

Montana Resources, LLC 600 Shields Ave. Butte, Montana USA 59701

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April 12, 2024

Mr. Conor Fox Air Quality Engineering Scientist Montana Department of Environmental Quality Air Quality Bureau <u>Conor.Fox@mt.gov</u>

RE: Winter Seasonal Emissions Inventory (Nov.-Dec. 2023 & Jan.-Feb. 2024) and Summary Report (Montana Air Quality Permit #1749-14)

Dear Mr. Fox:

Please find enclosed the 2023–2024 Winter Seasonal Emissions Inventory for Montana Resources, LLC. Also included is a Summary Report listing the maximum seasonal and daily production achieved during the months of November 2023 through February 2024 for those emission points that have seasonal and daily production limitations.

Please contact Mark Thompson at 406-496-3211, or myself at 406-496-3205, with any questions.

Sincerely,

Jeremy Fleege Environmental Engineer

### MONTANA RESOURCES, LLC

### CONTINENTAL PIT **BUTTE, MONTANA**

#### **EMISSIONS INVENTORY** WINTER 2023-2024

WINTER 2023-2024

		WINTER 2023-2024
Tons of Ore Mined		5,182,638
Tons of Waste Mined		5,807,196
Haul Truck Vehicle Miles (1)		252,432
Support Vehicle Miles Traveled (2)		238,621
Heavy Equipment Other Than Haul Trucks (5)		7,755
Number of Holes Drilled		6,967
Number of Blasts		60
Tons of Explosives		2,429
Tons of Ore Through Primary Crusher		5,182,638
Tons of Ore Through Secondary Crusher		5,182,638
Tons of Ore Through Fine Ore Bins		5,182,638
Tons of Ore to Concentrator (3)		5,182,638
Current Acreage of Disturbed Area		5,566
Current Exposed Area of Tailing Pond		1,106
Gallons of Diesel Consumed (6)		1,134,413
Gallons of Gasoline Consumed		27,116
Tons of Lime Unloaded @ Concentrator (7) Concentrator and Primary Crusher Water Treatmentment Plant	10,397.0 4,256.6	14,653.6
Tons Through Molybdenum Dryer (8)		2,802.6
Type of Chemical Dust Suppressant Used		Sodium Chloride
Tons of Chemical Dust Suppressant Used		0.0
Water Truck Hours (4)		303.0

(1) 18-6 wheel 240 ton haul trucks: 46,408 loads @  $\approx$  2.72 miles

(1) Highest vehicle miles traveled by haul trucks (VMT's) Dec. 17, 2023 -2,659 VMT's

(2) 68 vehicles - averaged 8.8 miles per gallon

(3) The daily average throughput for ore during the winter period of 2023-2024 was 42,832 tons per day

(3) The highest throughput day for ore during the winter period was December 10, 2023 - 54,209 tons of ore were treated in the mill

(4) MR's Water Truck: 52,000 gallons

(5) Loader @ 2 miles per day X 121 days = 242 VMT

(5) Grader @ 50 miles per day X 121 days = 6,050 VMT (5) Water Truck @ 5 miles per hour X 303 hours = 1515.00 VMT

(6) Average consumption per day of diesel during the winter period was 9,375.31 gallons

(7) Average tonnage unloaded per day of lime during the winter period was 121.10 tons

(8) The highest throughput day for the molybdenum dryer during the winter period was January 22, 2024 45.56 tons of molybdenum concentrate were dried.\* \*This excludes end of month inventory adjustments.

#### (9) Winter 2023-2024 includes: Nov. and Dec. 2023, and Jan. and Feb. 2024

# **MONTANA RESOURCES, LLC**

# SUMMARY REPORT

# MAXIMUM SEASONAL AND DAILY PRODUCTION RATES

Nov. - Dec. 2023 & Jan. - Feb. 2024

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

Emission Point (Production Units)	Max. Seasonal Prod. Rate	Actual Max. Prod. Rate	Variance
Haul Trucks (vmt) <sup>1</sup>	503,008.0	252,432.0	250,576.0
Diesel Exhaust <sup>2</sup> (gallons of diesel)	2,010,176.0	1,134,413.0	875,763.0
Lime Unloading (tons of lime)	27,738.5	14,653.6	13,084.9
Support Vehicles <sup>3</sup> (vmt)	353,331.4	246,376.0	106,955.4
Molybdenum Dryer (tons of molybdenum)	9,795.9	2,802.6	6,993.3
Primary Crusher Ore Dump (tons of ore)	6,840,821.9	5,182,638.0	1,658,183.9

## 2. Winter (Nov. - Feb.) Daily Production Limitations

Emission Point (Production Units)	Max. Daily Prod. Rate	Actual Max. Daily Rate	Variance
Haul Trucks (vmt) <sup>1</sup>	4,143.2	2,659.0	1,484.2
Diesel Exhaust <sup>2</sup> (gallons of diesel) <sup>4</sup>	16,613.0	9,375.3	7,237.7
Lime Unloading (tons of lime) <sup>4</sup>	231.2	121.1	110.1
Support Vehicles <sup>3</sup> (vmt) <sup>4</sup>	2,944.4	2,036.2	908.2
Molybdenum Dryer (tons of molybdenum)	81.6	45.6	36.0
Primary Crusher Ore Dump (tons of ore)	71,860.9	54,209.0	17,651.9

<sup>1</sup> VMT is Vehicle Miles Traveled

<sup>2</sup> Diesel Exhaust is based upon diesel consumption for Haul Trucks

<sup>3</sup> Support Vehicles plus Heavy Equipment Other Than Haul Trucks

<sup>4</sup> Diesel, lime, and support vmt are reported as Daily Averages for the 4 month period (121 days) instead of Actual Max.Daily Rate.