DEQ
Montana Department of Environmental Quality

Air, Energy & Mining Division

July 25, 2022

Mark Thompson
Montana Resources, LLC
600 Shields Avenue
Butte, MT 59701

Sent via email: MThompson@montanaresources.com

RE: Final Permit Issuance for MAQP #1749-14

Dear Mr. Thompson:

Montana Air Quality Permit (MAQP) #1749-14 is deemed final as of 7/23/2022, by DEQ. This permit is for an open pit copper and molybdenum mine, crushing facilities, milling operation and concentrator, located in Butte, Montana, Township 3 North, Range 7 West, Silver Bow County. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Troy Burrows
Air Quality Scientist
Air Quality Bureau
(406) 444-1452

Montana Department of Environmental Quality
Air, Energy & Mining Division
Air Quality Bureau

Montana Air Quality Permit #1749-14

Montana Resources, LLC
600 Shields Avenue
Butte, MT 59701

July 23, 2022

Montana Air Quality Permit

Issued to:	Montana Resources, LLC 600 Shields Avenue Butte, MT 59701	MAQP: #1749-14 Application Received: 6/30/2022 Application Deemed Complete: 6/30/2022 Department Decision: 7/7/2022 Permit Final: 7/23/2022

An air quality permit, with conditions, is hereby granted to Montana Resources, LLC (Montana Resources) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

An open pit copper and molybdenum mine, crushing facilities, milling operation and concentrator, located in Butte, Montana, Township 3 North, Range 7 West, Silver Bow County.

B. Current Permit Action

On June 30, 2022, DEQ received an application from Montana Resources for an Administrative Amendment to Montana Air Quality Permit (MAQP) #1749-13 to change the name from Montana Resources, LLP to Montana Resources, LLC.

SECTION II: Limitations and Conditions

A. Emission Control Requirements

Montana Resources shall install, operate, and maintain the following emission control equipment and practices, and all emission control equipment and practices as specified in their Montana Air Quality Permit and subsequent revisions, as shown in Section I.A. of the permit analysis (Existing Equipment, Facilities and Control Equipment/Procedures).

1. Fall distance shall be minimized during transfer of topsoil, overburden, and ore and waste removal (ARM 17.8.749).

2. Except as described below, all tailings ponds shall be maintained wet to the greatest extent possible. If a violation of the 20% opacity standard is documented, installation of particulate control measures approved by DEQ will be required. If the conditions at the tailings ponds change, Montana Resources must develop a long-term fugitive dust control plan for the tailings ponds. DEQ's approval of any plan submitted by Montana Resources does not relieve Montana Resources of its obligation to comply with all statutes and rules of the Clean Air Act of Montana, specifically including, but not limited to, ARM 17.8.308, Particulate Matter, Airborne (ARM 17.8.749).

3. Drilling shall utilize water sprays and mechanical deflectors and shall be conducted in such a way as to minimize fugitive emissions (ARM 17.8.749).

4. Blasting shall be conducted to prevent overshooting (ARM 17.8.749).

5. All haul roads and access roads shall be treated with water, as needed, and chemical dust suppressant at least one time per year, during October or November. If a violation of the 5% opacity standard is documented, more frequent applications of water and chemical dust suppressant will be required (ARM 17.8.749).

6. The primary crusher shall be equipped with a negative air pressure/baghouse system (ARM 17.8.749).

7. The primary crusher ore dump shall be equipped with a negative air pressure/baghouse system and water sprays (ARM 17.8.749).

8. The lime storage bins shall be controlled by a fabric filter collecting system (ARM 17.8.749).

9. The coarse-ore 3-7 transfer area shall be controlled by a baghouse (ARM 17.8.749).

10. The secondary crushers and the fine ore storage bins shall be controlled by baghouse systems (ARM 17.8.749).

11. All ore conveyors must be covered (ARM 17.8.749).

12. The molybdenum dryer shall be controlled by a high efficiency (99% control) wet scrubber (ARM 17.8.749).

13. Montana Resources shall not burn diesel fuel containing more than 0.05% sulfur by weight after December 31, 1993 (ARM 17.8.749).

14. Montana Resources shall operate and maintain the Detroit Diesel Electronic Control (DDEC) packages, or equivalent, on at least 15 haul trucks that have been converted (ARM 17.8.749).

B. Emission Limitations

1. Montana Resources shall not cause or authorize to be discharged into the atmosphere from any facility, unless otherwise specified, any visible emissions, point or fugitive, which exhibit opacity of 20% or greater. This opacity limitation applies to, but is not limited to, visible emissions from drilling, blasting, and all ore and waste handling (removal, dumping, etc.) (ARM 17.8.304).

2. Montana Resources shall not cause or authorize to be discharged into the atmosphere any visible fugitive emissions from haul roads or access roads that exhibit opacity of 5% or greater (ARM 17.8.749).

3. Montana Resources shall not cause or authorize to be discharged into the atmosphere any visible fugitive emissions from parking lots, disturbed areas, tailings ponds or storage piles that exhibit opacity of 20% or greater (ARM 17.8.308).

4. Montana Resources shall not cause or authorize to be discharged into the outdoor atmosphere from the primary crusher, lime bin, or coarse ore conveying system visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

5. Montana Resources shall not cause or authorize to be discharged into the outdoor atmosphere from the secondary crushers, fine ore storage bins or the molybdenum dryer, visible emissions that exhibit an opacity of 15% or greater (ARM 17.8.749).

6. Montana Resources shall not cause or authorize to be discharged into the outdoor atmosphere from the primary crusher, coarse-ore conveying system, secondary crushers, or the fine ore bins, total particulate emissions in excess of 0.05 gm/dscm (ARM 17.8.749).

7. Montana Resources shall implement the contingency measure for emission and production limitations within 60 days of notification by DEQ that the National Ambient Air Quality Standards for PM_{10} have been exceeded in the Butte Silver Bow PM_{10} nonattainment area (ARM 17.8.749).

8. Montana Resources shall not cause or authorize to be discharged into the atmosphere particulate emissions from the following sources in excess of the following limits. These limits are based on the DDEC packages being installed on 15 of the haul trucks and without the implementation of the contingency measure for Montana Resources (ARM 17.8.749).

   a. Winter (Nov. - Feb.) Seasonal Emission Limitations

EMISSION POINT	TOTAL PARTICULATE Tons/Season	PM_{10} Tons/Season
Haul Trucks	931.8	335.5
Diesel Exhaust	4.57	4.57
Lime Unloading	0.2	0.1
Support Vehicles	103.2	37.1
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	30.8	15.4

EMISSION POINT	TOTAL PARTICULATE Tons/Season	PM_{10} Tons/Season
Total from all sources at facility	2175.7	834.9

b. Summer (Mar. - Oct.) Seasonal Emission Limitations

EMISSION POINT	TOTAL PARTICULATE Tons/Season	PM_{10} Tons/Season
Haul Trucks	2,631.6	947.4
Diesel Exhaust	22.5	22.5
Lime Unloading	0.8	0.3
Support Vehicles	428.0	154.0
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	156.4	78.2
Total from all sources at facility	11,299.4	4,332.6

c. Winter (Nov. - Feb.) Daily Emission Limitations

EMISSION POINT	TOTAL PARTICULATE Pounds/Day	PM_{10} Pounds/Day
Haul Trucks	15,300.5	5,526.2
Diesel Exhaust	75.4	75.4
Lime Unloading	3.2	1.3
Support Vehicles	1,712.3	615.9
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	528.0[1]	264.0[2]
Total from all sources at facility	35,925.6	13,145.1

[1] Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average during the winter months will remain at 528.0 lb/day of total particulate, but the maximum that may occur on any day is 646.7 lb/day of total particulate.

[2] Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average during the winter months will remain at 264.0 lb/day of PM-10, but the maximum that may occur on any day is 323.4 lb/day of PM-10.

9. Montana Resources shall operate and maintain a weighted average of EPA Tier ratings of no less than 1.75 across the haul truck fleet or an equivalent demonstration. This is calculated by multiplying the number of the tier rating for each type of engine (1, 2, 3, or 4) times the number of haul trucks, added together for each tier rating category, and divided by the total number of trucks (ARM 17.8.752).

10. In the event the contingency measure must be implemented, Montana Resources shall not cause or authorize to be discharged into the atmosphere particulate emissions from the following sources in excess of the following limits. These limits are based on the DDEC packages being installed on 11 of the 15 haul trucks (ARM 17.8.749).

a. Winter (Nov. - Feb.) Seasonal Emission Limitations

EMISSION POINT	TOTAL PARTICULATE Tons/Season	PM_{10} Tons/Season
Haul Trucks	591.3	212.9
Diesel Exhaust	4.0[3]	4.0[3]
Lime Unloading	0.2	0.1
Support Vehicles	103.2	37.1
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	28.0	14.0
Total from all sources at facility	1,831.4	710.4

b. Summer (Mar. - Oct.) Seasonal Emission Limitations

EMISSION POINT	TOTAL PARTICULATE Tons/Season	PM_{10} Tons/Season
Haul Trucks	2,447.7	881.3
Diesel Exhaust	22.5[3]	22.5[3]
Lime Unloading	0.8	0.3
Support Vehicles	428.0	154.0
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	151.1	75.6
Total from all sources at facility	11,110.2	4,263.9

c. Winter (Nov. - Feb.) Daily Emission Limitations:

EMISSION POINT	TOTAL PARTICULATE Pounds/Day	PM_{10} Pounds/Day
Haul Trucks	9,817.0	3,532.9
Diesel Exhaust	66.2[3]	66.2[3]
Lime Unloading	3.2	1.3
Support Vehicles	1,712.3	615.9
Molybdenum Dryer	0.1	0.1
Primary Crusher Ore Dump	463.5[4]	232.4[5]
Total from all sources at facility	30,311.0	1,111.0

d. Compliance Determination

i) Compliance with annual, seasonal, and daily emission limits shall be determined through calculations, using annual, seasonal, and daily production information submitted by Montana Resources and representative emission rates (lb/hr, gr/dscf, etc.) determined during the required source tests (for point sources) or emission factors (for fugitive sources).

ii) Exceedances of the production limitations or implementation of process changes or changes in air pollution control equipment or procedures that increase emission rates, determined through the applicable emission factor, will constitute violations of the annual emission limits.

iii) Changes in the applicable emission factors or PM_{10} fractions due to testing or analysis, reassessment of applicable emission factors or use of revised or updated emission factors by DEQ or EPA will be reflected in changes in the allowable emission rates and compliance determinations, but will not result in changes in the production limitations.

3. These emissions have been reduced from the emission limitations in Permit #1749-04 by 31.5% for the installation of the DDEC packages on 11 of the 15 haul trucks in addition to the 17% reduction in emissions due to the installation of the injectors, intercoolers, etc. on the haul trucks.

4 Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average during the winter months will remain at 463.5 lb/day of total particulate, but the maximum that may occur on any day is 571.16 lb/day of total particulate.

5 Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average during the winter months will remain at 232.4 lb/day of PM-10, but the maximum that may occur on any day is 285.6 lb/day of PM-10.

iv) Changes in the applicable emission factors, PM_{10} fractions, or emission rates, due to substantive process changes or changes in air pollution control equipment or procedures, will be reflected in the compliance determination.

v) Implementation of substantive process changes or changes in air pollution control equipment or procedures may require an air quality permit modification prior to implementation or construction pursuant to ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources.

vi) Emission decreases for specific emission points resulting from substantive process changes or changes in air pollution control equipment or procedures may be distributed among other emission points within the source to increase the overall production if the process changes or the changes in air pollution control equipment or procedures are made enforceable through inclusion as permit conditions. The production rates and emission limitations for the named emission points may not be increased unless any emission increases are offset by emission decreases from other named sources. The amount of offset required in each case shall be based on the relative ambient impact of each named source based on the Butte Chemical Mass Balance (CMB)/source apportionment study.

Montana Resources has installed DDEC packages on 15 of the haul trucks at the mine, which allowed DEQ to change the levels contained in Section II.B.8.a-c and Section II.C.1-3 of Permit #1749-10. Montana Resources must still comply with the contingency measure, as necessary. In the event the contingency measure has to be implemented by Montana Resources, emission and production levels will revert to the pre-DDEC levels contained in Section II.B.9.a-c and Section II.C.4-6 of Permit #1749-10.

e. Emission Factors/PM_{10} Fractions

The allowable emission rates for each listed fugitive emission source were calculated using the following emission factors and PM_{10} fractions.

EMISSION POINT	EMISSION FACTOR	PM_{10} FRACTION
Blasting	50 lb/blast	50%
Waste Removal	.01 lb/ton	50%
Ore Removal	.01 lb/ton	50%
Haul Trucks	24.7 lb/vmt	36%
Waste Dumping	.01 lb/ton	50%
Diesel Exhaust	17.7 lb/1000 gal	100%
Drilling	1.5 lb/hole	50%
Wind Erosion Disturbed Areas	33.2 $g/m^2/yr$	50%
Wind Erosion Tailings Pond	1.3 ton/acre/yr	50%
Support Vehicles	1.4 lb/VMT	50%
Coarse Ore Stockpile	.01 lb/ton	50%

C. Production Limitations

Montana Resources shall not exceed the following production limitations. These limits are based on the DDEC packages being installed on 15 of the haul trucks and before the contingency measure for Montana Resources is implemented (ARM 17.8.749).

1. Winter (Nov.-Feb.) Seasonal Production Limitations

EMISSION POINT (Production Units)	MAXIMUM SEASONAL PRODUCTION RATE
Haul Trucks (vmt)	503,008
Diesel Exhaust (gallons of diesel)	2,010,176
Lime Unloading (tons of lime)	27,738.5
Support Vehicles (vmt)	353,331.4
Molybdenum Dryer (tons of molybdenum)	9,795.9
Primary Crusher Ore Dump (tons of ore)	6,840,821.9

2. Summer (Mar.-Oct.) Seasonal Production Limitations

EMISSION POINT (Production Units)	MAXIMUM SEASONAL PRODUCTION RATE
Haul Trucks (vmt)	1,420,560.0
Diesel Exhaust (gallons of diesel)	6,358,664.9
Lime Unloading (tons of lime)	123,898.5
Support Vehicles (vmt)	1,466,666.0
Molybdenum Dryer (tons of molybdenum)	61,875.6
Primary Crusher Ore Dump (tons of ore)	34,759,820.9

3. Winter (Nov.-Feb.) Daily Production Limitations

EMISSION POINT (Production Units)	MAXIMUM DAILY PRODUCTION RATE (unless designated otherwise)
Haul Trucks (vmt)	4,143.2
Diesel Exhaust (gallons of diesel)	16,613.
Lime Unloading (average tons of lime/day)	231.2
Support Vehicles (vmt)	2,944.4
Molybdenum Dryer (tons of molybdenum)	81.6
Primary Crusher Ore Dump (average tons of ore/day)	58,670.7[66]

In the event that a contingency measure must be implemented, Montana Resources shall not exceed the following production limitations. These limits are based on the DDEC packages being installed on 11 of the 15 haul trucks.

4. Winter (Nov.-Feb.) Seasonal Production Limitations

EMISSION POINT (Production Units)	MAXIMUM SEASONAL PRODUCTION RATE
Haul Trucks (vmt)	318,950.0
Diesel Exhaust (gallons of diesel)	871,281.7
Lime Unloading (tons of lime)	27,738.5
Support Vehicles (vmt)	353,331.4
Molybdenum Dryer (tons of molybdenum)	9,795.9
Primary Crusher Ore Dump (tons of ore)	6,218,929.1

6 Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average production during the winter months will remain at 58,670.7 tons of ore, but the maximum that may occur on any day is 71,860.9 tons of ore.

5. Summer (Mar.-Oct.) Seasonal Production Limitations:

EMISSION POINT (Production Units)	MAXIMUM SEASONAL PRODUCTION RATE
Haul Trucks (vmt)	1,320,299.7
Diesel Exhaust (gallons of diesel)	4,941,801.1
Lime Unloading (tons of lime)	123,898.5
Support Vehicles (vmt)	1,466,666.0
Molybdenum Dryer (tons of molybdenum)	61,875.6
Primary Crusher Ore Dump (tons of ore)	33,576,892.4

6. Winter (Nov.-Feb.) Daily Production Limitations

EMISSION POINT (Production Units)	MAXIMUM DAILY PRODUCTION RATE (unless designated otherwise)
Haul Trucks (vmt)	2,657.9
Diesel Exhaust (gallons of diesel)	7,260.7
Lime Unloading (average tons of lime/day)	231.2
Support Vehicles (vmt)	2,944.4
Molybdenum Dryer (tons of molybdenum)	81.6
Primary Crusher Ore Dump (average tons of ore/day)	51,824.4[77]

D. 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. The Department of Environmental Quality (DEQ) may require further testing (ARM 17.8.105).

3. Montana Resources shall perform compliance source tests (submittal of reports) on the primary crusher, the secondary crushers, the coarse ore conveying system, the fine ore system, and the molybdenum dryer before August 1, 2004, and at least once every 4 years thereafter, or according to another testing schedule approved by DEQ. The source tests shall include determination of total mass particulate and shall be conducted in accordance with the applicable test methods listed in 40 CFR Part 60, Appendix A (Total Particulate) and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.749).

7 Fluctuation occurred at the Primary Crusher Ore Dump during the CMB study year and the range has been reported by Montana Resources. The average production during the winter months will remain at 51,824.4 tons of ore, but the maximum that may occur on any day is 63,460 tons of ore.

4. All records compiled in accordance with this permit must be maintained by Montana Resources 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 DEQ, and must be submitted to DEQ upon request. These records may be stored at a location other than the plant site upon approval by DEQ (ARM 17.8.749).

E. Operational Reporting Requirements

1. Montana Resources shall supply DEQ with annual production information for all emission points, as required by DEQ in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I of this permit.

   Production information shall be gathered on a calendar-year basis and submitted to DEQ by the date required in the emission inventory request. Information shall be in the units required by DEQ. 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). Montana Resources shall submit the following information annually to DEQ by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

   Montana Resources shall supply a summary report listing the maximum daily production achieved during the months of November through February for those emission points that have a daily production limitation. This information, along with the winter seasonal inventory described below, must be submitted to DEQ by April 15 of the following calendar year.

   In addition, Montana Resources shall supply DEQ with annual, seasonal, and daily particulate emission inventories for the emission points listed in Section I.A of the permit analysis. This information is required to verify compliance with permit conditions and may also be used in the annual emission inventory. The emission inventories shall include the following production data (on an annual, winter seasonal, and summer seasonal basis), a listing of all emission factors used, all calculations and other related information that may be requested. This annual information must be submitted to DEQ by March 1 of the following calendar year (ARM 17.8.505).

   a. Tons of ore removed;

   b. Tons of waste, including all non-ore material removed;

   c. Haul truck vehicle miles traveled (this must include all supporting information such as length of haul, number of trucks, weight of trucks, etc.);

d. Support vehicle miles traveled (this must include all supporting information such as length of haul, number of trucks, weight of trucks, etc.);

e. Number of holes drilled;

f. Number of blasts;

g. Tons of ore through the primary crusher;

h. Tons of ore through each of the secondary crushers;

i. Tons of ore through the fine ore system;

j. Tons of feed to concentrator;

k. Current acreage of disturbed area;

l. Current exposed area of tailings pond;

m. Gallons of diesel consumed;

n. Tons of lime unloaded; and

o. Tons through molybdenum dryer.

2. Montana Resources shall notify DEQ 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 DEQ, 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).

SECTION III: General Conditions

A. Inspection – Montana Resources shall allow DEQ'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 such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (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 Montana Resources fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Montana Resources 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.* (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 DEQ's decision may request, within 15 days after DEQ 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 DEQ'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 source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Montana Resources 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 Analysis
Montana Resources, LLC
MAQP #1749-14

I. Introduction

A. Permitted Equipment, Facilities and Control Equipment/Procedures

	CONTROL EQUIPMENT/PROCEDURE	% CONTROL EFFICIENCY
1. Ore and Waste Removal and Handling		
a. Drills	Water Sprays and Mechanical Deflectors	50%
b. Blasting	Reduce Overshoot	0%
c. Ore and Waste Removal Fugitive Dust 1) Loaders, Dozers, Shovels 2) Haul Roads 3) Support Vehicles	 Minimize Drop Height Watering and Chemical Stabilization Watering and Chemical Stabilization	 0% 85% 85%
d. Diesel Truck Tailpipe Emissions	Installation of smaller injectors, Intercoolers on the turbochargers, Minimum throttle delay devices. Installation of DDEC on 15 haul trucks	17% 43%
e. Waste Dumping	Minimize drop height	0%
f. Wind Erosion Exposed Mill Tailings	None	0%
g. Wind Erosion Disturbed Area	None	0%
2. Crushing		
a. Primary Crusher Ore Dump	Neg. Air/Water	10%
b. Primary Crusher	Baghouse	99%
c. Lime Unloading	Fabric Filter	99%
d. Coarse Ore Conveying	Hoods, Baghouse, Vacuum Truck	99%
e. Coarse Ore Stockpile	None	0%
f. 3 Secondary Crushers	Baghouse	99%
g. Fine Ore Storage Bins	4 Baghouses	99%
3. Molybdenum Dryer	Wet scrubber	99%

B. Process Description

Mining at Montana Resources, LLC (Montana Resources) is done via conventional open-pit methods utilizing blast hole drills, loaders, shovels, trucks, dozers and typical haul road maintenance equipment. All ore is hauled to the primary crusher and then conveyed to the coarse ore stockpile.

Drilling is accomplished using rotary blast hole drills. The drills are crawler or rubber tire mounted and self-contained. Blasting utilizes bulk ANFO and non-electric primers and delays. Wet holes are loaded with a package ANFO or waterproof slurry.

Blast holes are filled with sufficient ANFO to ensure adequate fragmentation. The mining contractor is instructed not to overfill holes, and to clean up spillage prior to blasting. Spillage is placed in holes prior to stemming to ensure detonation. Cuttings from each blast hole are collected and assayed for delineation of ore and waste.

Loading of ore and waste is performed by front-end loaders or shovels. 170- ton trucks are used for hauling ore and waste. Ore is transported to the crushing plant while waste is taken to the dump sites.

C. Permit History

Montana Resources currently operates an open pit copper and molybdenum mine, crushing and milling operation in Butte, Montana. The original permit, **Montana Air Quality Permit (MAQP) #1749**, was issued to Atlantic Richfield Corporation (ARCO) on April 1, 1983, as a result of the Butte Total Suspended Particulate (TSP) State Implementation Plan (SIP).

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new ambient air quality standards for particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}). The annual PM_{10} standard is 50 ug/m^3 and the 24-hour PM_{10} standard is 150 ug/m^3. These standards were in turn adopted by the Montana Board of Health and Environmental Sciences on April 29, 1988. On August 7, 1987, EPA designated Butte as a PM_{10} Group I area due to numerous violations of the PM_{10} 24-hour ambient standards.

The 1990 amendments to the Federal Clean Air Act (FCAA) designated the Butte Group I area as a PM_{10} nonattainment area in November 1990. As a result of these designations, the Montana Department of Environmental Quality (DEQ) was required to develop a PM_{10} emission control program as part of the State Implementation Plan to bring the Butte area into compliance with the PM_{10} standard and demonstrate maintenance of that standard.

In order to identify the major PM_{10} emission sources in the area, DEQ conducted a chemical mass balance (CMB) study. Since the exceedance days were experienced during the winter when Butte has the worst air quality, the CMB results for the days

that exceeded the National Ambient Air Quality Standards (NAAQS) were used for the demonstration of emission contributions for the winter period. Montana Resources' emissions comprised 19.5% of the total contribution seen on the days that exceeded the NAAQS. The CMB study period was from September 25, 1987, through March 25, 1988. Therefore, September and October data was used to determine non-wintertime contributions. Montana Resources' emissions were 18% of the total for that period. Over the entire study period, Montana Resources' emissions comprised 21.3% of the total. Complete results of the CMB study and the compliance and maintenance demonstration are contained in the Butte PM_{10} SIP.

Since the sources have been identified, control plans were developed for each source (wood stove control programs, sanding material specifications and street sweeping programs, etc.), including the industrial sources (Montana Resources and Rhône-Poulenc).

EPA determined that the demonstration of compliance must be made using allowable emissions and that any allowable emission limits must be federally enforceable. Since Montana Resources' actual emissions during the PM_{10}/CMB study period (3-87 through 2-88) were substantially lower than their allowable emissions, based on **MAQP #1749A**, Montana Resources' permit had to be modified to reduce their allowable emissions. This modification, **MAQP #1749-04**, reduced Montana Resources' allowable daily winter (November through February) emissions to 90% of their actual daily emissions during the 1987-1988 CMB study period. The emissions identified during the CMB study were from the haul trucks, diesel exhaust, lime unloading, support vehicles, molybdenum dryer, and primary crusher ore dump. An average daily wintertime limit for production has been set for each of these sources. Due to the production schedule at Montana Resources during the study period, the primary ore crusher was given an average daily wintertime limit for production and a ceiling production limit. This was done because the crushing of ore ran on the same schedule currently as was present during the study period. This schedule includes scheduled down time each week for the primary crusher and scheduled down time each week for the secondary crushers. The variation during the study period ranged from 29,225 tons of ore crushed to 63,460. This range is reflected in the study period and was, therefore, allowed for future production. Montana Resources' annual allowable total particulate emissions were reduced to approximately 37% of Montana Resources' current annual allowable total particulate emissions.

MAQP #1749-04 also established PM_{10} emission limitations for the first time, as well as a Reasonably Available Control Measure (RACM)/Reasonably Available Control Technology (RACT) analysis. This permit required the use of chemical dust suppression on the haul roads and contained annual point-specific production and emission limits, and seasonal and daily source-wide production and emission limits. The initial analysis, completed by DEQ staff as part of the SIP development process, indicated that the modification (MAQP #1749-04), in conjunction with the control plans being developed for the other identified sources, demonstrated compliance with the daily and annual PM_{10} standards in the Butte PM_{10} nonattainment area by the year 1993. Complete details are contained in the Butte PM_{10} SIP.

Montana's air quality rules ARM 17.8.733(a) MODIFICATION OF PERMIT allowed DEQ to modify a source's permit due to changes in applicable rules or standards adopted by the Board of Health and Environmental Sciences. MAQP #1749A was issued to ARCO during the Butte TSP SIP development process and later transferred to Montana Resources. MAQP #1749-04 reflected the adoption of the new ambient PM_{10} standard by the Montana Board of Health and Environmental Sciences. The permit identified that the permit may be further modified if the currently proposed control plan for all point and area sources fails to achieve compliance with the ambient PM_{10} standards.

On October 13, 1991, and as part of the Butte PM_{10} SIP, DEQ issued a Notification of Permit Modification for the air quality permit held by Montana Resources. On October 28, 1991, a Petition for Hearing on this permit modification was filed by Montana Resources with the Board of Health and Environmental Sciences. After the filing of the petition, the parties met on several occasions and engaged in extensive settlement discussions concerning the terms of a modified permit. DEQ and Montana Resources subsequently agreed to the terms of a modified air quality permit for Montana Resources' operations. DEQ and Montana Resources filed a Stipulation for Issuance of Final Permit with the Board, which included a proposed modified permit. Paragraphs 7, 8 and 9 of the stipulation described the parties' understanding of the interpretation and application of Part B, Section 6.e.vi of the modified permit. On March 20, 1992, the Board accepted the stipulation and issued a final Order directing DEQ to issue the proposed modified permit to Montana Resources. Therefore, MAQP #1749-04 was issued on that date.

On November 15, 1993, Montana Resources applied for **MAQP #1749-05** to allow for production increases in their diesel consumption, vehicle miles traveled by the haul trucks, and ore hauled to the primary crusher dump. This increase was allowed because Montana Resources installed DDEC packages on 11 of the 15 haul trucks at the mine. The installation of DDEC packages on the haul trucks resulted in a 43% decrease in diesel exhaust emissions per truck. However, since only 11 of the 15 trucks had been retrofitted at the time, DEQ only credited Montana Resources11/15 of 43% or a 31.5% emission decrease.

In addition to allowing the production increases in MAQP #1749-05, a contingency measure was also added to this permit. The FCAA Amendments of 1990 require the implementation of a contingency measure within 60 days of notification from EPA that the area has exceeded the NAAQS after the date of December 31, 1994. The contingency measure must reduce ambient PM_{10} emissions in sufficient amounts to demonstrate compliance as determined in the Butte Silver Bow PM_{10} SIP from sources that are not currently controlled and accounted for in the Butte Silver Bow PM_{10} State Implementation Plan.

Since it was determined through source apportionment studies that the Montana Resources facility was one of the largest contributing sources of uncontrolled ambient PM_{10} emissions in the Butte Silver Bow PM_{10} nonattainment area, a contingency measure for Montana Resources was determined to be necessary to

bring the area back into attainment with the National Ambient Air Quality Standards in the event that these standards are exceeded. The contingency measure to be implemented by Montana Resources in case of an exceedance would be to decrease emission and production levels to the pre-DDEC limitations contained in Section II.B.9.a-c and Section II.C.4-6 of MAQP #1749-05.

Also, Montana Resources planned to retrofit the remaining four haul trucks with the DDEC packages in the following 18 months to 2 years. This would result in an additional 11.5% (43%-31.5%) emission decrease, which could be used for production increases elsewhere in the facility. Montana Resources was notified that they would need to apply for a permit modification requesting production increases when the remaining four trucks were retrofitted to include the DDEC package. These production increases were not included in the contingency measure production levels.

On March 29, 1994, Montana Resources applied for a permit modification, **MAQP #1749-06**, that would allow for the use of water sprays on the primary crusher ore dump. The water sprays provided more emission control than the negative air system currently used to control emissions from the primary crusher ore dump. Since Montana Resources was mining drier ore than previous years, the water spray was required to be utilized in the milling process. However, the water sprays cannot be used at the same time that the negative air system is being used because of the possibility of an obstruction occurring in the negative air system. Also, the water sprays cannot be used in the winter because of the possibility the water lines could freeze. Therefore, a condition was added in MAQP #1749-06 that allowed Montana Resources to use either water sprays or a negative air system to control emissions from the primary crusher ore dump.

On May 26, 1996, **MAQP #1749-07** was issued to Montana Resources. Montana Resources proposed, with concurrence from DEQ, to reduce the amount of required opacity observations contained in Section II.F.1 of MAQP #1749-06 for their facility. Montana Resources is now only required to conduct monthly visible emission observations for wind erosion from the tailings pond during the months of May through September. There was no emissions increase as a result of this modification.

On July 21, 1997, DEQ received a request from Montana Resources to replace the four wet scrubbers controlling emissions from the fine ore storage bins with four new baghouses. The baghouse system will control the particulate emissions better than the wet scrubbers and will result in a reduction in particulate emissions from the facility. This proposal was allowed under the Administrative Rules of Montana (ARM) 17.8.705(1)(q) provided that the permit was modified to reflect that baghouses, instead of the wet scrubbers, will be used to control emissions from the fine ore storage bins.

In addition, the permit was updated to reflect that Montana Resources retrofitted the four remaining haul trucks with the DDEC package for emission control. This would result in a decrease in emissions, which could be used by Montana Resources

for an increase in production elsewhere in the facility. **MAQP #1749-08** replaced Permit #1749-07.

On February 2, 1999, DEQ received a request from Montana Resources to modify MAQP #1749-08 to clarify some of the existing language in the permit. This modification request was given **MAQP #1749-09**. This modification was withdrawn because other changes were necessary for Montana Resources' permit that could not be completed under the existing modification rule.

On December 30, 1999, Montana Resources was issued **MAQP #1749-10**, which consisted of the following changes:

1. The diesel consumption limitation was increased because Montana Resources had installed 4 additional DDEC packages on the haul trucks and decreased the amount of ore sent to the Primary Crusher Ore Dump. The DDEC packages and the decreased production make offsets available for Montana Resources to use elsewhere at their facility.

2. Montana Resources' monitoring plan was revised to remove the requirement to operate and maintain the PM_{10} monitor at the Alpine Site. The lot where this monitor was located was sold and Montana Resources was required to remove the monitor from this location. Because DEQ operates and maintains a PM_{10} monitor at the nearby Greeley School, Montana Resources did not have to re-locate the monitor.

3. Montana Resources' monitoring plan was also revised to decrease the monitoring frequency for the remaining sites from every third day to every sixth day.

4. Montana Resources' monitoring plan was also revised to clarify that the annual report is required to be submitted 90 days after the end of the calendar year.

5. The daily production limitation for Lime Unloading was noted to be an average instead of a maximum amount for any one day. The limitation in the permit was changed to 231.2 tons/day as a daily maximum. However, when this limit was established, it was calculated as an average value and not a daily maximum, but it was never designated as an average.

6. Condition #14 of the permit was revised to allow for emission controls "equivalent" to the DDEC packages to be installed on the haul trucks in the future.

7. DEQ also made the verbiage changes requested by Montana Resources in a letter dated February 1, 1999.

The changes requested by Montana Resources resulted in an overall net decrease in emissions of PM and PM_{10}. MAQP #1749-10 replaced MAQP #1749-08.

On May 23, 2001, DEQ issued its decision on a permit modification for Montana Resources in accordance with the ARM 17.8.733. This permit modification required Montana Resources to design and operate a water and/or chemical dust suppression system to control emissions from the Yankee Doodle Tailings Pond. The permit also required Montana Resources to develop a long-term plan for the control of emissions from the pond. This was necessary because conditions had changed at the facility since Montana Resources ceased operation during the summer of 2000. Since the closure, wet tailings had not been applied to the surface of the pond and tailings had been observed blowing from the pond. Therefore, it was necessary for Montana Resources to take steps to minimize emissions from the tailings pond and remain in compliance with their air quality permit. **MAQP #1749-11** replaced MAQP #1749-10.

DEQ received a letter from Montana Resources on January 4, 2002, requesting the termination of their ambient air monitoring program at the Montana Resources mining operation. DEQ reviewed the request and supporting information relative to DEQ's October 1998 Monitoring Requirements Guidance Statement. In a letter dated March 5, 2002, DEQ approved the request. This permit action removed the ambient monitoring requirements from the permit, clarified stack testing timeframes in Section II.E.4, and updated the rule citations in the permit. **MAQP #1749-12** replaced MAQP #1749-11.

On November 2, 2021, DEQ received an application from Montana Resources to modify MAQP #1749-12 to allow additional diesel fuel usage during wintertime operation. An incompleteness letter was issued on November 30, 2021, and a response was received from Montana Resources on January 21, 2022. The requested change updates the particulate matter less than or equal to 10 microns (PM_{10}) emission factor for diesel fuel combustion to account for newer haul trucks used at the mine. The newer haul truck fleet has resulted in a decrease of PM_{10} emissions as the current fleet is now made up of Tier 1, Tier 2 and Tier 4 engines. Revising the emission factor to reflect the more efficient engines, will allow Montana Resources to use additional diesel fuel during the winter period of November thru February. The change revises the allowable wintertime diesel consumption from 1,220,624 gallons to 2,010,176 gallons, and the daily maximum diesel usage during winter operation from 10,065.8 gallons to 16,613 gallons. The current MAQP limit for PM_{10} from diesel combustion is 4.32 tons per year (tpy). Revising the emission factor to reflect the newer engines will increase the allowable PM_{10} emissions from 4.32 to 4.57 tpy, an increase of 0.25 tpy. The 0.25 tpy PM_{10} increase must be off-set to maintain the Chemical Mass Balance (CMB) which is the basis for the permit conditions within the MAQP. If completely utilized, the additional volume of diesel fuel would provide for approximately 378 miles in excess of the current MAQP haul truck vehicle miles traveled limit (VMT) limit. To maintain the underlining mass limit of PM_{10} from the CMB , the current VMT limit of 503,386 VMTs is reduced by 378 miles to 503,008 VMTs which is equivalent to a decrease of 0.25 tpy PM_{10} emissions. This off-set ensures the proposed permit action does not increase emissions above the limit established for PM and PM_{10} from the CMB study. The

Contingency Measures established in the State Implementation Plan remain unchanged and the maximum wintertime inventory of PM_{10} remains at 834.9 tons for the four-month period from November thru February. Other minor production limit updates for haul trucks and diesel combustion were made to fully ensure the overall mass limits for PM and PM_{10} remain in place. **MAQP #1749-13** replaced MAQP #1749-12.

D. Current Permit Action

On June 30, 2022, DEQ received an application from Montana Resources for an Administrative Amendment to change the name from Montana Resources, LLP to Montana Resources, LLC. **MAQP #1749-14** replaces MAQP #1749-13.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonable 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 Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (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 emission 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).

Montana Resources shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not

limited, 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, 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}

Montana Resources 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 an opacity limitation of less than 20% for all stacks or vents.

2. ARM 17.8.308, Particulate Matter, Airborne. This rule requires reasonable precautions for fugitive emissions sources and RACT for existing fugitive sources located in a nonattainment area. DEQ determined that a 20% opacity limitation for fugitive sources (5% for haul roads and access roads) and a requirement for use of chemical stabilization on haul roads and access roads will satisfy these requirements. (See Section VI, MAQP #1749-05, RACM/RACT Analysis.)

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 17.8.310, Particulate Matter, Industrial Processes. 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. The requirements of this section are superseded by the stricter emission limits established in the permit.

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 permanent 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, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR Part 60.

8. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

9. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. This facility is not a NESHAP-affected source because it does not meet the definition of any NESHAPs Subpart defined in 40 CFR Part 63.

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. Montana Resources 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 air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Montana Resources has a PTE greater than 25 tons per year 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 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to 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. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

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 Montana Resources 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 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 17.8.760 Additional Review of Permit Applications. This rule describes DEQ's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.

12. 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.

13. 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).

14. 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.

15. 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. RM 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.

   This facility is not a major stationary source because it is not a listed source and does not have the potential to emit 250 tons per year or more of any air pollutant, excluding fugitive emissions.

G. ARM 17.8, Subchapter 9 – Permit Requirements for Major Stationary Sources or Major Modifications Locating Within Nonattainment Areas, including, but not limited to:

The 1990 Clean Air Act Amendments require the application of RACM in moderate PM_{10} nonattainment areas. RACM has been defined as RACT for existing PM_{10} stack or point sources, process fugitive, and fugitive dust sources such as haul roads, open stockpiles, disturbed areas, tailings disposal areas, or unpaved staging areas (see "Guidance on Reasonably Available Control Requirements in Moderate PM_{10} Nonattainment Areas"). DEQ determined that a 20% opacity limitation for fugitive sources (5% for haul roads and access roads), application of NSPS emission limits to point sources, and a requirement for use of chemical stabilization on haul roads and access roads satisfies these requirements (see Section V, MAQP #1749-05, RACM/RACT Analysis).

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 FCAA is defined as any stationary source having:

   a. PTE > 100 tons/year of any pollutant;

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

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 #1749-14 for Montana Resources, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

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

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

   d. This facility is not subject to any current NSPS.

   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 Montana Resources is a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or modified source. Montana Resources shall install on the new or modified source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Air Quality Impacts/Compliance with Air Quality Standards

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.

V. Existing Air Quality

Butte is a secondary non-attainment area for TSP and was a PM_{10} Group I nonattainment area. DEQ submitted a PM_{10} redesignation request to EPA in 2019, and EPA approved the area as a limited maintenance plan effective July 26, 2021.

VI. Taking or Damaging Implication Analysis

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

YES	NO	
		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)].
		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)

Based on this analysis, DEQ determined there are no taking or damaging implications associated with this permit action.

VII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared By: Troy Burrows
Date: July 7, 2022