

**Baffinland Iron Mines Corporation
Mary River Project**

Type A Water License Application

Attachment 8: Document Summary - Explosives



Document Number	Date:	Reviewed By:
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1. Introduction

1.1 Description and Overview

The Mary River Project is located on north Baffin Island, in the Nunavut Territory, in the Canadian arctic. One aspect of the project that is required is obtaining a Nunavut Water Board (NWB) Type A water license to operate. In order to do this, a water License application needs to be completed and submitted to the Board so that they can exercise their powers under the *Nunavut Waters Nunavut Surface Rights Tribunal Act* (NWNSTRA or Act) and the *Northwest Territories Water Regulations* (NTWR or Regulations). As part of the application process there are certain engineering deliverables that need to be submitted. This document gives an outline of the engineering deliverable documents that fall under the heading Explosives.

1.2 Scope

The reports which form part of Explosive Management section summary include:

- Explosives Management Plan;
- ANE Bulk Permanent Plant Baffinland Iron Mines: Mary River Project General Scope;
- ANE Bulk Temporary Plant Baffinland Iron Mines: Mary River Project General Scope; and
- Tread 4216 Bulk Master Scope Proposal.

2. Document List

Document Title	Document Number	Description/Key Findings
Explosives Management Plan	E337697-PM407-50-126-0001	<p>This Plan discusses explosives management and in particular ammonium nitrate pursuant to directives from the Nunavut Impact Review Board and Nunavut Water Board, in terms of water quality, aquatic ecosystems, and fish, as well as health and safety. For construction and operation, explosives will be contracted to a licensed contractor who will have a detailed operations manual for transportation, storage, and handling of explosives.</p> <p>Ammonium nitrate and emulsion material (ANFO) are toxic to aquatic organisms and fish. In order to minimize the risk of ammonia losses to water bodies, Ammonium nitrate will be stored on land. Similarly, ANFO will be stored at the emulsion plant where spills can be contained easily. Transportation of explosives will be conducted in such a manner as to prevent or minimize harm to humans or impacts on the environment, and will comply with the Explosives Act and Regulations of Nunavut.</p> <p>Also, the Plan includes an overview of explosives requirement, mitigation measures, accident prevention and malfunctions, and identifies the roles and responsibilities and the monitoring and reporting requirements.</p>
ANE Bulk Permanent Plant Baffinland Iron Mines: Mary River Project General Scope	E337697-PM407-50-128-0001	<p>This document specifies the Project definition and the Project scope for the bulk Ammonium Nitrate Emulsion (ANE) permanent plant for the Baffinland Iron Mine (BIM) site. The document identifies the objectives and constraints of the Project, as well as the plant capacity, capability, availability, and the products requirements. The scope of the Project is thoroughly defined, with all aspects of the plant life addressed: EHS requirements, timescale/limitations, design life, plant flexibility/expandability, resources and timing, known risks and threats, documentation and project critical success factors.</p>

Document Title	Document Number	Description/Key Findings
ANE Bulk Temporary Plant Baffinland Iron Mines: Mary River Project General Scope	E337697-PM407-50-128-0002	<p>The intent of this Project is to design, construct and commission two modular/temporary bulk explosive manufacturing facilities for Baffinland Iron Mines (BIM). The two temporary plants will be used to supply bulk or packaged emulsion over a two year period for BIM to prepare the infrastructure and access roads for the mine.</p> <p>The document identifies the objectives and constraints of the Project, as well as the plant capacity, capability, availability, and the products requirements. The scope of the Project is thoroughly defined, with all aspects of the plant life addressed: SHE requirements, timescale/limitations, design life, plant flexibility/expandability, resources and timing, known risks and threats, documentation and project critical success factors.</p>
Tread 4216 Bulk Master Scope Proposal	E337697-PM407-50-128-0003	<p>This document provides a brief high level summary of the parameters, constraints, and details of the Project's proposed mobile mixing unit (MMU). The MMU will be used on site to mix ANFO from ammonium nitrate and fuel oil.</p>