AIR QUALITY VOL 1
EMISSIONS INVENTORY

TWIN METALS MINNESOTA PROJECT
Environmental Review Support Document

Prepared for Twin Metals Minnesota, LLC
Prepared by

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REVISION RECORD

Revision	Date	Description	EDMS Download Date	Project Configuration Version
0A	11-20-2020	Submitted for Agency Review – TOC		

REVISION NARRATIVE

DISCLAIMER

This document is a working document. This document may change over time because of new information, or further analysis or deliberation.

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LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS

TMM	Twin Metals Minnesota, LLC

1.0 INTRODUCTION

The Twin Metals Minnesota, LLC (TMM) Project (Project) is focused on designing, permitting, constructing, and operating an underground copper, nickel, cobalt, platinum, palladium, gold, and silver mining project. Located approximately nine miles (14 kilometers [km]) southeast of Ely, Minnesota, and 11 miles (18 km) northeast of Babbitt, Minnesota, the Project targets valuable state, federal, and private minerals within the Maturi deposit, which is a part of the Duluth Complex geologic formation.

All potential Project infrastructure locations presented herein are considered preliminary and are undergoing further design and engineering evaluations which will dictate final design and locations. Further information about TMM and the Project is located at http://www.twin-metals.com/.

The purpose of this document is to provide necessary information for the environmental review and permitting process. TMM retained [insert Consultant name] (insert abbreviated Consultant name) to complete [insert text].

2.0 SUMMARY

This report will:

- inventory all emissions sources from the proposed action and alternative during the construction, operation, and closure / post-closure phases; and
- provide justification for the emission factors associated with all emission sources.

This emission inventory will be used to inform the modeling that occurs as part of the other volumes of the *Air Quality Data Package*.

Report will also reference relevant sections of the FSDD, SEAW, and / or federal documents to remind the reader there is a defined scope that is being followed.

3.0 EMISSION INVENTORY

This section describes Project emission sources and rationale for emission factor selection.

3.1 Construction Emissions

3.1.1 Underground Emissions

Drilling / Blasting

Vehicle Emissions

3.1.2 Surface Emissions

Drilling / Blasting

Material Handling

- Conveyor unloading
- Material transfer

3.2 Operation Emissions

This section could also use a process flow diagram detailing emissions sources.

3.2.1 Underground Emissions

Material Handling

- Crushing
- Conveyors
- Truck loading / unloading

Propane Combustion

Drilling / Blasting

Vehicle Emissions

3.2.2 Surface Emissions

Material Handling

- Conveyor unloading
- Material transfer

Vehicle Emissions

Grading / Dozer Operations

Wind Erosion

3.3 Closure / Post-Closure Emissions

Discuss difference in the emission inventory between operation and closure / post-closure phases.

3.4 Total Facility Project Emissions

- Calculated in lb / hr and ton / yr for
  - NO_x, SO_2, TSP, PM_{10}, $PM_{2.5}$, VOC, Lead, CO and any greenhouse gases.
- Discuss any differences in total facility project emissions between the proposed action and alternatives.

3.5 Engineering Controls and Best Management Practices

Discuss any engineering controls and fugitive dust management practices.

4.0 REFERENCES

TABLES

FIGURES

APPENDICES

APPENDIX [#A, B, C, D]

[APPENDIX TITLE]

APPENDIX [#A, B, C, D]

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[Insert page break for each additional appendix.]