AGNICO EAGLE

MELIADINE GOLD PROJECT

Borrow Pits and Quarries Management Plan

MARCH 2017
VERSION 5
6513-MPS-04

ᓇᐃᓈᖅᓯᒪᔪᖅ

ᐊᓃᑯᒃᑯᑦ ᑕᓯᕐᔪᐊᕐᒥᑦ ᒨᓗᒧᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᓕᕆᕙᓪᓕᐊᔪᑦ (ᐱᓕᕆᐊᖅ), 25 ᑭᓛᒥᑕᒥᒃ ᐅᐊᖕᓇᖓᓂᑦ ᐅᖓᓯᒃᑎᑭᔪᖅ ᑲᖏᖅᖠᓂᕐᒥᑦ, ᐊᒪᓗ 80 ᑭᓛᒥᑕᒥᒃ ᓂᒋᖅᐸᓯᐊᓂᑦ ᐱᖓᖕᓇᖅᐸᓯᐊᓂᑦ ᐅᖓᓯᒃᑎᑭᔪᖅ ᐃᒡᓗᓕᒫᕐᔪᖕᒥᑦ ᑭᕙᓪᓕᕐᒥᑦ ᓄᓇᕗᒻᒥᑦ. ᐅᔭᕋᖕᓂᐊᕐᕕᖕᒧᑦ ᐸᕐᓇᐅᑕᐅᔪᖅ ᐅᒃᑯᐃᖓᔪᒥᒃ ᐊᒪᓗ ᓄᓇᐅᑉ ᐃᓗᐊᓂᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᖃᕐᓂᐊᖅᑐᖅ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᑎᕆᒐᓂᐊᖅ-ᒥᑦ ᒨᓗᓂᒃ ᐱᓂᕐᒧᑦ, ᒪᕐᑮᖕᓂᒃ ᐅᒃᑯᐃᖓᔫᖕᓂᒃ ᓄᓇᒥᑦ (ᑎᕆᒐᓂᐊᖅ Pit 1 ᐊᒪᓗ ᑎᕆᒐᓂᐊᖅ Pit 2) ᐊᒪᓗ ᐊᑕᐅᓯᖅ ᓄᓇᐅᑉ ᐃᓗᐊᓂᑦ ᐅᔭᕋᖕᓂᐊᕐᓂᖅ.

ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓄᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᒥᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᑦ ᓂᕈᐊᖅᑕᐅᓯᒪᔪᑦ, ᐊᐅᓛᖅᑎᑦᑎᓃᑦ, ᐊᒪᓗ ᐅᒃᑯᐊᖅᓯᓂᕐᒧᑦ ᖃᓄᖅᑑᕈᑏᑦ ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓄᑦ ᐱᓕᕆᐊᖑᔪᒪᔪᒥᑦ. ᐃᓗᑦᑐᖅᓯᒪᔪᓄᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᓇᓂᕐᒧᑦ ᐊᒪᓗ ᐱᓕᕆᐊᕆᖃᑦᑕᕐᓂᕐᒧᑦ ᐊᑉᖁᑎ ᑲᖏᖅᖠᓂᕐᒥᑦ, ᐃᑎᕕᐊᓂᑦ ᓄᖅᑲᖓᕝᕕᖕᒥᑦ, ᐊᒪᓗ ᐱᖁᑎᓄᑦ ᑐᙵᕕᐅᓂᐊᖅᑐᒥᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᓕᐊᖑᔪᒪᔫᑉ ᐃᓂᖓᓂᑦ. ᐊᑐᖅᑕᐅᓂᐊᕐᒥᔪᖅ ᐱᓕᕆᐊᖑᓂᖓᓄᑦ ᐅᑭᐅᓗᒃᑖᖅ ᐊᑉᖁᑎᒧᑦ (AWAR) ᐊᑯᓐᓂᖏᓐᓂᑦ ᑲᖏᖅᖠᓂᐅᑉ ᐊᒪᓗ ᑕᓯᕐᔪᐊᕐᒥᑦ ᐃᓂᐅᔫᑉ.

ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᑦ ᐃᓄᐃᑦ ᓇᖕᒥᓂᕆᔭᖓᓂᑦ ᓄᓇᒥᑦ ᐊᑐᖅᑐᐊᕐᓂᕐᒧᑦ ᐃᓗᑦᑐᖅᑎᕆᓂᕐᒧᓪᓗ ᐳᒥᑦᖃᓇᐊᖃᖅᑐᑦ ᐱᔪᖕᓇᖅᑎᑕᐅᔾᔪᑎᒥᒃ ᑭᕙᓪᓕᖅ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑯᖏᓐᓄᑦ ᑐᓂᔭᐅᖃᑦᑕᖅᑐᖅ. ᓄᓇᒥᒃ ᐃᓗᑦᑐᖅᑎᕆᓂᕐᒧᑦ ᐳᒥᑦ ᓄᓇᓕᖕᒌᑐᖅ ᐊᐅᓚᑕᐅᖃᑦᑕᖅᑐᑦ ᓄᓇᕗᒻᒥ ᒐᕙᒪᒃᑯᖏᓐᓄᑦ ᓄᓇᓕᖕᒧᑦ ᐊᒪᓗ ᒐᕙᒪᒃᑯᓐᓄᑦ ᐱᓴᑦᑎᕋᐃᓴᒃᑯᖏᓐᓄᑦ ᐱᔾᔪᔾᔭᐸᓗᑎᒃ ᑲᖏᖅᖠᓂᕐᒥᑦ ᕼᐋᓪᓚᒃᑯᓐᓂᑦ. ᐊᓯᖏᑦ ᑕᒪᒃᑯᓄᙵᒫᖓᔪᓄᑦ ᒪᓕᒐᖄᑦ ᐅᖃᐅᓯᐅᖕᒥᔪᑦ ᐸᕐᓇᐅᑎᒥᑦ.

ᑖᑉᑯᐊ ᐱᐅᓛᒃᑯᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᓂᕈᐊᖅᑕᐅᓯᒪᔪᓄᑦ, ᐊᐅᓛᖅᑎᑦᑎᓂᕐᓄᑦ, ᐊᒪᓗ ᐅᒃᑯᐊᖅᓯᓂᕐᒧᑦ ᖃᓄᖅᑑᕈᑎᓄᑦ ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓄᑦ ᐱᓕᕆᐊᖑᔪᒪᔪᒧᑦ:

- ᒥᒃᓵᒋᐊᕐᓗᒍ ᓄᓇ ᐃᓂᒋᓂᐊᖅᑕᖓ ᐃᓗᑦᑐᖅᑎᖅᑕᐅᓂᐊᖅᑐᐃᑦ, ᐊᔪᕐᓇᙱᑦᑕᕌᖓᑦ;
- ᒥᒃᓵᒋᐊᕐᓗᒍ ᐃᓗᑦᑐᖅᑎᕆᓃᑦ, ᐊᔪᕐᓇᙱᑦᑕᕌᖓᑦ;
- ᐱᓕᕆᐊᕆᖃᑦᑕᕐᓗᒍ ᐃᓗᑦᑐᖅᓯᒪᔫᑉ ᓇᑎᖓ ᖁᑦᑎᖕᓂᖅᓴᐅᕌᕐᔪᓪᓗᒍ ᐃᓂᐅᔪᒥᑦ ᑰᒃᑐᖅᑕᖃᖁᐸᓗᒍ, ᐃᓗᑦᑐᖅᓯᒪᔪᓂᒃ ᑕᓯᙳᖅᑎᑦᑎᑕᐃᓕᒪᓂᕐᒧᑦ, ᐊᒪᓗ ᖁᐊᖑᐃᓐᓇᐅᔭᖅᑐᓂᒃ ᓄᖑᓴᖅᑎᑦᑎᑕᐃᓕᒪᓂᕐᒧᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓂᑦ;
- ᓱᕈᖅᑎᑦᑎᑕᐃᓕᑎᑦᑎᓂᕐᒧᑦ ᐊᒪᓗ ᐊᓗᐊᓄᐊᖅᑐᖃᖅᑕᐃᓕᒪᑎᑦᑎᓂᕐᒧᑦ ᑕᒪᒃᑯᓄᙵᒫᖓᔪᑎᒍᑦ ᐊᐅᓚᑦᑎᓂᐅᔪᓂᒃ ᐊᑐᕐᓗᓂ;
- ᐊᑐᕐᓗᓂ ARD/ML-ᒥᒃ ᐆᒃᑐᕋᐃᓂᕐᒥᒃ ᐊᒪᓗ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᕆᔭᖓᓂᒃ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓗᓂ ᐃᑲᔪᐃᓂᕐᒧᑦ ᐊᖏᓗᐊᖏᒋᐊᖅᑎᑦᑎᓂᐅᔪᓂᒃ;
- ᒥᐊᓂᕆᓗᒋᑦ ᐃᑦᑕᕐᓂᑕᖅᕕᐅᔪᑦ;

- ᓇᓗᓇᐃᕐᓗᓂ ᐅᑉᓗᖅᑕᖃᙱᑦᑐᓂᒃ ᐃᓂᒋᔭᐅᔪᓂᒃ ᖃᓂᑕᖏᓐᓂᒡᓘᓃᑦ ᐃᓗᑦᑐᖅᓯᒪᓂᐊᖅᑐᐃᑦ ᐃᓗᑦᑐᖅᑎᓇᖅᑳᖅᑎᓐᓇᒋᑦ (ᑕᑯᓗᒍ ᓄᓇᐅᑉ ᐊᕙᑎᖓᓂᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᒪᓗ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ ᑐᓂᐅᑕᐅᔪᖅ ᐃᓚᒋᔭᐅᑉᓗᓂ ᑭᖑᓪᓕᖅᐹᖅ ᐊᕙᑎᒥᒃ ᐊᒃᑐᖅᓯᓂᕐᒧᑦ ᑎᑎᖅᑲᒥᑦ (ᐊᒡᓃᑯᒃᑯᑦ 2014);
- ᐱᓕᕆᐊᖃᕐᓗᓂ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑕ ᖃᓄᐃᓐᓂᕆᔭᖓᓂᒃ ᐳᔪᖃᑖᓕᓇᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᒃᑯᑦ/ᐱᑕᖃᓗᐊᖅᑎᑦᑎᑦᑕᐃᓕᒪᓂᖅ; ᐊᒪᓗ
- ᐊᑐᕐᓗᓂ ᐅᑎᖅᑎᑦᑎᕙᓪᓕᐊᓂᖃᖅᑐᒥᒃ ᐅᒃᑯᐊᖅᓯᑎᓪᓗᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓂᒃ ᐊᑐᖅᑕᐅᔭᕆᐊᖃᕈᓐᓃᕐᐸᑕ.

ᐃᓗᑦᑐᖅᑎᖅᑕᐅᓂᐊᖅᑐᑦ ᓂᕈᐊᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑉᖁᓯᐅᕐᓂᕐᒧᑦ (AWAR) ᑕᑯᒃᓴᐅᔪᖃᙱᑦᑐᖅ ᐋᓯᑦᑕᐅᕈᓐᓇᖅᑐᓂᒃ ᑰᒃᑐᖃᕐᓂᐊᕐᓂᖓᓄᑦ. ᑕᐅᑐᒡᓗᒍ ᖃᐅᔨᓴᐃᓃᑦ ᐊᑐᖅᑕᐅᔪᓂᒃ ᐊᒪᓗ ᐆᒃᑐᕋᐃᓂᒃᑲᓐᓂᖃᕐᓂᐊᖅᑐᑦ ᓴᓇᔭᐅᑎᓪᓗᒍ ᓇᓗᓇᐃᖅᓯᓂᕐᒧᑦ ᐱᐅᓛᒃᑯᑦ ᒪᓂᒪᔪᓂᒃ ᓴᓇᕙᓪᓕᐊᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᕐᓂᐊᖅᑐᓂᒃ.

ᐃᓗᑦᑐᖅᑎᓇᑎᓪᓗᒋᑦ ᐊᑐᕐᓂᐊᖅᑐᑦ “ᐃᑰᑕᐃᓂᖅ, ᖄᖅᑎᓇᓂᖅ, ᐅᓯᓕᖅᑐᐃᓂᖅ, ᐊᒡᔭᖅᑐᐃᓂᖅ, ᐊᒪᓗ ᑯᕕᖅᑕᐃᓂᖅ ᑕᒪᒃᑯᓂᙵᑦ”, ᑭᖑᓪᓕᖅᐹᒃᑯᑦ ᐃᓕᐅᖃᐃᓗᑎᒃ ᐅᔭᖅᑲᐃᑦ ᐃᓗᑦᑐᖅᑎᓇᓂᕐᒥᙶᖅᑐᑦ ᐃᓂᖏᓐᓄᐊᖅᑕᐅᓗᑎᒃ ᐳᐊᓇᑎᓕᖕᓂᒃ ᐊᑐᕐᓗᑎᒃ. ᐃᓚᖏᑦ ᐅᔭᖅᑲᐃᑦ ᓯᖃᓪᓕᖅᑎᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᐊᖏᓕᓃᒃᑐᑦ ᐊᑕᐅᓯᕐᒧᐊᖅᑎᕐᓗᒋᑦ. ᐊᔪᕐᓇᙱᑐᐊᕌᖓᑦ, ᐃᓗᑦᑐᖅᑎᑕᐅᔪᓂᙶᖅᑐᑦ ᓯᐊᒻᒪᒃᑎᖅᑕᐅᖃᑦᑕᕐᓂᐊᖅᑐᑦ ᐳᐊᓇᑎᓕᖕᓄᑦ. ᐃᑰᑕᐃᓂᖅ ᐊᒪᓗ ᖄᖅᑎᓇᓂᕐᓗ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᒃᓴᐅᔪᑦ ᓯᐊᒪᒃᑎᖅᑕᐅᓂᖅ ᐊᔪᕌᖓᑦ.

ᐊᖏᓗᐊᖏᒋᐊᖅᑎᑦᑎᓂᕐᒨᖕᒪᔪᑦ ᐃᑦᑕᕐᓂᑕᖃᖅᑐᓂᒃ ᐱᕝᕕᐅᖃᑦᑕᖅᑐᓂᒃ ᐊᒪᓗ ᑕᐃᑉᓱᒪᓂᑕᕐᓄᑦ ᐃᓂᒋᔭᐅᔪᑦ, ᐅᕐᓂᒃᑕᐅᔪᒪᖃᑦᑕᖅᑐᑦ, ᐊᒪᓗ ᐊᑐᖅᑕᐅᕙᒃᑐᑦ ᑭᒡᓕᓕᐅᖅᓯᒪᓂᖃᖅᑐᑦ ᐃᖃᓗᒑᕐᔫᑉ ᓄᓇᖓ ᒥᕐᖑᐃᖅᓯᕐᕕᖕᒧᑦ ᓂᕐᔪᑎᓄᓪᓗ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᑦ ᐊᒪᓗ ᐅᖃᐅᓯᐅᑉᓗᑎᒃ ᐸᕐᓇᐅᑎᒥᑦ. ᐳᔪᖃᑖᖅ, ᓂᐱᖃᕐᓂᖅ, ᐊᒪᓗ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᕆᔭᖓᓄᑦ ᖃᐅᔨᓴᐊᖃᑦᑕᕐᓂᖅ ᐃᓗᑦᑐᖅᑎᖅᑕᐅᓯᒪᔪᓂᑦ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᑦ ᓴᓇᔭᐅᑎᓪᓗᒍ, ᐊᐅᓛᖅᑎᓪᓗᒍ, ᐊᒪᓗ ᐅᒃᑯᐊᖅᐸᓪᓕᐊᑎᓪᓗᒍ ᐱᓕᕆᐊᖅ.

ᖃᓄᐃᓕᔪᖃᖁᙱᒧᑦ, ᐅᔭᖅᑲᐃᑦ ᐃᓕᐅᖃᖅᑕᐅᓂᐊᖅᑐᑦ 10 ᒦᑕᓂᒃ ᐅᖓᓯᒃᑎᒋᓗᒍ ᓯᓈᓂᑦ ᐃᓗᑦᑐᖅᓯᒪᔫᑉ ᐊᒪᓗ ᖁᓛᓃᓪᓗᒍ ᖁᑦᑎᒃᓯᓯᒪᔭᐃᑦ ᓴᓂᕋᖓᓂᑦ 2 ᒦᑕᓂᒃ ᖁᑦᑎᖕᓂᖅᑐᐊᕌᖓᑕ ᓯᑕᓕᓂᒃ Hᐋᓐᑕᓂᒃ ᓯᑭᑑᓂᒡᓘᓃᑦ ᐱᓂᕐᓗᐊᕿᕕᐅᑐᐃᓐᓇᕆᐊᖃᖅᑐᓂᒃ ᑲᑕᒡᓗᑎᒃ ᓯᓂᐊᑕ ᐅᖓᑖᓄᑦ.

ᐅᑎᖅᑎᑎᓇᕙᓪᓕᐊᖏᓐᓇᐅᓴᕐᓂᖃᕐᓂᐊᖅᑐᖅ ᐱᔪᓐᓇᖅᓯᑐᐊᕌᖓᑕ. ᒥᐊᓂᕆᓂᕐᒧᑦ ᓯᕗᓂᒃᓴᖅ ᐃᓱᒪᒋᔭᐅᑉᓗᓂ ᖃᓄᐃᖓᓂᐊᕐᓂᖓᓄᑦ ᐱᓕᕆᐊᖑᖅᑲᐅᑕᐅᓚᐅᖅᑐᖅ, ᐃᓗᑦᑐᖅᑎᖅᑕᐅᔪᒪᔪᑦ ᒥᑭᑦᑐᒥᒃ ᐅᑎᖅᑎᑎᓇᓂᖃᕋᔭᖅᑐᑦ. ᐅᑎᖅᑎᑕᐅᔪᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᑦ ᐊᖏᙱᑦᑐᒥᒃ ᓯᑐᓂᖃᕐᓂᐊᖅᑐᑦ ᓴᓂᕋᕐᒥᑦ ᐊᒪᓗ ᑰᒃᑐᖅᑕᖅᓗᓂ, ᑕᐃᒪᓐᓇ ᐋᕿᒃᓯᔪᓐᓇᑐᐊᕌᖓᑦ. ᐊᐅᓚᔪᓐᓇᖅᑐᑦ ᐅᔭᖅᑲᐃᑦ ᐃᓕᔭᐅᓂᐊᖅᑐᑦ ᐃᓗᑦᑐᖅᓯᒪᔫᑉ ᓇᑎᐊᓄᑦ, ᐊᒪᓗ ᐃᓗᑦᑐᖅᓯᒪᔪᒧᑦ ᐃᑎᖅᑕᕐᕕᑦ ᐃᑎᖅᑕᐅᔪᓐᓇᐃᓪᓕᑎᑕᐅᓗᑎᒃ ᐅᔭᕋᓪᔪᓂᒃ ᐃᓪᓕᓇᔭᐅᓗᑎᒃ.

EXECUTIVE SUMMARY

Agnico Eagle Mines Limited (Agnico Eagle) is developing the Meliadine Gold Project (Project), located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. The mine plan proposes open pit and underground mining methods for the development of the Tiriganiaq gold deposit, with two open pits (Tiriganiaq Pit 1 and Tiriganiaq Pit 2) and one underground mine.

This Borrow Pits and Quarries Management Plan describes selection, operations, and closure strategies for the borrow pits and quarries at the proposed Project. Borrow pit and quarry materials will be used for the construction and maintenance of the bypass road in Rankin Inlet, the Itivia laydown, and the infrastructure pad at the proposed mine site. It will also be used in the maintenance of the All-weather Access Road (AWAR) between Rankin Inlet and the Meliadine site.

Borrow pits and quarries on Inuit Owned Lands require a commercial lease and quarry permit issued by the Kivalliq Inuit Association. Quarry permits on municipal land are administered by the Government of Nunavut Department of Community and Government Services on behalf of the Hamlet of Rankin Inlet. Other relevant regulations are mentioned in the Plan.

The following best management practices will be used in the selection, operation and closure of borrow pits and quarries for the proposed Project:

- minimize the surface area of quarries and borrow pits, where possible;
- minimize quarry and borrow pit cuts, where possible;
- maintain the floor of the quarries and borrow pits slightly above the elevation of the surrounding area to promote drainage, to avoid creating quarry lakes, and to prevent permafrost degradation in borrow pits;
- prevent erosion and sedimentation through appropriate control measures;
- carry out ARD/ML testing and water quality monitoring in support of mitigation measures;
- protect archeological resources;
- verify that there are no raptor nests in or near quarries and borrow pits before beginning quarrying operations (see the Terrestrial Environment Management and Monitoring Plan submitted as part of the Final Environmental Impact Statement [Agnico Eagle 2014]);
- maintain air quality through dust control/suppression; and
- use progressive reclamation in closing quarries and borrow pits when no longer needed.

The quarries and borrow pits selected for building the AWAR showed no potential to generate acid drainage. Visual examinations of materials and additional testing will be conducted during construction to confirm that the best available building materials are being used.

Quarry operations will use a “drill, blast, load, haul, dump” sequence, the final step being placement of quarried rock using a dozer. Some rock could be crushed to produce aggregate of various sizes.

Wherever possible, borrow pit material will be ripped using a dozer. Standard drill and blast procedures may be used in instances where ripping is not possible.

Mitigation measures pertaining to archaeological resources and adjacent historical sites, attractions, and facilities within boundaries of Iqalugaajuup Nunanga Territorial Park, and wildlife were developed and are described in the Plan. Dust, noise, and water quality monitoring related to the use of the quarries and borrow pits will be carried out during the construction, operation, and closure phases of the Project.

As a surety measure, rock berms will be placed 10 metres from the edge of a quarry and above any exposed high walls that are more than 2 metres in height where there is a risk of an all-terrain vehicle or snowmobile accidentally going over the edge.

Progressive reclamation will be carried out as much as practicable. With prudent initial design, the proposed quarries/borrow pits should require little reclamation. Reclaimed quarries and borrow pits will have gently sloping walls and positive drainage, wherever possible. Loose wall rock will be pulled to the quarry floor, and quarry entrances will be blocked with large boulders.

TABLE OF CONTENTS

FIGURES AND TABLES

DOCUMENT CONTROL

Version	Date	Section	Page	Revision	Author
1	December 2012			First draft of the Borrow Pits and Quarries Management Plan	John Witteman, Env. Consultant, Agnico Eagle
2	March 2013	1.2.2	3-4	More detail on Discovery access road	John Witteman, Env. Consultant, Agnico Eagle
3	April 2014			FEIS submission	
4	April 2015			Update document for the Class A Water Licence Application	John Witteman, Env. Consultant, Agnico Eagle
5	March 2017			2016 Comprehensive Review following completion of AWAR Construction	Manon Turmel, Agnico Eagle Mines Ltd.
		1.2.1	2	Addition of Table 1	

ACRONYMS

INAC	Indigenous and Northern Affairs Canada
Agnico Eagle	Agnico Eagle Mines Limited
ARD/ML	Acid Rock Drainage/Metal Leaching
AWAR	All-weather Access Road
CGS	Department of Community and Government Services, GN
CH	Department of Culture and Heritage, GN
CLEY	Department of Culture, Language, Elders and Youth, GN
IOL	Inuit Owned Lands
KIA	Kivalliq Inuit Association
NIRB	Nunavut Impact Review Board
NWB	Nunavut Water Board
Park	Iqaluqaarjuup Nunanga Territorial Park
Project	Meliadine Gold Project

UNITS

km	kilometre
m	metres
m^3	cubic metre

SECTION 1 • INTRODUCTION

1.1 Overview

Agnico Eagle Mines Limited (Agnico Eagle) is developing the Meliadine Gold Project (Project), located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. Situated on the western shore of Hudson Bay, the proposed Project site is located on a peninsula between the east, south, and west basins of Meliadine Lake (63°1’23.8’’ N, 92°13’6.42"W), on Inuit Owned Lands (IOL).

The mine plan proposes open pit and underground mining methods for the development of the Tiriganiaq gold deposit, with two open pits (Tiriganiaq Pit 1 and Tiriganiaq Pit 2) and one underground mine. The proposed mine will produce approximately 12.1 million tonnes (Mt) of ore, 31.8 Mt of waste rock, 7.4 Mt of overburden waste, and 12.1 Mt of tailings. There are four phases to the development of Tiriganiaq: just over 4 years construction (Q4 Year -5 to Year -1), 8 years mine operation (Year 1 to Year 8), 3 years closure (Year 9 to Year 11), and post-closure (Year 11 forwards).

The Borrow Pits and Quarries Management Plan was prepared in accordance with the Guidelines issued by the Nunavut Impact Review Board and was subsequently updated to meet the needs of the Type A Water Licence application to the Nunavut Water Board (NWB).

Borrow pits and quarries are defined by the type of granular material extracted and the method of extraction. Quarries consist of rock material that is typically extracted by digging, cutting, or blasting and yields large stones that may then need to be crushed (INAC 2009). Borrows pits consist of fine grained fill materials, such as sand or clay, that are normally used at a nearby site (INAC 2009).

1.2 Project Components

1.2.1 All-weather Access Road

The construction of the Phase 1 AWAR was completed in 2013.

The borrow pits and quarries selected for the road construction and maintenance, as shown on Figure 1-1 and Table 1.1, are immediately next to the road route thereby minimizing the haul distances for road maintenance. Of the borrow pits and quarries selected, only R19 (closed and rehabilitated), Site D (Municipal Borrow Pit) and the proposed Itivia Quarry (being reviewed by NIRB)are located on municipal land; the remainder are located on IOL administered by the Kivalliq Inuit Association (KIA).

Other considerations in the selection of the borrow pits and quarries include: the volume of material available, proximity to receiving waters, acid rock drainage/metal leaching (ARD/ML) potential, archaeological resources in the immediate vicinity, surface area to be disturbed, and wildlife and

territorial park concerns (Golder 2011). The goal in selecting the quarries/borrow pits is to avoid or minimize, wherever possible, potential negative effects to the environment.

Table 1.1. Approved borrow pits and quarries

Issued By	Quarry permit	Quarries/borrow pits approved	Active (Y/N)
KIA	KVCA11Q01	B5	Y
		B5A	Y
		B6	Y
		R2	N
		R5	N
		B10	N
		B11A	N
		B12	N
		B13	N
		B15	N
		B15A	N
		R19	N
KIA	KVCA07Q08	Tiriganiaq	N
		Westmeg	Y
		Meliadine Esker	Y
GN	01-600-16	Site D	Y
GN	Ongoing with GN	Fuel farm Quarry	N
GN	Ongoing with NIRB	Itivia Quarry	N

NO. DESSIN
DRAWING NO.

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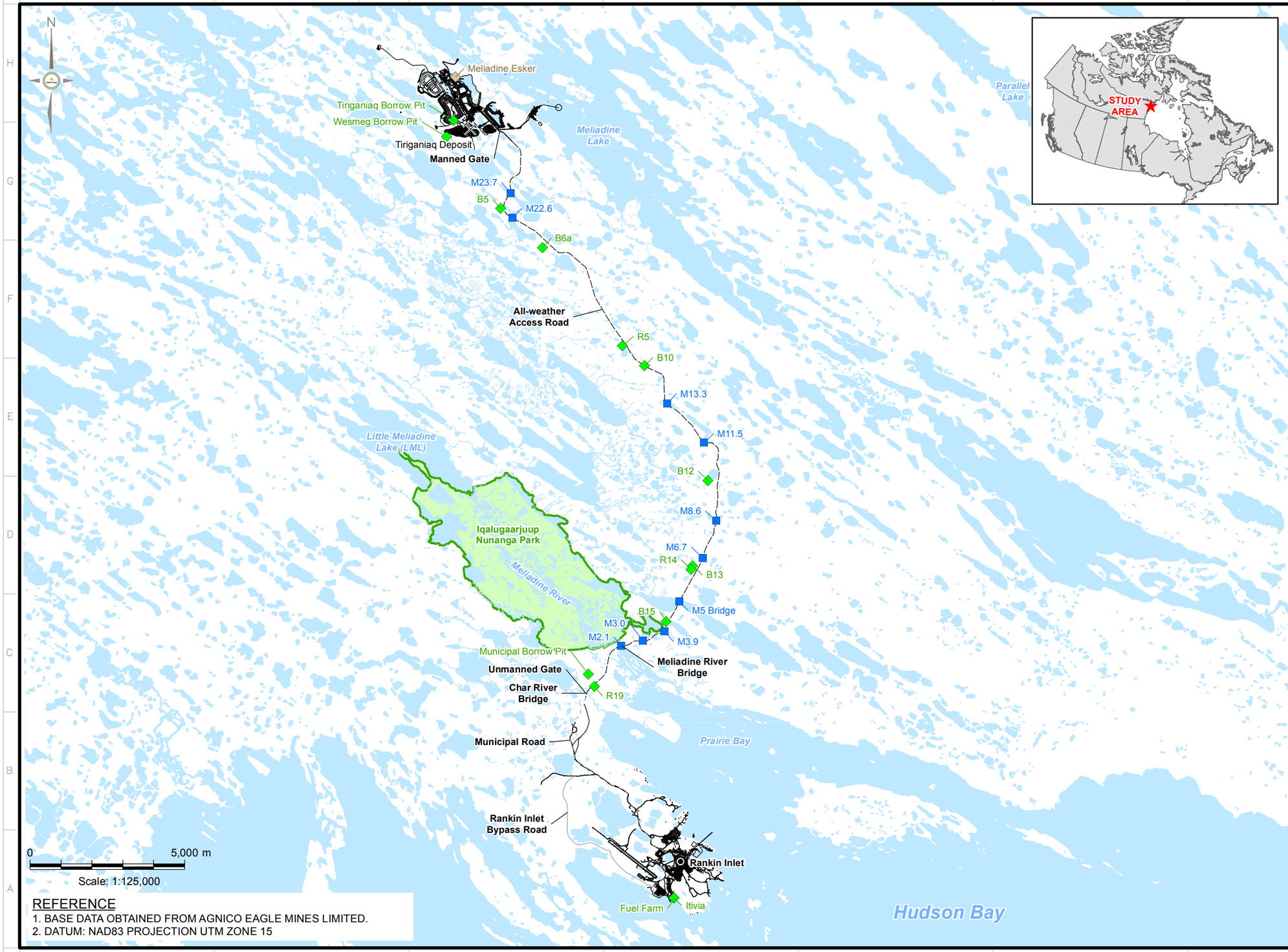

REFERENCE

1. BASE DATA OBTAINED FROM AGNICO EAGLE MINES LIMITED.
2. DATUM: NAD83 PROJECTION UTM ZONE 15

LEGEND

- PROPOSED MINE SITE
- QUARRY/BORROW PIT LOCATION
- ESKER LOCATION
- WATERCOURSE CROSSING
- ALL-WEATHER ACCESS ROAD (AWAR)
- ROAD - NEW
- ROAD - EXISTING
- Road - New Bypass
- WATERCOURSE
- WATERBODY
- TERRITORIAL PARK

AGNICO EAGLE

Golder Associates

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–	–
–	–
TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

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A	DRAFT	13-03-2017	MH
REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	VM	DATE	20-10-2016
VÉRIFIÉ PAR CHECKED BY	–		–
APPROUVÉ PAR APPROVED BY	–		–
No. PROJET PROJECT NO.	1656645		
DATE	–		

TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION

FIGURE 1-1 LOCATION OF BORROW PITS AND QUARRIES FOR THE MELIADINE GOLD MINE

ÉCHELLE/ SCALE	1:125,000	FICHIER FILE	.DWG
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		FEUILLE/SHT	1 / 1

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\\golder.gds\GAL\burnaby\CAD-GIS\Client\Agnico_Eagle_Mines_Ltd\Meliadine_Gold_Project\99_PROJECTS\1656645_MP_Updates\02_PRODUCTION\3300\MXD\3350\Report\1656645_Figure_1-1_Location_Borrow_Pits_Quarries.mxd

1.2.2 Hamlet Bypass Road and Itivia Laydown

A bypass road is proposed around the airstrip to Itivia harbour, as shown on Figure 1-1. This will allow traffic from Itivia harbour to bypass the hamlet in delivering dry goods and fuel from Itivia to the proposed mine site. It will also be used in moving air freight and mine personnel between the airport and the proposed mine site.

By building the bypass road, use of municipal roads by Agnico Eagle will be kept to a minimum. The proposed bypass road will be approximately 5.9 km long, and 6.5 metres wide. Road building materials will be sourced from Site D (Municipal Borrow Pit), the Itivia fuel farm area, and the Itivia Quarry once required approvals are received from regulatory bodies. The proposed laydown yard at Itivia harbour will cover 14 hectares. Material will be sourced from rock blasted in the fuel farm area and from the Itivia Quarry once required approvals are received from regulatory bodies.

1.2.3 Traditional All-terrain Vehicle and Snowmobile Trails

The proposed building of roads and the mine infrastructure at Itivia will impact some all-terrain vehicle and snowmobile trails. Where these trails cross a road, a ramp will be constructed to ease road crossing, and signage will be installed to alert road users of the crossing. Similarly, there will be a sign alerting all-terrain vehicles and snowmobiles that they are approaching a road. Maintenance of the roads would see no snow placed on these trails.

In accommodating existing trails rather than building new ones, the area impacted will be minimized. The ramps leading up to the road will be small and require little road building material.

The present ski-doo trail at Itivia harbour to the sea ice will be relocated to the east of the fenced laydown yard. Individuals will be able to readily access the sea ice using the re-located snowmobile trail.

1.2.4 On-Site Infrastructure Pad

The proposed major mine infrastructure, as shown on Figure 1-2, will be located on a pad having an area of approximately 70,000 square metres. The site preparation of the pad involved the spreading of waste rock and borrow pit materials to an average thickness of approximately 3 m over the pad area for a total volume of approximately 200,000 m^3. The material to construct the proposed infrastructure pad came from ramp development waste rock and from borrow pits Tiriganiaq Esker, Meliadine Esker, B5, and B6 (see Figure 1-1 for their location).

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DRAWING NO.

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INFRASTRUCTURE PAD
FRESH WATER INTAKE CAUSEWAY
CHANNEL2
TEMPORARY OVERBURDEN STOCKPILE
SEWAGE TREATMENT PLANT
WATER TREATMENT PLANT
WTP INTAKE CAUSEWAY
LANDFARM
TREATED SEWAGE DISCHARGE
MELIADINE LAKE
ORE STOCKPILE 3
ORE STOCKPILE 1
ORE STOCKPILE 2
CP2
CP1
CHANNEL1
CULVERT3
BERM2
TAILINGS
TAILINGS STORAGE FACILITY (TSF)
CULVERT1
CP3
WASTE ROCK COVER
CULVERT2
D-CP3
CHANNEL3
LANDFILL
BERM1
CHANNEL8
CHANNEL7
CHANNEL4
WASTE ROCK& OVERBURDEN STORAGE FACILITY 2 (WRSF2)
WASTE ROCK & OVERBURDEN STORAGE FACILITY 1 (WRSF1)
D-CP1
CULVERT4
CULVERT5
CHANNEL6
D-CP6
CP6 JETTY
CP6
WASTE ROCK & OVERBURDEN STORAGE FACILITY 3 (WRSF3)
D-CP4
CP4
CP5 JETTY
CP5
D-CP5
CULVERT6
CHANNEL5
TIRIGANIAQ PIT 1 (TIRI_1000_01)
BERM3
TIRIGANIAQ PIT 2 (TIRI_1000_02)
0 500 m
Scale: 1: 12 500

LEGEND
- CATCHMENT BOUNDARY
- SERVICE ROAD
- HAUL ROAD
- NON CONTACT WATERBODY
- CONTACT WATERBODY
- WATER COLLECTION POND
- DRAINED POND AREA
- OPEN PIT
- OVERBURDEN
- WASTE ROCK
- ORE
- TAILINGS
- INDUSTRIAL SITE PAD
- WATER FLOW DIRECTION
- STREAM

AGNICO EAGLE
TETRA TECH EBA

TITRE / TITLE	# DWG
DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS	

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	HX	DATE	14–04–2015
VÉRIFIÉ PAR CHECKED BY	NG		14–04–2015
APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT
FIGURE 1–2 MINE INFRASTRUCTURE PAD

ISSUED FOR PERMITTING
AGNICO EAGLE DATE : 14–04–2015

ÉCHELLE/ SCALE	FICHIER FILE		
1:12500	.DWG		
No. DESSIN/ DRAWING NO.		REVISION	FEUILLE/SHT
6500–680–210–200–012		A	01 / 01

AE–CART–ANSI B

Q:\Edmonton\Engineering\E141\Projects\E14103209_Meladine_Mgmt_Plans\EBA Drawings\Water MP\CAD_Dec_2014\Figure for Quarry MP.dwg

1.3 Quarry and Borrow Pit Extraction Methods

Quarry operations will use explosives. The design, size, and shape of the blasts are planned with safety being the foremost consideration. A predetermined pattern of drill holes are drilled to a depth not exceeding the overall depth of the quarry and filled with explosives. Prior to a blast, all personnel and equipment are moved to a safe distance from the blast area. The blast fragments (i.e., the blasted rock) is then loaded into haul or dump trucks using either a loader or an hydraulic shovel. The truck drives to the end of the road (or other construction area) where the rock is dumped. The rock is then pushed into place using a dozer. This sequence is called a “drill, blast, load, haul, dump” sequence.

Some rock can be moved to a crusher to produce aggregate of various sizes. The crusher is located as far from water as possible and where it is best shielded from the prevailing wind, preferably behind a high wall in a quarry so as to reduce the quantity of wind-blown dust and to have as much dust as possible fall within the boundaries of the quarry.

Wherever possible, borrow pit material will be ripped using a dozer. This loosens the material and allows it to be picked up using a loader or an hydraulic shovel. Standard drill and blast procedures may be used in instances where ripping is not possible. The sequence of steps under this circumstance follows that for rock quarries.

1.4 Related Documents

The following documents provided input to the Borrow Pits and Quarries Management Plan submitted as part of the Water Licence Application:

- Environmental Management and Protection Plan;
- Explosives Management Plan;
- Preliminary Closure and Reclamation Plan;
- Roads Management Plan, including the Dust Management Plan; and
- Water Management Plan.

The Borrow Pits and Quarries Management Plan is part of the Environmental Management and Protection Plan for the Project. The Air Quality Monitoring Plan and the Occupational Health and Safety Plan submitted as part of the Final Environmental Impact Statement also provided input to this plan.

1.5 Regulatory Setting

The proposed Project is located on IOL, with some components located within the municipality of Rankin Inlet. This includes all borrow pits and quarries exclusively used in building and maintaining the AWAR. As well, construction of the proposed bypass road and the fuel farm and laydown at Itivia will require granular material. Although federal requirements do not apply, the *Northern Land Use Guidelines, Pits and Quarries* prepared by Indian Affairs and Northern Development Canada (INAC

2009; now called Indigenous and Northern Affairs Canada) provides useful guidance in establishing and operating borrow pits and quarries in an Arctic setting.

In building the AWAR, borrow pits and rock quarries on IOL required a commercial lease and quarry permit issued by the KIA. Quarry permits from the KIA include terms and conditions specifying how operations are to be conducted.

Quarry permits on municipal land are administered by the Government of Nunavut Department of Community and Government Services (CGS) on behalf of the hamlet of Rankin Inlet. When the hamlet council passes a resolution approving the quarry and/or borrow pit, the permit is issued by CGS. If Agnico Eagle purchases materials from existing quarries and borrow pits in the hamlet for the construction of the bypass road and the Itivia laydown, permits would not be required in this instance.

The Department of Culture and Heritage (CH) administers the archaeology permitting process for Nunavut. Archaeological surveys are undertaken in advance of borrow pit and quarry selection to ensure all archaeological sites are identified and avoided if possible. If the sites cannot be avoided, they are mitigated with the approval of CH.

The Nunavut *Wildlife Act and Regulations* will apply as raptors nesting close to the AWAR and quarries/borrow pits may be disturbed, or raptors may nest in the quarries and/or borrow pits upon the completion of their use.

Land animals may also be disturbed by the quarrying activities. The quarries and possibly the borrow pits in some instances will require the use of explosives. The activities will have to comply with the *Explosive Use Act and Regulations*, and the *Mine Health and Safety Act and Regulations.* The latter is administered by the Worker's Safety and Compensation Commission.

Use of rock and granular material from the quarries and borrow pits could introduce waste to water, and will require a water licence from the NWB under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and associated water regulations*.* The federal *Fisheries Act* will apply if runoff water containing deleterious substances flow from the quarries/borrow pits into fish bearing waters.

Use of explosives at quarries could lead to fish destruction or to harmful alteration, disruption or destruction of fish habitat. The federal *Fisheries Act* will apply if this was to occur.

SECTION 2 • QUARRIES AND BORROW PITS MITIGATION MEASURES

The ranking of mitigation options is as follows:

- **Avoidance** – using an alternate site or technology to avoid the adverse effect all together. This is the most desirable;
- **Minimization** – taking actions to minimize and/or contain effects to the maximum extent possible during engineering design, pre-development, construction, operations, and closure;
- **Rectification** – taking actions to rehabilitate or restore the affected environment after the fact; and
- **Compensation** – this is used as a last resort to offset adverse environmental effects. This is the least desirable.

Best management practices will employ the following general mitigation measures for the quarries and borrow pits:

- minimize the surface area of quarries and borrow pits where possible;
- minimize rock and borrow pit cuts where possible;
- maintain the floor of the quarries and borrow pits slightly above the elevation of the surrounding area to promote drainage, to avoid creating quarry lakes, and to prevent permafrost degradation in borrow pits;
- prevent erosion and sedimentation through appropriate control measures;
- carry out ARD/ML testing and water quality monitoring in support of mitigation measures;
- protect archeological resources;
- verify that there are no raptor nests in or near quarries and borrow pits before beginning quarrying operations;
- maintain air, water, and sediment quality through dust control/suppression; and
- use progressive reclamation in closing quarries and borrow pits no longer needed.

2.1 Acid Rock Drainage and Metal Leaching

Initial testing of potential quarry and borrow pit materials was completed in 2010 (Golder 2010) and in 2016 and 2017 for the Itivia Quarry and Meliadine Esker. Static methods were used to assess the chemical composition of the potential building material, its potential to generate acid rock drainage (ARD), and its potential to leach metals into the receiving environment upon exposure to ambient conditions.

Sampling and testing prior to use of any quarry or borrow pit significantly reduces the risk of ARD/ML. The quarries and borrow pits selected for road building and maintenance materials

showed no potential to generate acid drainage due to the high buffering capacity and low sulphide content in the bedrock and glacial-fluvial deposits. In early testing, some potential quarries/borrow pits were rejected due to potential metal leaching (Golder 2010). Avoiding the use of undesirable or questionable road building materials ranks this mitigation measure as highly desirable.

Additional measures will be used while the quarries and borrow pits are operational. Visual examinations of the quarry material for sulphur species and additional testing for ARD/ML will be conducted during construction of the roads and pads. As recommended by Price (2009), for every 100,000 tonnes of material removed from a borrow pit or rock quarry, eight samples will be collected for static testing and analysis (ARD/ML). This will include samples of wall rock (Agnico Eagle 2012). If ARD/ML materials are found, these materials will not be used for construction and the area will be covered with a minimum two metre thick layer of non-acid generating borrow material to encapsulate it below the active layer.

The additional testing will confirm that the best available materials are being used in constructing the infrastructure pad, the bypass road, and Itivia fuel farm and laydown.

The same procedures will be used should any new quarry and/or borrow pit be developed.

2.2 Management of Water Originating from Quarries and Borrow Pits

While ARD/ML testing is a measure to avoid using questionable road and pad building materials, water quality monitoring of seeps from quarries and borrow pits provides information on possible impacts on the environment (e.g., water and sediment quality) should the water reach any nearby waterbodies. A buffer of at least 31 m of undisturbed land will be maintained between quarries/borrow pits and waterbodies when practicable. If not possible, Agnico Eagle will seek approval from the Board. Best management practices will prevent direct drainage of the quarry to watercourses. However, any significant seeps originating from the borrow pits or rock quarries likely to reach receiving waters will be sampled and analysed for a full suite of water quality parameters. Any problematic water will be directed away from waterbodies, or held if possible. If necessary, silt curtains will be used to control suspended sediments in water seeping from the quarries/borrow pits.

Although erosion is not expected to originate from water flow from the quarries/borrow pits, any evidence of erosion will be repaired by placing rip-rap over the affected area, and measures will be taken to reduce the velocity of the water with, for example, silt curtains and/or small check dams.

2.3 Archaeological Resources

The quarries and borrow pits were selected to avoid archaeological resources. Archaeological surveys were completed along the AWAR alignment, its buffer zone, over the footprint of selected quarries and borrow pits, and the immediate area. The archaeological site identified at borrow pit B11A will be protected. This borrow area is large in extent allowing Agnico Eagle to develop the

borrow pit without disturbing this site. There were sites identified at borrow pit B12 and quarry R14 that could not realistically be avoided and these were mitigated under a permit issued by CLEY[1] to Agnico Eagle.

If any potential archaeological site is identified during the operation of any quarry/borrow pit, work will stop, a professional archaeologist will be consulted, and CH will be informed of the discovery.

All equipment will remain within the boundaries of the quarries/borrow pits to ensure any nearby archaeological site is not inadvertently damaged.

Before any new quarry/borrow pit is selected, it will be surveyed for archaeological resources by a professional archaeologist registered in Nunavut. Sites with archaeological resources present will not be selected if there is a similar site devoid of archaeological resources nearby.

2.4 Iqaluqaarjuup Nunanga Territorial Park

Quarries and borrow pits will not be developed in or near the Iqaluqaarjuup Nunanga Territorial Park (the Park). Rock quarry R19 and borrow pit B15 (Figure 1-1) are the closest to the Park. Both are more than 1 km from the Park boundary and quarry R19 is closed and rehabilitated. All personnel working in the quarries/borrow pits and on the AWAR will not enter the Park during work hours. Noise from construction vehicles will be minimized as part of best management practices by ensuring noise control equipment installed on the vehicles are maintained and operating according to specifications.

Noise related to quarry/borrow pit operations will be of short duration and should be restricted primarily to the predevelopment and construction phases of the Project. While noise can be expected to be heard in a 5 km radius, the majority of the noise should be within 1 km of the activities.

The prevailing wind direction at Rankin Inlet is from the north-northwest. This prevailing wind direction is consistent for all months of the year and would tend to blow dust from the road and quarry/borrow pits away from the Park. All wind directions that could carry dust towards the Park occur on average 25 to 35 % of the time. A dust monitoring program between the road and the Park is being carried out.

2.5 Dust Control

Dust will be generated as part of quarry/borrow pit operations and will be restricted primarily to the predevelopment at the proposed mine, and the construction of the proposed bypass road and Itivia laydown. To limit the creation of dust, any crusher will be located where it is best shielded from the

[1] In a recent Nunavut government re-organization Culture, Language, Elders & Youth was renamed Culture and Heritage.

prevailing wind, preferably behind a high wall in the quarry. That way, the quantity of wind-blown dust should be reduced, and most of the dust should fall within the bounds of the quarry.

Transport of material from the quarries/borrow pits will be subject to speed limit restrictions to help reduce dust.

Dust monitoring is occurring along the AWAR and between the AWAR and the Park. Further dust monitoring will occur in the vicinity of active borrow pits.

2.6 Ground Ice and Permafrost Protection

The borrow pits[2] sites selected are from glaciofluvial deposits and weathered bedrock deposits located in well-drained areas. All have positive topography rising above the local setting. These types of granular deposits were selected because they are largely free of ground ice, thereby minimizing possible thaw settlement and melting ground ice, which can result in erosion, slumping of side slopes, and an altered landscape that extends beyond the borrow pit. Should this happen, the area will be monitored and, if necessary, stabilized by covering the affected land with approximately 2 m of rock or other granular material. This reclamation effort would allow the permafrost to move up into the material covering the area and stop any remaining ground ice from melting. Inspections of quarries/borrow pits will continue after their closure at the end of Project predevelopment and construction.

Any significant seeps originating from the borrow pits as a result of ground ice, permafrost melting, or from precipitation events will be monitored if the water is likely to reach receiving waters[3].

[2] Quarry sites are expected to be free of ground ice and should not release any water should the permafrost melt.

[3] Shallow, standing water will not be collected as it poses little risk to the receiving environment.

SECTION 3 • PROGRESSIVE RECLAMATION STRATEGY

The Project's reclamation objective is to avoid or minimize negative environmental effects wherever possible, practice progressive reclamation, and, upon closure, return negatively impacted areas to productive and lasting use by wildlife and humans. Reclaimed areas will be chemically and physically stable, and should ultimately support the same functions as surrounding undisturbed land. Because of the proximity to Rankin Inlet, particular attention will be paid to ensuring that reclaimed areas are safe for future traditional use.

A practical, cost-effective approach will be central to the closure and reclamation of the borrow pits and quarries. The intent is to pursue progressive reclamation to return areas to natural conditions and avoid long-term care and maintenance requirements. Most quarries and borrow pits will no longer be needed following the completion of construction[4]. Using best management practices, borrow pits and quarries will be reclaimed by stabilizing disturbed land surfaces, which will promote natural re-vegetation.

The reclaimed quarries and borrow pits will have gently sloping walls and positive drainage wherever possible. With prudent initial design, the quarries/borrow pits should require little reclamation. Loose wall rock will be pulled to the floor of the quarry, and the quarry entrance will be blocked with large boulders. For the interim until the quarries and borrow pits are reclaimed, rock berms will be placed 10 m from the edge of the quarry/borrow pits and above any exposed high walls that are more than 2 m in height where there is a risk of an all-terrain vehicle or snowmobile accidentally going over the edge.

Should acid-generating bedrock be exposed in borrow pit/quarry, these areas will be covered with a minimum of a 2 m thick layer of non-acid generating soil or rock. Water will be directed away from the area.

[4] A small number will remain active to store and/or supply crushed rock and/or granular material for ongoing road maintenance.

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