



# **SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE VOL 3 ENVIRONMENTAL EFFECTS**

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## **TWIN METALS MINNESOTA PROJECT**

Environmental Review Support Document

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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**

- Provide a high level summary of what is presented within this report.
- Description of the changes that will occur for proposed action, alternative, and no action.
- Description of impacts by feature and phase as appropriate.
- Description of EJ impacts.
- Describe how this report volume relates to the other volumes.
  - Indicate regulatory framework and proposed action and alternatives are defined in other volumes of the *Socioeconomics and Environmental Justice Data Package*.
- 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 ENVIRONMENTAL CONSEQUENCES**

### **3.1 Impact Assessment Indicators and Methods**

#### **3.1.1 Socioeconomics**

- Describe the impact assessment indicators and methods at a high level using the other volumes of the *Socioeconomics and Environmental Justice Data Package* and indicate where additional details can be found within this document.

- Describe and show within figures the area of analysis. Describe at a high level using the other volumes of the *Socioeconomics and Environmental Justice Data Package* and indicate where additional details can be found within this document.

### **3.1.2 Environmental Justice**

- Describe the impact assessment indicators and methods at a high level using the other volumes of the *Socioeconomics and Environmental Justice Data Package* and indicate where additional details can be found within this document.
- Describe and show within figures the area of analysis. Describe at a high level using the other volumes of the *Socioeconomics and Environmental Justice Data Package* and indicate where additional details can be found within this document.

## **3.2 Impact Assessment**

### **3.2.1 Socioeconomics**

Utilizing the impact assessment methods and area of analysis summarized in Section 3.1.1, an assessment of direct and indirect socioeconomic impacts will be conducted and described within this section. The following items, in addition to the indicators summarized in Section 3.1.1, will be assessed and described for the proposed action, alternatives to the proposed action, and the no action alternative:

- Impact on local / regional population, employment, or earnings;
- Impact on public sector revenues, expenditures, and fiscal conditions of local governments;
- Impact on housing;
- Impact on public services and infrastructure;
- Impact on construction services; and
- Assessment of effects on business and public around Birch Lake.

#### **Proposed Action**

Direct and indirect impacts associated with the proposed action will be described in this section.

#### **Alternatives to the Proposed Action**

Direct and indirect impacts associated with the alternatives will be discussed 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.

### **No Action Alternative**

Direct and indirect impacts associated with the no action alternative will be described in this section.

## **3.2.2 Environmental Justice**

Utilizing the impact assessment methods and area of analysis summarized in Section 3.1.2, an assessment of direct and indirect environmental justice impacts will be conducted and described within this section. The following items, in addition to the indicators summarized in Section 3.1.2, will be assessed and described for the proposed action, alternatives to the proposed action, and the no action alternative:

- Impact on population groups, including minority and low-income populations, during construction, operations, and reclamation / closure;
- Evaluation of the following:
  - Disproportionately burdened with adverse human health or environmental effects;
  - Deprived of beneficial effects, such as increased per capita income, that the general population experiences; and
  - Disproportionately burdened with an increased risk or rate of exposure to an adverse environmental hazard.

### **Proposed Action**

Direct and indirect impacts associated with the proposed action will be described in this section.

### **Alternatives to the Proposed Action**

Direct and indirect impacts associated with the alternatives will be discussed 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.

### **No Action Alternative**

Direct and indirect impacts associated with the no action alternative will be described in this section.

## **4.0 AVOIDANCE, MINIMIZATION, MITIGATION, AND MONITORING MEASURES**

### **4.1 Socioeconomics**

#### **4.1.1 Proposed Action**

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

#### **4.1.2 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.

### **4.2 Environmental Justice**

#### **4.2.1 Proposed Action**

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

#### **4.2.2 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.

## **5.0 REFERENCES**



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## **TABLES**





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## **FIGURES**



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## **APPENDICES**



**APPENDIX [#A, B, C, D]**

**[APPENDIX TITLE]**



## **APPENDIX [#A, B, C, D]**

### **[APPENDIX TITLE]**

*[Insert page break for each additional appendix.]*