



TRANSPORTATION RESOURCE REPORT

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
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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:

- Describe the proposed action and alternatives;
- Establish the area where baseline conditions of traffic need to be assessed;
- Define the methodology used to assess the baseline conditions;
- Describe the baseline conditions;
- Describe the methodology used to assess the impacts;
- Defining the area of effects of the impacts;
- Establish the indicators of effects to the baseline conditions;
- Describe the impacts of the proposed action and alternatives on the baseline conditions; and
- 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 PROPOSED ACTION AND ALTERNATIVES

3.1 Proposed Action

- Reference the TMM Project Description and Alternatives document and indicate the proposed action is defined within this document.

3.2 Alternatives to the Proposed Action

- Reference the TMM Project Description and Alternatives document and indicate the alternatives to the proposed action are defined within this document.

3.3 No Action Alternative

- Reference the TMM Project Description and Alternatives document and indicate the no action alternative is defined within this document.

4.0 REGULATORY FRAMEWORK

Establish regulatory framework that is applicable to traffic. This includes state, federal, or tribal federal statutes or regulations and NEPA / MEPA requirements. This should also include regulatory definitions and how they are used by the Project. Specifically this resource report should discuss:

- Bureau of Land Management (BLM), 2012. Travel and Transportation Management Handbook. BLM Handbook H-8342-1
- FSH 7709.59 - Road System Operations and Maintenance Handbook

Define traffic

- Annual average daily traffic

5.0 AFFECTED ENVIRONMENT

5.1 Area of Analysis

Areas of analysis for transportation will be determined by transportation routes used to access the proposed action and alternatives

5.2 Methods

Methods and data sources for defining the affected environment will be described in this section. Data sources may include the following:

- Discussion of exiting regional corridors, local roads / National Forest road.
- Traffic forecast.
 - Annual average daily traffic from MNDOT
- Review of regional transportation system using the Federal Highway Administrations Simplified Highway Capacity Calculation Method for the Highway Performance Monitoring System.

5.3 Existing Conditions

Using the methods and data sources defined in Section 5.2, existing conditions will be described within this section including the following:

- Description of the major routes that would be utilized.
 - Annual Average Daily Traffic
- Regional Corridors.
- Local Roads / National Forest Roads.
- Establish the current level of service (LOS) ratings for existing infrastructure.

6.0 IMPACT ASSESSMENT CRITERIA

6.1 Area of Analysis

The area of analysis for transportation would be determined by transportation routes used to access the proposed action.

6.2 Methodology and Evaluation Criteria

Describe rationale for how impacts will be assessed by the implementation of the proposed action or alternatives. The methodology should discuss how impact assessment were conducted on the potential effects to traffic.

6.3 Indicators

This section will discuss how indicators were selected and what the indicators are.

- Impacts to traffic conditions – level of service determinations.
- Impacts to maximum peak hour traffic.
- Impacts to the regional transportation system.
- Additional Infrastructure development and availability of transit.
- Impacts (if any) to the current level of service (LOS) ratings.

6.4 Timeline for Analysis

Timeline for analysis of the effects would be the construction and operations phase and some of the closure phase.

7.0 ENVIRONMENTAL CONSEQUENCES

Provide a high level summary of what is presented in the environmental effects. Section summarizes what environmental effects are and the effects of the proposed action and alternatives.

7.1 Discussion of Environmental Effects

Using the affected environment and the impact assessment an assessment of impacts to traffic will be conducted and described within this section.

The following items will be assessed and described for the proposed action, alternatives to the proposed action, and the no action alternative:

- Potential impacts to traffic conditions.
- Estimated maximum peak hour traffic.
- Impacts to Regional Transportation Systems.
- Additional Infrastructure Development and Availability of Transit.
- Impacts to the current level of service (LOS) ratings for existing infrastructure.

The analysis of impacts are characterized as follows:

- Timing.
- Extent.
- Regulatory oversight.

7.1.1 Proposed Action

Impacts associated with the proposed action will be described in this section.

7.1.2 Alternatives to the Proposed Action

Impacts associated with the alternatives to the proposed action will be described in this section.

This discussion will focus on differences in impacts between the alternatives and proposed action. Impacts that are the same between the proposed action and alternatives will be noted but not discussed in detail.

7.1.3 No Action Alternative

Impacts associated with the no action alternative will be described in this section.

8.0 AVOIDANCE, MINIMIZATION, MITIGATION, AND MONITORING MEASURES

Highlight environmental protection measures, best management practices, and mitigation plans that the proposed action and alternatives would reduce the potential for impacts from the Project. Information should be pulled from the TMM Project Description and Alternatives document.

8.1 Proposed Action

Avoidance, minimization, mitigation, and monitoring measures associated with the proposed action will be described in this section.

8.2 Alternatives to the Proposed Action

Avoidance, minimization, mitigation, and monitoring measures associated with the alternatives to the proposed action will be described in this section.

9.0 REFERENCES



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APPENDIX [#A, B, C, D]

[APPENDIX TITLE]



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APPENDIX [#A, B, C, D]

[APPENDIX TITLE]

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