts will be described in this analysis. When the analysis discloses environmental impacts, these are proximate impacts pursuant to 75-1-201(1)(b)(iv)(A), MCA.

Cumulative impacts are the collective impacts on Montana's environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures (ARM 17.4.603(7)). The project identified in Table 1 was analyzed as part of the cumulative impacts assessment for each resource subject to review, pursuant to MEPA (75-1-101, et. *seq*).

The duration of the proposed action is quantified as follows:

- **Construction Impacts (short-term):** These are impacts to the environment that would occur during the construction period, including the specific range of time.

- **Operation Impacts (long-term)**: These are impacts to the environment during the operational period of the proposed action, including the anticipated range of operational time.

The intensity of the impacts is measured using the following:

- **No impact**: There would be no change from current conditions.

- **Negligible**: An adverse or beneficial effect would occur but would be at the lowest levels of detection.

- **Minor**: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.

- **Moderate**: The effect would be easily identifiable and would change the function or integrity of the resource.

- **Major**: The effect would alter the resource.

1. Geology and Soil Quality, Stability, and Moisture

The affected area consists primarily industrial. Soils in the affected area are made up is a mixed carbonate-siliciclastic unit comprised of claystone, dolomitic to siliciclastic mudstone, dolostone, conglomerates/breccias with lesser amounts of anhydrite and sandstone.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to geology, soil quality, stability, and moisture would be expected as a result of the proposed action because there was not new disturbances associated with the proposed project.

Secondary Impacts:
No secondary construction or operational impacts to geology, soil quality, stability, and moisture would be expected as a result of the proposed action because there are new disturbances associated with the proposed project.

Cumulative Impacts:
There will be no cumulative impacts to geology, soil quality, stability, or moisture associated with the proposed action based on the direct and secondary impacts.

2. Water Quality, Quantity, and Distribution

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to water quality, quantity, and distribution would be expected as a result of the proposed action because water is not used as a part of the pellet drying process.

Secondary Impacts:
No secondary impacts would be expected as a result of the proposed action because water is not used as a part of the pellet drying process.

Cumulative Impacts:
No cumulative impacts are expected because of the proposed project based on direct and secondary impacts.

3. Air Quality

Air quality in the area affected by the proposed project is currently unclassifiable or in compliance with applicable NAAQS. Existing sources of air pollution in the area are limited and generally include emissions from the local town of Three Forks, MT.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Applicants are required to comply with all laws relating to air, such as the Federal Clean Air Act, NAAQS set by the Environmental Protection Agency (EPA), and the Clean Air Act of Montana.

In addition, MAQP #2282-17 provides legally enforceable conditions regarding the emitting units themselves, pollution controls, and requires the applicant to take reasonable precautions to limit fugitive dust from this location.

Direct Impacts:
Emissions resulting from the permit action would be considered minor. Further, no air quality restrictions exist for the affected area; therefore, the proposed project would not be expected to cause or contribute to a violation of the applicable NAAQS for any regulated pollutant. Therefore, any direct impacts would be short-term, negligible, consistent with existing impacts, and mitigated by implementation of enforceable reasonable precautions for dust.

Adverse air quality impacts would be minor because of the proposed project. See permit analysis for more information regarding air quality impacts. The majority of pollutants from the proposed project would be related to the combustion of natural gas and drying of talc pellets. This would result in the release of NO_X, CO, SO_X, VOCs, and particulate matter.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner, resulting in a decrease in calculated emissions.

The emission inventory is for one (1) 14 million British thermal unit (MMBtu) natural gas-fire burner and associated emissions for the pellet dryer operating up to 8,760 hours per year (unlimited operation). The emission inventory, located in Section IV of the MAQP Analysis, is based on emission factors provided by the manufacturer.

Secondary Impacts:
Emissions from the proposed project would use BACT and would not be expected to cause or contribute to a violation of the health and welfare-based primary and secondary NAAQS. Secondary NAAQS provide public welfare protection,

including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. See permit analysis for more detailed information regarding air quality impacts. Any adverse impacts would be long-term and minor. No beneficial secondary impacts would be expected because of the proposed project.

***Cumulative Impacts**:*
Cumulative impacts from the operation of the Three Forks Mill are restricted by conditions and limits contained in the MAQP; therefore, any expected air quality impacts would be minor.

The Gallatin County area also has other stationary sources, and all contribute to the overall air quality in Gallatin County, Montana.

The cumulative impacts of these other emitters and the proposed action would not have an adverse impact to air quality. Impacts from the Permitting Action are limited by enforceable conditions and limits contained in the MAQP and BACT must be used.

Because emissions from the proposed project, and all other similar or related projects located in the affected area are regulated, any adverse cumulative impacts to air quality would be long-term and minor.

4. Vegetation Cover, Quantity, and Quality

The affected area consists primarily of industrial land with the city of Three Forks located on the northwest property line and wildland to the southeast of the property line.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to vegetative cover, quantity, or quality would be expected as a result of the proposed action because there are no new areas of disturbance associated with the proposed action.

Secondary Impacts:
No secondary construction or operational impacts to vegetative cover, quantity, or quality would be expected as a result of the proposed action because there are no new areas of disturbance associated with the proposed action.

***Cumulative Impacts**:*
There will be no cumulative impacts to vegetative cover, quantity, or quality associated with the proposed action based on direct and secondary impacts.

5. Terrestrial, Avian, and Aquatic Life and Habitats

The affected area consists primarily of industrial property.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:

No direct construction or operational impacts to terrestrial, avian, or aquatic life and habitats would be expected as a result of the proposed action because the proposed action takes place inside of an existing facility and does not affect any undisturbed areas within the property boundary.

Secondary Impacts:

No secondary construction or operational impacts to terrestrial, avian, or aquatic life and habitats would be expected as a result of the proposed action because the proposed action takes place inside of an existing facility and does not affect any undisturbed areas within the property boundary.

Cumulative Impacts:

There will be no cumulative impacts to terrestrial, avian, or aquatic life and habitats associated with the proposed action based on direct and secondary.

6. Unique, Endangered, Fragile, or Limited Environmental Resources

DEQ did not conduct a search using the Montana Natural Heritage Program (MTNHP) because the permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner and does not make any physical changes to the site.

The proposed project is not in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program at: http://sagegrouse.mt.gov.

Direct Impacts:

No direct construction or operational impacts to unique, endangered, fragile, or limited environmental resources would be expected as a result of the proposed action because the proposed action takes place inside of an existing facility and does not affect any undisturbed areas within the property boundary.

Secondary Impacts:

No secondary construction or operational impacts to unique, endangered, fragile, or limited environmental resources are expected as a result of the proposed action because the proposed action takes place inside of an existing facility and does not affect any undisturbed areas within the property boundary.

Cumulative Impacts:
There will be no cumulative impacts to unique, endangered, fragile, or limited environmental resources associated with the proposed action based on direct and secondary impacts.

7. Historical and Archaeological Sites

The Montana State Historic Preservation Office (SHPO) was not notified of the application because the permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner without making any physical changes to building over 50 years old.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are within the Area of Potential Effect, and are over fifty years old, SHPO recommends that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

Direct Impacts:
No direct construction or operational impacts to historical or archaeological sites would be expected as a result of the proposed action because there are no new structures or modifications to any existing structures as part of the proposed action.

Secondary Impacts:
No secondary construction or operational impacts to historical or archaeological sites would be expected as a result of the proposed action because there were no new structures or modifications to any existing structures.

Cumulative Impacts:
There will be no cumulative impacts to historical or archaeological sites associated with the proposed action based on direct and secondary impacts.

8. Aesthetics

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner with no new construction to any facilities on the site property.

Direct Impacts:
No direct construction or operational impacts to the aesthetics would be expected as a result of the proposed action because there are no new structures or modifications to any existing structures affecting the exiting aesthetics for the facility associated with the proposed project.

Secondary Impacts:

No secondary construction or operational impacts to the aesthetics are expected as a result of the proposed action because there are no new structures or modifications to any existing structures effecting the exiting aesthetics for the facility associated with the proposed project.

Cumulative Impacts:
There will be no cumulative impacts to the aesthetics associated with the proposed action based on direct and secondary impacts.

9. Demands on Environmental Resources of Land, Water, Air, or Energy

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts on demands of environmental resources of land, water, or air. However, the proposed action removes three (3) natural gas-fired burner and replaces them with one (1) natural gas-fired burner which decreases the facilities need for energy.

Secondary Impacts:
No secondary construction or operational impacts demands of environmental resources of land, water, air, or energy are expected as a result of the proposed action.

Cumulative Impacts:
There would be no cumulative impacts to the demands of environmental resources of land, water, or air. Minor beneficial impacts would be associated with the proposed action due to the decreased volume of natural gas as a fuel source which will reduce overall long-term fuel needs for the facility.

10. Impacts on Other Environmental Resources

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts on demands of environmental resources would be expected as a result of the proposed action because the proposed action is located inside of an existing facility and would not affect any outside environmental resources.

Secondary Impacts:
No secondary construction or operational impacts demands of environmental resources would be expected as a result of the proposed action because the proposed action is located inside of an existing facility and would not affect any

outside environmental resources.

Cumulative Impacts:
No other impacts to environmental resources, beyond the resource areas already covered within this EA would result in any known additional cumulative impacts based on direct and secondary impacts.

11. Human Health and Safety

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to human health and safety would be expected as a result of the proposed action. Emissions released into the human environment from the facility due to the proposed action would be reduced due to less fuel being used and any emissions resulting from the proposed action would be routed to an existing bag house.

Secondary Impacts:
No secondary construction or operational impacts to human health and safety are expected as a result of the proposed action.

Cumulative Impacts:
No other affects to human health and safety, beyond the resource areas already covered within this EA would result in any known additional cumulative impacts.

12. Industrial, Commercial, and Agricultural Activities and Production

The effected area consists primarily of industrial land with wildlands on its southeast boarder. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to industrial, commercial, agricultural activities and production would be expected as a result of the proposed action because the proposed action does not increase the facilities production capacity.

Secondary Impacts:
No secondary construction or operational impacts to industrial, commercial, agricultural activities and production would be expected as a result of the proposed action because the proposed action does not increase the facilities production capacity.

Cumulative Impacts:
No other environmental resources, beyond the resource areas already covered within this EA would result in any known additional cumulative impacts based on direct and secondary impacts.

13. Quantity and Distribution of Employment

There are already existing staff and resources employed by Magris in the area, and these resources would be used to operate this facility. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
Magris would use existing staff or contracted services to construct the proposed facility. Therefore, any direct impacts to the quantity and distribution of employment in the affected area would be short-term and negligible. No adverse direct impacts would be expected because of the proposed project.

Secondary Impacts:
Magris would use existing staff to operate the proposed facility. Therefore, any secondary impacts to the quantity and distribution of employment in the affected area would be long-term and negligible. No adverse secondary impacts would be expected because of the proposed project.

Cumulative Impacts:
Short-term and negligible impact would be expected on long-term employment from the proposed action because the facility would not be expected to create any permanent new jobs.

14. Local and State Tax Base and Tax Revenues

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
No direct construction or operational impacts to local and state tax base and tax revenue would be expected as a result of the proposed action. However, because the proposed project would be small by industrial standards any direct impacts to the local and state tax base and tax revenues would be long-term, negligible to minor, and beneficial. No adverse direct impacts would be expected because of the proposed project.

Secondary Impacts:
Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefitting from the proposed operation. Further, Magris would be

responsible for accommodation of any increased taxes associated with operation of the proposed facility. Therefore, any secondary impacts would be negligible to minor, consistent with existing impacts in the affected area, and beneficial. No adverse secondary impacts would be expected because of the proposed project.

Cumulative Impacts:
Long-term beneficial negligible to minor impacts to local and state tax base and tax revenues are anticipated from this permitting action.

15. Demand for Government Services

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
The air quality permit has been prepared by state government employees as part of their day-to-day, regular responsibilities. Therefore, any adverse direct impacts to demands for government services is consistent with existing impacts and negligible. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:
Ongoing compliance inspections of facility operations would be accomplished by state government employees as part of their typical, regular duties and required to ensure the facility is operating within the limits and conditions listed in the air quality permit. Therefore, any adverse secondary impacts to demands for government services would be consistent with existing impacts and negligible. No beneficial secondary impacts would be expected because of the proposed project.

Cumulative Impacts:
Minor cumulative impacts are anticipated on government services with the proposed action and a minimal increase in impact would occur but regulators would likely combine visits to cover regulatory oversight needs.

16. Locally Adopted Environmental Plans and Goals

DEQ has reviewed the Gallatin County website and found no locally adopted environmental plans and goals for the area.

Direct Impacts:
No locally adopted environmental plans and goals were identified. Therefore, no direct impacts would be expected because of the proposed project.

Secondary Impacts:
No locally adopted environmental plans and goals were identified.; therefore, no

secondary impacts to locally adopted environmental plans and goals would be expected because of the proposed project.

Cumulative Impacts:
No cumulative impacts to the locally adopted environmental plans and goals are anticipated since no direct impacts or secondary impacts were identified.

17. Access to and Quality of Recreational and Wilderness Activities

The affected area consists primarily of industrial land with nearby wildlands. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
Wilderness areas occur in the vicinity of the proposed project but are not expected to be impacted by the permit action. There is no public access to wilderness areas located within the Margis property footprint, therefore, no direct impacts to access and quality of recreational and wilderness activities would be expected because of the construction phase of the proposed project.

Secondary Impacts:
The effected area consists primarily of industrial lands bordering wilderness lands. The project would have negligible impacts on the immediate wilderness area, therefore, no secondary impacts to access and quality of recreational and wilderness activities would be expected because of proposed facility operations.

Cumulative Impacts:
No cumulative impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed permitting action based on direct and secondary impacts.

18. Density and Distribution of Population and Housing

The affected area consists primarily of industrial lands with nearby wildness lands. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Direct Impacts:
Magris would employ existing staff and/or contracted services to for installation of the natural gas-fired burners and the project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no direct impacts to density and distribution of population and housing would be expected because of the proposed project.

Secondary Impacts:
Magris would employ existing staff to operate the facility and the proposed

project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no secondary impacts to density and distribution of population and housing would be expected because of the proposed project.

***Cumulative Impacts**:*
No cumulative impacts to density and distribution of population and housing are anticipated as a result of the proposed permitting. There are no impacts on the density and distribution of population and housing.

19. Social Structures and Mores

DEQ is not aware of any Native American cultural concerns that would be affected by the proposed activity. Based on the information provided by the Applicant, it is not anticipated that this project would disrupt traditional lifestyles or communities.

The existing nature of the area affected by the proposed project is industrial.

Direct Impacts:
Construction and operation of the facility would not be expected to affect the existing customs and values of the affected population. Therefore, no direct impacts to the existing social structures and mores of the affected population would be expected because of the proposed project.

Secondary Impacts:
The existing nature of the area affected by the proposed project is industrial (talc mineral processing); therefore, operation of the facility would not be expected to affect the existing customs and values of the affected population. Therefore, no secondary impacts to the existing social structures and mores of the affected population would be expected because of the proposed project.

Cumulative Impacts:
The replacement of the burners at a site with industrial activities would have negligible to minor cumulative impacts on the existing social structures because this site would be just one of many sites already operating in the area.

20. Cultural Uniqueness and Diversity

The existing nature of the area affected by the proposed project is industrial (talc mineral processing). It is not anticipated that this project would cause a shift in some unique quality of the area.

Direct Impacts:
Magris would employ existing staff and/or contracted services to construct the facility and thus the proposed project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no direct impacts to

the existing cultural uniqueness and diversity of the affected population would be expected because of the proposed project.

Secondary Impacts:
The existing nature of the area affected by the proposed project is industrial (talc mineral processing). Further, Magris would employ existing staff to operate the facility and thus the proposed project would not be expected to result in an increase or decrease in the local population.

Therefore, no secondary impacts to the existing cultural uniqueness and diversity of the affected population are anticipated as a result of the proposed action.

Cumulative Impacts:
No cumulative impacts to cultural uniqueness and diversity are anticipated because the skills required by this project would be similar to other existing sites in the area and this project would be considered small by industrial standards.

21. Private Property Impacts

The proposed project would take place on privately owned land. DEQ's approval of MAQP #2282-17 would not affect the applicant's real property.

DEQ has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements under the Montana Clean Air Act. Therefore, DEQ's approval of MAQP #2282-17 would not have private property-taking or damaging implications.

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].

YES	NO	
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

22. Other Appropriate Social and Economic Circumstances

Direct Impacts:
DEQ is unaware of any other appropriate short-term social and economic circumstances in the affected area that may be directly impacted by the proposed project. Due to the nature of the proposed action, no further direct impacts would be expected because of the proposed project.

Secondary Impacts:
The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner. Any impacts to air quality from replacing three natural gas-fired burner with one natural gas-fired burner are long-term, minor, and beneficial.

DEQ is unaware of any other appropriate long-term social and economic circumstances in the affected area that may be impacted by the proposed project. No further secondary impacts would be expected because of the proposed project.

Cumulative Impacts:
No cumulative impacts to any other appropriate social and economic circumstances are anticipated because no direct and secondary impacts were identified. The proposed project would take place on private land. DEQ has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements under the Montana Clean Air Act. Therefore, DEQ's approval of MAQP #2282-17 would not have private property-taking or damaging implications.

23. Other Appropriate Social and Economic Circumstances

Due to the nature and scope of the proposed project activities, no further direct or secondary impacts would be anticipated from this project.

24. Greenhouse Gas Assessment

The analysis area for this resource is limited to the activities regulated by the issuance of MAQP #2282-17 which provides an increase in operational hours and fuel usage. The GHG emissions were calculated from the project operation of 8760 hours per year and 14MMBtu/hr of natural gas usage.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products.

Other pollutants can have some properties that also are similar to those mentioned above, but the EPA has clearly identified the species above as the primary Greenhouse Gases (GHGs). Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with CO_2, CH_4, and N_2O and reports the total as CO_2e.

The SIT consists of eleven Excel based modules with pre-populated data that can be used as default settings or in some cases, allows states to input their own data

when the state believes their own data provides a higher level of quality and accuracy.

Once each of the eleven modules is filled out, the data from each module is exported into a final "synthesis" module which summarizes all of the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as emissions by sector and emissions by type of greenhouse gas. The SIT data is currently updated through the year 2021, as it takes several years to validate and make new data available within revised modules.

The combustion of natural gas at the site would release GHGs primarily being CO_2, N_2O, and much smaller concentrations of incomplete combustion of fuel components including CH_4 and other volatile organic compounds (VOCs).

Mobile emissions associated with this action are limited to construction of the site. This amount is insignificant and not included in the assessment. Additionally, there are no compressed gases, fire suppressants or refrigerants/air conditioning associated with this project which would have been considered Scope 1 emissions.

Direct Impacts

Operation of the 14 MMBtu natural gas-fired pellet dryer burner for the proposed project would produce exhaust fumes containing GHGs. DEQ has calculated GHG emissions using the EPA Simplified GHG Calculator version May 2023, for the purpose of totaling GHG emissions. This tool totals CO_2, N_2O, and CH_4 and reports the total as CO_2 equivalent (CO_2e) in metric tons CO_2e.

If there are also fluorinated compounds associated with the project those may also be input into the GHG calculator. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory.

Using the EPA's simplified GHG Emissions Calculator for sources, a maximum of 6507.5 metric tons of CO_2e would be produced per year of operation.

Secondary Impacts

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2021). If a reader would like further details please see the BLM 2022 report at: Annual GHG Report.

The impacts of climate change throughout the Northern Great Plains of Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM 2021).

Cumulative Impacts
DEQ has determined that the use of the default data provides a reasonable representation of the GHG inventory for all of the state sectors, and an estimated annual GHG inventory by year.

At present, Montana accounts for 47.77 million metric tons of CO_2e based on the EPA State Inventory Tool for the year 2021. This project may contribute up to $7.4286x10^{-7}$ million metric tons per year of CO_2e. The estimated emission of 0.00651 million metric tons of CO_2e from this project would contribute 0.000136% of Montana's annual CO_2e emissions.

Since CO2e is a global impact, DEQ has tried to show the amount this Proposed Action would have compared to Montana's cumulative CO_2e number and to show a reader the amount of change. This analysis is beyond just isolation and is trying to show a global change within a scale a reader can understand.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources.

Proposed Action Alternatives
No Action Alternative: In addition to the proposed action, DEQ must also considered a "no action" alternative. The "no action" alternative would deny the approval of MAQP #2282-17. The applicant would lack the authority to conduct the proposed activity.

Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If the Applicant demonstrates compliance with all applicable rules and regulations required for approval, the "no action" alternative would not be appropriate.

Other Reasonable Alternative(s): No other alternatives were considered.

Consultation
DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. External scoping efforts also included queries to the following websites/databases/personnel: https://www.gallatinmt.gov/

A review of the Gallatin County website, and listed department information did not indicate any specific planning documents that would be relative to this permitting action.

Public Involvement
The public comment period for this permit action is from 06/25/2025 through 07/10/2025. Public comments may be submitted to DEQ through the DEQ website, email, written letter, or in person.

Other Governmental Agencies with Jurisdiction
The proposed project would be located on private land. All applicable state and federal rules must be adhered to, which, at some level, may also include other state, or federal agency jurisdiction.

This environmental review analyzes the proposed project submitted by the Applicant. The project would be negligible and would be fully reclaimed to the permitted postmining land uses at the conclusion of the project and thus would not contribute to the long-term cumulative effects of mining in the area.

Need for Further Analysis and Significance of Potential Impacts
When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts – identify the parameters of the proposed action;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected.

- Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

Conclusions and Findings

DEQ finds that this action results in negligible impacts to air quality and GHG emissions in Gallatin County, Montana.

No significant adverse impacts would be expected because of the proposed project. As noted through the draft EA, the severity, duration, geographic extent and frequency of the occurrence of the impacts associated with the proposed air quality project would be limited. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner. The site is permitted to operate the burner 8,760 hours per calendar year using BACT for the control of emissions from the proposed operations.

As discussed in this EA, DEQ has not identified any significant impacts associated with the proposed actions for any environmental resource. DEQ does not believe that the activities proposed by the Applicant would have any growth-inducing or growth-inhibiting aspects, or contribution to cumulative impacts. The permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

There are no unique or known endangered fragile resources in the project area and no underground disturbance would be required for this project.

There would be no impacts to view-shed aesthetics as the permit action removes and replaces three (3) natural gas-fired pellet dryer burners with one (1) new natural gas-fired pellet dryer burner.

Demands on the environmental resources of land, water, air, or energy would not be significant.

Impacts to human health and safety would not be significant as access roads would be closed to the public and because the site is on private land.

As discussed in this EA, DEQ has not identified any significant impacts associated with the proposed activities on any environmental resource.

Issuance of a Montana Air Quality Permit #2282-17 to the Applicant does not set any precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If the Applicant submits another modification or proposes to amend the permit, DEQ is not committed to issuing those revisions.

DEQ would conduct an environmental review for any subsequent permit modifications sought by the Applicant pursuant to MEPA. DEQ would make permitting decisions based on the criteria set forth in the Clean Air Act of Montana.

Issuance of the Permit to the Applicant does not set a precedent for DEQ's review of other applications for Permits, including the level of environmental review. The level of environmental review decision is made based on case-specific consideration of the criteria set forth in ARM 17.4.608.

Finally, DEQ does not believe that the proposed air quality permitting action by the Applicant would have any growth-inducing or growth inhibiting impacts that would conflict with any local, state, or federal laws, requirements, or formal plans.

Based on a consideration of the criteria set forth in ARM 17.4.608, no significant adverse impacts to the affected human environment would be expected because of the proposed project. Therefore, preparation of an Environmental Impact Statement or EIS is not required, and the draft EA is deemed the appropriate level of environmental review pursuant to MEPA.

Preparation and Approval

EA and Significance Determination prepared by:

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Air Quality Engineering Scientist

Approved By:

Eric Merchant, Supervisor, Air Quality Permitting Services Section, Air Quality Bureau

References

- 2282-16_2025_02_28_APP – Application received from Magris Talc USA, Inc. on February 28, 2025. Additional information was received on April 1, 2025 and May 1, 2025.

- Three Forks Formation, Bottjer et al., 2011; Droege, 2014; Franklin and Sarg, 2018; Garcia-Fresca et al., 2018

- https://www.gallatinmt.gov/