

AGNICO EAGLE

MELIADINE GOLD PROJECT

Type A Water Licence
Main Application Document

APRIL 2015
VERSION 1

ᓇᐃᓇᖅᓯᒪᔪᖅ

ᒪᓕᒐᓱᐃᓂᖅ

Type A ᐃᒪᖏᒍ ᓕᐃᓴᓄᓯᒍ ᑐᐱᓯᕆᐅᑎ (ᑐᐱᓯᕆᐅᑎ) ᐱᓕᓱᐊᖓᔪᓕᐅᖅᑐᖅ ᑎᑭᐅᑎᓂᒍ ᐱᓴᓱᐊᖅᑲᖅᑎᑕᐅᔪᑦ ᓄᓇᕗᒻᒥ ᓄᓇᑦᓂᖏᒍ ᐊᖏᕐᖅᑲᑎᑦᑐᒍ (NLCA), *ᓄᓇᕗᒻᒥ ᐃᒪᖏᓂ ᐊᒪᓗ ᓄᓇᕐᔪ ᖃᐅᖏᓐᓄᓂ ᐱᔪᖏᓇᐅᑎᖅᑲᖅᑐᓂ ᐱᖁᔪᖅ* (NWNSRTA), ᐊᒪᓗ ᓄᓇᕗᒻᒥ ᐃᒪᐃᓂ ᒥᖅᓴᓂ ᒪᓕᑐᐃᓂ (NWR), ᑭᓯᐊᓂ ᐃᓯᒪᒋᔭᑐᑦᑕᐅᖅ ᒪᓕᖅᑎᓐᓂᓱᖏᑦᑕ ᓄᓇᕗᒻᒥ ᐃᒪᖏᓂ ᑲᑎᒪᔨᓂ (NWB) *ᒪᓕᖅᑕᐅᔪᓴᖅᖅ 4-ᒥᑦ – ᐱᐊᓂᖅᓯᓂᖅ ᐊᒪᓗ ᑐᓂᐅᑎᒋᓂᖅ ᐃᒪᖏᑦᒧᑦ ᓕᐃᓴᓄᓯᒍ ᑐᐱᓯᕆᐅᑎ ᓄᑖᒥᒃ ᓕᐃᓴᓄᓯᒥᒃ ᐱᓂᓕᐊᓪᓚᑐᓂᒧᑦ ᐊᐅᖏᓐᓄᑦᓂᒧᑦ ᐊᒪᓗ ᐃᓕᑎᑦᑐᐅᔪᖅ ᑐᐱᓯᕆᐅᓴᖏᓐᓄᒍ ᒪᓕᖅᑕᐅᓴᖏᓐᓄᑦ ᐅᓴᖃᖅᑐᐅᓕᐅᖅᑐᑦᒧᑦ ᐊᒪᓗ ᔪᖅᑲᓕᑎᒋᓂᖏᑦ* (SIG-MM3 ᒪᓕᖅᑕᐅᓴᖏᓐᓄᓕᐅᑐᒃ). ᐊᖏᕐᖅᑲᑎᑦᑐᒍᑕᐅᔪᓕᐅᖅᑐᖅ ᖃᐅᐅᓴᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ ᐱᓴᓱᐊᖅᖃᓂᖅᓯᒪᔪᓂᒃᑯᓂ NWB-ᔪᑦ ᒪᓕᖅᑕᐅᔪᓴᖅᑎᑦᑐᓂᒃᑯᓂ ᐊᒪᓗ SIG-MM3-ᒧᑦ ᒪᓕᖅᑕᐅᓴᓂᓕᐅᑐᒃᑯᑦ ᐊᒪᓗ ᐱᓴᖅᓴᓕᐊᖓᔪᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ ᓄᓇᕗᒻᒥ ᐃᓕᑎᑦᑐᐅᔪᖅ ᐊᐅᖓᔪᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ (NIRB) ᐃᓕᑎᓴᐅᔪᖅ 5-ᒥᑦ ᖃᑎᖅᑭᑐᖃᖅᑎᑦᓗᑎᑦ ᑭᖑᓪᓕᖃᖅᓯᖅ ᐊᐅᒋᑎᒃ ᐊᐅᑐᖃᓴᖏᓐᓄᒍ ᑎᑎᖃᖅᑎᒃ.

ᑕᓴᕐᕋᐊᖏᑦ ᔪᓗᒍᒧᑦ ᐱᓕᓱᐊᖅ (ᐱᓕᓱᐊᖅ) ᒪᓕᑎᐊᖅᑲᖅᑐᖅ ᓄᓇᒥᒃ ᐊᒪᓗ ᐱᕆᐅᔨᓂᒃ ᐊᐅᓕᕆᓂᖏᓪᔪᖓᓕᒫᓂ ᓴᖅᑭᑕᐅᔨᖅ NLCA-ᒧᑦ ᐊᒪᓗ ᐊᓴᖏᑦᓂᒍ ᑲᓇᑕᐅᔨ ᒪᓕᖅᑎᖏᑦᓂᒍ ᐊᒪᓗ ᒪᓕᖅᓴᕈᖏᑦᓂᒍ. ᐊᖏᓂᔪᓐᓇᖏᑦ ᐱᓴᓱᐊᖅᑲᖅᑎᑕᐅᔨᑦ ᒪᓕᖅᑐᓂᑦ NWNSRTA-ᔪᑦ ᐊᒪᓗ NWR-ᔪᑦ ᑐᓂᓴᖏᓪᓕᒍ Type A ᐃᒪᖏᓂᒍ ᓕᐃᓴᓄᓯᒥᒃ ᑐᐱᓯᕆᐅᑎᒥᒃ ᐅᓴᖃᖅᑐᐅᑲᖅᑐᑕᓚᖏᓪᓕᒍ ᐊᒪᓗ ᓴᖅᑭᑕᐅᓚᖏᓪᓕᒍ (ᑐᐱᓯᕆᐅᑎ) NWB-ᔪᓐᓇᓂᑦ ᐊᑐᖏᐊᖏᓪᓗᓂ ᐃᒪᖏᑎᒥᒃ ᐊᒪᓗ ᐊᐱᑕᔪᓚᐅᖏᓪᓕᒍ ᐱᓕᕆᓂᖏᓪᔪᖓᓕᒫᓂ ᐱᓕᕆᓂᖏᓪᓗᓂᒍ ᐱᓕᓱᐊᖅᑲᖅᑎᑕᐅᔪᓗ ᐱᓕᓱᐊᖅ.

ᑐᐱᓯᕆᐅᑎᒥᑦ ᐃᓕᐅᔨᖅᑐᖅ NWB-ᔪᓐᓇᓂᑦ ᑐᐱᓯᕆᐅᑎ, ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᒃ ᑎᑎᖃᖅᑲᖅ, ᐊᒪᓗ ᐃᓕᑎᓴᐅᔨᖅ ᐃᑲᔪᐃᔨᖅ ᑎᑎᖃᖅᑲᐃᓂ ᑐᐱᓯᕆᐅᑎᒥᒃ ᑐᓂᓴᖏᓪᓕᒍ ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᒃ ᐃᑲᔪᐃᔨᖅᑐᖅᑐᑦ, ᐊᑐᑕᔪᓚᐅᖏᓪᓕᒫᓂᓕᒫᓂ, ᐊᒪᓗ ᐊᑐᑐᔨᖅ ᖃᓄᐃᓚᐅᖏᓪᓕᒫᓂᖃᖅᑎᑦᑎᓐᓂᑦᑕ ᐊᒪᓗ ᔪᖅᑲᓕᑎᒋᓂᖃᖅᑎᑦᑎᓐᓂᑦᑕ, ᐃᓕᐅᔨᓪᓗᑎᒃ ᑐᐱᓯᕆᐅᑎᓕᕆᔨᒃᑯᑦ ᐱᔨᑎᖃᖅᑎᑦᑐᑦ ᐊᒪᓗ ᖃᓄᐃᓚᖓᓂᖅᑲᖅᑐᑦᑕᓚᖏᓪᓕᒫᓂ, ᐊᓇᐅᐅᓂᖓᓂ, ᐊᐅᓪᓚᕆᓂᖓᓂ, ᐊᒪᓗ ᐅᑎᖅᑎᑎᓇᓐᓂᑕᐊᓂᓪᓕᒫᓂᖓᓂ ᐱᓕᓱᐊᖅ.

ᐱᓕᓱᐊᓕᒫᑦ ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᖅ ᐃᑲᔪᐃᓂᓪᓕᒫᑦ ᑐᐱᓯᕆᐅᑎᒥᒃ ᑐᓂᓯᓂᓪᓕᖃᖅᑐᖅ ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᒃ ᑎᑎᖃᖅᑲᖅ. ᑕᑯᓂᒃ ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᒥᑦ ᐃᓕᐅᔨᖅ ᒪᓕᑐᓚᐅᖏᓪᓕᒫᑦ ᐱᖁᔪᖅᑲᖅᑎᑦᑐᖅ, ᐊᐅᑎᑎᖅ ᐋᖁᕐᑲᖅᑎᓂᖅ, ᐱᓕᓱᐊᖅ ᖃᓄᐃᓚᐅᖏᓪᓕᒫᓂᖅ, ᐃᓕᑎᒥᒃ ᐊᐅᓕᕆᓂᖏᓪᓕᒫᑦ, ᐊᒪᓗ ᓇᐃᓇᖅᓯᒪᔪᖅ ᑐᐱᓯᕆᐅᑎᓪᓗᐊᕕᒃ ᐃᑲᔪᐃᓂᓪᓕᒫᓂᖅ ᐊᐅᖓᔪᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ.

ᐊᖏᓂᔪᓐᓇᖏᑦ ᑕᓴᕐᕋᐊᖅᑲᖅᑎᑦᑐᓂᒃᑯᓂ ᐃᒪᖏᑎᒥᒃ ᐃᓕᑎᓴᐅᔨᖅᑐᖅᑐᑦ ᐃᓕᓴᐅᔪᓂᒃᑯᑦ ᐃᓕᓴᐅᔨᖅᑐᖅᑐᑦ ᐃᓕᓴᐅᔨᖅᑐᖅᑐᑦ ᑎᑎᖃᖅᑲᖅᑐᑦ. ᑕᒪᓐᓇᐅ ᐃᓕᓴᐅᔪᓂᒃᑯᑦ ᐃᓕᓴᐅᔨᖅᑐᖅᑐᑦ ᒪᓕᑐᓚᐅᖏᓪᓕᒫᑦ ᐱᖁᔪᖅᑲᖅᑎᑦᑐᓂᒃᑯᑦ, ᐊᐅᑎᑎᖅᑲᖅᑎᑦᑐᓂᒃᑯᑦ ᐊᑲᐅᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ, ᐱᓕᓱᐊᖅ ᖃᓄᐃᓚᐅᖏᓪᓕᒫᓂᖅ, ᐃᓕᑎᒥᒃ ᐊᐅᓕᕆᓂᖏᓪᓕᒫᑦ, ᐊᒪᓗ ᓇᐃᓇᖅᓯᒪᔪᖅ ᐃᓕᓴᐅᔪᓂᒃᑯᑦ ᐃᓕᐅᔨᖅᑐᖅᑐᑦ ᐊᐅᖓᔪᖅᑕᐅᓕᐅᖅᑐᖅᑐᑦ ᐊᐅᓕᕆᓂᖏᓪᓕᒫᑦ <ᕿᓇᐃᓂᖅ.

ᐊᖏᓂᔪᓐᓇᖏᑦ ᑕᓴᕐᕋᐊᖅᑲᖅᑎᑦᑐᓂᒃᑯᑦ ᔪᓗᒍᒧᑦ ᐅᓴᖃᖅᑐᐅᑲᖅᑐᑕᓚᖏᓪᓕᒫᑦᑐᑦ (ᐱᓕᓱᐊᖅ), 25 ᑭᓪᓕᑕᒥᒃ ᐅᐊᖅᓇᖅᑐᓂ ᐅᖅᑎᓂᕆᐊᖅᑐᖅ ᑲᖏᕐᖅᓴᓂᒥᑦ, ᐊᒪᓗ 80 ᑭᓪᓕᑕᒥᒃ ᓂᒋᖅᑭᓂᐊᓂ ᐱᖅᓯᖅᑭᓂᐊᓂ ᐅᖅᑎᓂᕆᐊᖅᑐᖅ ᐃᓗᓕᓕᒫᖅᑎᒥᑦ ᑭᓚᓕᒫᑦ ᓄᓇᕗᒻᒥ. ᐱᖅᓯᖅᑭᖅᑭᓂᐊᓂ ᑕᓴᐅᓴᕐᕋᐊᑦ ᓂᓴᖅᓱᒃᑐᑐᖅ, ᐱᓕᓱᐊᑦ ᐃᓂᒋᓕᖅᓱᒃᑐᑐᖅ ᑲᓇᖅᑭᖅᓱᒃᑐᑐᖅ ᖃᓄᖅᑭᖅᓱᒃᑐᑐᖅ, ᓂᒋᐊᓂ, ᐊᒪᓗ ᐱᖅᓯᖅᑭᖅᑭᓂᐊᓂ ᑕᓴᐅᓴᕐᕋᐊᑦ (63°1’23.8” N, 92°13’6.42"W) ᐃᓄᐃᑦ ᐅᖅᑎᒥᓂᖅᓯᓂᒥᑦ.

ᐱᓕᕆᐊᖅ ᑕᓯᖏᐊᖏᑦᑐᖅ Wilson ᐃᒪᖏᑲ ᐊᐅᓪᓚᑎᓂᖅᓱᓂᓪ (ᓄᓇᕗᒻᒥᓪ ᐃᒪᖏᓄᓪ ᒪᓕᑎᓴᕆᐅᕐᓪ ᑎᑎᖅᑲᖅ 4-ᒥᓪ).

ᐱᓕᕆᐊᖅ ᑕᓪᓕᒪᓂᑲ ᖃᐅᔨᒪᕗᖅᓴᓂᑲ ᔫᓗᖏᖅᑐᖅ : ᑎᕆᑎᓂᐊᖅ, F Zone, Pump, Wesmeg, ᐊᒪᓗ Discovery-ᒥᓪ. ᐊᖏᓂᔪᑦ ᐱᓕᕆᐊᕆᓚᓪᓕᐊᔨᒪᖃᓪᓚᑦ ᔫᓗᖏᖅᑐᓪᓚᑦ ᐊᕕᖅᑐᓂᖏᓐᓇᓪ ᐱᖏᔪᑎᓂᖅᓴᓪᓚᑦ ᐱᓕᐊᖏᖅᑎᓂᖅᓴᖃᖅᑐᓪᓚᑦ ᐊᒪᓗ ᐱᓚᓪᓕᐊᓂᖏᖅᑎᓂᖅᓴᖃᖅᑐᓪᓚᑦ ᐱᑎᐊᖏᖅᑎᖅ ᖃᓂᖅᓴᐃᓂᖅ ᑲᔨᓯᑎᓪᓗᔪ ᐊᓐᑎᑲᑎᐊᖅᑐᓪᓚᑦ ᖃᑦᑕᔨᒪᕗᖅᓴᓪᓚᑦ ᐅᖏᖅᑲᖅᑲᖅᑐᖅ. ᐱᓚᓪᓕᐊᓂᐅᖅᑲᐅᑕᐅᔨᖅ (Phase 1) ᑕᐅᑐᒪᖅᑲᖅᑐᖅ ᐱᓚᓪᓕᐊᑎᓂᖅᓴᖃᖅ ᑎᓕᒪᓂᐊᖏᖅᑎᑦ ᔫᓗᑕᓪᓕᖅ ᐊᑐᖏᓗᓂ ᐊᑐᖅᑕᐅᓚᓚᑐᖅᖏᖅᑎᖅ ᓄᓇᑦ ᐅᑦᔪᐃᓐᒪᔨᔪᖅᔪᑦ ᐊᒪᓗ ᓄᓇᐅᓴ ᐃᓗᐊᓂᓂ. Phase 2 ᓇᓗᓇᐃᖅᑕᐅᓂᐊᖅᑐᖅ ᐊᒪᓗ ᐱᔨᓇᖅᑎᑕᐅᓗᓂ Phase 1-ᖓᑎᓪᓗᔪ, ᐊᓯᖏᑦ ᔫᓗᑕᓵᓪ ᓇᓗᓇᐃᖅᑕᐅᑎᐊᑲᓂᖅᓴᑕ ᐃᑯᑕᐃᓂᑲᑯᑦ ᖃᓂᖅᑲᐃᓂᓪᓚᑦ. ᑕᒪᖏᑦ Phase 1 ᐊᒪᓗ Phase 2 ᐱᓕᕆᕆᑐᑦ ᐊᑐᐊᓂᖃᖅᓱᓗᑎᑲ ᐊᐅᑎᑦ ᐊᒪᓗ ᐃᓄᐃᑦ-ᐱᑭᖅᐸᓪᓕᐊᓂᓪᓚᑦ ᖃᑲᐅᔨᐱᐃᓂᐅᑕᐅᓂᖅᑐᖅ NIRB-ᑯᓘᓄᓪ, ᑐᓂᔭᐅᓂᖃᖅᑎᕋᑎᐸᓗᓂ ᐱᓕᕆᐊᓚᑦ ᓇᓗᓇᐃᑯᑕᖅ ᓱᓴᐅᑎ 006-ᒥᓪ.

12.1 ᒥᓕᔭᓱ ᑕᓱᓗᐊᑦ (Mt) ᐅᔨᕋᐃᑦ ᐅᔨᕋᖏᓂᐊᖅᑕᐅᓂᐊᖅᑐᑦ ᑎᕆᑎᓂᐊᕆᑦ ᐅᔨᕋᖏᓂᐊᕐᓂᖅ ᐊᕕᓪᓂᐊᓕᖏᓐᓂᓂᓪ 8 ᐅᑭᐅᓪᓗᐊᑦ. ᐊᕕᓪᓚᕐᓂᖅ 31.8 Mt-ᓂᒃ ᐊᒃᑕᑯᕐᓂᐊᖅᑐᖅ ᐅᔨᖅᑲᓂᒃ, 7.4 Mt-ᓂᒃ ᐅᖏᓪᑕᐅᑎᔪᓂᒃ ᐊᒃᑕᑯᓂᒃ, ᐊᒪᓗ 12.1 Mt-ᓂᒃ ᖃᑭᒃᑎᑐᓂᓪ. Phase 1-ᒧᑦ ᐅᔨᕋᖏᓂᐊᕐᓂᐅᔨᓪᓚᒧᑦ ᐱᓕᕆᑎᑦ ᑕᐃᑲᓂ ᐃᓪᓕᐅᔨᑦ ᐅᔨᕋᖏᓂᐊᖅᑐᑕᓪᓕᐅᓂᐅᑦ ᐃᓂᖏᓗ ᐊᒪᓗ ᓭᓂᒃᑕᕐᓵᑦ, ᒪᑭᑐᒃ ᐅᒃᑯᐃᖏᓐᓇᓪᓚᑦ ᓇᓂᑦ, ᐱᖏᓭᑦ ᑲᑎᑕᐅᔨᑦ ᐅᔨᖅᑲᐃᑦ, ᖃᑭᒃᑎᑐᓂᖅᑐᓪᓚᑦ ᑐᖅᑯᓂᖅᓭᓭᓪᓚᑦ (TSF), ᐱᖏᓭᓪ ᐊᒃᑕᑯᖅᑕᐅᔨᑦ ᐅᔨᖅᑲᐃᓂᓪ ᑐᖅᑯᓂᖅᓭᓭᓵᑦ (WRSF), ᐊᒪᓗ ᐃᒪᑕᓪᓕᐊᓂᓪᓚᑦ ᐋᑦᑭᐅᒪᔨᖅᑐᓂᓪ ᐃᓕᐅᓪᓚᑦ, ᑲᑦᓭᔪᐊᑦᔪᐃᑦ ᐃᒪᖏᑦ ᓴᖅᑐᑎᓂᑦ ᓭᓪᓗᐃᑦ, ᐃᒪᖏᑲ ᐊᓭᐅᓂᑕᐃᕐᓗᔪᑎᑦ, ᑲᑎᑦᓭᓵᑦ ᑕᓭᔪᓂᑦ, ᐊᒪᓗ ᑯᕕᔪᕐᓪᓚᔪᐊᑎ.

ᐱᓕᕆᐊᓱ ᒥᖅᓴᓂ ᓇᐃᓐᓇᖅᓭᒪᔨᖅ

ᐱᔪᖅᓂᖅ : ᐊᖏᓂᑯᖅᑯᓂ ᓇᓚᒥᓂᖅᑲᖅᑐᓂ ᑕᓭᔪᐊᑎᒥᓂ ᔫᓗᒥᖅ ᐅᔨᖅᑲᓂᐊᑎᖃᕐᓂᖅ.

ᓇᓂ : ᐅᔨᖅᑲᓂᐊᑎᖃᓕᕆᓚᐅᔨᓴᓪᓚᑦ ᐃᓂᖏᓗ ᑕᓭᔪᐊᑎᒥᓂ, 25 ᑭᓯᒥᑕᒥᖅ ᐅᐊᖏᓇᖏᓗᓂᓪ ᐅᖏᓭᓭᑎᑎᕐᓂᖅ ᖅᖏᑦᑕᓂᓂᒥᓂ, ᐊᒪᓗ 80 ᑭᓯᒥᑕᒥᖅ ᓂᒋᖅᓴᓭᐊᓂᓪ ᐱᖏᖏᓇᖅᓴᓭᐊᓂᓪ ᐅᖏᓭᓭᑎᑎᕐᓂᖅ ᐃᖏᔪᓯᓐᓂᖏᖅᑐᓂᓪ. ᑕᓭᔪᐊᑎᒥᓂ Wilson ᐃᒪᖏᑲ ᐊᐅᓪᓚᑎᓂᖅᓴᖃᖅᑐᓂᓪ (ᓄᓇᕗᒻᒥᓪ ᐃᒪᖏᓄᓪ ᒪᓕᑎᓴᕆᐅᕐᓪ ᑎᑎᖅᑲᖅ 4-ᒥᓪ).

ᑎᑭᖅᑐᐅᒪᔨᖅᑐᓂᖅ : ᑕᐃᒪᐃᓕᖅᑲᐅᑕᐅᓂᐊᖅᑐᖅ ᐃᓂᖏᓗ ᑕᓭᔪᐊᑎᒥᓂ ᔫᓗᒥᖅ ᐅᔨᖅᑲᓂᐊᑎᖃᕐᓂᖅ. AWAR 23.8 ᑭᓯᒥᑕᓂᒃ ᑕᑭᑎᒥᓪ ᕿᑦᑎᐊᑎ 6.5 ᒥᑕᒥᖅ ᑕᑭᓂᖅᑲᓗᓂ ᐃᓴᖅᓗᓐᓇᖏᑦ ᐃᑲᔪᑎᒥᑦ ᐊᒪᓗ ᐅᔨᖅᑲᓂᐊᑎᖃᓕᕆᓚᐅᔨᓴᓪᓚᑦ, ᐊᒪᓗ ᑭᐳᖃᓴᖅᑲᓗᓂ 400 ± 50 m.-ᑕᒪᑦ.

ᐃᓄᖅᓄᑦ ᑐᖏᕐᓴᑦ : ᓄᓇᒥᐊᓯᖏᑦ ᐃᓕᐅᓂᐊᖅᑐᑦ ᓯᓂᒃᑕᕐᓇᓕᑦ, ᐊᒪᓗ ᑎᑭᑐᓄᑦ ᑐᖏᖅᓯᓇᖅ ᐊᒪᓗ ᒥᐊᓂᖅᓯᓂᖅᓇᖅ, ᐃᑦᓇᖅ ᐊᒪᓗ ᓂᕆᓇᖅ, ᐊᐟᓄᖏᓂᖅ ᐃᖏᒃᓴᖅᓇᖅ, ᖃᑎᖅᓇᖅ, ᐊᐅᓚᕆᓂᖓᑦ ᐃᒡᓗᖏᐊᖅ, ᐊᒪᓗ ᐅᐟᓂᖅᑐᖅᑐᓚᕆᓇᖅ.

ᒥᑦᑕᓇᖅ : ᐊᑐᖅᑕᐅᖅᑲᑦᑕᓂᐊᖅᑐᖅ ᑲᙱᑦᓀᓂᒥᑦ ᒥᑦᑕᓇᖅ. ᒥᑦᑕᓇᖅᑕᖅᑲᓱᙱᑦᑐᖅ ᐅᓴᖏᙱᓂᐊᓇᙱᒥᑦ.

ᑐᓚᑦᑕᓇᖅ : ᑲᑦᑐᖅᑲᙱᙱᓂᐊᖅᑐᖅ ᐊᑎᓇᖅᓀᓂᒥᑦ ᑐᑦᑕᓇᖅ. ᑐᑦᑕᓇᖅᑕᖅᑲᓱᙱᑦᑐᖅ ᐅᓴᖏᙱᓂᐊᓇᙱᒥᑦ.

ᐅᓴᖅᑕᓇᖅ : ᑲᑎᒪᓇᓂᐊᖅᑐᖅ ᐃᓄᒃᑎᑐᑦ ᐅᓴᖏᙱᓂᐊᓇᙱᒥᑦ ᐅᒥᐊᖏᓂᖅᑐᓚᕆᓇᖅ/ᓯᖅᐅᓚᓂᑦ.

ᐅᓴᖅᖅᓂᖅ ᐱᓂᖅᖅᑐᑦ : ᔪᓚᐃᑦ ᐊᑐᖅᑕᐅᖅᑲᑦᑕᓂᐊᖅᑐᖅ ᐅᓯᖅᖅᑐᓚᓂᑦ ᐅᒥᐊᖏᓂᖅᑐᓚᕆᓇᓂᒥᑦ ᐅᓴᖅᖅᓂᖅ. ᐅᓴᖅᖅᓂᖅ ᐱᐟᖅᓂᓂᒥᑦ ᓱᓇᐅᑎᓂᖅ 3,000 ᑕᵒ-ᖃᓂᐊᑦ ᖅᐅᑕᒧᑦ (tpd) ᓄᓇᐅᑦ ᐃᓗᐊᓂᑦ ᐅᑭᐅᖅ 1 ᐅᑭᐅᖅ 3-ᒧᑦ, ᐊᒪᓗ 5,000 tpd-ᓂᖅ ᓄᓇᐅᑦ ᐃᓗᐊᓂᑦ ᐊᒪᓗ ᓄᓇᒥᑦ ᐅᖅᑯᐃᖏᓚᒥᑦ ᐅᑭᐅᖅ 4 ᐅᑭᐅᖅ 8-ᒧᑦ. ᐅᓴᖅᖅᓂᐊᖅᑐᑕᓚᕆᓂᖅ ᐊᒪᓗ ᓯᖅᑲᓕᑎᓚᕆᓂᖅ ᐃᑲᖅᓇᓂᑦ 24-ᓂᑦ ᐅᑦᓗᖅᑦ, 365 ᐅᑦᓗᐃᑦ ᐅᑭᐅᑕᒧᓕᒃᖃᖅᑲᑦᑕᓂᐊᖅᑐᑦ. ᐅᓴᖅᖅᓂᐊᖅᑐᑕᓚᕆᓂᒧᑦ ᐊᑐᖅᑕᐅᖅᓯᒪᓯᑦ ᐃᑯᑕᐃᓂᖅᖅ ᖃᑲᖅᑎᓚᕆᓂᖅ, ᐊᒪᓗ ᓄᓇᒃᑯᑭᑐᒃᑯᑦ >ᐊᓚᑎᒃᑯᑦ ᐊᑐᖅᓗᓂ.

ᐅᓴᖅᖅᓂᐊᖅᑐᑦᖅᖅᑦ : ᑲᑎᒪᓗᑎᑦ 12.1 Mt ᐅᓴᖅᖅᓂᐊᖅᑐᑦᖅᖅᑦ ᑎᓚᒪᓂᐊᕐᓂᖅᓱᓇᖅᓂᐊᖅᑐᑦ. ᐅᓴᖅᖅᓂᐊᖅᑐᑦᖅᖅᑦ ᓄᓇᒃᑯᑭᑐᖅᑯᑦ ᐊᓴᖅᖅᑐᑦᑕᖅᑲᑎᒃ ᐱᑕᓚᐊᖏᓐᓇᓂᑦ, ᑐᖅᑯᖅᑐᑦᖅᓯᒪᓕᐅᕐᐱᒪᓗᑎᒃᓴᓂᑦ ᐅᓴᖅᖅᓂᐊᖅᑐᑦᖅᖅᑦ ᑲᑎᕐᓗᑦᑐᓂᑦ.

ᐅᓴᖅᖅᓂᐊᖅᑐᖅᓇᖅ : ᐅᑯᑯᐃᓚᓱᑦ ᓄᓇᒥᑦ ᐊᒪᓗ ᐃᓗᐊᓂᑦ ᐅᓴᖅᖅᓂᐊᖅᑐᖅᑐᖅᑐᓂᐊᖅᑐᑦ ᑎᓚᒪᓂᐊᕐᓂᑦ. ᓯᖅᑲᑦᑕᑎᓚᐊᕐᓂᑦ ᐃᓕᓐᓂᒃᓴᓂᐊᖅᑐᖅ ᑎᓚᒪᓂᐊᒥᑦ ᔪᓗᖅᑲᖅᑐᒥᑦ. ᐱᑕᓚᐊᑦ ᑲᑎᒪᓗᑎᑦ ᐊᐅᑐᖅᑕᐅᖅᓯᒪᓂᐊᖅᑐᖅ 453 ha-ᓗᐊᖅ.

ᐅᓴᖅᖅᓂᐊᖅᑐᕐᕕᑦ ᐊᐅᓪᓚᖅᓱᒃ : 8-ᓂᑦ ᐅᑭᐅᓂᑦ ᐊᐅᓪᓚᖅᓂᐊᖅᑐᖅ ᐊᑐᖅᓗᒍ ᓇᓪᐅᑦᖅᑕᐅᖅᑦ ᐅᓴᖅᖅᑕᐃᑦ ᐱᙵᐅᕐᓇᖅᑐᑦ ᑎᓚᒪᓂᐊᖅᑐᑦ.

ᐊᐅᓪᓚᖅᓂᐅᓂᐊᖅᑐᖅ ᐅᓴᖅᖅᓂᐊᖅᙵᐅᕐᕕᑦ : Phase 1 ᑕᐅᑐᒃᑯᖅᑐᖅ ᐱᕐᓪᓚᐊᑎᓂᖅᑐᑦ ᑎᓚᒪᓂᐊᖅᑐᑦ ᔪᓚᑦᓪᓚᓂ ᐊᑐᖅᑕᐅᕐᕚᑐᑐᒃᖅᑐᑦ ᓄᓇᒥᑦ ᐅᒥᐊᖏᓂᖅᑐᓚᕆᓇᓂᖅ ᐊᒪᓗ ᓄᓇᐅᑦ ᐃᓗᐊᓂᑦ. Phase 2 (F Zone, Pump, Wesmeg ᐊᒪᓗ Discovery) ᓇᓚᓇᐃᖅᑕᐅᓂᐊᖅᑐᖅ ᐊᒪᓗ ᐱᙵᐅᖅᑎᑕᐅᓚᓂ Phase 1-ᖃᑎᒌᓚᔪ

ᔪᓚᑦᖅᖅᑐᑦ : ᑎᓯᐱᓚ 31, 2013-ᒥᑦ, ᓇᓚᓇᐃᖅᑕᐅᙵᐅᑦ ᑕᐃᒪᐅᙵᐅᑦ ᑎᓚᒪᓂᐊᕐᒥᑦ 2.8 ᒥᓕᕐᐅ ᐊᐅᐅᓯᔨ-ᖏᓪᓕᐅᖅᑐᑦ ᔪᓚ.

ᓯᖏᓪᓗᑕᒃ : ᐅᓴᖃᓄᐊᖅᑕᐅᔪᖅ ᐱᓪᓚᐊᖓᓄᐊᖅᑐᖅ ᐊᑐᖅᓗᓂ ᔨᓗᓄᑦ ᓯᖏᓪᓗᑎᓄᖅᓴᓂ ᐊᑐᖅᑕᐅᓭᒃᑐᒃ. ᐅᓴᖃᓄᐊᖅᑕᐅᔪᑦ ᐊᓂᒍᓄᒐ ᒥᒃᓚᒋᐊᖅᑕᐅᓄᐊᖅᑐᖅ ᐊᓴᐅᓪᓗᓇ ᓯᐅᖃᖅᑎᑐᑦ ᓯᖏᓪᓗᑎᖃᓪᓗᒋᑦ. ᐃᓚᖓᒐ ᔨᓗ ᐱᓴᐅᓄᐊᖅᑐᖅ gravity circuit-ᒥᒃ ᐊᑐᖃᓄᓂ. ᐊᒥᐊᑯᔪᖅ ᔨᓗ ᐱᓴᐅᓄᐊᖅᑐᖅ ᐊᑐᖃᓄᓂ cyanidation-ᒥᒃ ᐊᒪᓗ carbon absorption-ᒥᒃ, elution, electrowinning-ᑕᐅᓪᓗᓇᑎᒃ, ᐊᒪᓗ ᐱᐅᔨᒋᐊᖅᑕᐅᓪᓗᓇᑎᒃ. ᖃᑭᒃᑎᑐᑦ cyanidation ᐱᓴᐅᓄᐊᖅᑐᖅ ᐊᑐᒃᑲᓄᓄᐊᖅᓗᐊ ᐅᓀᓕᓂᑦ ᐋᖅᑕᐅᓗᓂ ᐃᓪᓚᐊᖓᓄᐊᖅᑐᑦ ᐊᒪᓗ ᐃᑎᑕᐅᓗᓂ ᐅᓗᓚᐊᓇᖅᑐᖅᓴᖅᑐᑎᑦ ᐊᒃᑕᑯᓂᑦ. ᑭᖑᓪᓕᖅᕿᖅ ᐱᓪᓚᐊᖓᓄᐊᖅᑐᖅ ᔨᓖᒃᑎᓪᓗᐊᓘᑦ ᐋᓴᐃᓄᖅ ᔨᓗᒥᑦ.

ᐱᓪᓚᓕᑦ : ᐱᓪᓚᖃᒃᑕᓄᓄᐊᖅᑐᑦ ᐱᓪᓚᐊᒥᑦ ᓴᓇᕈᑎᓪᓗᓇ 200-ᖓᔪᓄᐊᖅᑐᑦ ᐅᑭᐅᓂᑦ ᑕᑦᓪᒪᓂᑦ. ᐱᓪᓚᖃᒃᑕᓄᓄᐊᖅᑐᑦ 8 ᐅᑭᐅᓄᑦ ᐊᐅᓪᓓᖅᑎᑎᓪᓗᐊ 680-ᑎᓗᐊᖓᓄᐊᖅᑐᑦ, ᐊᖏᕈᓐᓇᑯᑦ ᐅᑭᐅᖅ 4-ᒥᑦ 800 ᐅᖓᓚᑎᐊᕐᕕᐊᓂᑦ ᐱᓪᓚᕕᖃᖅᓗᑎᒃ.

ᐃᒪᖅᑐᓄᖅ ᐃᓄᐅᔨᒥᑦ : ᑕᓯᕐᕕᐊᖅ, ᐅᐊᖏᓇᖅᓯᓯᖏᓄᑦ ᑲᓇᖏᓇᖅᓯᓯᖏᓄᑦ ᑐᖏᓚᕆᐅᔨᑦ.

ᖃᐅᔨᓄᖅ ᐃᒪᒥᖅ ᐊᑐᓚᐊᖃᖅᓄᖅ : 62,000-ᓗᐊᓄᖅ m^3/ᐅᑭᐅᖅ ᐃᒪᒥᑦ ᐊᑐᓚᐊᖃᖅᓄᐊᖅᑐᑦ ᕿᓇᐅᑎᓪᓗᓇ, ᐊᒪᓗ 318,000-ᓗᐊᓄᖅ m^3/ᐅᑭᐅᖅ ᐃᒪᒥᖅ ᐊᑐᓚᐊᖃᖅᓄᐊᖅᑐᑦ ᐊᐅᓪᓗᓇ.

ᐊᖅᑕᑯᖅᑕᐅᔪᑦ ᐅᔪᖅᑲᐃᑦ : ᑲᑎᒪᓗᒋᑦ 31.8 Mt ᐊᖅᑕᑯᖅᑕᐅᔪᑦ ᐅᔪᖅᑲᐃᑦ ᐊᒪᓗ 7.4 Mt ᐅᖓᓚᑕᐅᑎᔪᑦ ᐅᓴᖃᓄᐊᓄᒥᖓᓚᓄᐊᖅᑐᑦ ᑎᓪᓚᔅᓄᐊᖅᑎᑦ ᐅᐱᑯᐃᖓᓚᔪᑦ ᐊᒪᓗ ᓄᓇᐅᔨᑦ ᐃᓗᐊᓄᒋᑦ. ᐊᖅᑕᑯᖅᑕᐅᔪᑦ ᐅᔪᖅᑲᐃᑦ ᐅᖓᓚᑕᐅᑎᔪᓪᓗ ᓄᓇᐅᑯᑭᐅᖅᑐᑦ ᐊᓚᖅᑕᑕᐅᖅᑲᐅᑦᓴᓄᐊᖅᑐᑦ ᐊᔪᑯᑎᖅᑐᑦ (WRSF). ᐊᔨᑦᓯᐅᖓᑦᑐᑦ ᐊᒪᓗ ᓴᐃᖓᓄᑦ ᑯᐃᓄᐅᖅᓯᖓᑦᑐᑦ ᐅᔪᖅᑲᐃᑦ ᐊᒪᓗ ᐅᖓᓚᑕᐅᑎᔪᑦ ᐊᑐᖅᑕᐅᓴᖅᑲᑦᓴᓄᐊᖅᑎᒋᔪᑦ ᐊᔪᖅᑲᐅᑎᖅᑐᑦ.

ᐃᒪᖅᔅᓗᑎᒃ ᑯᐃᔪᖅ ᐃᓄᐅᔨᒥᑦ : ᐃᒪᓕᓚᔪᐊᑎ ᑲᓇᖏᓇᖓᓄᑦ ᑕᔨᔪᐊᖅᓕᐊᓄᖅᑐᖅ ᑲᑎᖅᔨᐃᐃᐊᓄᖅᑐᖅ ᑕᔨᖅᖁᖅᑐᑦ 1. ᐃᒪᖅ ᑲᑎᖅᔨᐃᐃᐊᖅᓯᖏᓄᖅ ᑕᔨᖅᖁᒃ 1-ᒥᑦ ᑯᐃᔪᐅᓄᐊᖅᑐᖅ ᐃᒪᓕᓚᐃᒃᑯᑦ ᑕᔨᔪᐊᖅᓕᐊᖅᓕᒋᑦ.

ᐅᓴᖏᓂᐊᖏᕆᐅᖅᑕᐅᔪᒪᔪᒥᑦ ᐱᖏᑎᑎᓴᐅᔪᑦ :

- ᐊᓐᓇᖏᑲᖅᑐᖅ ᐅᓴᖏᓂᐊᖏᕐᓗᐊᓂᐊᖏᑐᓂ
- ᓄᓇᒥᑦ ᐅᖅᑕᐃᕐᓴᔪᑦ ᐅᓴᖏᓂᐊᖏᓂᖅ
- ᓄᓇᐅᔨ ᐃᑐᐊᓂᑦ ᐅᓴᖏᓂᐊᖏᓂᖅ
- ᓄᓇᐅᔨ ᐃᑐᐊᓂᑦ ᐅᓴᖏᓂᐊᖏᕐᓗᐊᖏᕐᓗᒃ
- ᓯᖏᒃᑕᑎᑭᑦ
- ᐅᓴᖏᓂᐊᖅᑕᐅᔪᑕᓚᕐᓗᒃ (ᓯᖏᒃᑕᑎᑕᓚᕐᓗᒃ)
- emulsion-ᑕᓚᕐᓗᒃ
- ᖃᑭᒃᑎᑐᑭᓄᑦ ᑐᖅᑯᓂᖅᓯᓯᒪᕐᓗᒃ
- ᐃᑐᑐᖅᓯᒪᔪᑦ
- ᐅᓴᖏᓂᐊᖅᑕᐅᔪᓂᒃ ᑐᖅᑯᓂᖅᓯᓯᒪᕐᓗᒃ
- ᐊᖅᑕᔨᐃᑦ

- ᐊᖅᑕᔨᖅᑕᐅᔪᓂᒃ ᐅᓴᖅᑲᓂᒃ ᑐᖅᑯᓂᖅᓯᓯᒪᕐᓗᒃ
- ᓄᓇᐅᔨ ᖃᐅᖅᓯᓂᑦ ᐊᒪᓗ ᐃᓗᐊᓂᑦ ᐃᒪᑕᓇᕐᓗᒃ
- ᐃᒪᖏᑲᐅᓯᒃ
- ᐃᓄᖅᓄᑦ ᐊᑐᖏᑕᐅᖏᑲᑕᖏᑐᑦ ᐃᒡᓗᖏᔪᐊᑦ
- ᐊᓚᖏᑐᐃᓕᖏᑕᖏᓂᖅ ᐊᓯᖏᑐᓂᒃ
- ᐅᑭᐅᓗᓂᒃ ᐊᔪᖏᐊᑎ ᑲᖅᑭᖏᓐᓂᖅᑭᑦ
- ᐅᓴᖏᓂᐊᖅᑕᐅᔪᓂᒃ ᐊᔪᖏᐊᑎ ᑲᖅᑭᖏᓐᓂᖅᑭᑦ
- ᐅᑭᐅᓗᓂᒃ ᐃᓕᓴᐅᔪᓂᒃ
- ᐃᓐᓇᖅᑐᑦ ᐊᔪᖏᐊᑎ
- ᐅᓴᖏᓂᐊᖅᑕᐅᔪᓂᒃ ᐊᔪᖏᐊᑎ
- ᐃᓄᖅᓄᑦ ᐃᓕᓴᐅᔪᓂᒃ ᐊᔪᖏᐊᑎ
- ᓄᓇ ᐃᓂᒋᓴᐅᔪᖏᑦ

ᐱᖏᑎᑦ ᑲᖅᑭᖅᑕᓂᖅᑭᑦ (ᐃᓕᒋᓴᐅᔪᖏᑦ A, ᐊᓴ 1.2):

- ᐅᖏᓯᐊᓕᓯᕐᓗᒃ
- ᓄᖅᑲᖅᓯᒪᕐᓗᒃ ᐊᒪᓗ ᐱᖏᑎᓄᑦ ᑐᖅᑯᖏᓯᓯᒪᕐᓗᒃ
- ᓯᒃᑲᐅᓄᑦ ᐊᑐᖏᑕᐅᔪᑦ
- ᐊᔪᖏᐊᑎ

ᐅᓴᖏᓂᐊᖏᕐᓗᑦ ᕿᖏᓇᐅᑎ ᖃᖅᓱᒃᑯᖃᑕᖏᓂᖅ

ᐅᓴᖏᓂᐊᖏᕐᓗᐊᓕᐅᖅᑕᕿᓕᓕᐊᓂᖅ ᐱᒋᐊᖏᓂᐊᖏᕐᑐᖅ ᓯᑕᒪᐅᓕᓂᖅᓱᓕᔪ : ᐱᓪᓕᓕᐊᓂᐊᕐᓴᖅᑎᓕᓗᔪ, ᓴᓇᔨᐅᓂᖅᓱᒃ, ᐊᐅᓪᓚᖏᓂᖅᓱᒃ, ᐊᒪᓚᖅᖅᓂᖏᓕᓗᔪ ᖃᐅᐅᔨᒋᐊᖃᖅᑎᑕᖏᓂᖏᓐᓄᑦ ᐊᒪᓗ ᐊᖓᑐᓕᐊᖓᑎᒋᐊᖅᑎᓕᒋᓂᖅᓴᖅ ᑲᕐᓯᓂᖅᖏᓕᓗᔪ ᐅᖅᑯᓕᒋᐊᖅᑕᐅᔨᒪᓕᖅᑎᓕᔪ.

ᐱᓪᓕᓕᐊᓂᐊᕐᓴᖅᑎᓕᔪ ᓇᓕᓇᐃᖅᑕᐅᔨᒪᔪᖅ ᓴᓇᔨᐅᓂᐅᔪᑦ ᐊᔨᐅᑦᓕᔪ ᓇᓕᓇᐃᖅᑕᐃᐅᔨᒪᓂᖓᑦ ᐊᒋᓂ ᑭᔨᐊᓂ ᐱᓴᕐᓂᖅᖅᓴᓕᓂ ᖃᖅᓄᐃᑦᑕᐅᔪᓴᖅᓇᐊᖃᖅᓂᖅᑕᐅᔪᑦ ᒪᓕᒃᓕᑦ ᒪᓕᑲᖏᓐᓂᑦ NLCA ᑎᑎᖅᖅᓴᖅ 13, ᐃᓕᒋᓴᐅᔪᖏᑦ 13.5.5-ᒥᑦ ᐅᓪᓗᓕᓂᑦ NWNSRTA-ᒥᑦ. ᑕᒪᐃᓇ ᐱᒋᐊᖏᓂᐊᖏᕐᑐᖅ

ᐱᓕᕆᐊᒧᑦ ᓇᓗᓇᐃᑯᑕᖅ ᐱᖅᐅᖏᓂᒃᓴᑦ NIRB-ᑯᓘᓂᑦ, (ᓄᑦᖅ ᐅᓪᓗᓂᓕᑦ ᐊᖏᑭᐊᖅᑕᐅᔪᖅ) Type B ᐃᒪᖏᒧᑦ ᓕᐃᓴᓄᓗ NWB-ᑯᓘᓂᑦ, ᐊᒪᓗ ᓄᓇᒥᒃ ᐊᑐᐸᓇᖏᓂᖏᒧᑦ >ᒥᑦ ᑭᓪᓕᓕᖅ ᐃᓄᐃᑦ ᑲᑐᖏᓴᒃᑎᑯᓘᓂᑦ.

ᓴᓇᐅᐅᓂᖅ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᖅ ᖃᓄᓄᐃᑕᐅᖏᓂᕆᓴᐅᖏᖃᑦᑕᖅᑐᑎᑐᑦ ᐱᔭᐸᑎᖃᖅᓱᑎᒃ ᓴᖅᑭᑦᑎᓂᖏᒧᑦ ᐅᓪᓗᓂᓕᑦ ᓴᓇᓪᓕᑕᐊᓂᖏᑦᑐᖓᓕᒫᓂᑦ, ᐱᖏᐊᖅᑐᓂᖏᒧᑦ, ᐊᒪᓗ ᐃᓚᖏᔭᐊᓂᒃ ᐱᓕᕆᐊᖅᖃᖅᑐᓂᒃ ᐱᓪᓕᕆᐊᑎᓂᓂᖏᒧᑦ ᐅᐸᖏᓂᕆᐊᖅᓇᒃ. ᐅᐸᖏᓂᕆᐊᖅᓇᓱᓕᒃᑯᓘᓐᓃᑦ ᓴᓇᓴᐅᓂᓴᓐᓃᑦ ᐱᑕᐊᖅᖃᖅᑐᑦ ᐱᖅᐅᖏᓂᒃᓴᑦ Type A ᐃᒪᖏᒧᑦ ᓕᐅᔪᓂᓯ NWB-ᑯᓘᓂᑦ ᐊᒪᓗ ᓄᓇᒥᒃ ᐊᑐᐸᓇᖏᓂᖏᒧᑦ >ᒥᑦ ᑭᓪᓕᓕᖅ ᐃᓄᐃᑦ ᑲᑐᖏᓴᒃᑎᑯᓘᓂᑦ. ᓴᓇᓴᐅᓂᓴᓐᓃᑦ ᐅᑭᐅᓄᑦ ᔪᑕᒪᑦ ᐅᖏᓴᐅᓂᓴᓐᓃᑦ ᐊᑯᓘᓐᓃᑦᑐᓂᒃ -5 ᐊᒪᓗ ᐅᑭᐅᖅᑐᒃ -1.

ᐊᐅᓪᓛᖅᓂᖅ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᖅ ᐱᓕᕆᐊᓂᖏᒧᑦ ᐊᑐᖅᑕᐅᔪᖅ ᐊᐅᓪᓚᕆᒥᑦ ᐊᒪᓗ ᐱᓕᕆᐊᓂᖅᑲᓕᖅᓱᑦ (ᔪᑦᓗ ᔫᓗ). ᐅᔨᕐᓂᓂᐊᖏᒃ ᐱᑎᐊᖅᓱᑦᑕᐊᑎᑦᓗᒍ, ᐃᓕᐅᓂᐊᖅᑐᑦ ᐱᖓᓱᓪᓗᐃᑦ ᑕᖅᑭᑦ ᐊᑐᓕᖅᑎᑎᓂᖏᒧᑦ ᕿᖏᓇᐅᑕᐅᔪᖅ ᐅᖅᑐᐱᓇᒥᑦ ᑎᓪᓗᓇᒥᒧᑦ (ᔪᑦᓗ Q4) ᐅᑭᐅᖅ -1-ᒥᑦ.

ᐅᖅᑯᐊᓂᖅᓴᖓ (ᖁᑭᒪᐃᓂᖅ, ᐅᑎᖅᑎᑎᓇᓂᖅ, ᐊᒪᓗ ᐅᖅᑯᐊᖏᓂᖅ) **ᐊᒪᓗ ᐅᖅᑯᐊᖅᓱᒪᓕᖅᑎᓕᒍ** ᓇᓗᓇᐃᖅᑕᐅᔪᖅ ᐊᐅᓪᓚᖅᑎᐅᕐᓗᓂ ᓄᖅᑲᓂᖅ ᐊᐅᓪᓚᖏᓂᐅᔪᓂ ᐃᓕᓐᓂᐊᖏᓂᒧᑦ ᐱᑎᐊᑲᓂᓂᖏᓐᓂᒃᑯᓘᓐᓃᑦᑐᓂ ᐅᐸᖏᓂᕆᐊᖅᓇᓱᓕᒃᑯᓘᓐᓃᑦᑐᒃ. ᓂᓚᐅᓇᖏᓂᐅᔪᖅ ᐃᓂᐅᔪᖅ ᐅᑎᖅᑎᑕᐅᓂᐊᖏᓕᑦ ᐊᒪᓗ ᐅᖅᑯᐊᖅᓱᒪᓕᖅᑎᓕᒫᑦ ᖃᐅᔨᐅᑎᑦᑎᓕᖅᖢᑦ ᖃᐅᔨᐅᑎᖅᑕᐅᓂᖏᓐᓂᒃᑯᓘᓐᓃᑦᑐᒃ ᐅᓴᐅᑎᓂᖅᑐᑦ ᐊᑐᐊᖅᑐᑦ ᐊᐅᓪᓚᖅᑎᐅᕐᓗᓂ ᐅᖅᑯᐊᖏᓂᒃᓴᑦ ᐱᑎᐊᑲᓂᓂᖏᓐᓂᒃᑯᓘᓐᓃᑦᑐᒃ ᐅᓴᐅᑎᓂᖅᑐᑦ ᐃᓄᐃᑦ ᐅᖅᑯᐊᖅᓱᒪᓕᖅᑎᓕᒫᑦ ᐊᒪᓗ ᐅᖅᑯᐊᖅᓱᒪᓕᖅᑎᓕᒫᑦ ᐊᐅᓪᓚᖅᑎᐅᕐᓗᓂ ᐅᖅᑯᐊᖏᓂᒃᓴᑦ ᐱᓕᕆᐊᖅᖃᖅᑐᓂᒃ

ᐊᓄᓗᑐᐊᓵᖅᑕᕐᓂᖅᓱᓂᒃ, ᐱᓴᑕᐅᓗᐊᖅᑐᖅ ᒪᓂᕆᐅᓂᖅ ᐊᖏᕐᓂᖅᓱᓄᑦ, ᐊᒃᑐᖅᑕᐅᓯᒪᖏᕐᑐᑐᑦ ᐊᐅᖏᓕᓗᒃ ᐊᓄᓗᒧᑦ ᐱᓴᐅᖅᑕᕐᖅᑐᖅ (NPC 2000).

ᓄᓇᐅᑉ ᖃᓄᐃᖏᓂᖏᓱ ᑕᒫᓂ ᓯᑯᕐᓗᐅᖅᓯᒪᓂᖏᓂᑦ ᑕᐃᒪᐢᓇᐃᖏᓕᕐᖅ. ᖃᐅᑎᖏᓐᓂᑦ ᐊᒪᓗ ᐊᕎᑎᖏᓐᓂ. ᐊᐅᓚᐃᐅᓂᐅᑯ ᓯᑯᕐᓗᐅᖅᑐᑐᓂᑦ, ᑕᑭᕐᓂᒃ ᓯᐅᖅᐅᕐᕈᒃᑐᓂᒃ ᒪᓂᖅᐅᕐᕈᒥᒃ ᓄᓇᐅᕐᕈᖅ. ᑕᐃᒪᐢᓇᐃᖏᓕᕐᖅ ᓄᓇ ᐊᒥᓯᓂᒃ ᑕᓯᖅᑕᖅᑲᐅᖅᑐᖅ, ᑕᓯᕆᐊᐃᑦ ᐊᒪᓗ ᓄᓇ ᖃᐅᓯᕐᕈᒃᑐᒥᒃ. ᐃᕐᕈᐃᑦ Crysols-ᖏᓗᐊᖅᑐᑦ, ᐊᒪᓗ ᐊᑦᓂᓂ ᖃᐅᐊᖏᐃᓇᓇᖅᑕᕐᖅᑲᐅᖅᑲᓐᓂ ᖃᐅᖃᖅᑲᓐᒪᒃ ᖃᐅᓯᕐᕈᐅᕐᓇᖅᑐᒥᒃ ᐊᐅᖃᐅᑎᑦᓗᒍ.

ᑕᒪᓐᓇ ᐊᐅᖃᓕᑦ ᑐᖅᑐᑕᖃᖅᖃᑕᕐᖅᑐᖅ ᐊᒪᓗ ᓄᕐᓗᐅᖃᖅᑕᕐᑲᑎᒃ ᑲᓇᑕᒥᑦ ᐊᖏᕐᒋᓗᖃᐅᔪᓄᑦ ᑕᒥᕐᖅᐅᔪᓄᑦ. ᐱᓗᐊᖅᑐᒥᒃ ᖃᑦᓂᔪᐊᖅ ᐊᒥᕐᖅᐃᑦ, ᒡᕐᔨᐊ ᓂᕈᑭᖃᐅᓗᐊᖅᑐᑕᕐᖅᑐᑐᓂᑦ ᑕᒧᓂᕆᐅᓄᓂᑦ ᐃᓄᓂᑦ. ᑕᒪᓐᓇ ecozone ᐅᕐᓗᖅᓴᐅᑎᐊᖅᑐᑕᕐᒥᔪᖅ ᑎᖏᐊᓄᑦ. ᑕᓯᕐᔪᐊᖅ ᐊᔪᐸᖏᕐᑐᓂᒃ ᐃᕐᖃᓗᑕᖅᑐᖅᑐᖅ ᓂᓗᔪᐅᖅᑕᕐᖅᑐᓂᒃ ᓄᓇᓕᒥᒃ ᐃᓕᓴᐃᓐᓇᖅᑐᑦ, ᐃᑕᐅᕐᓗᑎᒃ ᐃᖅᑲᓗᐱᒃ, ᓯᓗᒃᐸᐅᒪᐃᑦ, ᐊᒪᓗ ᐃᓱᕐᓂᐃᑦ.

ᑭᓯᓕᖅ ᐊᕐᔪᒃᓯᑦ ᐃᓐᓗᒃᑕᐅᓯᒪᔪᖅ. ᐃᑕᒥᔪᐅᔪᖅ ᐃᓄᖏᓂ ᐊᖏᕐᓂᕐᓂᖅᓱᐅᕐᓗᓂ ᑕᒪᓐᓇ ᐃᓕᓴᕐᕕᐅᓂ 80%-ᓗᐊᓂᒃ ᐃᓄᕐᖅᑲᓂ (ᐅᒪᖅᑎᑯᓐᓂᑦ ᐱᑕᓚᐊᒋᑦ 1996). ᐱᑭᖅᐸᑦᑕᐊᓂᒥᓗᐊᖅᑕᖏᓐᓄᓂᑦ ᐱᔪᐊᕐᖅᑐᖅ ᒪᖅᑲᐃᓂᒃᓯᑦ, ᑭᔪᖅᑎᐊᕐᖅᑕᕐᓂᒃᓯᑦ, ᐊᒪᓗ ᐃᕐᖅᓗᓯᑭᐅᖅᑐᕐᓂᒃᓯᑦ. ᐅᔪᕐᖅᑲᓂ ᕿᓂᕐᖅᐃᐃᓐᓇᐅᖅᑐᖅᑐᓗ, ᐊᒪᓗ ᓴᓚᐅᐅᑦᑕᐊᓂᒃ, ᐃᑕᖏᑦ ᐃᖏᕐᓇᓱᑕᓚᓂᕐᖅ, ᐊᒪᓗ ᓴᖏᒪᒃᓯᑦ ᐱᔨᑎᓇᐃᓂᖏᑦ ᖃᐅᓄᖅᓯᐃᓂᖅ ᐅᔪᓇᖏᐅᕐᓂᐅᑕᐅᓗᐊᖅᑐᑦ.

ᐃᓄᐃᑦ ᖃᐅᔨᓪᓚᕐᖃᖏᑦ

ᐊᖓᑎᒥᒃ ᖃᐅᔨᓴᐃᓂᐅᑎᑦᓗᒍ, ᐊᖏᓂᔪᒃᓯᑦ ᐃᓱᒪᑕᐅᑕᐅᖅᑐᑦ ᐃᑕᐅᖅᑕᐅᑎᓐᓂᐅᕐᓂᐊᖅᓂᖏᓐᓄᑦ ᐃᓄᐃᑦ ᖃᐅᔨᓴᐃᓪᓚᕐᖃᖏᑦ (IQ) ᐊᐅᑕᕐᑎᓂᖅᓗᑦ ᕿᖅᓇᐅᑎᖏᓐᓄᓂ ᐱᑕᓚᐊᖅ ᔪᐅᓕᒃᑎᓐᓄᓂᐊᓂᖅᓗᑦ. ᐱᑕᓚᐊᖅ ᔪᐅᓕᒃᑦ ᐱᔭᕇᖅᑎᑕᐅᓂᒃᓯᑦ, ᐊᒪᓗ ᓇᓪᒪᕐᔪᐊᓕᒃᑦ, ᕿᓂᕐᖅᐃᐃᓐᓇᐅᑕᕐᖅᑐᑐᓂᑦ, ᐊᐅᑦᑕᕐᖅᑐᑐᓂᑦ, ᐊᒪᓗ ᐅᓐᔪᐊᑕᕐᖅᑐᓂᑦ, ᐊᖏᓂᔪᒃᓯᑦ ᑲᔪᓯᓂᖃᕐᓂᐊᖅᑐᖅ ᐃᑕᐅᖅᑕᐅᑎᕐᑎᓂᖅᓗᑦ ᓄᓇᕐᓗᐅᖅᓂᒃ ᐊᒪᓗ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᓂᒃ. ᐃᓄᐃᑦ ᖃᐅᔨᓴᐃᓪᓚᕐᖃᖏᓐᓄᓂ ᐱᖃᓐᓂᕐᓗᑎᒃ ᒪᓂᒪᓕᖏᓪᓗᑎᒃ, ᐃᑕᐅᓂᐊᖅᑐᖅ ᐅᕐᓂᐊᖅᑐᑕᐅᓂᕐᓂᖅᓗᑦ ᖃᐅᓄᖅᓯᐃᓂᖅᓱᓪᓚᕐᖃᖏᓐᓄᓂ ᐊᒪᓗ ᐊᑐᓕᖅᑎᓪᓚᕐᖃᖅᑐᖅ ᐱᓴᑕᖅᑐᖅ ᐱᐅᓂᖅᑐᑦ ᐃᑕᐅᖅᑕᐅᑎᕐᑎᓂᖅᓗᑦ ᐊᒪᓗ ᖃᐅᔨᓴᐃᓪᓚᕐᖃᖏᓐᓄᓂ ᐊᑐᓕᖅᑎᓪᓚᕐᖃᖅᑐᖅ ᓄᓇᕐᓗᐅᖅᓂᒃ ᐊᒪᓗ ᐃᓄᐃᑦ ᖃᐅᔨᓴᐃᓪᓚᕐᖃᖏᓐᓄᓂ ᐊᑐᓕᖅᑎᓪᓚᕐᖃᖅᑐᖅ ᐃᓄᐃᑦ

- <ᖁᓇᐅᑎ
- ᐊᕐᕉᑎᑕᓇᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖅ ᐊᒪᓗ ᒥᐊᓂᖅᓯᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐃᒪᖏᑲᒃ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐅᓴᖁᖅᓂᐊᖅᑕᐅᔪᓕ ᑐᖅᑯᖅᑕᐅᓯᒪᓂᖅᑭᓚᓄᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐅᓴᖁᖅᓂᐊᖅᑕᐅᔪᓕ ᐊᐳᑯᑯᖅᑕᐅᓂᖅᑭᓚᓄᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐊᖏᖁᑯᓂᖅ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᑎᓇᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖏᒃ <ᖁᓇᐅᑎ
- ᐊᐳᑯᑯᓂᖅ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᖁᕼᓕᕆᓂᖅᓯᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐃᑦᑐᖅᑎᓇᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐃᑯᐊᑦᓚᑎᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐅᓴᖁᖅᓂᐊᖅᑕᐅᔪᓕ ᐊᐳᑯᑯᖅᑕᐅᓂᖅᑭᓚᓄᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐊᐳᑯᑯᖅᑕᐅᔪᓕ ᐊᐳᑯᑯᖅᑕᐅᓂᖅᑭᓚᓄᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐃᑯᐊᑦᓚᑎᓂᖏᑦ ᐊᐅᓚᕋᑎᓂᖏᑦ <ᖁᓇᐅᑎ
- ᐅᓴᖁᖅᓂᐊᖅᑕᐅᔪᓕ ᐊᐳᑯᑯᖅᑕᐅᓂᖅᑭᓚᓄ

- ᐱᖏᓱᓪ ᐃᒪᖅᑎᒃ ᓴᖕᒍᑎᑎᑲᓴᑦᑏᑦ;
- 8 ᐃᒪᖅᑎᒃ ᓴᖕᒍᑎᑎᒃᓴᓪ ᓱᓴᓗᐃᑦ;
- ᐃᒪᓕᕆᔨᒃ (WTP); ᐊᒪᓗ
- ᓄᓇᐅᓴ ᐊᑕᐅᑐᖅᒃ ᑲᑎᓪᓗᒍᓴᒃ ᓱᑎᓴᒃ ᐋᔪᐃᔨᒃ (TSS).

ᐅᔪᖏᖅᓂᐊᖅᔨᒃ ᓴᓇᔪᐅᑎᑦᓗᒍ ᐊᒪᓗ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ, ᐃᒪᖅ ᐊᐃᑐᖅᑕᐅᓂᑯ ᖃᐅᑦ ᐊᐃᑐᖅᑕᐅᓱᒪᓂᖅᑲᖅᑐᙳᓴᖅᑐᖅ ᓄᖅᑲᖅᑎᑕᐅᓂᐊᖅᑐᖅ, ᓴᖕᒍᑎᑕᐅᓗᓂᓂ, ᐊᒪᓗ ᑲᑎᑕᐅᓗᓂᓂ ᐊᔪᐸᖏᓕᑐᓂ ᑲᑎᖅᓱᐃᔨᖏᓂ ᑕᓱᕋᖏᓂ. ᐃᒪᐃᑦ ᑲᑎᑕᐅᔨᑦ ᐅᔪᖏᖅᓂᐊᖅᔨᖏᑦ ᑯᔨᑎᑕᐅᑕᕋᑦᓂᐊᖅᑐᑦ ᑐᖅᑯᖅᑕᐅᓗᓂᑕᓪᓗ ᑲᑎᖅᓱᐃᔨᖏᓪᓗ ᑕᓱᕋᖏᓂ (CPQ), ᐊᐃᑐᖅᑕᐅᔨᖅ ᐃᒪᖅ ᐱᑕᕆᐊᖓᓂᐊᖅᓴᓂᓂ WTP-ᒥᑦ, ᐱᔪᕆᐊᖅᑲᖅᑦ, ᑯᔨᑎᑕᐅᓂᐊᓴᖅᑎᑦᓗᒍ ᑕᓱᕋᔦᖅᓂ ᐃᒪᑕᕆᔭᑎᑯᑯᓂ, ᐅᕙᓚᐅᓂ ᐊᑐᖅᑕᐅᓗᓂᓂ ᐃᒪᑕᕆᔭᑎᑯᑯᓂ. 0.73 ᒥᑕᔪᵒ-ᓗᐊᑦ m^3 ᐃᒪᖅ ᑯᔨᐅᖅᑲᑦᓂᓂᐊᖅᑐᖅ ᐊᖏᖅᒍᑕᒧᑦ ᐃᒪᑕᕆᔭᑎᑯᑯᓂ.

ᐊᐃᑐᖅᑕᐅᔨᖅ ᐃᒪᖅ ᓄᓇᐅᑦ ᐊᑕᓂ ᐅᔪᖏᖅᓂᐊᖅᑕᒥᑦ ᑲᑎᑕᐅᖅᑲᑦᓂᐊᖅᑐᖅ ᐱᑕᕆᔨᓗᓂᓗ ᓄᓇᐅᑦ ᐊᑕᓂᑦ TSS ᐋᔪᐃᔨᖅᑕᒥᑦ. ᐃᑕᖏᒐ ᐱᑕᕆᔨᔨᖅᑐ ᐃᒪᖅ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᑐᖅᑕᐅᑲᓐᓂᖅᑲᑦᓂᐊᖅᑐᖅ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ, ᐊᒪᓗ ᐊᒥᐊᑯᖏᒐ ᑯᐃᑎᑕᐅᓗᓂᓂ ᖃᐅᖖᒐᓂ ᑐᖅᑯᖅᑕᐅᓗᓂᓗ. ᓄᓇᒋᑐᓂᓐᓄ ᐃᒪᖅᓂᓐᓄ ᖃᐅᔨᓴᐃᐃᓂᖅᑲᖅᑎᑦᓗᒍᖅᑐᖅ ᐱᓕᕆᓪᓚᐊᓂᐊᖅᑎᑦᓗᒍ ᐊᒪᓗ ᓴᓇᔪᐅᑎᑦᓗᒍ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ, ᐊᒪᓗ ᐊᒥᐊᑯᖏᒐ ᑯᐃᑎᑕᐅᓗᓂᓂ ᖃᐅᖖᒐᓂ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ ᐊᑐᖅᑕᐅᓗᓂᓂ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ ᐊᑐᖅᑕᐅᓗᓂᓂ ᓄᓇᒋᑐᓂᓐᓄ. ᓄᓇᒋᑐᑐᓂᓄ ᐃᒪᖅᓂᓄ ᖃᐅᔨᓴᖅᑕᐅᖅᑲᖅᑎᑦᓗᒍᖅᑐᖅ ᐱᓕᕆᓪᓚᐊᓂᐊᖅᑎᑦᓗᒍ ᐊᒪᓗ ᓴᓇᔪᐅᑎᑦᓗᒍ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ ᓄᓇᒋᑐᓂᓐᓄ ᐊᒥᐊᑯᖏᒐ ᑯᐃᑎᑕᐅᓗᓂᓂ ᓄᓇᐅᑦ ᐊᑕᓂᑦ ᐊᐅᓪᓚᖅᑎᑦᓗᒍ ᐊᑐᖅᑕᐅᓗᓂᓂ ᓄᓇᒋᑐᓂᓐᓄ ᐃᒪᖅᓂᓐᓄ ᖃᐅᔨᓴᖅᑕᐅᖅᑲᖅᑎᑦᓗᒍᖅᑐᖅ ᐱᓕᕆᓪᓚᐊᓂᐊᖅᑎᑦᓗᒍ ᐊᒪᓗ ᓴᓇᔪᐅᑎᑦᓗᒍ ᐅᑭᒧᑦ

ᑲᑎᓯᒪᔨᓂᑦ 12.1 Mt ᖃᑭᒃᑎᑐᑦ, 9.7 Mt-ᓗᐊᑦ ᖃᑭᒃᑎᑐᑦ ᐃᓕᓴᐅᓂᖅᑲᖅᑐᑦ TSF-ᒧᑦ ᐸᓂᖅᑐᐃᔨᑎᑐᑦ ᐊᒥᐊᑯᔨᓕᓪᓚ 2.4 Mt ᐃᓕᐅᕋᖅᑕᐅᓗᑎᒃ ᓄᓇᐅᐸ ᐃᓗᐊᓂᑦ ᐅᓴᖏᓂᐅᓇᖅᓴᖅ. ᖃᑭᒃᑎᑐᑦ ᐊᓯᓕᓂᐅᖅᑐᑦᑕᑕᓴᐅᔨᓪᓚ (NPAG). TSF ᐱᖓᓱᐃᓕᓐᓄᔨᖅ, ᐊᐅᓪᓴᖅᑎᑕᐅᓂᐊᖅᑐᑦ ᐊᑕᐅᓯᐅᑕᕐᓗᑎᑦ ᐅᓄᑯᐊᖅᐸᕐᓕᐊᓂᐊᖅᑐᑦ ᐅᓴᕐᖏᓂᐊᖅᓴᖅ ᐊᐅᓪᓴᖅᑎᓪᓗᒍ.

WRSFs ᐊᒪᓗ TSF ᖃᓄᐃᖓᓂᕐᕕᑦ ᓴᓇᔨᐅᓪᓚᖅᑐᑦ ᐊᒪᓗ ᐊᐅᓪᓴᖅᑎᑕᐅᓂᐊᖅᓯᒪᓂᖅ ᒥᓄᕐᐊᖅᑎᓂᓂᕐᒧᑦ ᐊᓄᑐᖅᓯᓂᖅ ᐊᕐᕌᑎᒥᖅ, ᐊᒪᓗ ᓄᓇᓕᓂᖅᑐᑦ ᐃᓱᒪᒋᓗᒍ ᐊᒪᓗ ᓄᓇᒧᐊᖅᑐᑦ ᐱᐅᖓᕐᑐᑦ ᖃᓄᐃᓕᓚᐅᖓᖓᓪᓗ. ᖃᓄᖓᓂᑦ ᑯᕐᓴᖅ ᐃᒪᖅ ᑐᖅᑯᖅᓯᓯᒪᕐᓂᑦ ᓴᖕᒪᑎᑕᐅᓂᐊᖅᑐᑦ ᓯᑦᓗᑎᑐᓂᒃᓗ ᑲᑎᑎᑕᐅᓂᐊᖅᑐᑦ (Cps) ᑯᕐᓴᐅᓗᑎᒃ CP1-ᒧᑦ.

ᐅᓴᑯᐊᖅᓂᒧᑦ ᐸᖅᓇᐃᓂᖅ

ᑐᖃᓚᐅᔨᖅ ᐱᓕᓚᐊᖅ ᐅᓴᑯᐊᖅᓂᖓᓚᓄᑦ ᐊᑐᖅᓗᓂ ᐱᔭᓚᐊᖅᑲᖅᑐᑦ ᐅᓴᑯᐊᖅᓂᒧᑦ ᖃᓄᐃᓕᓕᐅᓚᐊᖅᑲᓂᐅᔨᑦ ᐊᒪᓗ ᓴᖅᑭᕈᑎᓗᓂ ᐃᖅᒥᖓᓂ ᐱᕐᓇᖅᑐᐦᓂᖓᕕᑦ ᐅᒪᖅᑎᑎᓂᐊᖅᑐᑦ ᖃᓄᐃᖓᓚᐅᖓᖓᓄᓄᑦ. ᐱᓕᓚᐊᖅ ᐅᓴᑯᐊᖅᑎᓂᓗᒍ ᐊᒪᓗ ᐅᑎᖅᑎᐊᖅᑐᓂᖓᓂᑦ ᐸᓇᖅᑐᑎᓂᐅᓴᖅᑕᐅᓂᖓᓂᐊᖅᑐᖅ ᓴᓇᔨᐅᑎᓂᓗᒍ ᐊᒪᓗ ᐊᐅᓪᓴᖅᑎᑎᓂᐊᖅᑐᑦ, ᓄᑖᓂᓂ ᑐᕈᓯᐅᒪᔭᕐᓇᑎᓂᓂ (ᓯᑦᓗ ᖃᐅᔨᓴᕐᓂᖓᓪᓗᑎᑦ ᖃᓄᐃᖓᓚᐅᖓᖓᓄᑦ) ᒪᓂᒪᓕᑲᖓᑕ.

ᐱᓕᓚᐊᖓᔪᓕᔨᖅ ᖃᓄᓴᐅᔨᖅ ᐃᓕᐅᕋᖅᑕᐅᖃᓕᓕᓂᐊᖅᑐᖅ ᖃᓄᖓᓚᓂ TSF. ᖃᓄᖓᔨᖅ 0.5 m ᐃᖅᔨᓂᖓᖅ ᐅᖓᒪᑕᐅᑎᓂᑯᓂ 2.5m ᐃᖅᔨᓂᖓᖅ ᐊᐸᑕᑯᖅᑕᐅᔨᓂᖅ ᐅᔪᖅᑲᓂᖅ ᖃᓄᖓᒪᓂ, ᐊᒪᓗ 3.7-ᒥᑦ 4.2m ᐃᖅᔨᓂᖓᖅ ᐊᐸᑕᑯᖅᑕᐅᔨᓂᖅ ᐅᔪᖅᑲᓂᖅ ᓴᓂᕐᕈᓐᓄᓂᑦ. ᐅᖓᒪᑕᐅᑎᔨᓂᑦ ᖃᓄᖓᔨᖅ ᑭᓯᕐᓴᖅᑎᕐᑎᓂᕐᒧᑦ ᑯᓚᐊᓂᓂᑦ ᖃᓄᒪᕐᑐᓗᓂᑦ. ᓂᓗᐅᕈᔪᐅᔨᖅ ᖃᓄᓕᖅᓯᒪᔨᖅ TSF ᐃᓐᒥᓂᒃ ᐱᓕᕐᑐᖅᑕᕐᓴᓕᖅᓂᓂᐊᕐᓂᖓᓪᓚᓂᑦ.

WRSFs ᐊᐃᕈᓯᕐᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᓇᔨᐅᓗᑎᒍᓗ ᐊᑯᓂᐅᔨᒥᒃ ᐊᔨᖏᕈᓂᓂᒧᑦ, ᑕᐃᒪᓐᓇᓗᑦ ᓯᑦᓗᑎᑐᓂᒃᓴᖅᑕᐅᓂᐊᖅᑐᑦ ᐅᓴᑯᐊᖅᑎᓂᓗᒍ. WRSFs ᐃᓐᒥᓂᒃ ᐱᓕᕐᓇᐅᔨᕕᖅᓴᓂᓕᕐᓂᖓᓂᐊᖅᑐᑦ.

ᐊᑐᖅᑕᐅᓴᓂᓕᓐᓄᑦ ᐃᒍᓗᔭᐊᑦ ᐃᑐᑎᖅᑕᐅᓂᐊᖅᑐᑦ ᐊᒪᓗ ᐊᐅᓪᓚᕐᒪᔪᓐᓇᕐᓂᑕᐅᓗᑎᒃ ᐃᓂᐅᔨᒥᑦ. ᐃᒍᓗᔭᐊᑦ ᑐᓂᐅᕋᖅᑕᐅᓂᐊᖅᑐᑦ ᑭᓚᓪᓕᖅ ᐃᓄᐃᑦ ᑲᑐᔭᖅᑎᑎᓂᖅ (ᓄᓇᖅᑲᖅᑐᓄᑦ) ᐅᓴᑯᐊᖅᑎᓂᓗᒍ ᐊᓯᐊᓂᑦ ᐊᑐᖅᑕᐅᓴᓂᓕᓐᓄᑦ. ᐅᑎᖅᑎᓂᓂᖅ ᐊᔨᖏᓇᖅᑐᑦ ᐃᒍᓗᔭᐊᑦ ᐃᑐᑎᖅᑕᐅᓂᐊᖅᑐᑦ ᓯᕐᓴᑎᖅᑕᐅᓂᓗᓄᑦᑐᑦ ᐊᒪᓗ ᐅᓗᓚᐃᓇᖅᑐᑦᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᐊᓴᑯᐊᖅᑎᓂᒃ ᐊᓴᑯᐊᓯᓚᖓᑦ WRSF1-ᒥᑦ. ᐅᓗᓚᐊᓇᖅᑐᑦ ᐊᓴᑯᐊᐃᑦ ᐋᖅᑕᐅᓂᐊᖅᑐᑦ ᐃᑎᑕᐅᓂᖓᓪᓗᑎᑦ ᑕᐃᒪᖅᓴᖅᑐᑦ ᑕᐃᒪᓐᓇᓚᐅᓂᖓᓪᓗᑎᑦ. ᐱᐅᖓᑎᑐᖅᑕᓪᓕᐊᓂ ᐋᖅᓴᖅᑕᐅᓂᐊᖅᑐᑦ ᐊᓴᖅᑐᖅᑕᕐᓇᓗᓄᑦᑐᑦ ᐊᓴᑯᐊᓯᓚᖓᑦ ᐃᖅᑲᐃᓐᓇᕐᓂᖓᓪᓗᑎᒃ.

ᑲᖏᖅᓯᓂᖅᑎᑦ, ᓄᖅᑲᖅᓚᐃᒃ ᐅᑎᖅᑎᑕᐅᓂᐊᖅᑐᑦ, ᓯᑲᐅᖅᑲᖅᐃᒃ ᐊᒪᓗ ᐅᖅᓯᐅᓄᓯᐃᓕ ᐃᑐᑎᖅᑕᐅᓄᓂᑦ ᐊᒪᓗ, ᐱᓕᕐᓇᖅᑲᖅᐸᑕ, ᐃᑎᑕᐅᓄᑦ ᐊᓯᐊᓄᑦ ᓇᓪᓕᑎᑎᐅᔨᓪᓚᑦ ᐊᐸᑕᑯᖅᓴᖅᑐᑦ ᐊᒪᓗ.

ᓄᓇᕗᒻᒥ ᑲᖏᒪᑯᓯ ᓇᖅᑎᓂᕆᔨᖅᑐᑦ ᓄᓇ ᐱᖁᑎᖃᖅᖁᓕᕆᔨᖅ ᑲᖅᑭᓚᐅᓂᖏᑦ ᐊᒪᓗ ᖃᐅᔨᒪᔨᕗᑦᑕᕆᔨᖃᖅᑐᑦ ᐅᖅᓯᐊᓗᖅᑕᕆᔨᖁᓕᕆᔨᒪᔨᖅ ᐊᒪᓗ ᓄᖅᑲᖅᓱᒪᓕᐅᑦ ᐊᑐᖅᑐᐊᖅᑕᖅᓱᓐᓂᑦ ᑲᖏᒪᑯᓐᓂᑦ ᑕᐃᒪᓐᓇᒧᑦ ᐋᔨᐃᓂᐊᕆᔭᖅᑐᑦ ᑭᑦᑯᓂᖅᑕᑦ.

AWAR, ᑕᒪᐃᓂᓗᒃᑲᖅ ᐃᓂᐅᔨᒥᑦ ᐊᑦᖁᑯᑕᐅᔨᑦ, ᐊᒪᓗ ᑲᖏᑦᖅᓚᓂᖏᑦ ᐊᑦᖁᑯᑎ ᐊᑐᐸᓵᖅᑎᑕᐅᓂᐊᖅᑐᑦ ᐊᑐᕆᐊᖃᐸᓵᖅᐸᑕ ᐊᒪᓗ ᓄᓇ ᖃᓄᐃᓐᓂᕆᓪᓕᐅᖅᑕᖓᓱᓄᑦ ᐅᑎᖅᑎᑕᐅᓗᓂᓂ. AWAR ᐋᖅᑕᐅᓗᓂᒃᑲᓂᐊᖅᑐᖅ ᐅᖃᑯᐊᖅᑲᓂᕆᓪᓕᑕᖅᑎᑦᓗᒍ ᐱᓕᕆᐊᖏᓴᕆᐊᖃᖅᑐᑦ ᐅᓴᖅᓂᐅᐊᖅᓴᐅᓂ ᐃᓂᖓᓂᑦ ᐊᖏᑕᓗᖏᓐᓂᖅᐸᑕ. ᐅᑎᖅᑎᑎᕆᓂᖅ ᐊᒪᓗ ᐅᖃᑯᖅᑕᐅᓂᖏᑦ ᐃᓗᔪᑐᖅᓯᓗᒃᑐᑦ ᓚᑕᖓᓂᖅᑐᖅ ᐃᓂᖓᓂᑦ ᐊᖏᑕᓗᖏᓐᓂᖅᐸᑕ. ᐅᑎᖅᑎᑎᕆᓂᖅ ᐊᒪᓗ ᐅᖃᑯᖅᑕᐅᓂᖏᑦ ᐃᓗᓪᓕᖅᐹᒪᔨᑦ ᒪᑕᖏᓂᐊᖅᑐᑦ ᐃᓂᐅᔨᑦ ᐊᖏᑕᓗᖏᓐᓂᖅᐸᑕ. ᐅᓴᖅᓂᐅᐊᖅᓴᐅᓂᖅ ᐃᓂᐅᔨᑦ ᖃᐅᔨᓴᖅᑐᑦ ᐃᓂᐅᔨᑦ ᖃᐅᔨᓴᖅᑐᑦ ᐃᓗᓪᓕᖅᐹᒪᔨᑦ ᒪᑕᖏᓂᐊ

ᐅᖏᒪᑕᐅᑎᓯᒪᖅᑐᐃᓐᓇᒪᐊᖅᑲᖅᑐᖅ SSWQO-ᒥᒃ; ᑭᓯᐊᓂ, ᑲᑎᓯᒪᔪᓕ ᒥᑭᓂᖅᓴᑲᖅᑕᒪᐃᑦ ᐊᑯᖅᑕᖅᑎᓗᓂᖏᓪᓕᐅᑦ ᐃᓂᐅᔪᒥᒃ ᑕᐃᑯᖏᓐᓄᑦᑐᖅᑐᓄᑦ (ᓯᖅᓗ ᑕᓯᖅᖢ B7-ᓕᑦ). ᑕᒪᒃᑯᐊ ᑐᖅᑯᓐᓇᖅᑐᖅᓂᖅᑲᖅᑐᑦ ᑲᑎᓯᒪᔪᓕ (Golder 2013) ᒪᓂᒪᓇᖅᑐᒥᑦᓯᒪᔪᓕ ᐅᓗᓕᐊᓇᖅᑐᑎᑕᐅᓯᒪᓕᖏᑐᑦ ᑲᓇᑕᒥᑦ ᐊᖓᑎᑕᓕᕆᔨᑯᓐᓂᓕ ᐱᑕᓕᒪᔪᑦ (EC 2014). ᑐᑭᖏᖅᑐᖅ ᐅᖅᑯᐊᖃᓂᑎᑦᓗᒍ, ᓂᓕᐅᑭᓴᐅᔪᓕ ᐊᖓᑭᔪᒥᒃ ᐅᓴᕐᓇᖅᑐᖅᑲᖅᓱᖓᑭᓂᖅᓯᓚᓄᑦ ᖃᑲᐃᖓᒪᑕᖅᑎᑎᑎᓂᐅᔪᓂᖅᐅ ᒧᓂᓇᓕᐅᔪᖏᖅ ᐱᖅᑯᓯᓕᕆᔨᑎᒍᑦ ᐱᖅᑯᓯᓕᕆᔨᖓᑭᐅᓂᖅᑐᓗᒍ ᐊᑐᖅᑕᐅᓂᖓᑦ ᐃᖏᕐᓂᐃᑦ, ᐋᓐᓂᐊᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᐃᒪᖓᑕᐅᑕᐃᑦ ᐊᒪᓗ ᐃᓅᓴ ᐋᓐᓂᐊᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ.

ᖃᐅᔨᓴᐅᔪᖅᑕᕐᓂᕐᒧᑦ ᑐᖏᖓᓪᓕᐊᑦ

ᐊᖏᑎᒥᒃ ᖃᐅᔨᓴᐅᔪᖅᑕᕐᓂᖅ ᐱᓕᓇᐃᒧᑦ ᐱᖓᓱᓯᓂᒃ ᐊᑐᖅᑕᕐᓂᖅᑐᑦ ᐃᒪᐢᓇ:

- ᒪᓕᓴᑎᒍᖓᓪᓕᐊᓂᑦ ᑯᐃᐱᕐᑎᓂᕐᒧᑦ ᖃᐅᔨᓴᐅᔪᖅᑕᕐᓂᕐᓂᖅᖃᖅᑕᕐᓂᖅᑐᖅ ᖃᐅᔨᓴᐅᔪᖅᑕᕐᕕᐅᔨᓂᕐᓂᑦ ᑎᑎᕋᖅᓯᓯᒪᔪᓕᒥᑦ ᓇᓕᔪᐅᔨᓂᑦ ᐅᖓᓪᓕᐅᑦᑐᖅᓂᑦ ᒪᓕᓴᑎᒍᑦ. ᐃᓕᐅᔨᓂᑦ ᑯᐃᓯᓂᒧᑦ ᑭᑲᓕᕆᔨᓂᑦ ᐱᖓᑕᐅᓂᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᐊᑐᖅᑕᕐᓂᖅᑐᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ (ᓯᖅᓗ, ᐃᓕᓴᒧᑦ ᓇᓕᔪᐅᔨᓂᑦ ᐱᖓᓱᓯᓂᒃ ᐅᖓᓪᓕᐅᑦᑐᖅᓂᑦ ᒪᓕᓴᑎᒍᑦ (ᓯᖅᓗ,ᓴᕕᖓᓂᑦ ᐅᓴᕐᓂᐅᔨᓴᐅᔪᓂᒧᑦ ᑯᐃᓕᔨᓂᑦ ᒪᓕᓴᑎᐃᑦ). ᐊᑐᖅᑕᕐᓂᖅᑐᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᖃᐅᔨᓴᐅᔪᖅᑕᕐᓂᖅᑐᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᐃᓕᓴᒪᓂᖓᓂᓪᓕᐅᑦ ᐊᑐᖅᑕᕐᓂᖅᑐᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᐱᖓᓱᓯᓂᒃ ᐊᑐᖅᑕᕐᓂᖅᑐᖅᑲᖅᑕᐃᓕᒪᓂᖓᓂᓪᓕᐅᑦ ᐃᓕᓴᒪᓂᖓᓂᓪᓕᐅᑦ

ᑲᑎᓗᒋᑦ ᐱᖓᓱᓕᐅᑦ ᐊᐅᓚᑦᑐᒋᑐᑦ ᖃᐅᔨᒋᐊᖃᕐᓂᖅᓗᑦ ᓴᓪᓚᒃᑐᓂᒃ ᓴᓇᐅᑎᓂᒃ/ᑎᑎᖃᐅᓂᒃ ᑐᓂᓯᔪᖅᑐᑦ ᐃᑲᔪᐃᓂᖅᓗᑦ ᐃᓱᒪᓕᐅᖓᓂᖅᑎᒃ ᐅᕝᕙᓪᓕᐊᖅᑎᓪᓗᑦ ᐊᐅᓚᓱᑎᓂᖅᓗᑦ ᐱᓕᕆᓂᑦ.

ᐃᒪᖅᑎᐅᑕᓂᒃ ᖃᓄᐃᖅᓯᖅᑎᕐᑎᓂᖅᓗᑦ ᖃᐅᔨᒋᐊᖃᕐᓂᖅᓗᑦ ᑐᕝᕕᖕᓴᖅ ᐱᓵᖓᐊᖃᖅᑐᖅ Type A ᐃᒪᖅᓗᑦ ᓪᐅᕐᓴᓯᓗᑦ ᑐᓂᔅᐅᓂᐊᖃᖅᑐᖅ NWB-ᑯᓘᓂᑦ. ᐃᒪᖅᑎᐅᑕᓂᒃ ᖃᓄᐃᖅᓯᖅᑎᕐᑎᓂᖅᓗᑦ ᖃᐅᔨᒋᐊᖃᕐᓂᖅᓗᑦ ᑐᕝᕕᖕᓴᖅ ᖃᓄᐃᖅᓯᓂᖅᓄᓂᒃ <ᖅᓇᐅᑎ ᐱᓕᖖᐊᓗᑦ ᐱᓕᖖᐊᖅᓯᓪᓚᐅᖅᑐᖅ ᐅᖅᖃᕆᑎᖃᕐᓂᖅᑕᐅᑎᓂᒃᑯᑦ ᓄᓇᓕᖅᑎᐅᓂ, ᐱᖃᕆᖃᑕᐅᔪᓂᒃ, ᐊᒪᓗ ᒪᓕᖅᓂᒃ ᐱᔪᓇᖅᑎᕆᐊᓂᒃ. ᑲᑎᓯᒪᔨᔪᖅ ᖃᐅᔨᒋᐊᖃᕐᓂᖅᓗᑦ ᑐᑦᓴᖅ ᐊᒪᓗ ᐊᐅᔨᖃᖅᑎᑕᐅᔨᓪᑐᓂ ᐊᖏᑎᒥᒃ ᖃᓄᐃᖅᓯᓂᖅᓄᓂᑎᓪᓗᑦ ᖃᐅᔨᒋᐊᖃᕐᓂᖅᓗᒥᒃ ᐱᖓᓱᐊᖃᖅᓯᓂᐅᔪᓂᒃ ᕿᓚᐅᑦ ᐅᕝᕙᓪᓕᐊᓂᖅᓯᒪᓂᖅ ᐊᔪᖅᑐᓂᒃ ᐅᖅᖃᕐᓂᖅᓗᑦ ᐅᖅᖃᕐᓂᖅᓄᓂᑎᓪᓗᑦ ᐃᓚᖓᑕᐅᓂᖅᓄᓂᑎᓪᓗᑦ ᐊᒪᓗ ᐅᖅᖃᕐᓂᖅᓄᓂᑎᓪᓗᑦ (ᑕᓯᔪᐊᕐᒥᑦ ᖃᐅᔨᕿᐃᓂᖅ ᐊᒪᓗ ᖃᓂᑕᖏᑐᓂ ᑕᓯᓂᒃ ᖃᐅᔨᕿᐃᖅᑎᑕᕐᓂᖅ) ᖃᓄᐃᖅᓯᓂᖅᓴᖓ ᐋᑭᒃᓯᒪᓕᕐᓗᓂ ᐱᓕᖖᐊᓗᑦ ᖃᓄᐃᖅᓯᓂᖅᓴᖓᓂᓗᑦ, ᐃᓄᐃᑦ ᖃᐅᔨᕿᐃᓕᕐᑐᖅᑐᓂᑦ, ᐅᖅᖃᕐᓄᓂᖅᑎᑕᐅᑎᓂᒃᑯᑦ, ᐊᒪᓗ ᒪᓕᑦᑎᐊᑦ ᐱᓕᖖᐊᖅᓯᓂᒃᑯᑦ. ᑕᒪᕐᒥᒃ ᐃᓄᐃᑦ ᖃᐅᔨᕿᐃᓕᕐᑐᖅᑐᑦ ᐊᒪᓗ ᓄᓇᓕᖅᑎᐅᓂᒃ ᐅᖅᖃᕐᓄᓂᖅᑎᑕᐅᑎᓂᖅᑐᑦ ᐊᓯᒪᓕᐅᑎᓂᒃᑯᑦ ᐃᓕᓴᕐᓂᖅᓗᑦ ᐊᒪᓗ ᓂᕿᔨᖅᑐᑦ ᐃᓐᓇᕐᓂᖅᓗᑦ ᐊᓯᖏᓐᓂᒃᑯᑦ ᐃᓕᓴᕐᓂᖅᓗᒥᒃ ᐊᐅᓚᑦᑐᒋᑦ ᐊᓯᖏᓐᓂᒃᑯᑦ ᐃᓕᓴᕐᓂᖅᓗᒥᒃ ᐊᐅᓚᓱᑎᓂᖅᓄᓂᑎᓪᓗᑦ ᐱᓕᖖᐊᖅᓯᓂᒃᑯᑦ ᐊᒪᓗ ᐊᐅᓚᓱᑎᓂᖅᓄᓂᑎᓪᓗᑦ ᐃᓄᐃᑦ ᖃᐅᔨᕿᐃᓕᕐᑐᖅᑐ

EXECUTIVE SUMMARY

Regulatory and Project Overview

This Type A Water Licence Application (Application) has been prepared to meet requirements of the Nunavut Land Claims Agreement (NLCA), the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA), and the Nunavut Water Regulations (NWR), but also considers the guidance provided by the Nunavut Water Board (NWB) in *Guide 4 – Completing and Submitting a Water Licence Application for a New Licence* and the *Supplemental Information Guide for Mining and Milling* (SIG-MM3 Guide). Concordance has been assessed for the requirements of the NWB Guidelines and SIG-MM3 Guide and commitments made during the Nunavut Impact Review Board (NIRB) Part 5 Review of the Final Environmental Impact Statement.

The Meliadine Gold Project (Project) is subject to the land and resource management processes established by the NLCA and other Federal laws and regulations. Agnico Eagle Mines Limited (Agnico Eagle) is required in accordance with the NWNSRTA and NWR to submit a Type A Water Licence Application for a Mining and Milling Undertaking (Application) to the NWB to use water and to deposit waste in development of the Project.

The Application includes the NWB application form, the Main Application Document, and additional supporting documents to provide information on the proposed use of water, disposal of waste, and associated activities for the mining and milling undertaking, including information related to the planning and design, construction, operation, and reclamation phases of the Project.

The key Project information to support the Application is provided in the Main Application Document. This information includes the regulatory requirements, environmental setting, project description, water management, and summary information from the supporting management plans.

Agnico Eagle is developing the Project, located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of the hamlet of Chesterfield Inlet in the Kivalliq Region of Nunavut. Situated on the western shore of Hudson Bay, the 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 Land. The Project is located within the Meliadine Lake watershed of the Wilson Water Management Area (Nunavut Water Regulations Schedule 4).

The Project is composed of five known gold deposits: Tiriganiaq, F Zone, Pump, Wesmeg, and Discovery. Agnico Eagle proposes to develop these deposits in a phased approach to manage the initial capital investment required and to allow production to commence while ongoing exploration continues to increase the known ore reserve. The initial phase of development (Phase 1) focuses on the development of the Tiriganiaq gold deposit using a traditional open-pit mining method and underground mining. Phase 2 will be defined and permitted during Phase 1, once the other deposits are better defined through ongoing exploration drilling. Both Phase 1 and 2 are within the Project

that was the subject of the environmental and socio-economic assessment conducted by the NIRB, culminating in the issuance of Project Certificate No. 006.

Approximately 12.1 million tonnes (Mt) of ore will be mined from Tiriganiaq over a nominal mine life of approximately eight years. The operation will produce approximately 31.8 Mt of waste rock, 7.4 Mt of overburden waste, and 12.1 Mt of tailings. Proposed Phase 1 mining facilities in the area include a plant site and accommodation buildings, two open pits, three ore stockpiles, a tailings storage facility (TSF), three waste rock storage facilities (WRSFs), and a water management system including water treatment facilities, several water diversion channels, retention dikes/berms, collection ponds, and a discharge diffuser.

Project Summary

Ownership: Agnico Eagle Mines Limited is the sole owner of the Meliadine Gold Project.

Location: The proposed mine site is located on a peninsula extending into Meliadine Lake, 25 km north of Rankin Inlet and 80 km southwest of Chesterfield Inlet. It is located within the Meliadine Lake watershed of the Wilson Water Management Area (Nunavut Water Regulations Schedule 4).

Access: The existing All-weather Access Road (AWAR) provides access between Rankin Inlet and the proposed mine site. The AWAR is a 23.8 kilometre (km) private road built with a 6.5 m running surface between the Char River bridge turn-off and the proposed mine site, and has passing turnouts approximately every 400 ± 50 m.

Accommodation Infrastructure: The permanent camp will include accommodation, as well as a reception and security area, a kitchen and dining room, a laundry room, recreational facilities, an administration building, and a first-aid clinic.

Airstrip: The site will use Rankin Inlet's airport. There will not be an airstrip at the site.

Port: In Rankin Inlet, the established harbour at Itivia will be used to receive loaded ships/barges.

Mineral Claims: The gold deposits are situated on leased claims under the Canada Mining Regulations that were staked prior to the NLCA. The claim block covers 52,173 hectares (ha) and is approximately 80 km long.

Mining Methods: Traditional open pit and underground mining of the Tiriganiaq deposit. The mine production rate will be a maximum of 3,000 tonnes per day (tpd) from underground in Year 1 to Year 3, and 5,000 tpd from underground and open pit in Year 4 to Year 8. The mining and milling will take place 24 hours a day, 365 days per year. Mining methods proposed are standard drill-and-blast, and truck-and-shovel methods.

Ore: A total of 12.1 Mt of ore will come from mining Tiriganiaq. The ore will be trucked via haul road to the process plant and facilities, or temporarily stored in the ore stockpiles.

Mining Areas: Open pit and underground mining are planned at the Tiriganiaq deposit. The mill site will be located immediately east of the Tiriganiaq deposit. The Project's total area of disturbance will be approximately 453 ha.

Life of Mine: An eight year active mine life based on estimated mineral resources for the Tiriganiaq deposit.

Life Cycle of Mining: Phase 1 focuses on the development of the Tiriganiaq gold deposit using a traditional open-pit mining method and underground mining. Phase 2 (F Zone, Pump, Wesmeg, and Discovery) will be defined and permitted during Phase 1.

Gold Resources: As of December 31, 2013, the proven reserves for Tiriganiaq were 2.8 million ounces of gold.

Mill Process: The ore will be processed using a conventional gold-milling circuit. The ore size will be reduced to the consistency of fine sand using a sequence of crushing and grinding circuits. A portion of the gold will be recovered in a gravity circuit. The remaining gold will be recovered using cyanidation and carbon adsorption, followed by elution, electrowinning, and refining. Residual cyanide will be recovered for reuse or removed from process water and disposed as hazardous waste. The final step in the mill process will be the smelting of gold bars on-site.

Personnel: The average Project workforce during construction is 200 personnel over five years. The average Project workforce during the eight years of operations is about 680, with the maximum in Year 4 at just over 800 personnel.

Water intake location: Meliadine Lake, northeast of the industrial pad.

Quantity of Water Required: Approximately 62,000 m^3/year of freshwater will be required during the construction phase, and approximately 318,000 m^3/year of freshwater will be required during operations.

Waste Rock: A total of 31.8 Mt of waste rock and 7.4 Mt of overburden will come from mining the Tiriganiaq open pit and underground. The waste rock and overburden will be trucked via haul road to a WRSF. Non-potentially acid generating and non-metal leaching waste rock and overburden will also be used as construction material.

Wastewater discharge location: A diffuser outfall into Meliadine Lake east of Collection Pond 1. Water from Collection Pond 1 will be discharged via a water treatment plant through the diffuser into Meliadine Lake.

Proposed Mine Site Infrastructure:

- gated access to Mine
- open pit mines
- underground mine
- underground mine access portal
- crusher
- ore processing facility (mill)
- emulsion plant
- tailings storage facility
- quarries and borrow pits
- ore storage facilities
- landfill
- waste rock storage facilities
- surface and underground water treatment facilities
- water storage facilities
- accommodation infrastructure
- haul roads
- All-weather Access Road from Rankin Inlet
- maintenance and on-site storage areas
- power generation
- fuel storage
- incinerators
- landfarm

Satellite Infrastructure in Rankin Inlet (Appendix A, Figure 1.2):

- fuel storage facility
- laydown and material storage area
- barge structure
- Bypass Road

Mine Plan Schedule

Mine development activities will occur in four phases: pre-development, construction, operations, and closure, with additional monitoring and mitigation continuing into post-closure.

Pre-development is defined as any construction activities as defined below but specific to activities allowed under the provision of the NLCA Article 13, Section 13.5.5 or the NWNSRTA. This phase will commence after receipt of the Project Certificate from the NIRB, the (new or amended) Type B Water Licence from the NWB, and the land use permit from the Kivalliq Inuit Association.

Construction is defined as any activities undertaken for the purposes of establishing or constructing components, infrastructure, and facilities required for development of a mine. Full mine site construction will commence following receipt of a Type A Water Licence from the NWB and Land Use Permit from the Kivalliq Inuit Association. Construction will take a little over four years between Year -5 and Year -1.

Operations is defined as the period that the Process Plant is operating and producing a commodity (i.e., gold). During the mine start-up, this will include a three month commissioning period planned for October to December (i.e., Q4) of Year -1.

Closure (Abandonment, Reclamation, and Closure) **and Post-Closure** is defined as an Operator ceasing operations at a facility without the intent of resuming mining activities. The expectation

will be that the site will be reclaimed and post-closure monitoring will continue until it can be demonstrated that the mine site is both chemically and physically stable.

Environmental Setting

The Project is located in the Kivalliq Region of Nunavut. Most of this region is part of the Southern Arctic Ecozone (Ecological Stratification Working Group 1996). This ecozone represents a major area of vegetative transition between the taiga forest to the south and the treeless Arctic tundra to the north. It is characterized by dwarf shrubs, mixed with various herbs and lichens. Wetlands are common in the low-lying areas and mainly support sedge-moss vegetation. The vegetation present plays an important role in the food chain (NPC 2000). Nearly all sedges, grasses, and fruticose lichens, as well as many herbaceous and woody plants, provide food for grazing animals. Birds and small rodents, that in turn become food of fur-bearing carnivores, consume seeds, winter buds and the roots of many species.

The climate in region of the Project is extreme with long cold winters and short cool summers. Temperatures are cool, with a mean temperature of 12°C in July and -31°C in January. The region is also known for high winds, which are due in part to the broad, flat, uninterrupted expanses offered to moving air masses (NPC 2000).

The physical features of the region have largely been determined by glaciation. The terrain consists of broadly rolling uplands and lowlands. Strung out across the landscape are long, sinuous eskers. This undulating landscape is studded with innumerable lakes, ponds, and wetlands. Cryosols are the dominant soils, and are underlain by continuous permafrost with active layers that are usually moist or wet throughout the summer.

The region includes the major summer range and calving grounds for Canada's largest caribou herds. The major one is the Qamanirjuaq herd, which is the main food source for the local Inuit. This ecozone is also a major breeding and nesting ground for a variety of migratory birds. Meliadine Lake contains fish species that are eaten by the communities, including Arctic char, Arctic grayling, and lake trout.

The Kivalliq Region is sparsely populated. It is part of the Inuit homeland and Inuit form over 80% of the population (Ecological Stratification Working Group 1996). Much of the economy is based on subsistence hunting, trapping, and fishing. Mineral exploration and mining activities, as well as construction, some tourism, and government services are the other principal activities.

Inuit Qaujimajatuqangit

During the environmental assessment process, Agnico Eagle made a commitment to consider Inuit Qaujimajatuqangit (IQ) in management plans for the Project moving forward. As the Project advances through permitting, and if approved, into construction, operations, and closure, Agnico Eagle will continue active engagement with local communities and Inuit organizations. Additional IQ,

as it becomes available, will be included in updates to the design and implementation of Project environmental programs. This will ensure that the combination of science and IQ leads to monitoring that meets the expectations of local communities, Inuit organizations, and government. A summary of how IQ was used in management and monitoring plans is provided in plans submitted as part of the Application.

Supporting Management Plans

The following supporting management and monitoring plans have been developed in support of the Application:

- Mine Plan
- Environmental Management and Protection Plan
- Water Management Plan
- Ore Storage Management Plan
- Mine Waste Management Plan
- Roads Management Plan
- Borrow Pits and Quarries Management Plan
- Landfill and Waste Management Plan
- Quality Assurance/Quality Control Plan
- Incineration Management Plan
- Hazardous Materials Management Plan
- Explosives Management Plan
- Risk Management and Emergency Response Plan
- Spill Contingency Plan
- Preliminary Closure and Reclamation Plan
- Aquatic Effects Monitoring Program (AEMP) Design Plan
- Landfarm Management Plan
- Public Engagement and Consultation Baseline Report

In addition, supporting appendices are included with many of these plans. For example, the Water Management Plan includes supporting appendices for diffuser design, site water quality, and proposed effluent quality criteria. The Roads Management Plan includes a dust management plan appendix. A summary of the key plans is provided below.

Mine Water Management

Water management goals for the Project are to minimize potential impacts to the quantity and quality of surface water at the mine site. Water management structures (water retention dikes/berms and diversion channels) will be constructed as needed to contain and manage the contact water from the areas affected by the mine or mining activities. The major water management infrastructure includes the following:

- six water collection ponds;
- five water retention dikes;
- three water diversion berms;
- eight water diversion channels;
- a Water Treatment Plant (WTP); and

- an underground total suspended solid (TSS) removal plant.

During mine construction and operations, contact water originating from affected areas on surface will be intercepted, diverted, and collected within the various collection ponds. The collected water on the mine site will be eventually pumped and stored in Collection Pond (CP1), where the contact water will be treated by the WTP, if necessary, prior to discharge to Meliadine Lake through a submerged diffuser, or used as make-up water by the process plant. Approximately 0.73 million m^3 of water will be discharged annually through the diffuser.

Contact water from the underground mine will be collected in sumps and treated by the underground TSS removal plant. Some treated water from underground will be reused for underground operation, and the balance will be pumped to surface for storage. An intensive groundwater study will be undertaken during pre-development and construction to confirm the amount of groundwater that will require storage and to determine a final management option for any excess groundwater.

Major freshwater usages on-site include potable use, dust suppression, portion of make-up water for the mill, and other operational needs, such as drilling water if contact water from CP1 is not available, and water for the truck shop. Freshwater will be sourced from Meliadine Lake through a freshwater intake and pump system.

Where possible, water from the WTP will be the main source of water for the mill process. Additional water needs will be supplied by freshwater. Approximately 460 m^3/day of process water will be required in Year 1 to Year 3 of operations, and approximately 770 m^3/day of process water will be required in Year 4 to Year 8.

Mine Waste Management

Waste rock and overburden will be trucked to the WRSFs until the end of mine operations, with distribution according to an operation schedule. Results of geochemical testing indicate that the produced waste rock and overburden is non-potentially acid generating (NPAG) and non-metal leaching. Three areas have been identified as WRSFs.

Of the total 12.1 Mt of tailings produced, about 9.7 Mt of tailings will be placed in the TSF as dry stack while the remaining 2.4 Mt will be backfilled to the underground mine. The produced tailings are considered to be non-acid generating (NPAG). The TSF consists of three cells, which will be operated one by one to facilitate progressive closure during mine operations.

The WRSFs and TSF were designed and will be operated to minimize the impact on the environment, and to consider geotechnical and geochemical stability. The surface runoff and seepage water from the storage facilities will be diverted via channels and collected in water collection ponds (CPs) for pumping to CP1.

Closure Planning

The goal of the Project closure is to carry out required closure activities and establish self-sustaining ecosystems with land uses similar to pre-development conditions. The Project Closure and Reclamation Plan will be updated through the construction and operational phases of the Project, as new information (such as monitoring results) become available.

An engineered cover will be progressively placed on the surface of the TSF. The proposed cover includes a 0.5 m thick layer of overburden followed by a layer of 2.5 m thick waste rock on the top of the facility, and a 3.7 to 4.2 m thick layer of waste rock on the facility sideslopes. The overburden layer is intended to limit runoff water infiltration into the tailings. It is anticipated that the covered TSF will naturally re-vegetate with native lichen.

The WRSFs will be designed and constructed for long-term stability, thus no additional re-grading or construction will be required at closure. The WRSFs will be allowed to naturally re-vegetate with native lichen.

Salvageable buildings and surface structures will be dismantled and demobilized from the site. The buildings will be offered to the Kivalliq Inuit Association (the land owner) at closure for potential re-use elsewhere. Non-salvageable buildings and structures will be dismantled or demolished and inert non-hazardous materials disposed of in the landfill area in WRSF1. Hazardous wastes will be removed for disposal by a licensed handler. Contaminated soils will be excavated and hauled to the landfarm area for remediation.

In Rankin Inlet, the laydown area will be reclaimed, the barge and tank farm dismantled and, if necessary, disposed off-site at an approved disposal facility. The Government of Nunavut owns the land for the facilities in Rankin Inlet and it is important to note that the proposed fuel tank farm and laydown area are all situated on lands leased from the Government of Nunavut and thus Agnico Eagle's commitment is to remove all of these facilities.

The AWAR, all site roads, and Rankin Inlet Bypass Road will be decommissioned and the terrain restored when no longer required. The AWAR will be completely removed once post-closure maintenance requirements at the mine site are anticipated to be minor. Reclamation and closure of quarries and granular borrow pits will depend on individual site conditions.

All disturbed site areas will be re-graded to suit the surrounding topography. In areas where the original ground surface was lowered for site grading or structural requirements, the slopes will be stabilized and contoured. Cover materials may be required for erosion and dust control. It is anticipated that a succession of indigenous plant species will naturally re-vegetate the surface over time.

Following completion of mining, the open pits will be flooded with water from Meliadine Lake over a period of three years. The maximum pumping rate will be based on the maximum allowable

drawdown rate from Meliadine Lake, regulated by the Type A Water Licence. During mine closure, the water management infrastructure on-site will remain in place until mine closure activities are completed and monitoring demonstrates that the water quality is acceptable for discharge to the receiving environment without treatment.

The WTP will be decommissioned once it is no longer required; when water quality from the mine components meets licence criteria for direct discharge. The WTP and Meliadine Lake discharge diffuser will be maintained for 3 water treatment seasons as a contingency before being dismantled and disposed of in an appropriate landfill facility either on-site or in Rankin Inlet (if approved).

The long-term, post-closure water quality in the ponds and in the flooded open pit lakes will meet Canadian water quality limits defined by the Metal Mining Effluent Regulations limits and will meet the Canadian water quality guidelines for the protection of aquatic life (Canadian Council of Ministers of the Environment or CCME-WQG) and the Meliadine Site Specific Water Quality Objectives (SSWQOs) developed for aluminum, fluoride, and iron. These SSWQOs are conservatively protective of Meliadine Lake and Lake B7 (i.e., the primary receiving environment). Arsenic concentrations in one of the collection ponds (CP4) could slightly exceed the SSWQO; however, the concentrations are much less than the mixing capacity in the receiving environment (i.e. Lake B7). These arsenic concentrations (Golder 2013) are within the tolerance levels that have been deemed non deleterious by Environment Canada for the Project (EC 2014). This means that following closure, it is expected that there will be no significant adverse effects on existing opportunities for traditional and non-traditional use of fish, health of aquatic life and human health.

Monitoring Programs

Environmental monitoring for the Project consists of three forms as follows:

- Regulated discharge monitoring occurs at monitoring points specified in licenses or regulations. It includes discharge limits that must be achieved to maintain compliance with an authorization (i.e., water licence) or regulation (i.e., Metal Mining Effluent Regulations). Enforcement action may be taken if discharge limits are exceeded for a parameter.
- Verification monitoring is carried out for operational and management purposes by Agnico Eagle. This type of monitoring provides data for decision making and builds confidence in the success of processes being used. There is no obligation to report verification monitoring results, although some monitoring locations and results may be mentioned in environmental management plans (i.e., sampling to verify soil remediation in the landfarm).
- General monitoring is commonly included in a water licence specifying what is to be monitored according to a schedule[2]. It covers all types of monitoring (i.e., geotechnical, lake

[2] Referred to in Northwest Territories and old NWB licenses as the Surveillance Network Program.

levels, etc.). This monitoring is subject to compliance assessment to confirm sampling was carried out using established protocols, included quality assurance/quality control provisions, and addressed identified issues. General monitoring is subject to change as directed by an Inspector, or by the Licensee, subject to approval by the NWB.

The sum of all three types of monitoring will provide sufficiently robust data to support decisions in mine management for the Project.

An Aquatic Effects Monitoring Program is a requirement of the Type A Water Licence to be issued by the NWB. The Aquatic Effects Monitoring Program design plan for the Project was developed through consultation with communities, stakeholders, and regulatory authorities. It is an integrated monitoring program study design and is harmonized with the Environmental Effects Monitoring requirement of the Metal Mining Effluent Regulations.

Two distinct programs are proposed for the Aquatic Effects Monitoring Program (the Meliadine Lake study and the Peninsula Lakes study) with the design dictated by Project design, IQ, consultation, and regulatory requirements. Both IQ and community consultation emphasized the importance of clean water and the health of fish and wildlife to Elders and other people in the communities who rely on these resources for traditional use. Elders have expressed concerns regarding potential adverse effects due to the Project on drinkability of water and fish populations in waterbodies in the entire Meliadine watershed. To focus the study design and analysis of results in the annual monitoring reports, key questions were developed for each monitoring component in each of the two studies.

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DOCUMENT CONTROL

Version	Date	Section	Page	Revision	Author
1	April 2015			First version of the Type A Water Licence Application	Agnico Eagle

ACRONYMS

AANDC	Aboriginal Affairs and Northern Development Canada
ABA	Acid-base Accounting
AEM	Agnico Eagle Mines Limited (stock trading symbol)
AEMP	Aquatic Effects Monitoring Program
Agnico Eagle	Agnico Eagle Mines Limited
ANFO	Ammonium Nitrate/Fuel Oil
ARD	Acid Rock Drainage
ATV	All-terrain Vehicle
AWAR	All-weather Access Road
CCME	Canadian Council of Ministers of the Environment
CGS	Government of Nunavut Department of Community and Government Services
Comaplex	Comaplex Minerals Corporation
CP	Collection Pond
DFO	Fisheries and Oceans Canada
EMPP	Environmental Management and Protection Plan
FEIS	Final Environmental Impact Statement
GN	Government of Nunavut
HTO	Hunters' and Trappers' Organization
IIBA	Inuit Impact Benefit Agreement
IOL	Inuit Owned Lands
IQ	Inuit Qaujimajatuqangit
ISQG	Interim Sediment Quality Guidelines
KIA	Kivalliq Inuit Association
LSA	Local Study Area
ML	Metal Leaching
MMER	Metal Mining Effluent Regulations
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NPA	*Navigation Protection Act*
NPAG	Non-potentially Acid Generating
NPC	Nunavut Planning Commission
NTI	Nunavut Tunngavik Inc.
NWB	Nunavut Water Board
NWNSRTA	*Nunavut Waters and Nunavut Surface Rights Tribunal Act*
NWR	Nunavut Water Regulations
PHC	Petroleum hydrocarbons
Project	Meliadine Gold Project
QA/QC	Quality Assurance/Quality Control
bypass road	Rankin Inlet Bypass Road
RSA	Regional Study Area
SFE	Shake Flask Extraction

SIG-MM3	Supplemental Information Guide for Mining and Milling
SSWQO	Site Specific Water Quality Objectives
STP	Sewage Treatment Plant
TDS	Total Dissolved Solids
TSF	Tailings Storage Facility
TSS	Total Suspended Solids
WRSF	Waste Rock Storage Facility
WTP	Water Treatment Plant

UNITS

%	percent
°C	degree Celsius
cm	centimetre
g/t	grams per tonne
ha	hectare
km	kilometre
km^2	square kilometre
kPa	kilopascal
L	litre
m	metre
m^2	square metre
m^3	cubic metre
m^3/h	cubic metre per hour
m^3/s	cubic metre per second
mg/L	milligram per litre
mm	millimetre
Mm^3	million cubic metre
Mt	million tonne
PM_{10}	particles nominally smaller than 10 µm in diameter
t	tonne
tpd	tonnes per day
V	volt

1 INTRODUCTION

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and Nunavut Water Regulations (NWR or Regulations), Agnico Eagle Mines Limited (Agnico Eagle) is required to submit to the Nunavut Water Board (NWB or Board) a Type A Water Licence Application for a Mining and Milling Undertaking (Application) to use water and to deposit waste and associated activities for the development of the proposed Meliadine Gold Project (Project). A copy of the application form is provided in Appendix C, Document 1.1, Type A General Application Form.

Agnico Eagle is developing the Project, located approximately 25 kilometres (km) north from Rankin Inlet, and 80 km southwest from 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 (the Peninsula) between the east, south, and west basins of Meliadine Lake (63°01'23.8"N, 92°13'6.42"W). The Project is located within the Meliadine Lake watershed of the Wilson Water Management Area (Nunavut Water Regulations Schedule 4). Appendix B, Table 1.1 provides the geographical extent of the Project. Appendix A, Figures 1.1 and 1.2a and b show the proposed infrastructure at the proposed mine site and in Rankin Inlet. Appendix A, Figure 1.3 is a map based on the National Topographic Series indicating the location of the Project, watercourses, and location of proposed waste deposits.

Gold was discovered at the Project in 1969 with the first mineral claims staked in 1987. Over the ensuing years, there were episodic bursts of exploration by various operators and owners before the Project was purchased by Agnico Eagle in 2010.

The Project is largely on Inuit Owned Lands (IOL) with some Project infrastructure located within the municipal boundaries of the Hamlet of Rankin Inlet on Commissioner's Land. A controlled access, single lane All-weather Access Road (AWAR) between the proposed mine site and the municipality of Rankin Inlet was constructed in 2013 under Type B Water Licence 2BW-MEL1215.

1.1 The Applicant

Agnico Eagle is a long established gold producer, based in Toronto, Ontario, with mines located in Canada (northwestern Québec and Nunavut), Finland, and Mexico, and exploration and development activities in each of these regions and in the United States. The Project is Agnico Eagle's second gold mine in Nunavut (the Meadowbank Mine is the other).

The company is listed on the New York and Toronto Stock Exchange under trading symbol "AEM". A list of officers of the company is provided in Appendix B, Table 1.1. Evidence of registration of the company, and confirmation of agents are provided in Appendix C, Documents 1.2 and 1.3, respectively.

1.2 Agnico Eagle Mines Limited's Corporate Vision

Agnico Eagle's Corporate Vision is summarized in the following statement:

OUR VISION

Agnico Eagle is committed to creating economic value for our shareholders by operating in a safe, socially and environmentally responsible manner while contributing to the prosperity of our employees and the communities in which we operate. Our goal is to establish a strong financial foundation which will allow us to share the wealth that is created through our investment in the mining and extraction of gold, and act as catalysts for the development of sustainable communities.

OUR VALUES

Operate safely
Protect the environment
Treat people and communities with respect
Make a profit

Agnico Eagle has been in existence as a company since 1972. It was created through the merger of Agnico Mines Limited, a prominent silver producer operating mines in Cobalt, Ontario, and Eagle Gold Mines Limited, a successful gold exploration company. When taking into account these two predecessor companies, Agnico Eagle has been in business in Canada as a mining company for over 50 years.

Agnico Eagle prides itself on the fact that as a company it can rely on a highly experienced senior management team that have remained together for many years (the senior management team average approximately 20 years of service with Agnico Eagle). Agnico Eagle has an excellent track record as a local employer, in being a valued member of the communities in which they operate, in managing the environmental impact of their mining operations, in providing a safe work place, and in reporting performance to all stakeholders.

1.2.1 Sustainable Development Policy

Agnico Eagle is committed to creating value for their shareholders by operating in a safe, socially, and environmentally responsible manner while contributing to the prosperity of their employees, their families, and the communities in which they operate. This is imbedded into the four fundamental values that make up the keystones of Agnico Eagle's Sustainable Development Policy: Operate Safely, Protect the Environment, and treat Employees and Communities with Respect. This

commitment is reflected in Agnico Eagle's published Sustainable Development Policy, which includes environment and health and safety (Appendix C, Document 1.4).

The commitments made in this Sustainable Development Policy extend to all of Agnico Eagle operations world-wide, and thus apply to both the Meadowbank Mine and the Project. This policy states Agnico Eagle's commitment to protect the environment, public health and safety, and natural resources by conducting operations in an environmentally sound manner, while pursuing continuous improvement to environmental performance. Agnico Eagle subscribes to the principle of sustainable development in mining. Agnico Eagle makes it a key responsibility to limit negative environmental and social impacts, and to enhance positive impacts. The environmental policy of the company, as well as the health and safety policy, apply to all businesses for which Agnico Eagle has an operating responsibility (i.e., employees, contractors, subcontractors, and suppliers).

From an external perspective, each year Agnico Eagle publishes an annual Corporate Social Responsibility report online (www.agnicoeagle.com) that outlines its Corporate Social Responsibility performance, including environmental, health and safety components. The report makes it clear to all stakeholders how Agnico Eagle is doing in meeting its commitments and objectives as outlined in the Sustainable Development Policy.

In all parts of the business, Agnico Eagle limits their environmental impacts by using natural resources efficiently, by limiting or preventing pollution, and by reducing waste. Accountability for protecting the environment extends to every employee and contractor who works for Agnico Eagle. Everyone is expected to understand and act in accordance with the Environmental Policy, with various regulatory compliance requirements, and to report unacceptable practices to management.

In line with the Environmental Policy, Agnico Eagle's operations are required to meet and, where practical, exceed relevant laws, regulations, and standards. Agnico Eagle believes in using industry best practices to ensure that operations minimize their impact on the environment to the greatest practical extent possible. As part of Agnico Eagle's internal Environmental Management System (Responsible Mining Management System), each operation is required to identify, analyze, and manage the environmental risks specific to its activities and to work in a transparent manner with involved local stakeholders. Agnico Eagle has ensured that the resources (both human and economic) have been made available to ensure that regulatory requirements are being fully met at all of its mining operations. Agnico Eagle aims to minimize effects of their operations on the environment and maintain its viability and diversity as follows:

PROTECT THE ENVIRONMENT

We aim to minimize the effects of our operations on the environment and maintain its viability and its diversity. To achieve this we:

- *Minimize the generation of waste and ensure its proper disposal;*
- *Manage tailings, waste rock and overburden to ensure environmental protection;*
- *Implement measures to conserve natural resources such as energy and water;*
- *Implement measures to reduce emissions to air, water and land, and to minimize our footprint;*
- *Implement measures to reduce our greenhouse gas emissions and address climate change;*
- *Integrate biodiversity conservation and land use planning considerations through all stages of business and production activities;*
- *Rehabilitate sites to ensure physical and chemical stability and in consultation with the communities in a timely manner.*

Creating and maintaining a safe workplace is a shared responsibility of the company and each employee. Agnico Eagle's overriding goal is zero harm to all workers. Agnico Eagle endeavors towards this through a combination of safety standards, safe work practices and procedures, incident reporting and tracking, knowledge sharing across operations, and safety audits.

Each of Agnico Eagle's mine sites has an emergency response team – staffed with employees who volunteer for the assignment. Each employee receives extensive training and all the proper equipment they need to respond in an emergency situation.

The health and safety of employees is Agnico Eagle's top priority, and in 2014, safety performance continued to improve. The Québec Mining Association (AMQ) acknowledged Agnico Eagle's leadership in this area, recognizing 15 supervisors for keeping their workers safe. Furthermore, The Quebec Mining Association recognized 20 supervisors from the LaRonde, Lapa, and Goldex mines for achieving more than 50,000 hours without any compensable accidents and 15 of our supervisors at Canadian Malartic were recognized for achieving 50,000 to 300,000 consecutive hours without any compensable accidents from July 1, 2013 to June 30, 2014.

1.3 Statement of Financial Responsibility

The Project is 100 percent (%) owned by Agnico Eagle. All rights, title, interests, liabilities, and obligations for the Project rest with Agnico Eagle. In 2010, Agnico Eagle acquired all of the outstanding shares in Comaplex Minerals Corporation (Comaplex) to give it a 100% interest in the Project. The total acquisition cost of the Project to Agnico Eagle was in the order of $659 million.

Taking into account Agnico Eagle's past performance, Agnico Eagle confirms in this application that

1. they have the financial responsibility adequate to satisfy section 57 of the NWNSRTA, to complete the undertaking from construction to closure;

2. measures are in place and will be put in place to mitigate any adverse impacts; and

3. Agnico Eagle is committed to ongoing maintenance and restoration of the proposed Meliadine mine site in the event of future closing or abandonment of the undertaking. Agnico Eagle is confident in assuming its position, taking into account their current, ongoing, and past performance in the Kivalliq Region, Nunavut, and Canada.

A copy of Agnico Eagle's audited financial statements can be found in Appendix C, Document 1.5, Agnico Eagle's Audited Financial Statements for 2013 fiscal year.

In 2013, Agnico Eagle paid $372 million in global employee compensation, up from $308.8 million in 2011. Through the payment of wages and benefits, this represents a contribution of approximately $91 million to the economy of Nunavut.

All of Agnico Eagle's operating mine sites have up-to-date mine closure and reclamation plans. These plans define the way that Agnico Eagle will close out and reclaim each of its operating mine sites, once mining has ceased. In addition, the asset retirement obligation or reclamation liability has been calculated for each site and accounting provisions taken for this liability. Financial assurance requirements for mine reclamation are being met as required at each site. In addition to our active mining sites, Agnico Eagle is responsible for several closed mining properties in Québec and Ontario (Section 1.4).

Economic Feasibility

It is estimated that the capital cost to construct and bring the proposed Mine into production will be $1.5 billion. The construction workforce is expected to average 200 persons per year and the average operational workforce will be 680 persons. Based on an ore production rate of 3,000 tonnes per day (tpd) in Year 1 to Year 3, and 5,000 tpd from Year 4 to Year 8, the average operating costs for the Project are $195 million per year in Years 1 to 3, and $240 million per year in Year 4 to 8. Over the life of mine the Project is estimated to generate federal government revenue in the order of $252.3 million, and $114.7 million at the territorial level. Appendix B, Table 1.3 provides a summary of estimated government fiscal impacts for construction and operation. Agnico Eagle estimates that it will be paying corporate taxes on the production by the third year of planned production (P. McNamara, Agnico Eagle, 2012, pers. comm.).

Based on the Meliadine Update Technical Study Phase 2, 2015 completed by Agnico Eagle, and on the Mineral Reserves Mineral Resources, as of December 2013, the Project has proven gold reserves of 2.8 million ounces in the Tiriganiaq deposits (Independent Expert Engineering Investigation and Review Panel 2015. The indicated resources for the Tiriganiaq deposits are provided in Appendix B,

Table 1.4. The cut-off grades for the Tiriganiaq open pits and the underground are described in the Mine Plan, submitted in support of the Type A Water Licence Application.

1.4 Past Performance of Agnico Eagle Mines Limited

Since 1972, Agnico Eagle has been successfully operating open pit and underground mining operations in Québec, mainly, but also in Mexico, Finland, and Nunavut. The majority of Agnico Eagle operations are located in northern climates, with cold conditions present for a large part of the year. Agnico Eagle currently operates four mines in Canada (LaRonde, Lapa, Goldex, and Meadowbank), one mine in Finland (Kittilä), and two mines in Mexico (Pinos Altos and La India). In total, gold production for 2014 was 1,429 thousand ounces.

Agnico Eagle has submitted closure plans for mines in the Cobalt-Colman area to the Ministry of Northern Development and Mines, and the requirements from these plans were fulfilled. Agnico Eagle also has met and continues to meet reclamation obligations at Eagle and Telbel mines in Quebec. These sites are under the active long-term care and maintenance of Agnico Eagle, and Agnico Eagle continues to monitor environmental performance at each site. Agnico Eagle continues to work with the regulators and local communities to ensure that all of these sites remain stable and do not create any ongoing environmental or public safety risk to the surrounding area.

Mining in Nunavut

In Nunavut, Agnico Eagle operates the Meadowbank Gold Mine, located approximately 75 km north of the community of Baker Lake in the Kivalliq Region. The Meadowbank Mine was constructed in 2008 and 2009, entering commercial production in early 2010. Under current ore reserves, Agnico Eagle anticipates that Meadowbank will operate into 2017 and longer if additional profitable deposits can be identified.

The Meadowbank Mine depends on the annual sealift for transportation of bulk supplies and heavy equipment, and a 110 km all-weather road to link the site to Baker Lake, as well an on-site airstrip for shipping food and goods and for transporting employees. The mine also relies on an on-site power plant for energy production, which operates with diesel fuel shipped by sea, stored in Baker Lake, and then transported to the mine site by tanker trucks. The camp contains all the support and safety infrastructures and procedures necessary in an isolated area. In developing the Project, Agnico Eagle intends to build on its Meadowbank Mine experience, as similar activities are proposed for the Project.

Agnico Eagle maintains an updated Closure and Reclamation Plan for its Meadowbank Mine in accordance with both its Type A Water Licence and its Commercial Production Land Use Lease with the Kivalliq Inuit Association (KIA). This plan has been subject to review by the regulatory agencies and has been approved by the NWB and the KIA. Agnico Eagle maintains security bonds against Meadowbank reclamation liability in the form of guaranteed Letters of Credit held by one of

Canada's main banks. These bonds are pledged to the Government of Canada and to the KIA in the event that Agnico Eagle does not complete reclamation at Meadowbank in accordance with the approved Closure and Reclamation Plan. In total, Agnico Eagle has approximately $100 million in security bonds posted for its Meadowbank Mine for reclamation liability and for compensation for loss of fish habitat caused by the project. Agnico Eagle also maintains insurance coverage in the event of an environmental accident resulting in major harm to a third party caused by its activities at Meadowbank. In addition, Agnico Eagle has provided a third party liability bond of $5 million to the Government of Nunavut (GN) against an accident at its fuel storage facility in Baker Lake. Agnico Eagle anticipates posting of similar security bonds if and when the Project proceeds into construction.

Agnico Eagle has the financial responsibility and resources to complete the proposed Mine and to take any measures that may be required to mitigate any adverse impacts, as well as maintain and restore the site.

1.5 Inuit Qaujimajatuqangit (Traditional Knowledge)

Continuous observation of the environment by Inuit over generations exemplifies Inuit Qaujimajatuqangit (IQ). The knowledge is gained through direct observation and experience, recognising associations or patterns of biophysical characteristics, and is about how Inuit observed and interacted with the environment, such as past harvesting practices. Inuit Qaujimajatuqangit can add an important historical perspective and understanding of the variability and extent of biophysical phenomena, and allows Inuit to spot environmental changes[3].

Inuit Qaujimajatuqangit consists of Inuit values, preferences, and what they consider significant; it is about the relationships between humans, animals, and the environment. It is location specific and reflects the particular conditions in specific geographic locations. IQ, although normally undocumented, is shared information within the community, and maintains the means and knowledge of living off the land, continues traditional land use activities, and promotes a cultural life style, all of which sustained Inuit for generations. IQ studies were completed as part of the environmental assessment by Nanuk Enterprises (Nanuk Enterprises 1999, 2011).

Inuit Qaujimajatuqangit is the most successful and oldest monitoring practice in Nunavut, where the resource users do the observing or monitoring. As such, IQ represents a valid and essential source of information in the design and implementation of environmental monitoring programs.

The design of monitoring programs for the Project were advanced, but were not concluded, through the environmental assessment process. Improvements were incorporated based on stakeholder

[3] Adapted in part from the Mackenzie Valley Land and Water Board.
http://www.reviewboard.ca/upload/ref_library/1247177561_MVReviewBoard_Traditional_Knowledge_Guidelines.pdf

review, and through the inclusion of IQ from communities and Inuit organizations throughout the Kivalliq Region.

During the environmental assessment process Agnico Eagle made a commitment to consider IQ in Management Plans for the Project moving forward. As the Project advances through permitting, and if approved, into construction, operations, and closure, Agnico Eagle will continue active engagement with local communities and Inuit organizations, and will include additional IQ, as it becomes available, in updates to the design and implementation of Project environmental programs. This will ensure that the combination of science and IQ leads to monitoring that meets the expectations of Inuit organizations, local communities, and government.

1.5.1 Summary of Inuit Qaujimajatuqangit Knowledge, Traditional Land Use, and Concerns of Inuit regarding the Project

A summary of IQ and public concerns relating to the Project are provided below. Management Plans submitted as part of the Type A Water Licence Application also summarize the specific management decisions that take into account IQ and public concern. A full list of public concerns can be found in the Public Engagement and Consultation Baseline Report submitted in support of this Application.

Agnico Eagle has proposed mitigation and monitoring measures to address concerns in the following plans:

- Water Management Plan;
- Aquatic Effects Monitoring Program (AEMP) Design Plan;
- Environmental Management and Protection Plan;
- Spill Contingency Plan;
- Ore Storage Management Plan;
- Mine Waste Management Plan;
- Roads Management Plan; and
- Landfill Waste Management Plan.

1.5.1.1 Fish Resources and Water Quality

Fishing for Arctic char and Arctic grayling continues to be important to Inuit, and the rivers and Meliadine Lake are considered good fishing sites. Inuit Qaujimajatuqangit confirms that Arctic char migrate from the lakes down to the sea via rivers in spring and summer, and travel back upstream to the lakes in the early fall. In addition, IQ confirms that Arctic char prefer very clean waters, and any contamination to water could have adverse effects on this species. Community concerns raised include potential negative effects of the Project on water quality from contamination in the event of a disaster or bad practice, or by dust or spills along the AWAR. Public concern is that this contamination could jeopardise fish populations in Meliadine River, Meliadine Lake, and other waterbodies in the Meliadine watershed.

1.5.1.2 Waterbirds

Thousands of geese stop in the lower Meliadine area to rest and feed during both spring and fall migrations. Inuit Qaujimajatuqangit indicates that geese have been, and continue to be, hunted throughout the Project area, and waterfowl and ptarmigan are also hunted along the proposed AWAR route where important waterfowl feeding areas can be accessed by existing all-terrain vehicle (ATV) trails. Both observations of the land, such as old taluit blinds with shotgun shell casings, and IQ confirm that the area around Meliadine Lake is a good goose and waterfowl hunting area in the fall. Elders have indicated that geese, tundra swans, and sandhill cranes forage on portions of the AWAR in spring and fall and also nest in the area. Elders expressed concerns about the potential for birds to be caught in “tailings ponds.”

1.5.1.3 Caribou

Caribou are the most commonly harvested wildlife species for Inuit hunters, and remain an important part of their culture and lifeways. Based on IQ, harvesting of caribou has occurred throughout the Meliadine River valley and slopes, including the regional study area (RSA) and beyond. In the past, large herds of caribou including cows and calves migrated through the area approximately every 6 to 12 years. In the past few years, caribou have migrated through the area more frequently than in the past. Inuit Qaujimajatuqangit indicates important caribou hunting sites include a flat area north of the Meliadine River bridge used to observe the lowlands for approaching wildlife herds or flocks of birds, and the ridges and eskers used as a major transportation route to caribou hunting areas. Many people report that they continue to hunt caribou throughout Iqalugaarjuup Nunanga Territorial Park, along the slopes on the far side of the Meliadine River, and anywhere that caribou are to be found within ATV reach of Rankin Inlet. Access to hunting areas occurs by ATV and boat in summer, and ATV and snowmobile in winter.

Elders expressed the greatest concern regarding potential effects of mining activities on caribou, including road construction and motorized vehicles potentially limiting or altering wildlife movement patterns, and the potential for overhunting to occur as a result of increased access to caribou migration routes and calving grounds. Inuit hunters indicated that changes in seasonal environmental conditions was affecting the physical condition of caribou; for example, observed lower water levels in rivers and lakes, and its impact on vegetation resulting in skinnier individuals.

1.5.1.4 Other Land Animals

Polar bears are important to Inuit; however, they are rarely observed in the local study area (LSA). Based on IQ, the most likely area for polar bear hunting is in the lower Meliadine valley. Elders have noted that polar bears are sometimes hunted on a portion of the AWAR. Elders have also indicated that muskox were present in the time of their ancestors, but not when they were young, so muskox hunting fell out of common practice; however, community members have indicated that muskox are increasing again in the Rankin Inlet area. Arctic foxes are frequently seen in the area, and a few

people still trap them today throughout the Meliadine River valley area. Wolverine and wolves are hunted whenever and wherever they are observed.

Community concerns regarding land animals include the potential negative effects associated with snowmobiles, changes to the land and water impacting their diet, and road construction potentially affecting environmental stability, contaminating water, and creating barriers for wildlife movement.

1.5.1.5 Vegetation Resources

Inuit Qaujimajatuqangit indicates that berry harvesting has been, and continues to be an important fall activity throughout the Meliadine valley wherever there are low slopes with heath tundra, and in hummocky areas at the edges of wetlands. Families, including grandparents and children, regularly harvest berries on portions of the AWAR as it has abundant blueberries, lingonberries, bearberries, and crowberries. Based on IQ, the berries most commonly picked include paungait (crowberry); kigutangirnaq (blueberry), and kakautit (lingonberries). Wherever berry habitat is accessible by ATV, harvesting is practiced by families; however, people are less likely to cross the Meliadine River to access berry sites, especially if carrying young children.

1.5.1.6 Culturally Important Areas

Inuit Qaujimajatuqangit suggests that the lower Meliadine River (Iqalugaarjuk) has been used by Inuit since prehistoric times as an important dwelling and hunting area. The area has also figured prominently in legends of the area. An archaeological site, known “Qamaviniktalik” to the Elders, is located approximately 1 km upstream from the Meliadine River bridge site. Qamaviniktalik refers to old semi-subterranean sod houses. It is thought that the site was historically occupied during the fall and early winter, before people moved into igloos on the sea ice. Based on IQ, there is an area east of the AWAR that is also culturally important because people camped and hunted successfully there for many years; there is also evidence of meat caches, tent rings, and small inuksuit along ridges in this area. A community member also identified Apuqtinuaq (Meliadine River area) as a major camping area for Inuit in the past.

2 TYPE A WATER LICENCE APPLICATION

In accordance with the NWNSRTA and NWR, Agnico Eagle is required to submit a Type A Water Licence Application to the NWB to use water and to deposit waste and associated activities for the development of the Project (Appendix C, Document 1.1).

The Project is subject to the land and resource management processes established by the Nunavut Land Claims Agreement (NLCA), including provisions of Article 11 respecting the Nunavut Planning Commission (NPC) conformity determination against the Keewatin Land Use Plan and the provisions of Article 12 respecting the Nunavut Impact Review Board (NIRB) environmental assessment review processes. Additional provisions of the NLCA apply with regard to the nature and interests in the land with respect to IOL (surface and subsurface) and Inuit Water Rights and GN Commissioner's land use.

This Type A Water Licence Application has been prepared in accordance with the NLCA, the NWNSRTA, and the NWR, but also takes into account the detailed guidance provided by the Board in *Guide 4 – Completing and Submitting a Water Licence Application for a New Licence* (NWB 2010a) and the *Supplemental Information Guide for Mining and Milling* (SIG-MM3 Guide) (NWB 2010b).

All key documents related to the use of water and disposal of waste associated with the proposed Mine are included as part of this Application. However in keeping with the intent of the new Regulations, section 15 (2), *"…a document received by the Board in respect of the application does not need to be kept in the register if an Act of Parliament requires that the documents be kept in a registry maintained by the Nunavut Planning Commission or the Nunavut Impact Review Board"*. Therefore, Agnico Eagle considers any documents submitted as part of the NPC conformity determination and NIRB review processes, and held on their respective ftp site/public registries, to be part of this Application. For example, Agnico Eagle has not included some of the baseline information reports submitted as part of the Final Environmental Impact Statement (FEIS) review process that may be referenced in the Application, as they are already part of the public record available to any interested party or the Board through the NIRB Public Registry. Agnico Eagle believes this position is in keeping with the spirit and objects of the Board and its relationship with other bodies as provided in the *Act* s.36(2) and s.36(1) in relation to the NPC conformity and in relation to environmental screening/review of projects, respectively.

The Application includes this *General Water Licence Application* and a number of additional supporting documents containing more detailed information. These documents are as follows:

- Mine Plan
- Environmental Management and Protection Plan
- Water Management Plan
- Ore Storage Management Plan

- Mine Waste Management Plan
- Roads Management Plan
- Borrow Pits and Quarries Management Plan
- Landfill and Waste Management Plan
- Quality Assurance/Quality Control Plan
- Public Engagement and Consultation Baseline Report
- Incineration Management Plan
- Hazardous Materials Management Plan
- Explosives Management Plan
- Risk Management and Emergency Response Plan
- Spill Contingency Plan
- Preliminary Closure and Reclamation Plan
- Aquatic Effects Monitoring Program (AEMP) Design Plan
- Landfarm Management Plan
- Project Screening Report

In addition, supporting appendices are included with many of these plans. For example, the Water Management Plan includes supporting appendices for diffuser design, site water quality, and proposed effluent quality criteria, and the Roads Management Plan includes a dust management plan appendix. Agnico Eagle has also submitted as part of this Application a Project Screening Report for Phase 1 of the Project outlining the operational changes made by Agnico Eagle from the time NIRB completed review of the FEIS until submission of this Application. The Project Screening Report confirms that the operational changes do not impact the conclusions of the FEIS (Agnico Eagle 2014a).

Agnico Eagle is required to satisfy the NWB minimum information requirements as follows:

- **General Water Licence Application →** Type A General Application Form (Appendix C, Document 1.1)
- **Supplemental Information Guidelines Checklist →** Concordance Table (Attachment D of the Water Licence Application)
- **Executive Summary →** Main Application Document and all Supporting Documents listed in this section
- **Translated Executive Summary →** Main Application Document and all Supporting Documents listed in this section
- **Application Fee →** In accordance with s.11 of the Regulations, the $30.00 application fee for a licence is included as an attachment to the cover letter of the Application in the form of a cheque to the Receiver General for Canada

- **Water Use Fee →** No water licence fees are payable for the right to the use of waters on , in or flowing through Inuit Owned Lands. The Meliadine Project is on Inuit Owned Lands and subsequently no water licence fee is required.

2.1 Meliadine Site History

Agnico Eagle proposes to construct, operate, decommission, and rehabilitate a conventional gold mine in the Kivalliq Region of Nunavut, approximately 25 km north of the Hamlet of Rankin Inlet, and 80 km southwest of the Hamlet of Chesterfield Inlet.

The Project history dates back to the early 1970's, when multiple companies were involved in the exploration of Meliadine resources. Historically, the Meliadine property was divided as the Meliadine West property and the Meliadine East property. These areas were divided geographically by Meliadine Lake at 547500 E. Meliadine West contains the Tiriganiaq, Wesmeg, Pump, F Zone, and other regional gold showings deposits, and Meliadine East contains the Discovery deposit and other regional gold showings. Exploration activities on the Project (mostly West part) by previous operators are summarized in Appendix C, Document 2.1 and the exploration history is summarized in Appendix B, Table 2.1.

The first mineral claims in the Project area were staked by Comaplex and Asamera Minerals Ltd. in 1987. The Discovery deposit was found on the eastern half of the property in late 1989.

In July 2010, Agnico Eagle completed the purchase of Comaplex making the Project a wholly owned part of Agnico Eagle. The Project is located primarily on IOL administered by the KIA (surface rights) and by Nunavut Tunngavik Inc. (NTI) (sub-surface rights), although many of the claims are grandfathered (royalties are paid to the Government of Canada under the Canada Mining Regulations and then transferred by Canada to NTI) under the NLCA, as they pre-date the NLCA.

The Project moved from an exploration project to an advanced exploration project starting in 2007 when an underground exploration and bulk sample program was advanced for the first time. In late 2010, Agnico Eagle announced that it planned to accelerate the pace of advanced exploration at the Meliadine West property given the encouraging drilling results. Agnico Eagle subsequently re-opened the underground decline and advanced a second bulk sample from underground in 2011, increased the number of operating diamond drills, and modified and expanded the exploration camp and associated facilities (sewage treatment, potable water treatment, power generation, etc.) to allow exploration to continue year round.

Exploration continued during the environmental assessment. Diamond-drilling was required to better define existing mineral resources and to find new resources on the minerals claims. In 2011, condemnation drilling was required to confirm that the mine buildings and other infrastructure were not planned on top of potential new ore zones. For more a detailed site history for the exploration and bulk sampling phase of the Project refer to Appendix C, Document 2.1.

2.2 Current and Potential Future Development

The Meliadine property represents a large prospective land package. The Project assessed in the FEIS is composed of five gold deposits: Tiriganiaq, F Zone, Pump, Wesmeg, and Discovery (Agnico Eagle 2014a). Agnico Eagle proposes to develop these deposits in a phased approach to manage the initial capital investment required, and to allow production to commence while ongoing exploration continues to increase the known ore reserve. The initial phase of development (Phase 1) focuses on the development of the Tiriganiaq gold deposit using traditional open-pit and underground mining methods over an 8 year operational period. Phase 2 will be defined and permitted during Phase 1 once the other deposits are better defined through ongoing exploration drilling. Both Phase 1 and 2 are envisioned to be within the larger Meliadine Gold Mine Project that was the subject of the environmental and socio-economic assessment conducted by the NIRB, culminating in the issuance of Project Certificate No. 006.

Agnico Eagle has designed Phase 1 with growth in mind; however, foreseeable future Project exploration is limited to the known ore bodies assessed in the FEIS (i.e., Phase 2) and does not extend to ore bodies not yet discovered. Phase 2 will extend the mine life beyond 8 years, but it will not result in any expansion of the mining and milling rates as described in this Type A Water Licence Application. The proposed Mine site infrastructure (i.e., the milling plant, the maintenance facilities, the camp, water management and treatment facilities) have been designed in consideration of an extended mine life. No additional expansion of Project infrastructure is proposed; however, any potential additional infrastructure would remain within the footprint outlined in the FEIS. Agnico Eagle acknowledges that any future Project activities that would occur outside of the study area adopted for the FEIS may be subject to a separate review process including an assessment by NIRB and an amendment to the Type A Water Licence, if granted.

2.3 Project Alternatives

The Project needs to be technically, economically, environmentally, and socially viable if it is to proceed. Alternatives to Project components and activities were assessed by Agnico Eagle using the following criteria: technical feasibility, economic viability, environmental acceptability, community preference, social acceptability, and reclamation and closure. Select mine components can be constructed in different locations or operated differently, and activities can be completed or achieved in different ways; therefore, alternatives were evaluated and rated using the above-referenced criteria.

The alternative assessment approach employed by Agnico Eagle recognises that community preferences are important, and that positive and negative effects on valued components of the ecosystemic and socio-economic environments have to be carefully weighed in selecting the preferred alternative. The process gave due consideration to the vulnerability of the Arctic ecosystem, the potential for extension of the mine life, reclamation and closure, and potential for cumulative effects.

Agnico Eagle completed an explicit analysis of all of the reasonable identified means of carrying out the Project components or activities, including the "no-go" alternative. The alternatives analysis is summarized here but was presented in more detail in the FEIS (SD 2-1 Alternatives Assessment Report; Agnico Eagle 2014b). Project alternatives analyzed included the following:

- the marine shipping route for fuel and dry cargo;
- access road alternatives – community bypass road alignment;
- AWAR – restricted or unrestricted use by public;
- use of the Rankin Inlet airport or build airstrip on-site;
- use of Itivia or a private port;
- production rate and mining methods – open pit versus underground mining;
- location of mill complex and associated infrastructure;
- alternatives to on-site processing of ore;
- alternate road access to deposits;
- location of main fuel storage tank farm;
- power generation – power plant location, fuel transportation, choice of generating equipment, fuel choice, wind energy, solar, thermal energy, and hydroelectric;
- location and transport technology type for TSF;
- form of mill tailings generated – slurry, thickened, or filtered;
- alternatives to using cyanide in the mill process;
- waste rock/overburden storage alternatives;
- waste management and disposal alternatives;
- site water treatment alternatives;
- salt water management for underground water (including concentrated brine disposal options);
- mine dewatering alternatives;
- closure and reclamation alternatives;
- hiring point for work force; and
- "no-go" alternative.

Preferred Project alternatives may change as the Project proceeds through design for construction, as additional information becomes available, and as the economic climate changes.

There always remains the possibility that the Project as described in this Application will not proceed to development. Various reasons for this could include the Project failing to make a profit due to a fluxuating price of gold, or the Project is not socially acceptable to Inuit and/or government. The Project could also be delayed due to unforeseen circumstances. At this point in time, Agnico Eagle plans to proceed according to the proposed schedule and mine plan presented herein.

2.4 Regulatory History

Agnico Eagle has operated within Nunavut since early 2008, and has accumulated six years of operating experience under the Nunavut regulatory environment, primarily at its Meadowbank Mine near Baker Lake. From this experience, Agnico Eagle has developed the personnel and management systems required to understand, track, monitor, and report on its environmental performance against the regulatory requirements contained with its operating authorizations, permits, licenses, leases, as well as in the applicable Acts and Regulations in Nunavut. Agnico Eagle believes that it has demonstrated openness, transparency, and a history of being able to adaptively manage its operations to meet its regulatory obligations and requirements in Nunavut. Agnico Eagle further believes that it has demonstrated good faith in meeting all of its regulatory requirements at Meadowbank. This section focuses on current active water licenses issued to Agnico Eagle, Agnico Eagle's future needs, and the recent regulatory history related to the Application.

The Meliadine Project has a long regulatory history dating back to 1999 (Appendix B, Table 2.2). Agnico Eagle currently holds several water licenses related to exploration and mobilization for the Meliadine Project, summarized as follows:

Licence No.:	2BB-MEL1424
Project Name:	Meliadine West Exploration
Purpose:	Advanced Exploration - Bulk Sample
Date Expiry:	July 21, 2024
Location:	Approximately 25 km northwest of Rankin Inlet within the Kivalliq Region, Nunavut (with the general camp coordinates of latitude: 63°01'43''N and longitude: 92°10'12''W)
Scope:	• Underground bulk sampling program • Geotechnical drilling near the Meliadine River Crossing • Small exploration camp (capacity of 200 people in trailers) • Water treatment plant (potable water from Meliadine Lake, mine process water from Pump Lake – under previous water license) • Biodisk sewage treatment system • Landfill • Water containment area • Underground mine opening • Core shacks • Diesel generators • Incinerator • Non-hazardous and hazardous waste storage areas • Light petroleum hydrocarbon impacted soil stockpile
Licence No.:	2BW-MEL1215
Project Name:	Meliadine All-weather Access Road
Purpose:	Phase I AWAR
Date Expiry:	May 31, 2015

Location:	23.8 km long all-weather road between Rankin Inlet and the Meliadine exploration site
Scope:	Construction of a 23.8 km long all-weather road between Rankin Inlet and the Meliadine site, including water crossings over the Char River, Meliadine River, six fish bearing creeks and two non-fish bearing water crossings.
Licence No.:	2BE-MEP1318
Project Name:	Meliadine East Project
Purpose:	Direct water use and deposit
Date Expiry:	October 31, 2018
Location:	Approximately 25 km northwest of Rankin Inlet within the Kivalliq Region, Nunavut (Camp Location Latitude: 62° 55' 50" N Longitude: 91° 54' 58" W)
Scope:	Allow for the use of water and disposal of waste during camp operations and activities related to exploration that include prospecting, geological mapping, geophysical surveys, diamond drilling and trenching at the Meliadine East Project located within the Kivalliq Region

All current licenses are in good standing with no compliance issues identified.

The Project requires a Type A Water Licence from the NWB. Article 13 of the NLCA in conjunction with the Act and Regulations sets out the water licensing process managed by the NWB. The water licensing process deals with all Project uses of water and the disposal of all related wastes. The process also addresses ultimate closure of the proposed Mine and its related facilities. If Agnico Eagle is successful in meeting all of the requirements of the water licensing process, the NWB may issue a licence for approval by Minister of Aboriginal Affairs and Northern Development Canada (AANDC). If the Minister concurs, then the NWB may issue a Water License to Agnico Eagle with incumbent conditions under which the Project may proceed to construction, operation, maintenance and ultimate closure and reclamation (including a temporary closure should that occur during the mine life).

A Type A Water Licence Application for the Project was previously filed with the NWB and amended as follows:

- Initial application form was filed by Mark Balog, Chief Operating Officer, Comaplex Minerals Corp on March 5, 2010;
- Amended application form was filed by Eric M. Lamontagne, Meliadine Project Manager, Agnico Eagle Mines Limited on February 10, 2011.
- A revised General Type A Application Form will be filed as a cover to this Application with an additional copy in Appendix C, Document 1.1.

The Project is also subject to additional requirements under the NLCA, including articles related to land use planning, environmental assessment, Inuit water rights, and other Federal and Territorial acts, regulations, and guidelines. Key objects related to the issuance of the water licence by the NWB are detailed in the followings sections and in Appendix B, Table 2.3.

Agnico Eagle acknowledges its responsibility for compliance with all of the requirements and conditions contained within all regulatory approvals, and to provide the necessary resources to meet these obligations.

2.4.1 Land Use Planning and Environmental Assessment

The Project is subject to land use planning conformity determination by the NPC, and environmental and socio-economic impact assessment processes by the NIRB established under Article 11 and Article 12 of the NLCA, respectively.

Land Use Planning

Current and future land use planning is framed by the Regional Land Use Plan (NPC 2000). This plan establishes a set of objectives relating to:

- community use areas and local authority;
- environmental protection and wildlife conservation;
- mineral, oil and gas exploration and development;
- heritage resources;
- transportation and regional infrastructure; and
- scientific research.

In the Kivalliq Region of Nunavut, land use planning is guided by the existing Keewatin Regional Land Use Plan. The NPC prepared the Keewatin Regional Land Use Plan in accordance with the procedure for public consultation and government review, set out in Part 5, Article 11 of the NLCA. The plan was submitted to government for final consideration in May, 2000, and was approved by the Government of Canada in June, 2000. In the plan, the NPC states that the primary purpose of land use planning in the Nunavut Settlement Area is "*to protect and promote the existing and future well-being of those persons ordinarily resident and communities of the Nunavut Settlement Area taking into account the interests of all Canadians*". The NPC goes on to indicate that "*special attention shall be devoted to protecting and promoting the existing and future well-being of Inuit and Inuit Owned Lands"* (NLCA Article 11.2.1 (b)) *and "the purpose of a land use plan shall be* [in addition to those stated above] ...*to protect, and where necessary, to restore the environmental integrity of the Nunavut Settlement Area* (11.3.2)".

The Project is subject to conformity determination to the Keewatin Regional Land Use Plan. On June 8, 2011, the NPC issued a positive conformity determination for the Project proposal and forwarded the Project proposal and determination to the NIRB for screening (NPC 2011).

Environmental Assessment

Agnico Eagle submitted its proposal for the Project to the NIRB on April 26, 2011 (Agnico Eagle 2011). Upon receipt of the conformity determination from NPC, the NIRB initiated the environmental assessment process (i.e., screening) and, on September 14, 2011, the Minister of AANDC concurred with the NIRB's recommendation that the proposal requires review under Article 12, Part 5 or 6 of the NLCA. The Minister referred the Project to the NIRB for a *"review of its ecosystemic and socio-economic impacts in the Nunavut Settlement Area"*. The Part 5 review process including project scoping, guideline development, submission and review of a draft to final environmental impact statement culminated in a final hearing for the Project in August 2014. For further details on the regulatory history related to the environmental assessment process, refer to the NIRB Final Hearing Report Meliadine Gold Project Agnico Eagle Mines Limited NIRB File No. 11MN034 (October 2014) issued to the Minister on October 10, 2014.

On January 27, 2015 the NIRB received notification from the Honourable Bernard Valcourt, Minister of AANDC, that the Final Hearing Report for the proposed Mine (NIRB File No. 11MN034) had been accepted pursuant to section 12.5.7(a) of the NLCA. In the Final Hearing Report NIRB recommended 127 terms and conditions for the Project consistent with the objectives set out in Section 12.2.5 of the NLCA (NIRB 2014). A Project Certificate Workshop was held on February 23 and 24, 2015 with Agnico Eagle and all relevant regulatory authorities to review the implementation of the terms and conditions presented in the Final Hearing Report, and to assist the NIRB with the finalization of the draft Project Certificate. Project Certificate No. 006 was issued on February 26, 2015 (NIRB 2015).

The Project assessed by the NPC and NIRB included development of the Tiriganiaq, F Zone, Pump, Wesmeg, and Discovery deposits (Agnico Eagle 2014a). This Type A application for the Project requests a term of 15 years to cover construction, mining of ore from the Tiriganiaq deposit, and closure. It is Agnico Eagle's desire and expectation to mine all the deposits as presented in the FEIS. Following ongoing detailed feasibly assessments and detailed design of mining the deposits at F Zone, Pump, Wesmeg, and Discovery, Agnico Eagle will submit an amendment to the Type A Water Licence and management plans would be updated, as required. Should Agnico Eagle determine that further mining is not possible, the Application provides for final closure and long-term monitoring of all facilities related to mining the Tiriganiaq deposit.

The FEIS prepared for the NIRB assessed the Project under a scenario that was considered worst case or greatest environmental impact (Agnico Eagle 2014a). A Project Screening Report has been prepared and is submitted as a supporting document to the Application to confirm that the potential environmental and social effects from the Project assessed in the FEIS are equally relevant and applicable to the Application proposal. As the Project assessed in the FEIS has the greatest environmental impact, the effects analysis and predictions provided in the FEIS are equally relevant and applicable to this Application proposal, and the conclusions regarding the environmental and social effects assessed in the FEIS are applicable and sufficiently robust to accommodate the

proposed refinements to the Project. Therefore, the conclusions presented in the FEIS remain valid for the proposed Mine.

2.4.2 Nature of Interest in the Land

The Meliadine property consists of 52,173 hectares (ha): 887 ha as claims, and 51,286 ha as leases. The 51,286 ha are held under the Canada Mining Regulations, administered by AANDC; and are referred to as Crown Land. As well, Agnico Eagle has 3,430 ha of sub-surface NTI concessions, where the sub-surface mineral rights are administered directly by NTI. Compensation has been paid to the respective owning entities (NTI and AANDC) for Project land use and access to date.

The mineral claims underlying the deposits at the Project were staked with the Government of Canada prior to the signing of the NLCA in 1999, and have been held continuously by the mining rights holder (Comaplex, and now Agnico Eagle). Consequently, they are considered to be grandfathered under the NLCA, meaning that the mineral production royalties payable to the land and mineral rights owner are administered by the Government of Canada under the *Canada Mining Regulations*, unless otherwise mutually agreed to by the mineral claim holder and the mineral rights owner. The royalties collected are then transferred to NTI as the new sub-surface mineral rights owner.

The Meliadine claim and concession block is contiguous, with the exception of the CWM claims and the FAY, FELSIC, and ANT 3 concessions. A location map of the concessions, claims, and leases is shown in Appendix A, Figure 2.1. Additional information specific to the claims, leases, and concessions can be found in Appendix B, Table 2.4, and Appendix B, Table 2.5.

The main Project components are located on IOL, with some infrastructure within the municipal boundaries of Rankin Inlet. The gold deposits of the Project are situated on IOL owned and administered by NTI (sub-surface and mineral rights) and the KIA (surface rights) on behalf of the Inuit Beneficiaries, as designated under the NLCA.

The Project will require the authorization and consent of the KIA for development, construction, operation, and closure of the Mine and its related facilities. These approvals will be in the form of land use leases, production lease, an Inuit Impact and Benefit Agreement (IIBA), a Water Compensation Agreement and other forms of approvals, permits, and authorizations (Appendix B, Table 2.3).

Municipal lands administration in Nunavut is through municipal corporations. In Rankin Inlet, the Land Administration By-laws provide for the administration of municipal lands, and outline the terms and conditions that will be required in municipal leases. The Rankin Inlet Zoning By-law provides for the administration and enforcement of the community plan. The Rankin Inlet Community Plan By-law describes the manner in which development or redevelopment of the municipality may best be organized and carried out.

Security

Agnico Eagle funds its reclamation and water licence financial security liability for its Meadowbank operation through guaranteed letters of credit issued by one of the five major Canadian based banks (currently issued by Scotia Bank). These are irrevocable letters of credit issued as follows:

- interest of the Government of Canada (for water related financial security against reclamation or major accident causing environmental damage as outlined under the Type A Water Licence);
- GN (for accidents or incidents such as a fuel oil spill from the Baker Lake tank farm that could cause major damage to the environment);
- KIA (for land and water related financial security against reclamation or major accident causing environmental damage, as outlined under the Commercial and Production land use leases for IOL); and
- Fisheries and Oceans Canada (DFO) (for financial security against successful implementation of fish compensation measures as authorized by DFO).

These financial security requirements (posted bonds or other forms of financial security) are intended to ensure that money is available to address cleanup, including payment of compensation in the event of accidents that directly or indirectly result in major damage by the Project to the environment, as well as to cover the cost of planned or premature closure, whether temporary or permanent should Agnico Eagle not be able to meet such obligations at such time.

The total value of these letters of credit are in the range of $100 Million pledged for reclamation liability, fish habitat compensation initiatives and various other forms of security (third party liability for the Baker Lake fuel tank farm, land use lease security, etc.). These letters of credit are deducted from Agnico Eagle's credit lines held by the banks, and are irrevocable letters of credit. Agnico Eagle currently reports available lines of credit of approximately $1 Billion.

Agnico Eagle expects that similar financial security requirements will be required if and when the proposed Mine is approved to proceed, and is prepared to meet this obligation in a similar manner to how it meets its financial security obligations for the Meadowbank Mine. Consequently, Agnico Eagle is confident that it has the economic preparedness to meet the requirements for reclamation and security should the Project proceed.

2.4.3 Inuit Impact Benefit Agreement and Inuit Water Rights

Inuit Owned Land is administered by the KIA. Inuit Beneficiaries in the Kivalliq Region are represented by the KIA. Consequently, Agnico Eagle has entered into negotiations with the KIA for the provision of benefits to Inuit through an IIBA. Under the NLCA Section 12.5.2 f, Agnico Eagle is required to detail the steps it proposes to take to compensate interests adversely affected by the Project.

Agnico Eagle and the KIA initiated negotiations for an IIBA for the Project in January, 2012, and continue to advance discussions in accordance with the requirements set out in Article 26 of the NLCA. Both parties are working towards finalizing the IIBA, which could occur early in 2015. For the purposes of the Project IIBA, the KIA and Agnico Eagle have agreed that the most affected communities are Rankin Inlet and Chesterfield Inlet, but the IIBA will cover all seven Kivalliq Communities. Once agreement in principle has been achieved on the IIBA, both KIA and Agnico Eagle will take the proposed IIBA to their respective Boards of Directors for approval. As negotiations are still underway, Agnico Eagle is not in a position to publically disclose any of the details of this IIBA.

In addition to the IIBA, Agnico Eagle and the KIA will undertake the negotiation of an agreement to provide benefits for impacts on wildlife and wildlife habitat. Agnico Eagle will also need to reach a Water Compensation Agreement for the Project with the KIA in accordance with the requirements of Article 20 of the NLCA. To date Agnico Eagle has negotiated a Water Compensation Agreement with the KIA covering the construction, operation, and decommissioning of the AWAR between Rankin Inlet and the proposed Mine site. This agreement is in compliance with Article 20 of the NLCA addressing Inuit Water Rights. Agnico Eagle will require a similar agreement with the KIA for the construction, operation, and decommissioning of the proposed Mine. Agnico Eagle is aware that the NWB is precluded from issuing a water licence for the Project if a water compensation agreement has not been reached with the KIA.

Because it lies on IOL, the Project can only proceed with the full consent of the Inuit as provided by the KIA working with NTI. However, the Project is also closely aligned with the Hamlet of Rankin Inlet; therefore, the Project will also require the cooperation and consent of the Hamlet and the GN.

2.4.4 Existing and Other User Water Rights

Presently, there are no properties adjacent to the proposed Mine that have any influence on the Project. No trap lines have been identified within or directly adjacent to the proposed Mine footprint. No third party or individuals have been identified, or have come forward as existing or other water users with rights that might be impacted by the Project. Agnico Eagle knows of no other water rights that must be secured for the Project.

2.5 Other Authorizations

2.5.1 Government of Nunavut

The proposed Rankin Inlet port facility, laydown area, fuel tank farm, bypass road and the first 2 km of the AWAR are sited on Commissioner's land, administered by the Department of Community and Government Services (CGS) for the benefit of the Hamlet of Rankin Inlet. The Phase 1 AWAR was constructed under land use permits issued by CGS on municipal land, and the KIA on IOL. Rankin Inlet infrastructure will also require leases from the CGS, and the GN will require Rankin Inlet

municipal consent before issuing such leases. Agnico Eagle is not intending to dispose of waste to municipal facilities or use municipal water in any significant amount.

2.5.2 Fisheries and Oceans Canada

Fisheries protection and pollution prevention measures for the Project are subject to the requirements of the *Fisheries Act* s.35, which states that no person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational, or Aboriginal fishery, or to fish that support such a fishery. The Project is not expected to cause serious harm to fish that are part of commercial, recreational, or Aboriginal fisheries, or to fish that support the commercial, recreational, or Aboriginal fisheries in the Peninsula waterbodies (i.e., primarily Arctic grayling), or affect the productivity of the Meliadine Lake commercial, recreational, or Aboriginal fishery, which includes Arctic grayling, Arctic char, and lake trout as the most important species of the fishery. Therefore, it is not anticipated that an authorization will be required under the *Fisheries Act* for the proposed Project undertakings, works, or activities.

Tiriganiaq open pits are proposed to be actively flooded during closure using water from Meliadine Lake to create a connection with the waterbodies that are part of the same watershed, and to facilitate the introduction of fish in the pit lakes. Agnico Eagle will follow the DFO Water Withdrawal Protocol when withdrawing water from Meliadine Lake (DFO 2010).

2.5.3 Environment Canada

The Project will be subject to Metal Mining Effluent Regulations (MMER) requirements (Government of Canada 2012). The MMER establishes conditions governing the authority to deposit effluent and the necessity of operators to conduct environmental effects monitoring studies. The Aquatic Effects Monitoring Program (AEMP) Design Plan submitted in support of this Application has been developed to meet MMER requirements (Government of Canada 2012) and regulatory guidance provided in the SIG-MM3 Guide, while also meeting commitments made during the NIRB environmental assessment process. A single design plan that meets the needs of all applicable regulatory bodies has been developed to avoid duplication of sampling and reporting efforts.

2.5.4 Transport Canada

The Project may be subject to the *Navigation Protection Act* (NPA). Agnico Eagle met with Transport Canada to explore the implications of applying the NPA to the Project. The NPA which came into force on April 1, 2014, is the result of the 2012 amendments made to the *Navigable Waters Protection Act*. These amendments have been incorporated into planning at the proposed Mine, and updated information was provided in supporting document SD 8-1 submitted as part of the FEIS (Agnico Eagle 2014c).

At this time, Agnico Eagle does not believe that the small lakes, ponds, and streams within the Project's footprint are navigable waterbodies. Agnico Eagle recognizes that Meliadine Lake,

Meliadine River, and Melvin Bay in Rankin Inlet are navigable waterbodies, and will continue to work with Transport Canada to determine appropriate mitigation measures and strategies to protect navigable waterbodies and ensure compliance with the NPA.

2.5.5 Type B - Pre-Development Licence

For all pre-development activities, Agnico Eagle will be submitting a standalone Type B Water Licence Application for consideration by the NWB. Following submission of the Type A Application it may take up to one year before Agnico Eagle receives a Ministerial approved Type A Water Licence authorizing full development of the Project. However, since construction scheduling and implementation is dependent upon, and restricted by the seasonal sea lift to support mobilization of supplies and equipment, waiting up to a year to receive a Type A Water Licence before starting construction has significant impact on the overall Project schedule.

The regulatory framework provided in the NLCA and the Act allows for interim, short-term approvals for water uses related to exploration or development work for a proposal under development impact review. Since a Project Certificate was recently issued by the NIRB, the NWB is not restricted from issuing an interim, short-term period water licence for development work related to the Project.

In the Final Environmental Impact Statement for the Project (Volume 2, s.2.2.2; Agnico Eagle 2014d), Agnico Eagle identified the following specific pre-development (site preparation) activities that would be beneficial in accelerating the overall Project schedule if they could be started as early as possible:

- construction of fuel storage tanks farm in Rankin Inlet;
- preparation of the laydown area in Rankin Inlet, including installation of the spud barge;
- construction of a pad for the permanent camp;
- installation of pilings for the permanent camp and infrastructure;
- start of work on concrete foundations;
- construction of necessary service roads to undertake the other pre-development activities;
- stripping of open pit(s) (overburden and waste rock) and ore/waste rock stockpiling;
- new portal and conveyor ramp, including ventilation infrastructure to the underground mine;
- construction of the access roads; and
- pre-delivery of material (i.e., equipment, material, and fuel).

Agnico Eagle planned that these activities would be separately permitted after the Project Certificate was issued, allowing construction to start soon thereafter rather than waiting for other permitting issues involving mine operations to be addressed. This is a similar approach to pre-development work completed at the Meadowbank Mine (under a land use permit from the KIA and a Type B Water Licence from the NWB). This pre-development permitting approach could allow construction work to start this summer (i.e., in 2015), which would be a substantial gain considering

the very small window for construction in the Arctic each year. Pre-development activities for the Project are planned to occur from August 2015 to July 2016.

Pre-development activities will necessitate limited use of existing borrow pits and quarries, and the crushing of materials to generate aggregates necessary for the construction activities (roads, pads, concrete).

Water management will start at pre-development, including culvert installation for the industrial pad. Water management will continue through construction to manage water that comes into contact with Project activities.

2.6 Consultation

Since 2010, Agnico Eagle has had ongoing discussions and consultations with the GN, KIA, local Hunters' and Trappers' Organization (HTO) and Hamlet of Rankin Inlet to ensure that all parties are kept aware of development plans for the Project. This has enabled the GN, KIA, and the Hamlet to incorporate, and where possible, dovetail development plans with their regional economic development plans. This dialogue will continue throughout the life of the proposed Mine. Agnico Eagle will continue to meet directly with Hamlet council in Rankin Inlet to discuss all Project-related issues and cooperate with the Hamlet, where appropriate. The proposed Mine will contribute new monetary income to both Federal and Territorial Governments through payments (taxes), but cannot directly take on the role of paying for new services or infrastructure within the community, which are under the control of Federal, Territorial, or Municipal governments.

In 2012, Agnico Eagle created (with the assistance of the Hamlet) a Rankin Inlet – Meliadine Project Community Liaison Committee made up of representatives from various community groups. This group meets with the Agnico Eagle Project Management team to allow issues related to Project development to be aired and discussed in a troubleshooting format. The committee met in 2012 and 2013, and Agnico Eagle is committed to continue meeting in 2015. While the committee did not meet in 2014 due to waning interest, Agnico Eagle has discussed with the Hamlet the desire to reconstitute this committee or replace it with a similar interagency committee as was proposed by many of the participants in the original Community Liaison Committee. Once construction for the proposed Mine is initiated, Agnico Eagle is intent on reconstituting this approach as a valued community engagement tool.

With the assistance of KIA, Agnico Eagle has engaged in meetings with the Rankin Inlet HTO and Community Lands and Resources Committee to review the proposed Mine development and work on modifying the mine plan to meet issues of concern to local hunters, trappers, and other traditional land users. The Community Lands and Resources Committee will continue to meet throughout the mine life to address concerns as they arise.

Public consultations on the Project have been recorded from 1995 to the present, and have included information sessions, consultation, informed participation, and negotiation. In its public

engagement and consultation, Agnico Eagle focused on those communities in close proximity to the Project (Rankin Inlet and Chesterfield Inlet). Stakeholders were identified and consulted amongst the general public, local and regional communities and Inuit organizations, federal and territorial government departments, and government institutes having a mandate relevant to the Project. The negotiations with the KIA for an IIBA are part of the ongoing consultation process (Section 2.4.3).

Common to all communities were concerns related to caribou preservation, jobs, and training. An additional concern raised in 2012 was employee relations, particularly as it relates to the accommodation of different cultures working together at the proposed Mine. Key community findings and Agnico Eagle's response to address them are outlined in the FEIS (Agnico Eagle 2014a). Community findings directly related to water use and waste disposal are summarized in Appendix B, Table 2.6. In addition, the Public Engagement and Consultation Baseline Report, including a record of all consultation, has been updated and is submitted in support of this Application.

3 ENVIRONMENTAL SETTING

Section 3 of this Application presents a summary of the environmental setting for the Project site, including regional and local site conditions and key baseline information. The information presented represents a snap-shot of the information provided to the NIRB by Agnico Eagle as part of the FEIS (Agnico Eagle 2014a). As stated in Section 2, Agnico Eagle considers any documents submitted as part of the NPC conformity determination and NIRB review process, and held on their respective ftp site/public registries, to be part of the Type A Water Licence Application. All baseline data collected by Agnico Eagle has been submitted as part of the FEIS and are available to the public, any interested party, or the Board through the NIRB Registry.

3.1 Environmental Setting

Nunavut is divided in three regions, Kitikmeot, Qikiqtaaluk, and Kivalliq. The Project is located in the Kivalliq Region, near the northern border of the southern Arctic terrestrial ecozone, and within the Arctic tundra climate region. The Kivalliq Region includes mainland to the west of Hudson Bay, as well as Southampton Island and Coats Island. The population is 8,348 in an area of 445,109 square kilometres (km²) (Statistics Canada 2007). It is composed of seven communities of Arviat, Whale Cove, Rankin Inlet (capital), Chesterfield Inlet, Baker Lake, Coral Harbour, and Repulse Bay.

Most of the Kivalliq Region is part of the Southern Arctic Ecozone (Ecological Stratification Working Group 1996). This ecozone represents a major area of vegetative transition between the taiga forest to the south, and the treeless Arctic tundra to the north. It is characterized by dwarf shrubs, mixed with various herbs and lichens. Wetlands are common in low-lying areas and mainly support sedge-moss vegetation. Major limitations to vegetation growth in the Region include low precipitation, high winds and extremely dry winters. The vegetation present plays an important role in the food chain (NPC 2000). Nearly all sedges, grasses, and fruticose lichens, as well as many herbaceous and woody plants, provide food for grazing animals. Birds and small rodents, that in turn become food of fur-bearing carnivores, consume seeds, winter buds, and the roots of many species.

Within the Kivalliq Region daylight reaches a minimum of 4 hours per day during the winter, and a maximum of 20 hours per day during the summer. The growing season can be up to 750 growing degree-days, enhanced by long periods of daylight; however, frost is common during the summer. Total annual precipitation is less than 30 centimetres (cm). The region is also known for high winds, which are due in part to the broad, flat, uninterrupted expanses offered to moving air masses (NPC 2000).

The physical features of the region have largely been determined by glaciation. Primarily underlain by Precambrian granitic bedrock, the terrain consists largely of broadly rolling uplands and lowlands. Much of it is mantled by discontinuous morainal deposits, except near the coasts, where fine-textured marine sediments cover the surface. Strung out across the landscape are long, sinuous

eskers. This undulating landscape is studded with innumerable lakes, ponds, and wetlands. Cryosols are the dominant soils, and are underlain by continuous permafrost with active layers that are usually moist or wet throughout the summer. The Region is located in the Churchill geological province.

The Region includes the major summer range and calving grounds for Canada's largest caribou herds, including the Qamanirjuaq herd. Caribou are an important food source for the local Inuit. This ecozone is also a major breeding and nesting ground for a variety of migratory birds.

The marine part of the Kivalliq Region lies within the Northern Arctic Archipelago marine ecozone. It is largely ice-free during the two to three month summer and has land fast ice during the winter. The marine ecozone is used by migratory birds and is a major breeding ground for Arctic loons, whistling swans, and snow geese. Marine wildlife includes walrus, seals (grey, harp, bearded, harbour, and ringed), and whales (beluga, narwhal, sperm, northern bluenose, and bowhead) (NPC 2000).Protection areas of the Kivalliq Region include the following:

- Arvia'juaq and Qikiqtaarjuk National Historic Site of Canada;
- East Bay Migratory Bird Sanctuary;
- Fall Caribou Crossing National Historic Site of Canada;
- Harry Gibbons Migratory Bird Sanctuary;
- Iqalugaarjuup Nunanga Territorial Park;
- Inuujarvik Territorial Park;
- McConnell River Migratory Bird Sanctuary; and
- part of the Thelon Wildlife Sanctuary.

The Kivalliq Region is sparsely populated. It is part of the Inuit homeland and Inuit form over 80% of the population (Ecological Stratification Working Group 1996). Much of the economy is based on subsistence hunting, trapping, and fishing. Mineral exploration and mining activities, as well as construction, some tourism, and government services are the other principal activities.

3.2 Regional and Local Site Conditions

3.2.1 Climate

The nearest weather station is Rankin Inlet A (Station 2303401) located approximately 25 km south of the Project. The closest regional evaporation station estimates are from a long-term station operated by Environment Canada at Churchill, Manitoba.

The monthly mean air temperature in the Project region is typically above 0 degrees Celsius (°C) for the months of June to September, and below 0°C between October and May. July is typically the warmest month and January the coldest. Winters are typically long and cold, while summers are short and cool. Spring and autumn are short. The mean annual temperature for the period of record from 1981 to 2009 was -10.4°C.

Mean annual precipitation at the mine site, based on the hydrological year from 1 October to 30 September, is estimated to be 411.7 mm after accounting for rainfall and snowfall undercatch. Approximately 51% of precipitation occurs as rain (207.1 mm), and 49% occurs as snow (199.1 mm). This value is based on the hydrological year (i.e., October 1st to September 30th), and differs from the mean annual precipitation value of 404.8 mm based on the calendar year (i.e., January 1st to December 31st) presented in Appendix B, Table 3-1, which presents the site monthly climate characteristics.

The region is known for high winds, which are due in part to the broad, flat, uninterrupted expanses offered to moving air masses. The wind blows from the north and north-northwest direction more than 30% of the time. The mean values for wind speed show that the north-northwest, north, and northwest winds have the highest speeds, and tend to be the strongest.

Historical climate trends at Rankin Inlet and Baker Lake were analyzed in the FEIS using data from the climate data archives (Agnico Eagle 2014a). The assessment included estimating changes in air temperature and precipitation from observed historical values. Conclusions on trend deviation for air temperature and precipitations are as follows:

- The climate in the Project region is projected to be warmer for the 2050s and 2080s time horizons when compared to the observed historical values.
- Precipitation shows a larger amount compared to historical values; however, the majority of projections are within the annual recorded precipitation values.

Conclusions from FEIS (Volume 5; Agnico Eagle 2014a) also indicate that a warming climate can increase the thickness of the permafrost active layer. Overall, warming could cause thawing of ice-rich permafrost, potentially resulting in permafrost degradation including thaw lakes and subsidence of the land surface.

3.2.2 Topography and Permafrost

The dominant terrain in the Project area comprises glacial landforms, such as drumlins (glacial till), eskers (gravel and sand), and lakes. A series of low relief ridges composed of glacial deposits oriented northwest-southeast control the regional surface drainage patterns. The Tiriganiaq deposit is located on a large peninsula separating the east and west basins of Meliadine Lake. The Project property is about 60 metres above sea level (masl) in low-lying topography with numerous waterbodies.

The Project is located within a zone of continuous permafrost with intervening taliks[4] and thaw bulbs induced by lakes. The permafrost in the region is “cold”, having an average annual surface

[4] Unfrozen ground surrounded by permafrost.

temperature and zero amplitude temperature of less than -4 °C. The depth of permafrost and of the active layer varies based on the proximity to lakes, soil thickness, vegetation, climate conditions, and slope direction. Based on thermal studies and measurements of ground temperatures, the depth of permafrost at the proposed Mine site is generally between 360 to 495 metres (m). The depth of the active layer ranges from about 1 m in areas with shallow overburden, up to about 3 m adjacent to the lakes. The depth of the permafrost and active layer will vary based on proximity to the lakes, overburden thickness, vegetation, climate conditions, and slope direction (Agnico Eagle 2014e). The typical permafrost ground temperatures at the depths of zero annual amplitude (typically at the depth of below 15 m) are in the range of -5.0 to -7.5 °C in the areas away from lakes and streams. The geothermal gradient ranges from 0.012 to 0.02 °C/m (Golder 2012a). The ground ice content in the region is expected to be between 0 and 10% (dry permafrost) based on the regional scale compilation data and the Canada Permafrost Map published by Natural Resources Canada (NRC 1993). Areas of local ground ice are generally associated with low lying areas of poor drainage.

Baseline studies have been completed from 1998 to the present to characterize the permafrost thermal regime at the Project site. In total, 33 thermistors have been installed in the Project area and no apparent changes in permafrost thermal stability have been noted during the monitoring period. Additional permafrost baseline information for the Project is provided in supporting document SD 6-1 of the FEIS (Agnico Eagle 2014e).

3.2.3 Groundwater

There are generally two groundwater flow regimes in areas of continuous permafrost; a shallow groundwater flow regime located in the active layer near the ground surface, and a deep groundwater flow regime located beneath permafrost. From late spring to early autumn, when temperatures are above 0 °C, the active layer thaws out. Within the active layer, the water table is expected to be a subdued replica of topography, and is expected to parallel the topographic surface. Project area groundwater in the active layer flows to local depressions and ponds that drain to larger lakes at velocities estimated to range from about 0.0025 to 0.02 m/day (Agnico Eagle 2014f).

The permafrost in the rock at the Project would be virtually impermeable to groundwater flow. Therefore, the shallow groundwater flow regime has little to no hydraulic connection with the deep groundwater regime. Rock below the base of the permafrost or in taliks is generally of low hydraulic conductivity, on the order of 3×10^{-9} metres per second. Therefore, groundwater velocities in the deep groundwater regime are very low and on the order of 0.2 to 0.3 metres per year.

The elevations of the larger lakes with taliks extending down to the deep groundwater regime (referred to as open taliks) provide the principal driving force for deep groundwater flow. A review of bathymetric data, ice thickness data, and results of thermal modelling suggests that near the Tiriganiaq deposit, only Meliadine Lake and Lake B7 would have open taliks connected to the deep groundwater flow regime. To a lesser degree, groundwater flow beneath the permafrost is also

influenced by density differences (density-driven flow) due to the upward diffusion of deep seated brines (saline water). In the Canadian Shield, concentrations of Total Dissolved Solids (TDS) in groundwater increase with depth, primarily in response to upward diffusion of deep-seated brines. A "WestBay"- type well was installed at the site near the proposed Tiriganiaq underground infrastructure to establish a baseline for deep groundwater quality (Golder 2012b). Mean salinity below the permafrost is estimated at approximately 57,000 milligrams per litre (mg/L) or 5.7% (Agnico Eagle 2013, Agnico Eagle 2014f). Salinity can induce a freezing point depression, creating a cryopeg in permafrost where water can be unfrozen even though the temperature is below 0 °C. The freezing point depression at the proposed Mine site was calculated to be 3.3 °C (Golder 2012b). The portion of the permafrost where groundwater may be partially or wholly unfrozen due to the freezing point depression is estimated to be at a depth of 350 to 375 m.

3.2.4 Ground Condition

In general, the local overburden stratigraphy in the Project area consists of a thin layer of topsoil overlying a layer of silty gravelly sand. Cobbles and boulders are present throughout the entire site and at various depths. The bedrock surface at the Project site is encountered between about 2 and 18 m below ground surface.

Terrain and soil mapping has been completed in the Project area (Agnico Eagle 2014g). The mapping describes and characterizes the terrain and soil resources, their distribution across the landscape, and their quality and sensitivities within the LSA. Seven soil map units were identified, and 15 terrain units have been defined and mapped for the LSA. Soil sensitivities to wind and water erosion range from low to moderate. Soil samples were collected for total metal analysis to measure background metal concentrations. The results indicated that naturally occurring arsenic concentrations are high in the Project area (i.e., above Canadian Soil Quality Guidelines [CCME 2015]).

3.2.5 Geology and Mineralogy

The Kivalliq Region is considered to have excellent mineral potentials. For example, the Rankin-Ennadai-Kaminuriak (Qamanirjuaq) greenstone belt in the central Kivalliq is comparable to the Abitibi greenstone belt in Ontario and Québec for copper, gold, lead, nickel, platinum, silver, and zinc (NPC 2000). In addition, Hudson Bay retains some potential for hydrocarbons, and prospecting activities have been ongoing in the Region for decades. Appendix A, Figure 3.1 and Appendix B, Table 3.2 summarize past and current mineral exploration in the Region.

The Project is located in the northern portion of the Archean Rankin Inlet Greenstone Belt, which is situated in the Northwest Hearne Sub-domain of the Churchill Structural Province that forms part of the northern Canadian Shield. Supracrustal rocks of this belt consist of mafic volcanic rocks, felsic pyroclastic rocks, sedimentary rocks and gabbro sills of about 2.7 billion years old that have been polydeformed and metamorphosed. These rocks were deformed in both the Archean and Proterozoic eras.

The Meliadine trend is defined by northwest-trending rock units as well as a major fault zone known as the Pyke Fault. The Pyke Fault is a several kilometre-long high strain zone, characterized by multiple foliations and regionally important shear zones.

Tiriganiaq is the largest of the known deposits within the Meliadine Gold district and occurs along the east-west trending and steeply north-dipping Tiriganiaq Lower Fault zone. The Tiriganiaq deposit is primarily hosted by banded iron formation (BIF) and crosscutting quartz-carbonate veins. The stratigraphic sequence hosting the Tiriganiaq deposit strikes east-west and dips to the north at an average of 60°.

3.2.6 Vegetation

Vegetation studies have been undertaken for the Project since the mid-1990s to establish a baseline prior to the development of the Mine (Agnico Eagle 2014g). In general, the community types identified within, or in the vicinity of the Project and AWAR areas include upland terrestrial vegetation classes (predominantly heath vegetation - low growing evergreen shrubs, such as Labrador tea, bearberry, and black crowberry), wetland classes (wet sedge meadows or tussock-hummock areas and low shrubby riparian vegetation along the margins of lakes and rivers), and un-vegetated classes (such as areas disturbed by pre-mining activities or bare ground and water).

A total of six rare plant species have been observed within the Project area and include pretty milkvetch (*Astragalus eucosmus*), northern tansy-mustard (*Descurainia sophioides*), hairy butterwort (*Pinguicula villosa*), Lanate willow (*Salix lanata* sp. *calcicola*), moor rush (*Juncus stygius*), and false chamomile (*Tripleurospermum maritimum*).

There are an additional 11 species of rare plants that may have the potential to occur in the Project area, though they have not been encountered during baseline field programs. These are all listed as “Sensitive” in Nunavut (CESCC 2011), though none are federally listed (COSEWIC 2012; *SARA* 2012).

Assessments of baseline metal concentrations in plant tissue and soil in the Project area was undertaken in the fall of 2008 and completed in the fall of 2009, to provide a basis for evaluating potential effects of dust borne contaminants containing metals originating from the proposed Mine and AWAR. In total, 29 permanent sample sites were established in the vicinity of the Project site and along the road; plant tissue samples from at least two different plant species and a soil sample were collected from each site. Most of the soil metal concentrations were within acceptable guidelines, with the exception of arsenic, which exceeded Canadian Council of Ministers of the Environment (CCME) (2007) guidelines for agricultural use on 12 plots. All but three of these exceedances were found in the immediate vicinity of the Project site or along the AWAR near the Mine site. Metal concentrations in tissue from selected plant species were also analyzed to provide an understanding of baseline levels of various metals that may be concentrated in plant tissue. The results of the plant tissue metals analyses indicated a wide variability in the range of metal

concentrations, with highest levels of arsenic found in alpine manzanita *(Arctostaphylos alpine)* and water sedge (*Carex aquatilis)* near the proposed Mine site.

3.2.7 Wildlife

Wildlife baseline studies were completed for the Project between 1998 and 2009 (Agnico Eagle 2014g). Aerial surveys documented the abundance and distribution of caribou in the RSA, while the wildlife baseline was also complemented by observations recorded in the *Meliadine Exploration Camp Wildlife Observation Log* and by an annual Hunter Harvest Survey. Based on the baseline observations, caribou commonly use the area, wolves are infrequently observed, and polar bears are uncommon.

Caribou are an important part of Inuit life, providing food, fuel (from caribou fat), and materials for clothing, tools, and traditional crafts. The Kivalliq Region includes the major summer range and calving grounds for some of Canada's largest caribou herds. The Qamanirjuaq caribou herd in particular uses the Project area and Agnico Eagle has committed to supporting the GN Department of Environment's caribou satellite-collaring program for the Qamanirjuaq herd. Other land animals important to the communities include ungulates such as muskox, and fur-bearing species such as foxes, wolves, and wolverines.

Birds and bird eggs are also important in the Project area, and baseline ground and aerial surveys have recorded the presence and abundance of upland breeding birds, shorebirds, and waterbirds in the RSA. The region is a major breeding and nesting ground for a variety of migratory birds and the peregrine falcon population near Rankin Inlet has the highest known breeding density in the Arctic.

The Project has a Wildlife Protection and Response Plan in place (Agnico Eagle 2012), and in July 2012, Agnico Eagle signed a Caribou and Muskox Protection Agreement with the KIA, which calls for 1) the immediate reporting of a caribou or muskox herd, 2) avoiding disturbing the herd, and 3) the immediate suspension of activities that may interfere with caribou and muskox migration.

3.2.8 Hydrology

The proposed Mine site is located within the Meliadine Lake watershed of the Wilson Water Management Area (NWR Schedule 4). Meliadine Lake has a drainage area of 560 km^2, a lake water surface area of approximately 107 km^2, a maximum length of 31 km, features a highly convoluted shoreline of 465 km in length, and has over 200 islands. Unlike most lakes, Meliadine Lake has two outflows that drain into Hudson Bay through two separate river systems. Most drainage occurs via the Meliadine River, which originates at the south west end of the lake. The Meliadine River flows 39 km through a series of waterbodies, until it reaches Little Meliadine Lake and then continues into Hudson Bay. A second, smaller outflow from the west basin of Meliadine Lake drains into Peter Lake, which discharges into Hudson Bay through the Diana River system (a stream distance of 70 km).

Watersheds near the proposed Mine site comprise an extensive network of waterbodies and interconnecting streams. The hydrology of these watersheds is dominated by lake storage and evaporation. Waterbodies comprise more than 30% of the landscape within the LSA and are typically connected by short outlet channels, which have low slopes at the headwaters, but are steep relative to land slopes at the lower end of the watershed. Channels are typically only slightly entrenched, have high bankfull width-to-depth ratios (greater than 12) and moderate sinuosity (greater than 1.2). Most lake outlet channels in the LSA could be described predominantly as C2 channels by the Rosgen Level II classification system (Rosgen 1994).

Local watersheds have lake surface fractions (i.e., the ratio of lake area to land area) of up to 51%, and the hydrology of these watersheds is dominated by lake storage and evaporation. Summer evaporation is roughly equivalent to summer precipitation, with little if any net input from summer rain. The net input to the annual water balance of the watershed comes from spring run-off that recharges the lakes and ponds. Local study area waterbodies thus follow a predictable seasonal cycle, with a rapid rise in water levels and discharge in late May to mid-June, and subsequent decline in water levels and discharge, until freeze-up towards the end of October (with the exception of Meliadine Lake, which has been observed to flow over the winter). Derived mean annual water yields for LSA lakes vary from 126 to 184 mm, and are similar to the long-term mean annual value of 194 mm at Diana River near Rankin Inlet.

Based on bathymetric surveys, the lakes on the Peninsula range from 1.3 to 90.5 ha in surface area and are shallow (mean depths range from 0.7 to 1.6 m; Agnico Eagle 2014f and h). Only four lakes have maximum depths of 4.0 m or greater. Surveyed ponds on the Peninsula ranged from 0.1 to 18.8 ha in surface area. The ponds are shallow, with maximum depths typically less than 1.0 m.

Observed lake ice thicknesses near the proposed Mine site have been observed to vary between 1.0 and 2.3 m prior to the spring melt. With the exception of the main outlet of Meliadine Lake which has been observed to flow continuously throughout the year, all lake outlets surveyed during baseline studies have been completely frozen over the winter, with no measurable flow. These lake outlets typically start flowing late May or early June, followed by freshet flows in mid- to late-June. Flows steadily decrease in July and low flows are ongoing from August to the end of October, prior to freeze-up.

The beds of larger channels are typically armoured with inerodible boulder and cobble layers. Channels may include flat and steep reaches as governed by the local topography. Channel banks typically consist of vegetated mats of organic material, below which are found organics and fine soils within a matrix of cobble and boulders similar to the bed materials. Mid-channel islands were also observed to consist of a veneer of vegetated organic material resting on a bouldery substrate. Erosion resistance of channel banks is also likely enhanced by frozen conditions during spring snowmelt peak discharges, as has been observed in other northern areas (Scott 1978). However, during unfrozen conditions after spring runoff, these banks may be sensitive to changes in flow regime.

3.2.9 Surface Water and Sediment Quality

Water quality data in the area of the Project were collected and analysed for general parameters (field and laboratory), major ions, nutrients (carbon, phosphorus, and nitrogen), total and dissolved metals, and selected organic compounds (Agnico Eagle 2014f). The data were compared to the most recent CCME *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (CCME 2012a) and Health Canada's *Guidelines for Canadian Drinking Water Quality* (Health Canada 2010). Metal concentrations are generally very low in surface waterbodies in the Project area, and in most cases, concentrations are less than guidelines (see Section 3.3.2). Measured organic compounds are generally below detection limits.

Lake bed sediments in the Project area were analyzed for particle size, nutrients (carbon, phosphorus and nitrogen), total and dissolved metals, and selected organic compounds. Sediment quality data were compared to the CCME values for *Interim Sediment Quality Guidelines* (ISQG) and the higher Probable Effect Level for the *Canadian Sediment Quality Guidelines for the Protection of Aquatic Life* (CCME 2012b). Concentrations of arsenic, chromium, and copper in sediments were above guidelines in many samples. The mean concentration of arsenic from Meliadine Lake was above the ISQG, but the 90th percentile concentration was above the Probable Effect Level. In the waterbodies on the Peninsula and near the Discovery deposit, mean and 90th percentile arsenic concentrations were above the Probable Effect Level value. Some organic compounds were detected in sediments but were either less than the detection limit or less than the ISQGs and Probable Effect Level.

3.2.10 Fish and Fish Habitat

Fish populations were studied in 10 different years at streams, ponds and lakes within the Project RSA (Agnico Eagle 2014i). In total, about 200 waterbodies were sampled, including small lakes, ponds, and interconnecting streams on the Peninsula. Detailed studies were also carried out to describe the movements of Arctic char, to collect tissue samples for metal analysis, and to complete fish population estimates in selected lakes. Arctic char migrations in the Meliadine River were studied and a radio-telemetry and tagging program was employed to describe seasonal movements to different areas of the LSA and RSA. Lower trophic communities (periphyton, benthic invertebrates, phytoplankton, and zooplankton) were also studied at streams, ponds, and lakes within the LSA and RSA.

Small and shallow ponds are the predominant waterbody types in the Project area and have low habitat value for year-round use by fish. However, fish were found to inhabit all lakes and more than the half of the ponds for at least a portion of the year. Stickleback species are the most common species found in the study area. Appendix B, Table 3.3 provides a summary of fish present in the ponds impacted by Phase 1, mining of the Tiriganiaq deposit. Fish were found to have low levels of metal accumulation.

Meliadine Lake is an important lake for fishing for residents of Rankin Inlet. It is considered a recreational and Aboriginal fishery, but not a commercial fishery. The substrate in Meliadine Lake is characterized by coarse materials consisting of a boulder/cobble mix along the shallow areas close to shore. Transition areas, consisting of fine organic materials interspersed among cobbles, are common throughout most of the lake. Substrates within the deep sections of the lake are composed primarily of fine organic material and silt.

Owing to its long shoreline perimeter and the shallow nature of the basins, the littoral zones (i.e., less than 6 m in depth) of Meliadine Lake contribute approximately 66% and 72% of the east and south basins, respectively. Coarse and mixed substrates in these shallow, near-shore areas provide important rearing habitat for juvenile stages of all fish. Coarse substrates (boulder/cobble reefs) in areas of sufficient depth (below the maximum extent of ice cover) may provide spawning habitat for fall and winter spawners. The fine substrates in the deeper areas provide forage habitat for round whitefish and are used as feeding areas for piscivores, such as lake trout, Arctic char, and burbot.

Arctic char, lake trout, and Arctic grayling, the valued ecosystem components in the assessment of fish and fish habitat, occupy top trophic positions in the Meliadine Lake ecosystem. At the base of the ecosystem phytoplankton in lake water and periphyton on shoreline rocks use nutrients and carbon sources for growth, and provide food to benthic invertebrates and zooplankton. Zooplankton feed directly on phytoplankton, while benthic invertebrates feed on periphyton and decaying organic material that settle on the bottom of waterbodies. Fish feed on zooplankton and benthic invertebrates, and predatory fish feed on smaller fish.

Since 1997, extensive baseline monitoring in Meliadine Lake has determined the presence of lake trout, Arctic char, Arctic grayling, round whitefish, cisco, burbot, slimy sculpin, and threespine stickleback (eight of nine species present in the RSA - ninespine stickleback was not recorded). All age-classes of Arctic char, lake trout, and Arctic grayling were well represented in the Project area. Radio tracking of Arctic char demonstrated movements between Hudson Bay and Meliadine Lake, with many fish overwintering in Little Meliadine Lake.

3.2.11 Marine Environment

A detailed description of the baseline data related to the marine environment, as well as the associated impact assessment is presented in Volume 8 of the FEIS (Agnico Eagle 2014c). A baseline field program investigated bathymetry, water and sediment chemistry, aquatic organisms, and fisheries in Itivia and Melvin Bay (Nunami Stantec 2012). Water depths in Itivia Harbour and Melvin Bay were determined to be relatively shallow (maximum depths in the Project footprint reaching 6.6 m). Mean surface water temperature (at 1 m depth) in the harbour was about 8.8 °C, with a salinity of 29.3 parts per thousand, and a pH of 8.08. Mean conductivity was 45.6 microSiemens per centimetre and dissolved oxygen was 114%. Water samples collected for chemical analysis indicated variable metal concentrations ranging from below analytical detection limits to exceeding CCME ISQGs (chromium slightly exceeded the CCME ISQG).

3.3 Key Baseline Considerations for Design

3.3.1 Geochemical Baseline Studies

A baseline geochemical characterization program for the Project was initiated in 2008 and consisted of static and kinetic testing methods to assess the chemical composition of the mine waste and overburden, its potential to generate acid rock drainage (ARD) and its potential for metal leaching (ML) upon exposure to ambient conditions. The objectives of the program were to identify chemicals of environmental interest in the framework of mine water and waste management and probable future mine water quality.

The Project site properties are located in the Rankin Inlet Greenstone Belt. The ore deposits are low-sulphide, gold-quartz vein deposits. The principal lithological units that are likely to be disturbed by mining include turbiditic sedimentary rocks, volcanic-hosted and sediment-hosted iron formation, sericite altered siltstones and graphitic argillite, and schistose and carbonate-altered mafic volcanic rocks.

The waste rock and ore sample selection was completed to obtain a data set that is compositionally and spatially representative of the material to be removed by mining. All waste rock, tailings, and overburden samples were subjected to a variety of static testing to evaluate chemical and mineralogical composition, the potential to ARD, as well as short-term and long-term ML potential. ARD potential was assessed following *Guidelines for Acid Rock Drainage Prediction in the North* (INAC 1992) for waste rock and tailings, and the *Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials* (MEND 2009). All leach test water quality results were screened against MMER for effluent quality (MMER; DFO 2006).

The following subsections summarize the test results for waste rock, overburden, and tailings from the Project geochemical characterization program (SD 6.3 of FEIS; Agnico Eagle 2014j). The results indicate that waste rock and overburden produced on-site are appropriate for use as construction materials; however, the geochemistry of the material will continue to be monitored as needed to verify the chemical adequacy of the material.

3.3.1.1 Waste Rock

The key findings from the geochemical characterization program for waste rock (SD 6.3 of FEIS; Agnico Eagle 2014j) are summarized as follows:

- ARD generation test results (acid-base accounting or ABA) indicate that the waste rock from the Tiriganiaq deposit has no potential for acid-generation (NPAG) owing to its low sulfur content and a readily-available buffering capacity.
- The final pH values of the leachates from the short-term leaching tests (Shake Flask Extraction or SFE tests) are circum-neutral to alkaline with values ranging from 6.1 to 9.5, corroborating the available buffering capacity of the waste rock.

- Leachate quality from the short-term leaching tests meet mine effluent criteria (DFO 2006) for almost all parameters with the exception of arsenic. Arsenic was leached in concentrations marginally higher than the MMER effluent limit (maximum monthly mean of 0.5 mg/L) in one Tiriganiaq greywacke/siltstone sample. However, the average arsenic concentration from all samples was well below the MMER limit.
- Kinetic test leachate quality results from humidity cells, large columns and field cell tests on waste rock also yielded circum-neutral to alkaline pH values ranging from 6.5 to 9.3. This confirms the NPAG classification of the Tiriganiaq waste rock.
- For all kinetic leaching test types, leachate concentrations were below mine effluent criteria (DFO 2006).
- Large column and field cell tests conducted at low water-to-rock ratios that are more appropriate to site conditions generated leachate concentrations well below MMER criteria.

Based on the above, the waste rock from the Tiriganiaq deposit area is considered to be NPAG and has a low potential for metal leaching. Kinetic tests at various scales indicate that drainage water quality will meet MMER monthly mean effluent limits.

3.3.1.2 Overburden

The key findings from the geochemical characterization program for the overburden material (SD 6.3 of FEIS; Agnico Eagle 2014j) are summarized as follows:

- Overburden samples were NPAG, and reported very low sulphur content and the presence of available buffering capacity.
- For all overburden samples, the concentrations of all leachate parameters met mine effluent criteria (DFO 2006) with the exception of one Tiriganiaq surface overburden sample that exceeded the MMER maximum monthly mean limit (0.5 mg/L) for zinc. However, the average zinc concentration for Tiriganiaq overburden samples (0.09 mg/L) was an order of magnitude below the MMER limit.
- Arsenic content in the overburden samples exceeded the CCME Soil Guidelines (12 mg/kg) (CCME 2015). These results are consistent with the natural occurrence of higher arsenic concentrations in soil and surface water samples collected in the area of the Meliadine deposit.

The results of geochemical characterization indicate that the overburden produced is NPAG, and leachate concentrations are generally lower than waste rock and meet MMER monthly mean limits. Waste rock and overburden have compatible geochemical characteristics such that overburden material can be managed together in the same disposal facility.

3.3.1.3 Tailings

The key findings from the geochemical characterization program for tailings (SD 6.3 of FEIS; Agnico Eagle 2014j) are summarized as follows:

- The test results from ABA indicate that the whole ore tailings sourced from the Tiriganiaq deposit are NPAG according to INAC (1992) and MEND (2009) guidance criteria.
- Kinetic testing on the tailings samples maintained neutral pH (>6.5) and stable to decreasing parameter concentrations.
- Most leachates from the SFE tests on Tiriganiaq tailings had constituent concentrations below MMER with the exception of arsenic, which was above the MMER monthly mean limit of 0.5 mg/L (DFO 2006).
- Arsenic concentrations reported decreasing trends in kinetic testing, with initial concentrations ranging from 0.05 to 0.9 mg/L, and the final test results to date ranging from 0.003 to 0.05 mg/L; substantially lower than reported from the SFE tests.

From the available testing results, the Tiriganiaq tailings will not pose an acid generation problem (Agnico Eagle 2014j), nor a metal leaching problem in the long-term. However, any drainage water reporting from the TSF will be captured, monitored and treated if necessary to meet water quality criteria prior to discharge to the receiving environment.

3.3.2 Baseline Water Quality

Results for metal concentrations from baseline water quality sampling of waterbodies in the Project area are presented in Appendix B, Table 3.4 in comparison to aquatic life guidelines (acute and chronic) and drinking water guidelines. Metal concentrations exceeding the lowest of all guidelines were flagged and included in the summary table. None of the metals had concentrations above acute aquatic life guidelines. The following is a summary of baseline metal concentrations relative to guidelines:

- metal concentrations exceeding aquatic life and drinking water guidelines include aluminum, arsenic, cadmium, iron, and lead;
- metal concentrations greater than aquatic life guidelines but less than drinking water guidelines include chromium, copper, mercury, selenium, and zinc;
- metal concentrations exceeding aquatic life guidelines but do not have a drinking water guidelines for comparison include nickel and thallium;
- metals concentrations that are less than aquatic life and drinking water guidelines include antimony; and
- metal concentrations that exceed drinking water guidelines but do not have an aquatic life guidelines for comparison include manganese.

Overall, metal concentrations were very low in surface waterbodies in the Project area, and in most cases, concentrations were less than guidelines. Meliadine Lake had the highest proportion of

samples with cadmium concentrations above guidelines, but mean cadmium concentrations were higher in the Peninsula waterbodies. Chromium concentrations most often exceeded guidelines in samples from the larger waterbodies in the Project area, but mean concentrations were comparatively higher in the Peninsula waterbodies than the other waterbodies sampled. Occasionally aluminum, chromium, copper, and zinc exceeded guidelines in Meliadine Lake.

4 PROJECT DESCRIPTION

The Project involves building, operating, decommissioning, and rehabilitating a conventional gold mine. Some facilities development will take place at Rankin Inlet, where materials will be received by air and sea transport. Year-round access between Rankin Inlet and the proposed Mine site will be facilitated by an all-weather access road (i.e., the AWAR). Appendix A, Figures 1.2a and 1.2b shows the overall Project layout, including the AWAR and Rankin Inlet proposed infrastructures.

The Project assessed in the FEIS is composed of five gold deposits: Tiriganiaq, F Zone, Pump, Wesmeg, and Discovery (Agnico Eagle 2014a). Agnico Eagle proposes to develop these deposits in a phased approach to better manage the initial capital investment required and to allow production to commence while ongoing exploration continues to increase the known ore reserve. The initial phase of development (Phase 1) focuses on the development of the Tiriganiaq gold deposit using a traditional open-pit mining method and underground mining. Two open pits (Tiriganiaq Pit 1 and Tiriganiaq Pit 2) and one underground mine (Tiriganiaq Underground) will be developed. Phase 1 encompasses an 8 year time period and starts commercial production as a nominal 3,000 tpd underground mine centered on the Tiriganiaq deposit, expanding to a nominal 5,000 tpd mine in operating Year 4 with the addition of the two Tiriganiaq open pits. Phase 2 will be defined and permitted during this 8 year Phase 1 period, once the other deposits are better defined through ongoing exploration drilling. Both Phases 1 and 2 are envisioned to be within the larger Meliadine Gold Mine Project that was the subject of the environmental and socio-economic assessment conducted by the NIRB, culminating in the issuance of Project Certificate No. 006.

Mining facilities include a plant site, an ore stockpile site, two open pits, underground mine, TSF, waste rock storage facilities (WRSF), water diversion infrastructure, containment dikes, and a freshwater intake and effluent discharge point in Meliadine Lake.

The Tiriganiaq deposit is located at 63°01'3''N, 92°12'3''W (National Topographic Survey sheets 55/J, N, and O).Tiriganiaq resources located close to surface are to be mined by two open pits developed above the underground mine operation. Mining from these pits will increase production by an additional 2,000 tpd (to 5,000 tpd) of ore from the beginning of Year 4, following a mill expansion planned for Year 3. Tiriganiaq Pit 1 and Tiriganiaq Pit 2 contain a combined total of mineable material (rock and overburden) in excess of 38 million tonnes (Mt). The main open pit (Tiriganiaq Pit 1), which hosts 86% of the open pit ore reserves (2.75 Mt), will be developed first during a 15 month period starting late in Year 2. The two pits contain a combined 3.4 Mt of ore at an average grade of 5.26 grams per tonne (g/t) (after dilution) and 0.2 Mt of marginal ore. This is enough ore to sustain mining for about 4.4 years (Year 4 to Year 8).

A conventional truck/shovel operation for both pits is planned, with different mining approaches for ore and waste zones; selective mining will be used in ore zones and non-selective mining will be used in waste zones.

The ore will be trucked to the mill site located near the Tiriganiaq deposit. When possible, the ore will be dumped directly into the crusher and transported via conveyor to the milling circuit. The mining plan considers that higher grade ores will be processed first, and lower grade ores will be stockpiled and processed at the end of operations. During the last year of operations, only low grade ore and marginal material stockpiled from the pit operations will be processed. Waste rock and overburden not used for construction will be placed in one of the identified waste rock storage facilities.

The Tiriganiaq deposit will also be mined using underground methods at a rate of about 3,000 tpd from Year 1 to Year 7. Two types of stopes will be mined using the same mining method; long hole mining (transverse and longitudinal). The variant selected for a particular stope will depend on the ore zone thickness associated with that stope. The underground mine will use part of the existing decline built for advanced underground exploration and bulk sampling program. The decline will be extended and a new portal (Portal 2) will also be built closer to the mill.

A proposed 7.5 Mt of ore at an average grade of 8.65 g/t will be mined underground within the Tiriganiaq deposit. An estimated 0.94 Mt of marginal grade material at 3.42 g/t from the underground mine will be hauled and stockpiled on surface, then processed. The underground mine will produce approximately 5.4 Mt of waste rock over the life of mine. The majority of the waste rock generated underground will be reused underground for ground stability purposes. Mined-out workings will be backfilled using cemented paste backfill and uncemented rockfill. A backfill paste plant will be part of the infrastructure and located near Portal 1.

The total quantity of explosives required is estimated at about 25,000 tonnes of emulsion over the life of mine. The Emulsion Plant will operate 7-days a week on a 12-hour (h) per day basis. The handling of explosives on-site will be carried out by the supplier and by qualified Agnico Eagle staff (blasters and helper-blasters).

The ore will be processed in a centrally located facility that will comprise: crushing, grinding, gravity recovery, cyanidation and gold recovery in a carbon-in-leach circuit. Gold bars will be smelted on-site. A thickener will be used to recover cyanide solution from the tailings for reuse in the mill. The tailings will be pressed to remove the water, then packed into cakes and transported for storage in the TSF or used in the paste backfill recipe and sent back underground; water removed from the tailings will be reused in the milling process. All tailings water reporting from the TSF will be treated in the Water Treatment Plant (WTP) prior to release.

Potential saline water will come from groundwater infiltration below the permafrost and will mix with other groundwater. Hydrogeological studies are planned for 2015 and 2016 to increase the accuracy of current estimates for groundwater flow and saline water content. Groundwater will be re-circulated for underground operations and excess groundwater will be pumped to the surface for management.

Diversion infrastructure will be constructed to avoid the contact of clean runoff water with areas affected by mining activities. Contact water, originating from affected areas will be intercepted, collected, conveyed to central storage facilities for treatment (if needed) prior to re-use in process or release to Meliadine Lake. Freshwater for potable use and as make-up water for the mill and other operational needs will be sourced from Meliadine Lake.

Power will be generated by diesel-fuelled engines. Camp waste will be managed through a waste management building to promote recycling and to direct waste to proper waste management infrastructure (i.e., incinerator, hazardous waste management, and landfill). A landfarm will be constructed on-site to treat soils contaminated with light hydrocarbons.

Non-local crew changes will take place by air through Rankin Inlet airport, and employees arriving at the airport will be transported by bus to the permanent camp at the Mine site – no additional on-site air transport facilities are proposed. The permanent camp will include accommodation, as well as a reception and security area, a kitchen and dining room, a laundry, recreational facilities, an administration building, and a first-aid clinic.

4.1 Mine Schedule

Mine development activities will occur in four phases: pre-development, construction, operation, and closure, with additional monitoring and mitigation continuing into post-closure.

Pre-development is defined as any construction activities as defined below but specific to activities allowed under the provision of the NLCA Article 13, Section 13.5.5 or the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. This phase will commence after receipt of Type B Water Licence from the NWB and the land use permit from the KIA.

Construction is defined as any activities undertaken for the purposes of establishing or constructing components, infrastructure, and facilities required for development of a mine. Full mine site construction will commence following receipt of a Type A Water Licence from the NWB and Land Use Permit from the KIA. Construction will take a little over four years between the period Year -4 to Year -1.

Operations is defined as the period that the Process Plant is operating and producing a commodity (i.e., gold). During the mine start-up, this will include a 3 month commissioning period planned for October to December (i.e., Q4) of Year -1.

Closure (Abandonment, Reclamation, and Closure) **and Post-Closure** is defined as an Operator ceasing operations at a facility without the intent of resuming mining activities. The expectation will be that the site will be reclaimed and post-closure monitoring will continue until it can be demonstrated that the mine site is both chemically and physically stable.

Key mine development and water management activities and sequence can be found in Appendix A, Figure 4.1; Sequence figures showing each year of development of water management infrastructure can be found in the Water Management Plan, Figures 3.1 to 3.13, accompanying the application.

4.1.1 Construction

4.1.1.1 Pre-Development (Year -5 to Year -4 or 2015 to 2016)

Agnico Eagle is preparing a Type B Water Licence for pre-development to allow key components of the required construction to start as early as possible in the permitting process, given the constraint that no construction of any permanent infrastructure can begin until after the Project Certificate is issued. Agnico Eagle has identified the following specific pre-development activities that will be applied for under a Type B Water Licence to maintain the overall Project schedule:

- construction of fuel storage tanks farm in Rankin Inlet;
- preparation of the laydown area in Rankin Inlet, including installation of the spud barge;construction of a pad for the permanent camp;
- installation of pilings for the permanent camp and infrastructure;
- start of work on concrete foundations;
- construction of necessary service roads to undertake the other pre-development activities;
- stripping of open pit(s) (overburden and waste rock) and ore/waste rock stockpiling;
- new portal and conveyor ramp, including ventilation infrastructure to the underground mine;
- construction of the access roads; and pre-delivery of material (i.e., equipment, material, and fuel).

It is expected that these activities will be separately permitted under a Type B Application, allowing construction to start soon thereafter, before waiting for other permitting issues involving mine operations to be addressed. This is a similar approach to pre-development work completed at the Meadowbank Mine (under a Land Use Permit from the KIA and a Type B Water Licence from the NWB). This pre-development permitting approach could allow construction work to start in the summer season of 2015, which would be a substantial gain considering the very small window for construction in the Arctic each year. Appendix B, Table 4.1 shows the key pre-development and construction schedule.

4.1.1.2 Construction (Year -4 to -1 or 2016 to 2019)

Construction would only start once the required permits, licenses, and authorizations have been obtained. The Construction Phase will take about 4 years to complete and will continue a couple of months concomitantly with the Operations Phase. Appendix B, Table 4.1 provides a list of key activities occurring in each year of construction.

The Phase 1 Project footprint is approximately 453 ha. Construction includes all the steps from engineering to instrumentation and control, including architecture; planning; site preparation; drainage and dewatering; excavation; backfilling; piling; concrete works; buildings construction/installation; piping and plumbing; and mechanical, electrical and communication installations, including programming. Specifically for mine infrastructure, it also includes planning and installing ventilation and other underground services, as well as all infrastructure related to rock handling, mill processing, and tailings and water management.

All site infrastructure construction will be completed during the Construction Phase with most earth work construction being completed during winter seasons to minimize potential impacts to the environment. Culverts, ditches, and water catchment ponds will be installed to effectively manage water. Ponds A54, H19, and H20 will be dewatered in the open water season to facilitate infrastructure construction and mine waste management. Depending on the timing of receipt of the Type A Water Licence, Pond H17 may also be dewatered to facilitate Dike D-Collection Pond (CP) 1 construction in the open water season. The top 0.5 to 1.0 m of freshwater in Pond H17 will be pumped to Meliadine Lake if it meets discharge criteria.

The proposed major mine infrastructure, as shown on Appendix A, Figure 1.2a, will be located on a pad having an area of approximately 178,000 square metres (m^2). The site preparation of the pad will involve the spreading of waste rock and borrow pit materials to an average thickness of 2.5 m over the pad area for a total volume of approximately 445,000 m^3. Similar to the building of the AWAR, Agnico Eagle will target building most of the pad during the winter with surface dressing material added during the summer. The material to construct the proposed infrastructure pad will come from two main sources:

- ramp development waste rock; and
- borrow pits B5 and B6A located near the AWAR (see Appendix A, Figure 4.2 for their locations).

4.1.2 Operations (Year 1 to 8 or 2020-2027)

Operations is projected for about eight years, with mining occurring over the first seven years, and milling over eight years. Ore will be milled in the process plant at a feeding rate of 3,000 tpd in Year 1 to Year 3, and 5,000 tpd in Year 4 to Year 8. A proposed 7.5 Mt of ore at an average grade of 8.65 g/t will be mined underground within the Tiriganiaq deposit. An estimated 0.94 Mt of marginal grade material at 3.42 g/t from the underground mine will be hauled and stockpiled on surface, then processed. The underground mine will feed the process plant at a nominal rate of 3,000 tpd in Year 1 to Year 7. Mining from two open pits will increase production by an additional 2,000 tpd (to 5,000 tpd) of ore from the beginning of Year 4. The milling plan is presented in Appendix B, Table 4.2 and the production schedule in Appendix B, Table 4.3. Both schedules include a pre-production period of 3 months at the end of Year-1 for operational ramp-up.

Maintenance is part of the Operations Phase and will be done on an ongoing basis. If operations or plans need to be modified during the course of operations to optimize efficiency or due to unexpected data, then these modifications will be captured through regular updates of the Management Plans that have been developed for the Project. These Management Plans have been included as supporting documents to this Type A Water Licence Application.

4.1.3 Closure (Year 9 to 11 or 2028 to 2030)

Agnico Eagle intends to start reclamation works as soon as an area's operation is complete. The TSF will be closed progressively as shown in Mine Waste Management Plan. Closure of the TSF will include the placement of an engineered cover to limit vertical infiltration of water to the tailings surface. The progressive placement of the engineered cover will also help prevent dust production. The surface of the TSF will be graded to shed water. The waste rock and overburden storage facilities will also be closed progressively during operations based on the current deposition plan. Waste rock storage facilities will be progressively reclaimed when they reach design capacity (i.e., WRSF1 is expected to reach its design capacity by end of Year 4, WRSF2 and WRSF3 are expected to reach their design capacities by end of Year 7). Following completion of underground and open pit mining in Year 7, the active flooding of the open pit mines will start. Passive flooding of the Tiriganiaq underground mine will also occur following completion of mining.

Most removal or demolition of buildings and infrastructure will occur at the end of the Operations Phase, and would be done during a two years of decommisioning. Reclamation work should be completed within three years of the closure, including the active flooding of the open pits. The passive flooding of the underground mine with groundwater inflows would extend for approximately six years.

4.1.4 Post Closure

Agnico Eagle is committed to monitoring throughout the life of the proposed Mine. The data collected through this monitoring will enable Agnico Eagle to monitor trends and to compare such trends against the predictions made during the environmental assessment process. This will allow Agnico Eagle to review its applied mitigation measures and adaptively modify, change, add, or delete mitigation measures as needed, to ensure that Project impacts are (at a minimum) meeting those predicted during the environmental assessment phase.

Monitoring programs will be initiated during pre-development, construction, and operations to provide baseline information on which to base the final closure and reclamation plan. Monitoring and maintenance programs that are implemented during the closure and post-closure phases of the mine life will use the data collected during operational monitoring. The data collected in operations will also assist with defining measures of success at closure and the performance of the reclamation and closure efforts. The data collected during post-closure monitoring will allow the procedures and activities to be adjusted or modified as necessary to confirm ongoing environmental protection.

Post-closure activities, including monitoring, would continue until chemical and physical stability of site is demonstrated (for a period of 10 years beyond closure).

4.2 Project Infrastructure

The Project comprises the following activities and infrastructure.

4.2.1 Existing Site Infrastructure

Existing site infrastructure is regulated by the NWB under the following water licenses:

- Water Licence 2BE-MEP1318 (Meliadine East Project) (expires 2018-10-31); and
- Water Licence 2BW-MEL1215 (expires 2015-05-31).

Ongoing exploration is an essential component to supporting a long-term mining operation through the identification of potential future reserves. As such, Agnico Eagle proposes to maintain its current Type B Water Licence to allow for the flexibility in water and waste management needed at the exploration stage separate from the Type A Water Licence Application.

Current infrastructure on-site is as follows:

- exploration camp;
- WTP (potable water from Meliadine Lake, mine process water from Pump Lake – under previous water licence);
- Biodisk sewage treatment system;
- water containment area;
- underground portal;
- core shacks;
- diesel generators;
- incinerator;
- non-hazardous and hazardous waste storage areas; and
- light petroleum hydrocarbon impacted soil stockpile.

The decommissioning of the Meliadine East camp on Atulik Lake began during the summer of 2010, and was completed in Spring 2011. The Meliadine East core shack and storage building remain at the former camp site.

The current Meliadine exploration camp is located on the shore of Meliadine Lake, approximately 2.3 km east of the Tiriganiaq deposit. The camp can accommodate 200 people and has a kitchen, a laundry area, potable water and sewage treatment plants, a workers' dry area, and some offices. For the construction period of Phase 1, 50 rooms will be added to the existing camp to make a total of 250 rooms available. During operations, the exploration camp will be maintained for the lodging of

contractors on-site. Three 725 kilowatt diesel generators currently provide energy at 480 volts (V), and these will continue to be used as the power generation system for the exploration camp.

Soil contaminated with light petroleum hydrocarbons (PHC) is being deposited in this bermed and lined area for treatment. To date, there is approximately 420 m^3 of contaminated soil being treated.

A 25 km-long road between Rankin Inlet and the Project site has been built. The road has three bridges and is connected to the existing community road, approximately 7 km from Rankin Inlet, close to the Char River Bridge. This road will be an integral part of the transportation infrastructure for the proposed Mine. Most existing on-site roads will be used for the Project (road from camp to Portal 1 and road from existing camp to water intake location).

4.2.2 Proposed Site Infrastructure

Keeping the Project footprint compact has been at the forefront of strategic planning to increase efficiency and reduce potential environmental impact. The following Project elements have design specifications, input requirements, resulting by-products, operation and maintenance requirements, mitigation measures, contingency plans, and reclamation/remediation plans:

On-Site (Meliadine):

- open pit mining;
- underground mining;
- underground mine access Portal 2;
- crusher;
- ore processing facility (mill);
- emulsion plant;
- TSF;
- quarries and borrow pits;
- ore storage facilities;
- WRSFs;
- surface and underground water treatment facilities;
- water storage facilities;
- accommodation infrastructure;
- maintenance and on-site storage areas;
- power generation;
- fuel storage;
- incinerator;
- haul roads;
- landfill;
- landfarm; and
- AWAR from Rankin Inlet.

Off-Site (Rankin Inlet):

- Fuel storage facility (i.e., Itivia Oil Handling Facility);
- Laydown and material storage area;
- Barge structure; and
- Rankin Inlet Bypass Road (herein refered to as the bypass road).

Details on the above listed Project infrastructure are outlined in subsequent sections of this Application, and/or in the supporting management plans, were applicable.

4.2.3 Mining and Milling Infrastructure

The underground mine will feed the process plant at a nominal rate of 3,000 tpd in Year 1 to Year 7. Process plant feed from the underground is planned to start in the last quarter of Year -1. Access to all underground workings is via one of two declines. The Tiriganiaq underground resource extends from 100 m below surface to 625 m below surface. The main underground mine consists of 21 levels, with one additional level extending to the east. Tiriganiaq resources located close to surface are to be mined by two open pits developed above the underground mine operation. Mining from the open pits will increase production by an additional 2,000 tpd (to 5,000 tpd) of ore from the beginning of Year 4, following a mill expansion planned for Year 3.

The mineral processing facility consists of four main components:

1. Crusher plant;
2. Belt conveyor from crusher to the ore bin;
3. Process plant; and
4. Paste backfill plant.

The proposed ore processing facility will be centrally located relative to the mining site, but at a sufficient distance from the open pits (a minimum safety distance of 750 m was used) to reduce the impact of vibration and limiting the potential for blasting fly rock caused from striking the facility.

The facilities will comprise crushing, grinding, gravity recovery, cyanidation, and gold recovery in a carbon-in-leach circuit. The main ore processing streams will be continuous operations, while the carbon-handling and gold recovery circuits will be batch operations. The plant operating schedule will be on a continuous basis with 92% plant availability, and a design processing rate at 385 tonnes per hour, or 3,000 tpd in Year 1 to Year 3. Expansion to 5,000 tpd is planned for Year 4 to Year 8. The processing plant is anticipated to operate for eight years.

4.2.4 Water Supply Infrastructure

4.2.4.1 Water Source

The freshwater intake is housed within a rockfill causeway located north east of the industrial pad in Meliadine Lake, as shown in Appendix A, Figure 1.2a. The intake will consist of vertical filtration wells fitted with vertical turbine pumps that supply water on demand. The intake will be connected to the pump house with piping buried under the rockfill causeway (Appendix D, Design Drawings) The intake pipe inlet from Meliadine Lake will be located at the bottom of the causeway, and will be fitted with a stainless steel screen. The rockfill causeway will act as a secondary screen to prevent

fish from becoming entrained in the pumps. The stainless steel screen design for the water intake will be consistent with DFO "*Freshwater Intake End-Of-Pipe Fish Screen Guideline*" (DFO 1995). As per the DFO policy, intake screens will be cleaned every two years.

Freshwater from Meliadine Lake will be pumped through an overland pipeline to an insulated main storage tank located at the plant site. The freshwater pipe will be a high density polyethylene pipe, which will be insulated and heat traced. The water storage tank will have a dimension of 10 m diameter and 10 m height, with a total capacity of 739 m^3. Approximately 62,000 m^3/year of freshwater will be required during the construction phase, and approximately 318,000 m^3/year of freshwater will be required during the Operations Phase.

Major freshwater usages on-site include potable use, fire suppression, portion of make-up water for the mill, and other operational needs, such as drilling water if contact water from CP1 is not available and water for the truck shop.

Agnico Eagle will endeavour to minimize the amount of water required for the Project, where possible. Both potable (camp only) and non-potable water (industrial processes) will be used for mine operations.

4.2.4.2 Potable Water Treatment/Use

The camp area will have a WTP for potable (domestic) water. The design flow rate for the potable water for the main camp and accommodations (kitchen, laundry) is 136 m^3 per day (based on a 680-people camp capacity and a nominal consumption of 200 L/day/person). In the portable WTP, the freshwater will first go through sand filters and then be pumped through ultraviolet units, and finally be treated with chlorine. The treated water will be stored within a potable water tank. Potable water will be monitored according to the Health Canada regulations for total and residual chlorine and microbiological parameters. Treated potable water will be piped to areas in the process plant, service complex, and other facilities requiring potable water.

The average consumption of potable water is 29 cubic metres per hour (m^3/h) (Year 1 to 3) and 43 m^3/h (Year 4 to 8). The pump station will be designed with vertical well pipes that include two submersible pumps, one of which will serve as a standby unit and one diesel pump. The design flow rate for the freshwater is 64 m^3 per hour. The water will be pumped through an insulated and heat-traced HDPE pipe (150 mm diameter, 815 m long) to a 736 m^3 insulated main storage tank located at the proposed Mine site. This tank will provide both fire suppression water and freshwater storage.

The fire suppression water reservoir is adequate for two hours of firefighting. A pump station located adjacent to the main storage tank will house two freshwater pumps for distribution, one operating and one on standby, and two fire pumps. One fire pump will be equipped with an electric motor and the other with a diesel motor.

4.2.4.3 Summary of Water Requirements

Water Source Capacity:

The freshwater source for the Project is Meliadine Lake. The Meliadine Lake catchment has a total area of 560 km^2 (including 361 km^2 of land surface area and 199 km^2 lake catchment surface area). The average outflow rates for baseline at the outlet of Meliadine Lake are 16.1 cubic metres per second (m^3/s) for June, 7.7 m^3/s for July, 3.3 m^3/s for August, and 2.5 m^3/s for September (Agnico Eagle 2014f).

Freshwater Requirements:

Freshwater will be pumped through an overland pipeline to an insulated main storage tank located at the plant site. The freshwater pipe will be an insulated and heat traced high density polyethylene pipe. The water storage tank will have a dimension of 10 m diameter and 10 m height, with a total capacity of 739 m^3. Approximately 871 m^3/day and 318,000m^3/year during operations and 170 m^3/day or 62,000 m^3/year of freshwater will be required from Meliadine Lake. The freshwater requirements will be continuous during construction and operations. During closure, freshwater will be used to flood the open pits. The assumed pumping rate is 0.44 m^3/s (38,300 m^3/day) during the open water season from mid-June to end of September for each year. Therefore, approximately, 4,000,000 m^3 of freshwater will be required per year to fill the mined-out open pits. This pumping rate is negligible compared to the average outflow rate at the outlet of Meliadine Lake, and therefore is anticipated to have a neglible effect to the lake. The pumping rate will be further evaluated and managed to minimize potential effects to Meliadine Lake and will ensure the outflow rate at Meliadine Lake outlets does not drop below the 10-year dry condition. In years during which Meliadine Lake discharges are forecast to naturally fall below the 10-year dry condition, no pumping will occur.

4.2.5 Water Management Infrastructure

4.2.5.1 Water Collection Ponds

Six water collection ponds (CP1 to CP6) will be constructed as part of the proposed water management infrastructure. The locations of these water collection ponds are shown on Figure 1.2a.

Collection Pond 1, CP5, and CP6 will be established within existing shallow ponds. Collection ponds 2 to 4 will be established through sub-excavation of the original ground to increase the water storage capacity and eliminate or limit the requirement for berm construction. The design drawings are provided in Appendix D.

4.2.5.2 Water Retention Dikes and Berms

Dikes and berms will be constructed to protect contact water from potentially contaminating fish habitat, to prevent flooding of portals and pits, and to divert natural water away from possible sources of contamination. In general terms, “dikes” will retain sustained water during normal operations. “Berms” on the other hand, may retain short-term water under flooding events.

Permafrost is expected to exist beneath the footprint of each dike and berm on the proposed Mine site. Each of the water retention dikes (D-CP1, D-CP3, D-CP4, D-CP5, and D-CP6) has been designed as a zoned earth fill dam with a geomembrane liner keyed into the expected permafrost foundation to limit the seepage through the dike and its foundation (Appendix D).

4.2.5.3 Water Collection Ditches

Eight water diversion channels (Channel1 to Channel8) will be constructed as part of the proposed water management infrastructure. These ditches are mainly surrounding the WRSF to collect surface runoff and direct the water to the contact water ponds on the site.

4.2.5.4 Water Treatment Plant

The WTP is designed to treat large volumes of water to minimize costs associated with water storage on-site; an iterative process was used to optimize the balance between the size of the pond and the treatment plant capacity.

The selected equipment to treat total suspended solids (TSS) in contact water is the Actiflo® from Veolia Water. This type of unit has demonstrated its robustness and flexibility in Arctic environments (e.g., Meadowbank). Based on the maximum flow rate required each year, it was determined that the WTP (Actiflo® system model ACP-600R) will have a TSS treatment capacity of 520 m³/h (nominal flow) at Year -4 and will be increased with a second ACP-600R to reach a capacity of 1,040 m³/h at Year 3 (see the Mine Plan, Figure 2.33).

At Year -3, one WTP unit (Actiflo® system model ACP-300R [see the Mine Plan, Figure 2.32]) having a TSS treatment capacity of 100 m³/h will also be installed underground to manage underground water including recirculated water for underground operation and excess groundwater.

4.2.5.5 Diffuser

The design basis of the diffuser is as follows:

- number of ports – 6;
- port diameter – 51 mm;
- port height from the lake bottom, assuming minimal sinking into the lakebed – 1 m;
- port angle of discharge from horizontal – 45°;
- space between ports – 6 m;

- overall diffuser length – 30 m; and
- diffuser pipeline diameter – 356 mm.

Appendix E of the Water Management Plan provides more detail on the proposed diffuser design.

4.2.6 Marine Areas

Agnico Eagle will have a floating dock facility (spud barge) dedicated to the Project located at Itivia. This floating dock will consist of a barge that is connected by cables to the shore, while the other end is anchored in place by two "spuds" onto the seabed, which allow the barge to rise and fall with the tides. The barge will be connected to the shore using a ramp or removable bridge section. A portable crane (capacity of about 200 t) will be set up on the floating dock and used to lift the sea cans and other containers and equipment directly off the delivery barges, and place them onto trucks. The barge model anticipated for that facility would be a barge series 1500b, type deck/bulk (length 76 m, breath 17 m, deadweight 2,190 t). The gateway to link the barge to the beach will be about 6.5 m wide by 21 m long.

Agnico Eagle gained extensive experience in shipping fuel and dry cargo to the Meadowbank Gold Mine since its construction began in 2008 and commercial production in 2010. The procedures for offloading equipment in the Itivia area will largely be similar to those currently used in Baker Lake for cargo being shipped to the Meadowbank Gold Mine.

The ship(s) will be located offshore in deep water (approximately 3 km from Itivia) where they will be offloaded onto barges for the transport of materials to the Itivia laydown area. Sea cans, large equipment, machinery, and vehicles will be placed onto the barges for transport through the access passage using tugs before being docked alongside the floating dock (the spud barge) located at Itivia. During lightering onto the barges, attention will be directed to ensuring the barges are secured alongside or anchored, with due consideration to the prevailing and expected wind, weather, and tide conditions. The tug/barges used to ferry the dry cargo to shore will be highly manoeuvrable and capable of transiting the access passage with its changing current patterns. All ships, tugs, and tankers will be equipped with electronic navigational aids. Navigation will be during daylight hours and as much as possible with good visibility. Traffic through the access passage will be coordinated through communication between the tugs to avoid shipping conflicts and to ensure safety. Agnico Eagle is not planning to install any new water based navigational aids on the shipping approaches to Rankin Inlet but will take advice on whether any new aids are required from the shipping contractor, once such a contract has been let.

Most materials will arrive in sea cans, which will be stacked in the Itivia laydown area or immediately moved to the proposed Mine site. At the end of the shipping season, or when all the dry cargo has been received by Agnico Eagle for the year, outgoing cargo will be loaded on the barges for the return trip to southern ports.

4.2.7 Waste Disposal Infrastructure

4.2.7.1 Landfill

The waste management philosophy on-site will be to reduce, reuse, or recycle material where practical. Non-salvageable, non-degradable solid waste material generated during Project construction, operations, and closure will be disposed of in a solid waste landfill. The landfill will not receive any waste that will attract birds or wildlife and it will be maintained in such a manner that windblown litter will be minimal.

The proposed landfill is planned to be located within the WRSF1 footprint as shown on Figure 1.2a. The active WRSF1 will set the bounds of the proposed landfill on its south and west sides, while berms will be constructed on the north and east sides of the landfill (see Figure 1.2 of the Landfill and Waste Management Plan). The purpose of the berms will be to confine the area for waste disposal and to act as a wind shield to reduce windblown debris. The landfill will be a rectangular shape with the length perpendicular to the prevailing wind direction so that much of the waste will be protected from wind by the berm.

Both the floor and the berm of the proposed landfill will be constructed with material (rockfill and/or waste rock) sourced from open pit stripping of Tiriganiaq Pit 1 or 2. The landfill floor will be a minimum of 1.2 m thick. The design of the berms will not assume that they will be in a frozen state or permanently impermeable to leakage. The final design will take into account berm and subgrade stability. The surface runoff from the landfill will be managed as part of the WRSF and the overall site water management plan (see Water Management Plan).

An estimate of waste volume is required to determine the appropriate size of the landfill. However, an exact waste volume is not a critical parameter in the design because of the flexibility of design to accommodate extensions (larger to accept more waste) or contractions (smaller to accept less waste) within WRSF1. Table 4.4 in Appendix B summarizes the current estimate of waste that will be sent to the landfill during construction, operations and closure.

The proposed landfill will be covered with a minimum 3.7 m of waste rock, and should thereafter be stable. When finalizing the design for the cover, the need for thermistors to be installed will be evaluated. The cover surface will be left irregular so as to capture snow, windblown sediment, and plant seeds.

4.2.7.2 Incinerator

The incinerator will be located in its own building on the south end of the infrastructure pad, down-wind of other mine infrastructure. The Project will select and operate its incinerator based on Environment Canada's *Technical Document for Batch Waste Incineration*. The incinerator for the Project will be similar to the one installed at Agnico Eagle's Meadowbank Gold Mine. The Meadowbank incinerator is a camp waste incinerator (model no. ECO 1.75TN 1P MS 60L) from Eco-

Waste Solutions, which is in keeping with Environment Canada's technical guidance. The incinerator complies with the guidelines, where the maximum emissions are expressed as a concentration in the exhaust gas exiting the facility's stack.

Due to the predicted volumes of waste to be generated at the proposed Project site, the incinerator will have an approximate incineration capacity of 1,500 kilogram per day based on a daily 6 to 10 hour burn period. As the incinerator will be operational daily, there will be no opportunity for food waste to collect and attract wildlife. Approximately 360,000 litres (L) of used oil will also be burned in the incinerator per year.

4.2.7.3 Landfarm

Similar to the waste management philosophy, plans are to actively work towards minimizing potential spills through suitable work procedures. Plans developed to support the environmental impact statement address the management of spills on land, ice, water and into the marine environment. When spills do occur, the goal will be to limit the spread of the spill. See the Spill Contingency Plan, submitted in support of Type A Water Licence Application.

Petroleum hydrocarbons (PHC) soils generated during the construction, operations, and closure phases will need to be adequately addressed. One of the management options for soil contaminated with light hydrocarbons, such as diesel, is to treat this material on-site in a landfarm. Materials contaminated with heavy hydrocarbons (e.g., hydraulic fluid or grease) are not treatable in the landfarm and will need to be segregated, packaged and shipped south for treatment and/or disposal. Spills that occurred during the exploration phase have resulted in approximately 420 m^3 of light PHC being currently stored on-site. This material will need to be moved to the landfarm facility if treatment is not complete at the start of the construction phase. This volume has been included in the design of the facility.

At Meadowbank, it was assumed that 350 m^3 per year of PHC will need to be managed for the 12 years of construction, operations, and closure of the Project. This assumption has also been used for the design of the Meliadine landfarm. For the two years prior to the commencement of construction, half of this volume per year (175 m^3) is used in the design criteria. Additionally, it was assumed that a yearly volume of 500 m^3 contaminated ice and snow would require management. Based on these assumptions, Appendix B, Table 4.5 shows the potential volume of PHC and snow and ice contaminated materials to be managed on-site. The total potential volume of PHC used in the Project design is estimated to be 4,970 m^3.

It is estimated that soils contaminated with light end petroleum hydrocarbons would require three full summer seasons for complete remediation (Tetra Tech EBA 2014). When remediated, the soils will be removed from the facility and can be used for any construction purpose, such as overburden for use in the TSF cover, or it can be stacked in the WRSF. Refer to Appendix B, Table 4.6 for the Landfarm Design Criteria.

Appendix B, Table 4.6 shows the evolution of the volume of PHC considering a remediation over 3 years, and the maximum volume of contaminated material that is anticipated to be stored over constuction, operations, and closure. The maximum volume of PHC and ice/snow in the facility is estimated to be 2,670 m³. Based on a stacking thickness of 1.5 m and the requirement to turn over the surface of the piles during the summer months, the required storage surface is 3,650 m². In addition, the landfarm will have sufficient water storage capacity to contain 500 m^3 of contaminated snow and runoff from the 1 in 100 wet year spring freshet. To prevent movement of contaminants from the landfarm facility into groundwater and the surrounding environment, the Meliadine landfarm will have an impervious liner.

4.2.7.4 Sewage Treatment

The sewage treatment plant (STP) will be housed in a prefabricated (modular) structure, located south-east of the service complex. The sewage treatment system will be designed based on a flow rate of 200 L per day per worker for a peak load of 680 people, for an average daily flow rate of 136 m³ (5.67 m³/h). Biological reactors like Bionest Kodiak units are envisioned to treat camp waste water.

The STP for the camp facilities will be designed to meet appropriate guidelines for wastewater discharge (for example, NWT Water Board 1992). *Wastewater System Effluent Regulations* criteria are not currently applicable to systems located in Nunavut, and are unlikely to apply to the Meliadine effluent quality. Appendix B, Table 4.7 provides the anticipated performance of the system compared to the *Wastewater System Effluent Regulations* criteria.

4.2.7.5 Ore Storage Facilities

The design for the ore pads consists of a layer of 1 m thick waste rock placed over the original ground. The ore stockpiles are temporary structures and small compared to the WRSFs. Based on the stability and thermal analyses completed for the WRSFs presented in the Mine Waste Management Plan and past experience with similar structures at other mine sites (i.e., Meadowbank Mine), the ore stockpiles will have an acceptable factor of safety against potential slope failure. The ore material below the seasonal thawed layer is expected to be in a frozen condition. The key design parameters for ore stockpiles are summarized in Appendix B, Table 4.8. Appendix D provides design drawings. Details on the ore storage facilities and management are provided in the Ore Storage Management Plan.

4.2.7.6 Mine Waste Storage Facilities

The design location of the WRSFs took into consideration the environmental, social, economic, and technical aspects of waste rock management which included the following:

- minimize the overall footprints of the WRSFs while maintaining the short-term and long-term stability of the facilities;
- avoid or minimize impacts to adjacent fish bearing lakes;
- minimize the haul distance from the open pits to the WRSFs;
- minimize the number of the water catchment areas potentially affected by drainage from the WRSFs;
- when feasible, divert the upstream clean natural non-contact run-on water away from the WRSFs;
- facilitate the collection and management of the contact water from the WRSFs during mine operations to avoid potentially negative impacts on the surrounding environment;
- maintain a minimum distance of 100 m between the toe of the WRSFs and the open pits;
- maintain a minimum distance of 20 m from the toe of the WRSFs to haul and access roads; and
- maintain a minimum distance of 100 m between the toe of the WRSFs and adjacent lakes that will not be disturbed by mine activities.

Appendix B, Table 4.9 summarizes some of the key physical parameters used for the design of the WRSFs. The WRSFs will provide a 9.4 million cubic metres (Mm^3), 3.6 Mm^3, and 5.0 Mm^3 of design capacity for WRSF1, WRSF2, and WRSF3, respectively.

The TSF is located on high ground west of the proposed mill and east of Lake B7. The direct distance from the mill to the tailings stacks ranges from 300 to 900 m. The minimum setback distance from the edge of Lake B7 is approximately 200 m. The TSF is designed to accommodate approximately 9.7 Mt of tailings. The tailings will be managed using a three cell system (Cell 1, Cell 2, and Cell 3) to limit dust generation, control tailings surface erosion, and to facilitate the progressive reclamation and closure of the TSF (see Figure 6.1 of the Mine Waste Management Plan). As the tailings reach final elevation, it is proposed that the tailings are progressively encapsulated with either waste rock or a layered combination of waste rock and overburden. The properties of the tailings and TSF operational parameters relevant to the design of the TSF are provided in Appendix B, Table 4.10. Appendix D provides the design drawings.

4.2.7.7 Minewater Disposal

All water that has been in contact with any infrastructure and facilities on-site (i.e., contact water) will either be reused to minimize freshwater requirements or discharged via a submerged diffuser into Meliadine Lake after treatment. Design criteria for the diffuser is provided in Section 4.2.5.5, based on a maximum effluent flow rate of 0.12 m^3/s and an average flow rate of 0.047 m^3/s.

Contact water in the underground mine will be collected within underground sumps and treated to remove TSS by the underground TSS removal plant. A proportion of the treated water will be recirculated as make-up water for underground drilling. Excess treated underground water (treated water less make-up to underground drilling) will be pumped to surface for management. The

estimated volume of water to be managed is expected to range from a minimum of about 0.11 Mm^3/year to a maximum of 0.18 Mm^3/year depending on the year of mine life.

Agnico Eagle is considering several options for the long-term management of groundwater reporting to the underground workings at the Project (Water Management Plan, Appendix F). During Year -5 and Year -4 of construction, a hydrogeological investigation program will be completed to improve estimates of the amount and quality of groundwater that may potentially report to the underground mine. In Year -3 (i.e., 2017), following the completion of the investigation, the long-term groundwater management strategy for the Project will be finalized and submitted to the NWB for approval.

An interim plan is required for the first two years of groundwater inflows (i.e., Year -3 and Year -2) to allow for implementation of the long-term groundwater management strategy. Excess water from the underground mine will be pumped to the surface for storage for Years -3 and -2. Based on the estimated groundwater inflow rates (Water Management Plan, Table 4.5) and underground drilling water make-up requirements, up to approximately 0.25 Mm^3 of groundwater will require storage on surface.

4.2.8 Accommodation and Associated Infrastructure

Due to the remote location of the proposed Mine, it will be necessary to provide catered accommodation on-site. The permanent camp will include individual rooms, with the flexibility to house visiting senior staff and guests. Recreational facilities will be included as they are considered essential to maintain a healthy life style and retain employees.

The camp complex will be constructed out of insulated structural wood frames resting on a structural steel frame floor on piles. The camp complex will meet National Building Code of Canada Group C fire safety and occupancy requirements. At full operational capacity, the camp will house approximately 680 people.

A two storey building of 100 modules will house the kitchen, dry/warehouse, and offices. The first floor (2,290 m^2) will have the main entrance with security services, a kitchen and dining room, and a dry warehouse. The second floor (1,686 m^2) will house administration offices, an engineering and training room, various departmental offices (e.g., human resources, training, geology, engineering, planning, environment), and a potable WTP, emergency boiler, and HVAC equipment. This service building is constructed out of insulated structural wood frames on a structural steel frame floor on a pile-supported foundation.

4.2.8.1 Explosives Production and Storage Facility

The construction and operation of the Project will require the use of ammonium nitrate/fuel oil (ANFO) and emulsion based explosives. ANFO will be used during construction until the Emulsion

Plant begins manufacturing emulsion-based explosives. Presplit explosives will also be used to control the final pit walls, where required. General infrastructure for the management of explosives at the proposed Mine site includes the following:

- Emulsion Plant;
- storage of raw materials used in the manufacturing of emulsion;
- Powder Magazines for storage of explosives such as boosters, detonating cord, presplit explosives, and ANFO (surface and underground mining); and
- Cap Magazines (surface and underground).

All products required for blasting activities will be shipped by vessel from the south to Rankin Inlet, loaded onto barges at the vessel anchoring location, and transported to Itivia. Explosives, boosters, and caps, will be transported directly to the proposed Mine site after being unloaded from the barges. The bypass road and AWAR will be used to truck explosives and raw materials for manufacturing explosives to designated storage locations at the proposed Mine site. In the event that these products require temporary storage in Rankin Inlet, they will be stored in appropriate storage magazines meeting federal *Explosives Act* and *Regulations*. The temporary storage magazines will remain under constant surveillance by Agnico Eagle personnel while in use.

The Emulsion Plant, raw material storage, and magazines will be safely located away from vulnerable facilities, as stipulated by the federal and territorial *Explosives Use Act* and *Regulations*. The explosives truck(s) will be based at the Emulsion Plant. A garage will be included in the building for the maintenance and washing of trucks and equipment used to handle explosives.

The minimum setback distances between the proposed Emulsion Plant, explosives storage facilities and the other mine site facilities will be governed by the *Quantity-Distance Principles User's Manual,* as published by the Explosives Branch of Natural Resources Canada. Use of these setback distances will ensure that the location of these proposed facilities meet all federal and territorial regulations regarding safe siting of such facilities.

4.2.8.2 Laboratory and Core Shack

The assay laboratory and core shack will be designed to accommodate, but not be limited to, an average of 300 samples/day in a building located on the proposed Mine site. The assay laboratory and core shack will be housed in a building located near the south of the warehouse building. The building will be a prefabricated steel frame (foldaway type) structure covered by cladding and roofing panels.

The assay laboratory and core shack will comprise:

- a core shack with receiving area and a saw room; and

- an assay laboratory with a sample receiving area, sample preparation room, balance room, fire-assay room, warehouse, an office and also a service room (locker, washroom, and janitor's room).

4.2.8.3 Quarries and Borrow Pits

Borrow pits and quarry management procedures are described in detail in the Borrow Pits and Quarries Management Plan.

Borrow pit and quarry material will be needed to build proposed Project infrastructure including the following:

- bypass road;
- Itivia laydown area;
- Infrastructure pad; and
- maintenance of the AWAR.

The proposed major Mine infrastructure, as shown on Appendix A, Figure 1.2a, will be located on a pad having an area of approximately 70,000 m^2. The site preparation of the pad will involve 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. Culverts, ditches, and water catchment ponds will be installed to effectively manage water. The location of potential quarries and borrow pits is provided in Appendix A, Figure 4.2.

Site preparation was previously discussed in Section 4.1.1.2 (Year -4 to -1 or 2016 to 2019).

4.2.8.4 Maintenance, Warehouse, and Laydown

An industrial mine maintenance shop containing several maintenance bays, a wash bay, a machine shop, and a welding shop will be required at the proposed Mine site. The concrete foundation will be designed according to the type of bay (e.g., for a wash bay, drains in the foundation will be designed for used water with a sump for an oil separator).

The Itivia Oil Handling Facility includes the fuel tank farm is located fairly close to the barge landing and within an area of about 114,200 m^2 (Appendix A, Figure 1.2b). The tank farm will consist of one 20 million L tank, one 13.5 million L tank, and one 4 million L tank, for a total capacity of up to 37.5 million litres of diesel fuel.

A fenced-in laydown area needs to be built near the offloading barge to store the material being received during the barge season. An area of approximately 6.68 ha will be established to act as a laydown yard for the incoming freight. The 6.68 ha laydown will be backfilled with 1.2 m of 0-500 and 200 mm of 0-20 mm crushed rock with a total excavation of 42,000 m^3.

4.2.8.5 Power Generation

The Project power plant will be a diesel-fuelled facility using multiple medium-speed reciprocating engines housed in a building (Murox type building) with a floor area of 2,680 m². A separate modular building is required (13 modules, 3.7 m x 15.2 m each with a floor area of 731 m²) to house all the switchgears, transformers, mechanical rooms, electrical rooms, and heat recovery systems. The power station will be equipped with heat recovery and auxiliary equipment. The power output is rated to meet the requirements of the process plant, ancillary support loads, and the camp. Two spare units will be installed so that any two units can be on standby and/or out-of-service for maintenance or repair. Waste heat from the diesel power plant's high-temperature loop (jacket water, oil cooler, and after cooler) will be recovered to provide total space heating and domestic water heating.

During construction, five 600 V diesel generator sets will be used to provide power for temporary facilities, such as office trailers and power for construction activities. These generators will progressively be bought during the construction period to provide power when needed (e.g., underground ventilation, new building, and temporary power). After construction is completed, these generators will be consolidated and used as an emergency standby system.

4.2.8.6 Fuel storage

The tank farm at Agnico Eagle's Itivia Oil Handling Facility will consist of one 20 million L tank, one 13.5 million L tank, and one 4 million L tank, for a total capacity of up to 37.5 million L of diesel fuel. Tanker trucks will transfer the fuel from Agnico Eagle's Itivia Oil Handling Facility to the tanks located at the proposed Mine site. The main storage tanks at the proposed Mine site will include one 6 and one 3 million L tank. There also will be a number of storage tanks with capacities varying between 1,000 and 250,000 L. The total diesel fuel storage capacity at the proposed Mine site will be in the range of 9.7 million L.

The diesel tanks at the proposed Mine and at Itivia will be single-walled, constructed of welded steel, and designed, constructed, and located to meet the CCME guidelines for *Aboveground Storage Tank Systems Containing Petroleum and Allied Petroleum Products*. The fuel unloading facility in each area (i.e., proposed Mine site and at Itivia) will include a sloped lined pad to prevent contamination of the receiving environment. A continuous 60 mm high-density, polyethylene liner sheet will be installed under the diesel tanks and within the sides of the perimeter berm. The containment area will be sized to hold 110% of the volume of the largest tank.

With the exception of diesel fuel, most petroleum fuel and lubricant products will be delivered to the proposed Mine site and stored in the original packing container from the manufacturer. These types of containers include a variety of sealed drums, pails, 1-ton super sac, bulk cubs, cans, and tubes.

Due to transportation restrictions, a full year's supply of petroleum fuel and lubricants products will be transported and stored at the proposed Mine site during the shipping season. During the summer months, diesel will be shipped from eastern ports to Rankin Inlet, where it will be transferred into storage tanks at the Itivia Oil Handling Facility. From the Itivia storage tanks, fuel will be transported daily to the proposed Mine site via the bypass road and AWAR.

4.2.8.7 Roads

The AWAR, as shown in Appendix A, Figure 1.1, connects Rankin Inlet to the proposed Mine site. The AWAR is a 23.8 km private road built with a 6.5 m running surface between the Char River bridge turn-off and the proposed Mine site, and has passing turnouts approximately every 400 ± 50 m (9.5 m total road width at passing turnouts[5]). The AWAR was built in 2013.

A bypass road will be built around the south of the airstrip to Itivia as shown in Appendix A, Figure 1.1. Its design and width will be identical to the AWAR (6.5 m). The bypass road will be approximately 5.1 km long and will allow traffic from Itivia to bypass the hamlet in delivering people, materials and fuel to the proposed Mine site.

Haul roads outside the open pits will be 26 m wide to allow for two way traffic, or 17 m for single lane traffic with passing zones spaced accordingly. A two-lane 17 m-wide haul road designed for 70-t trucks in dual lanes is required to lead to the TSF and paste plant. Safety berms will be installed where necessary along the haul roads.

The ramps and haul roads will be designed for the largest equipment (70 payload tonne class haul trucks), with an operational width not exceeding 5.7 m, in accordance with Nunavut mine regulations. For double lane traffic, the ramp width will be 21.5 m decreasing to 15.8 m for single lane traffic at the pit bottom (last three benches) to reduce waste stripping. The ramp's width includes a protection berm and a drainage ditch. The safety berm on the outside edge will be constructed of crushed rock to a height equal to 3/4 of the rolling radius of the largest tire using the ramp. To facilitate drainage, ramp gradients have been established at 10% and will increase to 12% for the last three benches at the bottom of the open pit.

[5] Passing turnouts allow vehicles to pass each other when travelling in opposite directions.

5 ENVIRONMENTAL IMPACTS AND MITIGATION

The Project was subject to a NIRB Part 5 environmental impact review process which culminated in a decision to proceed with the Project, approval of the Minister, and issuance of Project Certificate No. 006 in February 2015. To fulfill the information requirements as defined in the NIRB Guidelines (NIRB 2012), Agnico Eagle submitted a FEIS (Agnico Eagle 2014a) that provided a detailed evaluation of the potential biophysical and socio-economic effects of the Project. The FEIS includes extensive baseline data characterizing the Project area, and provides descriptions of Project design features and mitigation measures that will be implemented to remove or minimize potential adverse effects to valued ecosystem components in the Project area for construction, operations, and closure. Conceptual management and monitoring plans were provided during the Part 5 review process and have been updated to reflect the requirements of the Project Certificate issued by NIRB, the requirements of the Water Licence, and Project design refinement. These plans provide the approach to assess the validity of the impact predictions made and describe the systematic adaptive management approach to decision making whereby operational practices can be adapted and adjusted as required to reduce or eliminate any unforeseen negative impacts throughout the life of the Project. A summary of the potential environmental and cumulative environmental impacts of the Project relating specifically to the use of water or disposal of waste is provided below.

5.1 Air Quality

Potential air quality effects relating to the use of water or disposal of waste include the potential deposition of dust into natural waterbodies. The assessment of potential air quality effects from Project activities focused on the Operations Phase when emissions and activities will be at their highest. Effects from all compounds with the exception of 24-hour total suspended particulate and particles nominally smaller than 10 µm in diameter (PM_{10}), are predicted to be of negligible to moderate magnitude at the proposed Mine site, and of negligible magnitude along the AWAR. Effects of total suspended particulate and PM_{10} are predicted to be of high magnitude for the proposed Mine site, and of moderate to high magnitude for the AWAR within the Site Study Area and LSA. However, all residual effects are assessed to be of a negative direction, medium-term duration, and fully reversible once Project emissions cease. Therefore, the potential residual air quality effects from Project activities were determined to be not significant. No potential cumulative effects on air quality were identified.

For additional information on potential environmental impacts and predictions related to air quality refer to Volume 5, Section 5.2 of the FEIS (Agnico Eagle 2014k). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to air quality from mining Tiriganiaq only. For mitigation and monitoring related to dust controls refer to the Roads Management Plan, Mine Waste Management Plan, and the Borrow Pits and Quarries Management Plan.

5.2 Noise

Potential noise effects relating to the use of water or disposal of waste include the noise from equipment during the disposal of waste, waste rock, and tailings. The assessment of potential effects of Project activities on environmental noise focused on the Operations Phase when emissions and activities will be at their highest. The potential residual effects on noise levels at the identified receptor locations were assessed to be of a negative direction, negligible to moderate magnitude, low to moderate geographic extent, medium-term duration, moderate frequency, and reversible once Project activities cease. Therefore, the potential direct residual effects on the identified noise receptor locations as a result of the Project were determined to be not significant. No potential cumulative effects on noise were identified.

For additional information on potential environmental impacts and predictions related to noise refer to Volume 5, Section 5.5 of the FEIS (Agnico Eagle 2014k). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to noise from mining Tiriganiaq only.

5.3 Permafrost and Permafrost Terrain

Potential permafrost and permafrost terrain effects relating to the use of water or disposal of waste include potential permafrost loss or alteration from the waste rock, ore, and tailings storage facilities. Physical loss or permanent alteration of terrain and soils from the Project were determined to have potential negligible to low magnitude residual effects to permafrost and permafrost terrain. Therefore, the potential residual effects of the Project on permafrost and permafrost terrain were determined to be not significant.

For additional information on potential environmental impacts and predictions related to permafrost and permafrost terrain refer to Volume 6, Section 6.3 of the FEIS (Agnico Eagle 2014g).

5.4 Soil and Vegetation

Site clearing and construction for the Project, particularly through the processes of soil stripping and storage, may result in changes to soil quality. With the implementation of mitigitation measures effects to soil quality the change in local soil quality from soil stripping and subsequent storage, compaction and erosion is anticipated to be within the range of baseline values or neglible. The residual change from soil stripping and storage on local soil quality is predicted to be reversible at the end of closure. For additional information on potential environmental impacts and predictions related to soil refer to Volume 6, Section 6.4 of the FEIS (Agnico Eagle 2014g).

Potential vegetation effects, (i.e, changes in species composition and abundance and/or accumulation to toxins or heavy metals) relating to the use of water or disposal of waste include the potential loss or alteration from the waste rock, ore, and tailings storage facilities and the general construction/operation of the mine (e.g. introduction of non-native species). The physical loss or

alteration of vegetation (including permanent loss or alteration) from the Project was determined to have potential residual effects to vegetation. Potential changes from the Project are predicted to result in moderate, local-scale impacts to plant populations and communities. The effects analysis results on vegetation pathways indicate that the Project should not result in significant adverse impacts to the persistence of plant populations and communities, including listed plant species and the use of traditional plants. Overall cumulative direct and indirect effects to vegetation are predicted to be negligible to low. Incremental and cumulative effects should be reversible in the long-term. Therefore, the Project is not predicted to have a significant adverse impact on plant population and community abundance and distribution, nor on the continued opportunity for traditional and non-traditional use of plants in the region.

For additional information on potential environmental impacts and predictions related to vegetation refer to Volume 6, Section 6.5 of the FEIS (Agnico Eagle 2014g). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts from mining Tiriganiaq only. For mitigation and monitoring related to vegetation refer to the Preliminary Closure and Reclamation Plan.

5.5 Terrestrial Wildlife and Wildlife Habitat

Potential terrestrial wildlife and wildlife habitat effects relating to the use of water or disposal of waste include potential habitat loss or alteration from the waste rock, ore, and tailings storage facilities. Incremental and permanent wildlife habitat loss and fragmentation, changes in caribou migration patterns, and sensory disturbance from the Project, as well as improved access for harvesting were determined to have potential residual effects to terrestrial wildlife and wildlife habitat.

Caribou move through the Project area in some years. Results from a satellite collar program run by the GN show that 40 collared individuals from the Qamanirjuaq caribou herd have been within 14 km of the Project in the last 14 years. However, a number of caribou have moved through the Project area in recent years. Caribou that were recorded moving near the Project, moved south of the Project in the post-calving and late summer seasons, and through the Narrows region at the main mine and camp site in early winter.

Increased ease of access for traditional and non-traditional harvesting as a result of the AWAR may increase the risk of mortality for caribou. Agnico Eagle, in consultation with Inuit, will establish an appropriate “no shooting zone” around the proposed Mine site. Agnico Eagle will also develop and enforce a “no hunting, trapping, harvesting, or fishing policy” for employees and contractors while on shift and on-site, to help mitigate potential effects from increased access for harvesting wildlife.

Changes from the Project are predicted to result in negligible to high, local to beyond regional scale impacts to terrestrial wildlife population abundance and distribution. Cumulative effects to terrestrial wildlife population abundance and distribution are also predicted to be of negligible to

high magnitude but are predicted to occur at a regional to beyond regional scale. All effects are expected to be reversible in the long-term. Therefore, the Project is not predicted to have a significant effect on terrestrial wildlife population abundance and distribution, nor on the continued opportunity for traditional and non-traditional use of terrestrial wildlife in the region. Potential effects from the Project will be limited to a very small area and unlikely to be a major contributing factor to changes in wildlife abundance and distribution.

For additional information on potential environmental impacts and predictions related to wildlife and wildlife habitat refer to Volume 6, Section 6.6 of the FEIS (Agnico Eagle 2014g). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to wildlife and wildlife habitat from mining Tiriganiaq only. For mitigation and monitoring related to wildlife and wildlife habitat refer to the Roads Management Plan and the Preliminary Closure and Reclamation Plan.

5.6 Birds and Bird Habitat

Potential bird and bird habitat effects relating to the use of water or disposal of waste include habitat loss or alteration from the waste rock, ore, and tailings storage facilities. Incremental and permanent habitat loss and fragmentation, and sensory disturbance from the Project were determined to have potential residual effects to birds and bird habitat. Changes from the Project are predicted to result in negligible to high, local to regional scale impacts to upland bird, waterbird, and raptor population abundance and distribution. Cumulative effects to upland bird, waterbird, and raptor population abundance and distribution are also predicted to be of negligible to high magnitude but are predicted to occur at a regional scale. However, all effects are expected to be reversible in the long-term. Therefore, the Project is not predicted to have a significant effect on bird population abundance and distribution, nor on the continued opportunity for traditional and non-traditional use of birds in the region. Potential effects from the Project will be limited to a very small area and are unlikely to be a major contributing factor to changes in the abundance and distribution of birds.

For additional information on potential environmental impacts and predictions related to birds and bird habitat refer to Volume 6, Section 6.7 of the FEIS (Agnico Eagle 2014g). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to birds and bird habitat from mining Tiriganiaq only. For mitigation and monitoring related to birds and bird habitat refer to the Borrow Pits and Quarries Management Plan and the Roads Management Plan.

5.7 Hydrogeology and Groundwater Quantity and Quality

Groundwater is not used as a resource by local populations and is not anticipated to become a resource in the future. As a result, potential effects to groundwater were examined, but residual impacts were not classified. The Project is expected to result in no detectable to negligible environmental change and no residual effects to groundwater quality and hydrogeology.

For additional information on potential environmental impacts and predictions related to hydrogeology and groundwater quantity and quality refer to Volume 7, Section 7.2 of the FEIS (Agnico Eagle 2014f). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to hydrogeology from mining Tiriganiaq only. For mitigation and monitoring related to hydrogeology quantities refer to the Water Management Plan and the Mine Plan.

5.8 Hydrology, including Water Quantity

Potential hydrology including water quantity effects relating to the use of water or disposal of waste include the use of dewatering, diversions, flow changes and channel and bank stability. Effects from dewatering, Project infrastructure, and watershed diversion on flows, water levels, and channel/bank stability were determined to have potential residual effects to hydrology, but these are expected to be negligible. Potential residual effects from the AWAR and bypass road are also expected to be negligible compared to baseline conditions.

For additional information on potential environmental impacts and predictions related to hydrology and water quantity refer to Volume 7, Section 7.3 of the FEIS (Agnico Eagle 2014f). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to hydrology and water quantity from mining Tiriganiaq only. For mitigation and monitoring related to hydrology and water quantities refer to the Water Management Plan.

5.9 Surface Water and Sediment Quality

Potential surface water and sediment quality effects relating to the use of water or disposal of waste include the use of water for camp and industrial purposes, and the discharge of effluent into a natural waterbody. Changes in water and sediment quality from water emissions, physical alterations of watersheds, and air emissions were determined to have potential residual effects to surface water and sediment quality. Potential effects to water quality (e.g., nutrient and metal concentrations) in Meliadine Lake are expected, but will be small based on the proposed mine design. Water quality will change from what it is now and the concentrations of some metals and nutrients in the water will be greater than baseline conditions. However, no parameters will exceed CCME guidelines for the protection of aquatic life or drinking water, and predicted values should remain within 10% of baseline values (CCME 1999). Therefore, the Project should not have a significant adverse effect on water and sediment quality because predicted changes will not adversely affect the continued opportunity for traditional and non-traditional use of fish, on the health of aquatic life, or on human health.

For additional information on potential environmental impacts and predictions related to water and sediment quality refer to Volume 7, Section 7.4 of the FEIS (Agnico Eagle 2014f). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts

to water quality from mining Tiriganiaq only. For mitigation and monitoring related to water and sediment quality, refer to the Water Management Plan and Mine Waste Management Plan.

5.10 Fish and Fish Habitat

Potential fish and fish habitat effects relating to the use of water or disposal of waste include the use of water for camp and industrial purposes, changes to the hydrological regime, and the discharge of effluent into a natural waterbody. Numerous pathways were determined to have potential residual effects to aquatic habitat and fish, and included changes to drainage patterns, drainage flows, water levels, habitat area, water quality, and increased access for traditional and non-traditional users of fish. Potential Project related effects influencing the abundance and distribution of fish were determined to be negligible to moderate in magnitude, local to regional in geographic extent, and medium-term to permanent in duration. A measurable change in the abundance and distribution of Arctic char, lake trout, and Arctic grayling is predicted in the area directly affected by the Project, which includes Meliadine Lake. However, the incremental changes to the quantity, quality, and spatial distribution of habitats should not have a significant impact on the structure and function of fish populations in the ecosystem. Also, the risk to fish health (survival, reproduction) as a result of the Project will be low. Cumulative effects are predicted to be of negligible to moderate magnitude and occur at the regional scale.

The Project will also result in improved access to lakes, ponds, and streams along the AWAR, as well as to Meliadine Lake. Increased angler access may lead to overharvesting and effects to local populations of fish, particularly Arctic char and lake trout in Meliadine Lake. To reduce the potential for overharvesting along the AWAR, Agnico Eagle staff and contractors will not be permitted to fish while on-site. This mitigation and the ability of the regulators to implement management regulations to limit harvesting, should protect the fisheries resources in Meliadine Lake. Therefore, the Project was determined not to have a significant adverse impact on the continued opportunity for traditional and non-traditional use of fish.

For additional information on potential environmental impacts and predictions related to fish and fish habitat refer to Volume 7, Section 7.5 of the FEIS (Agnico Eagle 2014f). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to fish from mining Tiriganiaqonly. For mitigation and monitoring related to fish and fish habitat refer to the Aquatic Effects Monitoring Program Design Plan.

5.11 Marine Environment

Potential marine environment effects relating to the use of water or disposal of waste include the potential disposal of waste from spills into the marine environment during the shipping of goods to Itivia. Habitat loss, habitat quality, sensory disturbance, spills, and collisions with ships from the Project were determined to have potential residual effects to marine wildlife and wildlife habitat. Potential Project related and cumulative effects are predicted to be negligible to high in magnitude,

local to beyond regional in geographic extent, and reversible in the short- to long-term. Therefore, the Project is not predicted to have a significant adverse impact on the marine environment and marine wildlife population abundance and distribution, nor on the continued opportunity for traditional and non-traditional use of marine wildlife in the Region.

For additional information on potential environmental impacts and predictions related to the marine environment refer to Volume 8, Section 8.2 of the FEIS (Agnico Eagle 2014c). For mitigation and monitoring related to the marine environment refer to the SD 8-1 Shipping Management Plan and SD 8-2 Oil Pollution Emergency Plan, submitted as part of the FEIS.

5.12 Traditional Activities and Knowledge

Potential traditional activities and knowledge effects relating to the use of water or disposal of waste include alteration in traditional activities due to the waste rock, ore, and tailings storage facilities. Residual impacts to the availability of wildlife for traditional harvesting are considered to be positive and negative, as access to harvesting areas is expected to improve as a result of the AWAR, and is desired by hunters and other harvesters. Effects from improved access for harvesting are not significant for wildlife populations but are significant for people. The Project is expected to negatively impact the availability of some plants and birds, marine species behavior, and maintenance of traditional culture. These effects are considered to be of negligible to high magnitude, and are considered to be anywhere from not significant to significant.

The Project is expected to have a negligible to moderate negative effect on the use of culturally important areas. This effect is considered to be significant. The Project is also expected to have a moderately positive impact on access to land use areas, resulting in a significant effect on land use and mobility. In addition, the Project is expected to have a negative effect on food security in that perceptions of the Project may lead to mental stress and changes in behaviors (i.e., diet). This effect is assessed to be of moderate magnitude, and significant.

For additional information on potential environmental impacts and predictions related to traditional activities refer to Volume 9, Section 9.3 of the FEIS (Agnico Eagle 2014l). The Project Screening Report, submitted in support of this Application, provides a summary of potential impacts to traditional use and knowledge from mining Tiriganiaq only. Inuit Qaujimajatuqangit represents a valid and essential source of information in the design and implementation of environmental monitoring programs. Inuit Qaujimajatuqangit has also been considered in Project design, which is outlined in the management plans, submitted in support of this Application. For mitigation and monitoring related to traditional land use refer to the Roads Management Plan.

5.13 Non-Traditional Land Use and Resource Use

Potential non-traditional land use and resource use effects relating to the use of water or disposal of waste include alteration in land use due to the waste rock, ore, and tailings storage facilities. Potential effects of the Project on access to non-traditional hunting and fishing, outfitting, and

guiding via the AWAR are considered to be positive as increased access to resources enhances opportunities for non-traditional land use. The magnitude of this effect is considered to be negligible to low and not significant.

Potential Project effects on the availability of wildlife for hunting, fishing, and tourism are assessed as being negative. The effects are considered to be of negligible to moderate in magnitude and not significant. The potential effect of the Project on access to the Iqalugaarjuup Nunanga Territorial Park and surrounding areas via the AWAR is considered to be positive and not significant.

Project traffic would act cumulatively with traffic from other developments to increase noise levels in the LSA where the Manitoba to Nunavut road would enter Rankin Inlet. Given the unlikelihood of this scenario, this effect is not considered to be significant.

For additional information on potential environmental impacts and predictions related to non-traditional land use and resource use refer to Volume 9, Section 9.9 of the FEIS (Agnico Eagle 2014l). For mitigation and monitoring related to non-traditional land use refer to the Roads Management Plan.

6 WATER MANAGEMENT

The water management objectives for the Project are to minimize potential impacts to the quantity and quality of surface water at the Project site. This will be done by diverting non-contact water from undisturbed lands away from the Project site infrastructure to minimize the amount of contact water generated and limiting freshwater make-up quantities to the extent practical.

In developing the water management at the Project, the following principles were followed:

- keep the different water types separated as much as possible;
- minimize freshwater consumption; and
- reduce water discharge to the environment.

Keeping the types of water segregated allows for water quality control in the different areas of the site, reduces costs, and isolates uncertainties. Five types of water were identified for the Project:

- Contact water: Water that has been in contact with any infrastructure and facilities on-site; may contain TSS.
- Process water: Water used for processing ore and water in the tailings; may contain cyanide and species metals.
- Underground mine water: water pumped from the underground mine (including groundwater inflow and water used for underground mine operation); may contain TDS and TSS.
- Non-contact water: Runoff water that has not been in contact with mining infrastructure and facilities on-site.
- Freshwater: Water pumped from Meliadine Lake and used as potable water or as make-up to the process plant.

During construction and operations, the Project is expected to require water treatment for surface contact water and sewage. As stated in Section 4.2.7.7, the short-term groundwater management strategy is to store excess saline underground water on surface. A long-term management strategy for the Project will be developed and submitted to the NWB for approval in Year -3, subsequent to the completion of a hydrogeological investigation program (Appendix F of the Water Management Plan).

6.1 Proposed Activities Sequence

The sequence of the major water management activities for the Project are presented in Appendix B, Table 4.1

6.2 Non-Contact Water Management

To minimize the quantity of contact water that must be managed on-site, eight water diversion channels will be constructed to divert non-contact water away from the site.

6.3 Contact Water

During the mine construction, operations, and closure phases, a network of collection and interceptor channels, sumps, and ponds will be constructed and maintained to facilitate Mine site water management. Contact water on-site will be directed via channels to one of the six water collection ponds on-site. Ponds and lakes in the Project are impacted by the proposed Mine are discussed in the Water Management Plan. Specific streamflow data is provided in Volume 7 (SD 7-1 Aquatic Baseline Synthesis Report), of the FEIS (Agnico Eagle 2014); however, based on the mine plan only channel and outlets are anticipated to be impacted (see Appendix B, Water Balance Inputs, Asssumptions and Selected Results in the Water Management Plan). During mine construction and operations, contact water originating from affected areas on surface will be intercepted, diverted, and collected within the various CPs. The collected water on the proposed Mine site will be eventually pumped and stored in CP1, where the contact water will be treated by the WTP if required prior to discharge to the receiving environment or used as make-up water by the process plant. Under average precipitation conditions, up to 0.798 M m^3 of water will be treated in the WTP. Under these conditions, up to 0.73 M m^3 will be discharged annually to Meliadine Lake through an effluent diffuser.

6.3.1 Collection Ponds

Collection Pond 1 (originally Pond H17) is a key component of the Water Management Plan (Figure 1.2a). To achieve the proper level of flexibility and contingency with water management, the pond has been designed for a storage capacity of approximately 659,000 m^3 (under a maximum design water elevation of 66.11 m) under the inflow design flood (1:100 wet year spring freshet or the 1:2 mean year spring freshet plus 1:1,000 24-hour extreme rainfall). This design capacity has been determined using an iterative calculation process to reach an acceptable balance between the WTP and pond capacities under the inflow design flood event. Under normal operating conditions, the estimated peak operating storage is approximately 377,000 m^3 with an estimated maximum pond operating water elevation of 65.13m.

The first step in the development of the main contact water collection basin (Pond CP1) will involve construction of a low permeability dike during the early months of Year -4. This dike is required to isolate the main site watershed from the natural drainage system, and to increase capacity of CP1 the design capacity of approximately 659,000 m^3 (the current H17 capacity is approximately 144,600 m^3). The design crest elevation of the dike containment element (liner system) is 66.5 m. The corresponding pond volume for this water elevation is approximately 778,500 m^3, which provides additional 119,000 m^3 contingent storage capacity over the inflow design flood.

As soon as the dike is built and operational, the extended H17 watershed runoff water will be managed as contact water through the WTP (if required) and discharged to Meliadine Lake.

The remaining CPs are described briefly below:

- **CP2**. CP2 is located east of the plant site and collects runoff from the small catchment area east of the site. It will be constructed in Year -3 and, under normal operating conditions, will have a maximum operating volume of approximately 1,400 m^3. Water from this pond will be pumped to CP1.
- **CP3**. CP3 is located west of the tailings facility. Seepage water and runoff from the TSF footprint located within the catchment of Lake B7 will report to CP3 via Channel 3 (the remaining TSF footprint will report to CP1). The pond and its corresponding water retaining dike D-CP3 will be constructed in Year 1 and, under normal operating conditions, will have a maximum operating volume of approximately 16,900 m^3. The collected water in CP3 will be pumped to the partially drained Pond H13. It will then be diverted to CP1 via Channel1.
- **CP4**. CP4 is located west of the WRSF1. Seepage water and runoff from the WRSF1 footprint located within the catchment of Lake B7 will be diverted and collected in CP4 via Channel4. The pond and its corresponding water retaining dike D-CP4 will be constructed in Year 1 and, under normal operating conditions, will have a maximum operating volume of approximately 19,500 m^3. The collected water in CP4 will be pumped to the partially drained Pond H13, where the water will flow through Channel1 to CP1.
- **CP5**. CP5 is located southeast of WRSF2. Seepage water and runoff from WRSF1 and WRSF2 footprints located within the catchment of Pond A54 will be diverted to CP5 via Channel6. Open pit runoff will also be pumped to CP5. The pond and its corresponding water retaining dike D-CP5 will be constructed in Year -3 and, under normal operating conditions, will have a maximum operating volume of approximately 27,200 m^3. The collected water in CP5 will be pumped to CP1.
- **CP6**. CP6 is located to the north of WRSF3. Seepage water and runoff from WRSF3 will report to CP6. The pond and its corresponding water retaining dike D-CP6 will be constructed in Year -3 and, under normal operating conditions, will have a maximum operating volume of approximately 19,200 m^3. The collected water in CP6 will be pumped to CP1.

6.3.2 Industrial Site Area

Pond H14A and a small portion of Pond H13 are within the footprint of the industrial pad. During construction and operations, the contact water from the plant site area will naturally flow or be diverted via Channel 2 into ponds H15E, H15, H14, H13, and H12, and eventually collected in CP1. The collected runoff within Pond H15E will naturally flow to Pond H15, then to Pond H14 and eventually into partially drained Pond H13. The water within partially drained Pond H13 will flow (before Year -2) or be diverted via diversion Channel 1 (after Year -2) into Pond H9, where the

contact water will flow into CP1. The runoff water from the small catchment area northeast of the plant site pad will flow into CP2 and then be pumped to CP1. A small portion of the industrial pad for the camp is within Watershed G. The runoff water from this portion of industrial pad will be diverted via Channel 2 to Pond H15E. No contact water will flow into lakes/ponds within Watershed G.

6.3.3 Tiriganiaq Pits

The Tiriganiaq open pits are expected to remain within the permafrost regime. Therefore, groundwater inflow into open pits is expected to be negligible. Thus, the major contribution to the pit water will be precipitation runoff and snow melt.

During mine operation, the contact water for the open pits will be collected within sumps located at the bottom of the pits. The pumps will be designed and moved as needed to effectively collect and manage pit runoff as pit development occurs. The collected pit runoff within the sump will be pumped to CP5 and then CP1. Water retention dike D-CP5 and Berm3 will be constructed to prevent surface water from entering the open pits during operations.

All water diversions berms/dikes will be kept intact to provide a barrier between the open pits and surrounding lakes until the pit lake water levels achieve static conditions and the water quality is considered acceptable for release to the environment without treatment.

6.3.4 Tailing Storage Facility

The TSF is located within the catchment of Lake B7 with a small portion straddling the catchment of Pond H17 (CP1). Since dry stacking of tailings will be used for this Project, limited contaminated seepage is anticipated. However, this seepage, along with runoff from the tailings, needs to be collected and managed appropriately. Seepage and runoff water from the TSF during the construction and operation phases will be managed via water diversion channels, water retention dikes and berms, and water collection ponds as follows:

- seepage water and runoff from the TSF within the catchment of Pond H17 will be diverted to CP1 via Channel 1;
- seepage water and runoff from the TSF within the catchment of Lake B7 will be diverted and collected in CP3 via Channel 3; and
- collected water in CP3 will be pumped to the area of the partially drained Pond H13, and then be diverted to CP1 via Channel1, where the contact water will be treated by the WTP if required prior to discharge to the receiving environment.

6.3.5 Ore Stockpiles

The ore stockpiles (OP1, OP2, and OP3) are located within the catchment of Pond H17 (CP1), as shown in Appendix A, Figure 1.2a. A portion of Pond H12 is within the footprint of OP1, while Pond

H18 and portions of Ponds H9, H10, and H11 are within the footprint of OP2. No existing pond is located within the footprint of OP3.

Based on the topographic information, contact water from OP1 will flow into the drained Pond H12 from where it will drain to CP1 via Channel 1. Contact water from OP2 will flow into Pond H9 via Channel 1 and the drained ponds H10 and H11. The water collected within the drained ponds H10 and H11 will be diverted via Channel1 into Pond H9, from where it flows to CP1. The majority of the contact water from OP3 will flow into the drained Pond H11, from where it will be diverted via Channel1 to Pond 9, and then flow into CP1.

6.3.6 Overburden Stockpile

The temporary overburden stockpile is located within the catchment of Pond H17 (CP1). No existing pond is located within the footprint of the temporary overburden stockpile. Contact water from the stockpile will flow into Pond H15, and from there diverted to CP1 via Channel1.

6.3.7 Waste Rock Stockpiles

Waste rock storage facility 1 will straddle three catchment areas (catchment of Pond H17, catchment of Pond A54, and catchment of Lake B7), WRSF2 will straddle two catchment areas (catchment of Pond H17 and catchment of Pond A54), and WRSF3 will be located within the basin of Pond H20. Ponds A17, A58, B9, H20 and portion of ponds H8, H9, H10, and H11 are within in the footprint of the WRSFs.

Seepage and runoff from the WRSFs during construction and operations will be managed as described below:

- seepage water and runoff from the WRSF1 footprint located within the catchment of Pond H17 will be diverted to CP1 via Channel1 and Channel8;
- seepage water and runoff from the WRSF1 footprint located within the catchment of Pond A54 will be diverted to CP5 via Channel5 and Channel6;
- seepage water and runoff from the WRSF1 footprint located within the catchment of Lake B7 will be diverted and collected in CP4 via Channel4;
- seepage water and runoff from the WRSF2 footprint located within the catchment of Pond H17 will be diverted to CP1 via Channel1 and Channel7, or directly flow into CP1;
- seepage water and runoff from the WRSF2 footprint located within the catchment of Pond A54 will be diverted to CP5 via Channel6; and
- seepage water and runoff from WRSF3 will directly report to CP6 (Pond H19).

6.3.8 Effluent Treatment System for Contact Water

Prior to discharge into Meliadine Lake, water from CP1 will flow through the WTP. Based on the site wide water balance (Water Management Plan, Appendix B), the WTP will be required to treat and

discharge 470,000 m³ of contact in Year -4 depending on the water quality. This volume will increase to a maximum of 798,000 m³ in Year 3 and then decrease to 673,000 m³ at the end of mine life (Year 8).

Based on the anticipated water quality (Water Management Plan, Appendix G), the WTP will only be required to treat TSS. Based on the maximum flow rate required each year, it was determined that the WTP will include an Actiflo® system model ACP-600R with a TSS treatment capacity of 520 m³/h (nominal flow) in Year -4. The TSS treatment capacity will be increased to a capacity of 1,040 m³/h with the addition of a second ACP-600R in Year 3.

Treated contact water will be discharged to Meliadine Lake via an effluent diffuser located off the peninsula (Section 6.3.8.1). Discharge will meet MMER discharge criteria and Type A Water Licence discharge criteria. The WTP will only be operational during the ice free period (mid-June to September). The maximum annual discharge volume to Meliadine Lake is predicted to be 730,000 m³.

6.3.8.1 Meliadine Lake Discharge Point

The Project will have only one mine effluent discharge point, where water will be discharged to Meliadine Lake via an effluent diffuser after treatment. This effluent discharge will meet the MMER limits, as well as Water Licence requirements.

A 4.58 km HDPE pipeline will be required to discharge water to Meliadine Lake via an effluent diffuser for optimal diffusion. The diffuser will be similar in design to the one installed at Agnico Eagle's Meadowbank operation, and will be configured to promote mixing of the effluent in the lake ambient water. The diffuser will only operate during summer months (June to September), when the WTP is operating.

6.4 Process Water

Process water will be required in the process plant for ore processing. Treated contact water, sludge water from the WTP, and freshwater from Meliadine Lake will all be used as process water. Where possible, water from the WTP will be the main source of water for the ore process. Approximately 460 m^3/day of process water will be required in Year 1 to Year 3 of operations, while approximately 770 m^3/day of process water will be required in Year 4 to Year 8. The estimated balance between the WTP usage and the freshwater usage is presented in the Water Management Plan.

6.5 Freshwater

Major freshwater usages on-site include potable use, fire suppression, a portion of the make-up water for the mill, and other operational needs, such as drilling water (if contact water from CP1 is not available) and water for the truck shop. Freshwater will be sourced from Meliadine Lake through a freshwater intake and pump system.

Approximately 62,000 m^3/year of freshwater will be required during the construction phase, and approximately 318,000 m^3/year of freshwater will be required during the Operations Phase. At closure, approximately 4,000,000 m^3/year will be required to flood the mined-out open pits during the open water season from mid-June to end of September for each year. Preliminary annual flooding rates for each pit are approximately 3.1 M-m^3/year and 0.8 M-m^3/year for Tiriganiaq Pit 1 and Tiriganiaq Pit 2, respectively.

The camp area will have a WTP for potable (domestic) water. The design flow rate for the potable water for the main camp and accommodations (kitchen, laundry) is 136 m³ per day. The treated water will be stored within a potable water tank and piped to areas in the process plant, service complex, and other facilities requiring potable water.

It should be noted that Agnico Eagle is not planning to use any water at the proposed Itivia facilities and fuel storage facility in Rankin Inlet. There will be no warehousing or office facility at this site hence no freshwater facilities are planned for Rankin Inlet facilities.

6.6 Sewage Disposal

There are a number of site-specific parameters that need to be considered in the design of a sewage treatment facility. These include the proximity of the system to wastewater inputs, the anticipated influent characteristics (i.e., the quality and quantity of the wastewater), the estimated site conditions (e.g., number of workers), the effluent requirements, and the maximum and minimum ambient temperatures. At the Project site, a STP is required to treat black and grey water.

Sewage will be collected from the camp and change-room facilities and pumped to a STP. The objective of the STP is to treat sewage to an acceptable level for discharge to CP1 via a sewage water discharge pipeline. The sewage treatment system will be designed based on a flow rate of 200 L per day per worker for a peak load of 680 people, for an average daily flow rate of 136 m³ (5.67 m³/h). Biological reactors like the Bionest Kodiak units are envisioned to treat camp waste water.

The STP for the camp facilities will be designed to meet appropriate guidelines for wastewater discharge (for example, NWT Water Board 1992). *Wastewater System Effluent Regulations* criteria are not currently applicable to systems located in Nunavut, and are unlikely to apply to the Meliadine effluent quality.

Sewage sludge removedfrom the Sewage Treatment Plant will be added to the landfarm as nutrient amendment onan as needed basis. Excess sludge will be disposed of in the tailings storage facility.

6.7 Underground Mine Water

The Tiriganiaq underground mine will extend approximately 625 m below the ground surface, and therefore, part of the underground mine will be operated below the base of continuous permafrost. The underground mine is believed to reach cryopeg limit at the beginning of Year -3. At this point, saline groundwater seepage is expected to start. The underground excavations will act as a sink for groundwater flow during mining, with water induced to flow through the bedrock to the underground mine workings once the mine has advanced below the base of the permafrost. Appendix B, Table 6.1 presents the estimated rates of passive groundwater inflow to the underground mine. A hydrogeological investigation program is planned for 2015 and 2016, which will provide additional information on potential volumes and quality of the saline groundwater to be managed.

Contact water in the underground mine will be collected within underground sumps and treated to remove TSS by the underground TSS removal plant. The TSS treatment plant for groundwater will be an Actiflo model ACP-300R, with a TSS treatment capacity of 100 m³/h.

A proportion of the treated water will be recirculated as make-up water for underground drilling. Underground drilling water requirements are estimated to range from approximately 300 m^3/day in Year -5, to a maximum of 1,500 m^3/day in Year 1. The drilling water will report back to the underground sumps for recirculation.

Agnico Eagle is considering several options for the long-term management of excess groundwater reporting to the underground workings at the Project. Once the hydrogeological investigation program is completed and the estimates of the amount and quality of groundwater have been improved, the long-term groundwater management strategy for the Project will be finalized and submitted to the NWB for approval.

For the first two years of groundwater inflows (i.e., Year -3 and Year -2), excess water from the underground mine will be pumped to the surface for storage. Based on the estimated groundwater inflow rates (Appendix B, Table 6.1) and underground drilling water make-up requirements, up to approximately 0.25 Mm^3 of groundwater will require storage on surface. The surface storage option selected will be dependent on the results of the hydrogeological study and the amount of groundwater encountered.

6.8 Off-site Water Management Plan

In Rankin Inlet, the tank farm containment area will be equipped with a pump to manage accumulated water if required. Visual inspection of this area will be done on a regular basis and after significant rainfall events, to ensure that no water overflows into the environment. Prior to discharge, accumulated water in the containment area will be tested. If there is trace of contamination, the water will be pumped into a tank truck and hauled to the Project site to be

managed appropriately. One verification monitoring station will be set up to test water in the secondary containment area of the tank farm (see Section 7.12).

6.9 Water Balance

A water balance model was developed to assist in the evaluation of the proposed water management infrastructure and estimation of the pumping requirements over the life of the mine and under closure conditions. The model focuses specifically on contact water management infrastructure and areas that have been affected by mining activities.

A monthly site-wide water balance was conducted for CP1 to CP6, Tiriganiaq Pit 1, Tiriganiaq Pit 2, water in the underground mine operation, make-up water for the mill, water for the WTP, and freshwater from the mine construction to mine closure under mean precipitation years. The following were assumed when developing the water balance:

- precipitation data and runoff calculation are based on average conditions at Rankin Inlet from 1982 to 2009 (EBA 2013b);
- snow accumulates throughout the months of November to May, and thaws in June during the annual spring freshet period;
- the water management infrastructure will be designed to handle a 1 in 100 wet-year spring freshet;
- the open pits and water collection ponds (CP2 to CP6) will not be used for long-term storage of water during operations. It is assumed that all intermediate contact water ponds are kept empty most of the time (High pumping capacity for runoff);
- ponds will be completely empty in the autumn to have enough capacity to store spring freshet;
- contact water pumping and treatment prior to discharge to Meliadine Lake occurs only during the open water season, which it is considered to be the four warmest months of the year (June to September);
- limited seepage will occur into the open pits since they are situated entirely within the permafrost;
- saline groundwater inflow volumes in the underground mine below the base of permafrost are based on data provided in the FEIS. A hydrogeological investigation program is planned for 2015 and 2016, which will provide additional information on potential volumes and quality of the saline groundwater to be managed; and
- excess saline groundwater will either be used in underground mining operations or stored on surface as described in the Water Management Plan.

The water balance framework developed for the site-wide water balance model is presented in Appendix B of the Water Management Plan. Appendix A, Figure 6.1 shows the Water Balance Block Flow Diagram for the Project site while Appendix B, Table 6.2 presents select results from the mean annual water balance.

6.10 Water Quality

6.10.1 Water Quality Predictions

Water quality predictions for the Project were generated by combining the contact water flows derived from the water balance with chemistry data from materials exposed in mine infrastructure (TSF, WRSF, etc.) and site baseline information. Where site specific information was not available, data from other mine sites in the north were used. Appendix G of the Water Management Plan presents the water quality model including model computations, assumptions, results verification, and limitations.

Water quality estimates were generated for the operations and post-closure periods, for each contact water collection pond, for the sumps in the two open pits and for the two fully flooded open pit lakes post-closure.

Operations period results were compared against MMER limits for all ponds, although only treated CP1 water will be discharged to the receiving environment (Meliadine Lake). During operations, the quality of most contact waters (including CP1 water) is predicted to meet MMER monthly mean discharge limits, with the exception of suspended solids at all ponds, and arsenic, on occasion, at CP3 (which receives water from the TSF). Arsenic transfer from process water to CP3 water will be minimized by the effective dewatering of tailings prior to placement in the TSF and from freezing of the tailings in the TSF, which will limit infiltration and seepage. Water from CP3 will be pumped to CP1 where it will mix with other site waters. Dissolved arsenic concentrations in CP1 are predicted to meet the MMER monthly average maximum concentration.

The long-term, post-closure water quality in the Project ponds and in the flooded open pit lakes are anticipated to meet MMER limits and CCME water quality guidelines for the protection of aquatic life (CCME-WQG) or the Site Specific Water Quality Objectives (SSWQOs) developed for the Meliadine site for aluminum, fluoride, and iron. Arsenic concentrations in CP4 (next to WRSF1) could slightly exceed the arsenic SSWQO during post-closure, a criteria that is conservatively protective of the receiving aquatic environment (Golder 2013). The exceedances predicted are minor, much less than the mixing capacity in the receiving environment. These arsenic concentrations (Golder 2013) are within the tolerance levels that have been deemed non deleterious by Environment Canada for the Project (Environment Canada 2014).

6.10.2 Effluent Discharge Criteria

The contact water generated will be treated and released to Meliadine Lake via an effluent diffuser during the open-water period - mid-June to September, between Year -4 to Year 11, as outlined in the Water Management Plan. The highest volumetric discharge during operations will occur in Year 3, and the highest volumetric discharge during closure will occur in Year 10.

Effluent quality criteria are to be applied at the last point of control prior to discharge to the receiving environment. They represent values that will be protective of aquatic life, protective of traditional drinking water uses, and are in compliance with regulations (i.e., MMER; Government of Canada 2012). The Mine will be operated so that water quality objectives are met at the edge of the mixing zone in Meliadine Lake and so that the Project does not have a significant adverse effect on opportunities for traditional and non-traditional use of fish, the health of aquatic life, and human health. Water quality objectives at the edge of the mixing zone come from a combination of SSWQO developed for fluoride, arsenic, and iron, generic aquatic life guidelines (CCME 1999), and drinking water guidelines (Health Canada 2010).

Predicted quality of effluent to be released to Meliadine Lake was included in the FEIS (Agnico Eagle 2014f) and then updated for mining the Tiriganiaq deposit only. Following a screening process to identify constituents of potential concern, effluent quality criteria for the constituents listed in Appendix B, Table 6.3 were set for the Project. The screening process is described in Appendix E of the Water Management Plan.

6.10.3 Effluent Monitoring

The overall objective of site water quality monitoring (as stated in the AEMP) is to assess potential mine-related effects on the aquatic ecosystem. Water quality monitoring is an important part of the site water management plan to verify the predicted water quality trends and conduct adaptive management should differing trends be observed. Water quality of the effluent will be monitored as part of the water quality monitoring program, which will be active through all stages of the Project, from construction through closure and post-closure. Two monitoring stations related to the effluent have been proposed as a part of the monitoring program:

- MEL_02: verification monitoring station located upstream of the WTP to test the quality of the water before treatment. This is required to evaluate the treatment efficiency.
- MEL_01: general aquatic monitoring location downstream of the WTP to test the quality of the water before release to Meliadine Lake.
- MEL_03: general aquatic monitoring location in the Meliadine Lake mixing zone to test the mixing of the effluent in the receiving environment.

More details on the monitoring program can be found in the Environmental Management and Protection Plan and Section 7.12.

6.11 Closure Water Management

Water management during closure and reclamation will involve flooding the mined-out open pits using freshwater from Meliadine Lake, passive flooding of the underground mine, and maintaining contact water management systems on-site until monitoring results demonstrate that water quality is acceptable for discharge of all contact water to the environment without further treatment. At this point, the WTP will be decommissioned.

Following completion of mining, the open pits will be filled with natural precipitation and water pumped from Meliadine Lake using the existing freshwater system. Groundwater seepage into each of the pits is not anticipated since their maximum depth is much shallower than the average permafrost thickness. The maximum pumping rate from Meliadine Lake will be based on the maximum allowable drawdown rate from Meliadine Lake established during the water licence application. The planned pumping period will occur during the open water season from mid-June to end of September for each year. Under the current water management plan, it will take approximately three years to fill the pits (assuming a pumping rate of 0.44 m^3/s or 38,300 m^3/day). This pumping rate is based on minimizing the effect on Meliadine Lake during average conditions. In years during which Meliadine Lake discharges are forecast to fall below the 10-year dry condition, no pumping will occur.

The walls of the open pits will have been exposed for a number of years during mine operations, and some weathering may have occurred. As the pits fill, the water will contact the weathered rocks, which may affect the water quality by increasing concentrations of dissolved metals. The water quality model results indicate that despite this, water quality in the flooded pit will meet the discharge criteria and no post-closure treatment required. The water quality within the flooded pits will be monitored during the filling periods to verify the prediction of the water quality model. The information will be used to develop a strategy to minimize potential contamination of the regional surface water system. If required, the flooding plan will be adjusted, while minimizing effects to Meliadine Lake.

Passive flooding of the Tiriganiaq underground mine will also occur following completion of mining. The estimated total flooding volume of the underground workings is 1.4 Mm^3. Seepage water into the underground mine will be the main water source for flooding. It is estimated that it will take approximately six years to flood the underground mine.

The water collection ponds, dikes, berms, and the WTP will remain in place to collect and treat the surface runoff water and seepage from the proposed Mine site until the water quality meets discharge criteria. Once the water quality meets discharge criteria without the need for treatment, dikes will be breached to allow the water to naturally flow to the receiving environment. Dike breaching will involve the removal of a portion of the dikes to a minimum depth of 1 m below average water level or back to original ground levels. Consideration will be given to breach staging, with the above water portions of the dike in the breach area removed during winter periods, when there will be little surface water flow, thereby minimizing the potential release of sediments to the neighbouring waterbodies. The remainder of the breach would be completed during the open water season following freshet so as to allow for the deployment of turbidity curtains to control potential releases of sediment. The WTP will also be decommissioned once the water quality meets the discharge criteria.

7 MANAGEMENT PLANS

The purpose of the Project Management Plans is to outline the framework or structure where monitoring and follow-up programs will be implemented to verify impact predictions and determine effectiveness of mitigation measures. The Plans will also help identify unanticipated effects, if any, which will be handled though adaptive management. The Plans will be updated, as needed, for various planning and regulatory requirements, should the Project proceed. Adaptive management will be a priority for environmental indicators.

Best management practices will be used for all phases of the Project. Specific concerns (dust, noise, traffic, erosion, transportation of dangerous goods, waste management, sociological, wildlife protection, etc.) have been addressed through the following management plans Agnico Eagle has prepared for the Project:

- **Environmental Management and Protection Plan (EMPP)**
- **Water Management Plan**
- **Mine Waste Management Plan**
- **Ore Storage Management Plan**
- **Spill Contingency Plan**
- **Landfarm Management Plan**
- **Roads Management Plan**
- **Borrow Pits and Quarries Management Plan**
- **Landfill and Waste Management Plan**
- **Incineration Management Plan**
- **Hazardous Materials Management Plan**
- **Explosives Management Plan**
- **Preliminary Mine Closure and Reclamation Plan**
- **Aquatic Effects Monitoring Program (AEMP) Design Plan**
- **Quality Assurance and Quality Control**
- **Public Engagement and Consultation Baseline Report**
- **Risk Management and Emergency Response Plan**
- SD 5-1 Air Quality Monitoring
- SD 5-2 Conceptual Noise Abatement and Monitoring Plan
- SD 6-4 Terrestrial Environment Management and Monitoring Plan
- SD 7-4 Conceptual Fisheries Protection and Offsetting Plan (will be finalized in collaboration with DFO)
- SD 8-1 Shipping Management Plan
- SD 8-2 Oil Pollution Emergency Plan
- SD 9-1 Heritage Resources Protection Plan
- SD 9-2 Socio-economic Management Plan

- SD 9-3 Business Development Plan
- SD 9-4 Human Resources Plan
- SD 9-5 Community Involvement Plan
- SD 9-6 Occupational Health and Safety Plan

While the above list is exhaustive and all inclusive, only those plans listed in **bold** are submitted as part of this Type A Water Licence Application. Apart from the Water Management Plan described in Section 6, the following sections summarize the key water management strategies in the management plans submitted in support of this application.

7.1 Ore Storage Management

Three areas have been identified for ore storage:

- Ore Stockpile 1 - near the crusher, will be used to store the high grade ore from the underground mine between last quarter of Year -5 and Year 3, and the storage of low grade ore from the open pits between Year 4 and Year 7;
- Ore Stockpile 2 - adjacent to Ore Stockpile 1, will be used to store the marginal ore from the underground mine between last quarter of Year -5 and Year 6; and
- Ore Stockpile 3 - near Fuel Tank #1, north of Ore Stockpiles 1 and 2, will be used to store the marginal ore from the open pits between Year 4 and Year 7.

Any stockpiled ore remaining in Year 8 will be milled in Year 8. No ore will be stockpiled following the last year of operations.

The ore stockpiles are all located within the Pond H17 (CP1) catchment. A portion of Pond H12 is within the footprint of OP1. Pond H18 and portions of Ponds H9, H10, and H11 are within the footprint of OP2. There are no ponds within the footprint of OP3.

The initial construction for the Ore Stockpile 1 and Ore Stockpile 2 is planned to take place during the last quarter of Year -5; therefore, no contact water management will be required in Year -5. From Year -4 to mine closure, any contact water from OP1 will naturally flow into drained Pond H12 and then be diverted by Channel 1 to CP1. Contact water from OP2 will naturally flow into drained Pond H9, H10, and H11. The water collected within the drained Ponds H10 and H11 will be diverted via Channel1 into Pond H9, where the water will naturally flow into CP1. The majority of contact water from OP3 will flow into drained pond H11, from where it will diverted via Channel1 to H9, and then naturally flow into CP1. A small portion of contact water from OP3 will directly flow into CP1.

Based on available geochemical testing results, ore from the Tiriganiaq deposit has no potential for acid generation and metal leaching above MMER. Runoff and seepage water from the ore stockpiles will be collected in CP1, where water quality will be monitored and can be treated, if required by the WTP prior to being reused in process or discharged to the receiving environment. Prior to closure all

ore stockpiled will be mined. No ore will remain on-site. Therefore, no negative impacts on the receiving environment is expected.

7.2 Tailings and Waste Rock Management

It is proposed to place and store the tailings as drystacked tailings within the TSF. The TSF is located on an area of high ground located between the proposed mill and Lake B7. The majority of the TSF footprint is located within the B7 catchment, with a small portion straddling the Pond H17 catchment. The dry stack TSF will be constructed on land and will not cover any major waterbodies

Contact water from the TSF during construction and operations will be managed as follows:

- seepage and runoff from the TSF within the catchment of Pond H17 will be diverted to CP1 via Channel1;
- seepage and runoff from the TSF within the catchment of Lake B7 will be diverted and collected in CP3 via Channel3; and
- water collected in CP3 will be pumped to CP1, where the contact water will be treated by the WTP prior to reuse in process or discharge to the receiving environment.

From the available geochemical testing results, tailings acid generation and long-term ML are not anticipated to be an issue (Appendix G, Water Management Plan). Therefore, the tailings are considered to be NPAG for the tailings management. However, the test results also show that tailings pore water could contain residual arsenic and cyanide. The tailings closure cover design will therefore consider infiltration and potential metal loadings in surface runoff. If necessary, water quality analysis through hydrogeological (groundwater) modelling, unsaturated flow modelling in the cover layer, and field trials will be undertaken to assess the potential water quality from the TSF at closure. The modelling will be completed during operations and the Closure and Reclamation Plan will be revised based on the results of the water quality analysis. The water management infrastructure will remain in place until mine closure activities are completed and monitoring results demonstrate that the contact water quality from the TSF meets discharge criteria.

Once the water quality from the TSF meets the discharge criteria, the water retention dikes/berms will be breached or removed to allow the water from the TSF to directly flow to the receiving environment.

7.3 Waste Rock Management

There are three waste rock storage areas planned for the site:

- WRSF1: located north of Tiriganiaq Pit 1 with an approximate footprint of 41.4 ha. WRSF1 will straddle three catchment areas (catchment of Pond H17, catchment of Pond A54, and catchment of Lake B7). From Year -2 to Year 4, the majority of the waste rock produced will

be placed at WRSF1, with a portion of waste rock being used for underground backfill and TSF progressive closure cover.

- WRSF2: located south of Pond H17 (CP1) with an approximate footprint of 20.2 ha. WRSF2 will straddle two catchment areas (catchment of Pond H17 and catchment of Pond A54). The WRSF2 will accommodate the majority of waste rock produced from Tiriganiaq Pit 1 from Year 5 to Year 7. The WRSF2 is expected to reach its design capacity by the end of Year 7.
- WRSF3: located north of Tiriganiaq Pit 2 with an approximate footprint of 22.7 ha. WRSF3 will be located within the basin of Pond H20, and will accommodate overburden from pre-stripping of Tiriganiaq Pit 2 and all waste rock produced from Tiriganiaq Pit 2 with some portions of waste rock from Tiriganiaq Pit 1 in Year 4 and Year 5. The WRSF3 is expected to reach its design capacity by end of Year 7.

Seepage and runoff from the WRSFs during construction and operations will be managed using the water management system described below:

- seepage water and runoff from WRSF1 within the catchment of Pond H17 will be diverted to CP1 via Channel1 and Channel8;
- seepage water and runoff from WRSF1 within the catchment of Pond A54 will be diverted to CP5 via Channel5 and Channel6;
- seepage water and runoff from WRSF1 within the catchment of Lake B7 will be diverted and collected in CP4 via Channel4;
- seepage water and runoff from WRSF2 within the catchment of Pond H17 will be diverted to CP1 via Channel1 and Channel7, or will directly flow into CP1;
- seepage water and runoff from WRSF2 within the catchment of Pond A54 will be diverted to CP5 via Channel6;
- seepage water and runoff from WRSF3 will directly report to CP6 (Pond H19); and
- the collected water in CP4, CP5, and CP6 will be pumped to CP1, where the contact water will be treated by the WTP prior to reuse in process or discharge to the receiving environment.

During closure, the water management infrastructure will remain in place until mine closure activities are completed and monitoring results demonstrate that the contact water quality from the WRSFs meets discharge criteria. Once the water quality from the WRSFs meets the discharge criteria, the water retention dikes/berms will be breached or removed to allow the water from the WRSFs to directly flow to the receiving environment, which includes Lake B7, former CP5 and the pit lake for Tirgianiaq Pit 2, and Pond H9. Further details on water management for the WRSFs are described in the Water Management Plan.

Based on the waste rock geochemical testing findings, the waste rock from the Tiriganiaq deposit area is considered to be NPAG and non-metal leaching. Kinetic tests at various scales indicate that drainage water quality from the WRSFs will meet MMER monthly mean effluent limits.

Waterbodies in the upper A and B watersheds freeze to the bottom during winter and do not provide overwintering fish habitat. Most of the ponds are connected by short sections of ephemeral streams lacking a defined channel. No measureable changes to downstream habitat quality (e.g., TSS) and habitat quantity (e.g., flows) are a result o fthe proposed WRSFs are predicted.

7.4 Overburden Management

The temporary overburden stockpile is located within the catchment of Pond H17 (CP1). No pond is within the footprint of the temporary overburden stockpile. Site contact water from the stockpile will be collected within Pond H15, and then eventually diverted to CP1 via Channel1. The results of geochemical characterization indicated that the overburden produced will be NPAG and does not require means to prevent oxidation. Leachate concentrations in overburden are generally lower than waste rock and all meet MMER monthly mean limits.

7.5 Landfill Management

The proposed landfill will be a controlled landfill where:

- Wastes will be segregated with liquids, hazardous, and putrescible waste all being diverted away from the landfill. The segregation of waste involves a major commitment by Agnico Eagle to educating all its employees and contractors in directing wastes to the proper waste collection bins.
- Waste management will include an incinerator where all organic, office waste, and any waste coming in contact with food is incinerated (Section 7.6). Ash from the incineration process will be disposed in the landfill.
- Waste in the proposed landfill will not be scattered all over the floor of the landfill but will be placed daily at the active working face where the waste can be leveled, compacted, and covered.

The landfill will be used for the disposal of non-salvageable, non-hazardous, non-putrescible solid wastes from the construction, operations, and closure of the Project. The proposed landfill will be located within WRSF1 located to the northeast of the main mine infrastructure. The slopes of the proposed landfill will be constructed of waste rock and should not be subject to erosion. Should it prove necessary, surface water and erosion control will be incorporated into the landfill design. Wastes will be disposed directly on the landfill floor and compacted against the berm, or an existing row of debris that was compacted earlier, using heavy equipment. Controlling the materials that can be placed in the landfill is a strategy aimed to reduce the concentration of constituents in potential leachate and to minimize the attraction of wildlife to the landfill. Landfill operation will also conform to best management practices to reduce the potential for windblown debris.

Leachate from the landfill is anticipated to be weak due to the controls placed on materials acceptable for landfilling. Moreover, drainage from the landfill is largely expected to freeze within the WRSF with little to none reporting to the water collection infrastructure placed around the WRSF. Annual landfill operation will also involve clearing of snow prior to spring melt. However, in the event there is leachate from the landfill due to periods of heavy rainfall or spring freshet, the runoff will be collected and directed to CP1, where it will be controlled and, if necessary, treated before reuse in the process or release to the receiving environment.

The landfill will be one of the last parts of mine infrastructure to close. It is expected to be extensively used during closure for demolition waste and will remain operational until it is no longer needed.

At the end of its life, the landfill will be progressively covered with a minimum of 0.3m thick of rock fill on top of the waste to reduce windblown debris. Upon closure, the entire landfill will be covered with 3.7 m of waste rock. Contact water from the proposed landfill at its closure will continue to be managed using best management practices in accordance with the Project's closure and reclamation plan.

7.6 Incineration

Incineration is an essential part of waste management at the proposed Mine site. The incineration of acceptable solid waste from the accommodation complex, kitchen, lunch rooms, shops, warehouses, and offices will divert waste from directly reporting to the on-site landfill (Section 7.5). Incineration will provide the advantage of eliminating putrescible waste that could potentially attract wildlife to the landfill, thereby reducing possible dangerous interactions between humans and wildlife. Waste will be carefully sorted to ensure that no hazardous materials are incinerated.

Acceptable waste for incineration will be:

- solid waste (mainly organic matter, including food, food containers and wrappings contaminated by food, paper, etc.);
- used oils and waste fuels, according to the *Used Oil and Waste Fuel Management Regulations* (NWT 2012).

The ash from the incinerator will be disposed of in the landfill, provided that the ash is found to be suitable following ash testing. An ash testing protocol developed by the GN will be implemented to ensure that the incinerator ash is suitable for disposal in the landfill. Three ash samples will be collected (one per month for the first 3 months of the incinerator in operation) and the leachate tested for metals content. Ash not meeting the guidelines will be packaged in drums to be sent to a certified waste management facility for appropriate treatment, recycling, and/or disposal in another provincial or territorial jurisdiction, or will be buried within the dry stacked tailings.

7.7 Landfarm Management

In the event of a spill, onsite storage and remediation is the most practical and efficient method in handling contaminated soil, particularly in an isolated location such as the Project. Soils contaminated with light hydrocarbons (such as diesel) will be treated on-site in a landfarm. This method involves spreading, mechanical mixing, and placing the contaminated soil in windrows within a containment area and promoting conditions favorable for the volatilization and aerobic microbial degradation of hydrocarbons.

The landfarm facility will only treat and/or store light petroleum hydrocarbon (PHC) contaminated soils that have been generated through mine related activities at the Project and that transferred from the Meliadine advanced exploration camp landfarm upon closure. Material from the Hamlet of Rankin Inlet or other sites will not be accepted without approval from the Nunavut Water Board, AANDC Water Resources Inspectors, and the Kivalliq Inuit Association.

Materials contaminated with heavy hydrocarbons (e.g. hydraulic fluid or grease) will need to be segregated, packaged, and shipped south for treatment and/or disposal.

It is estimated that soils contaminated with light end petroleum hydrocarbons will require three full summer seasons for complete remediation. When remediated, the soils will be removed from the facility and can be used for construction purpose such as part of the cover of the Tailings Storage Facility (TSF) or stacked in the Waste Rock Storage Facility (WRSF).

7.7.1 Acceptable Contaminants and Spill Excavation

The following products are acceptable for treatment in the landfarm if used on-site and spilled on soil:

- diesel fuel;
- gasoline;
- aviation fuel (Jet A);
- hydraulic oil;
- other light oil e.g. engine oil, lubricating oil; and
- ethyl Glycol (antifreeze).

Soil contaminated with the above-described petroleum hydrocarbon materials will be excavated and transported to the landfarm facility in dump trucks or in roll-off containers. Care will be exercised to ensure that the entire spill is excavated (verified by olfactory and visual assessment, or sampling, if necessary) and that none of the contaminated material is lost during transport.

7.7.2 Placement in the Landfarm

Contaminated Soils

Larger coarse material (rocks) will be separated from the finer material (sand and gravel) in the landfarm and assessed visually for PHC staining and product. If the material is saturated, it will be spread to allow volatilization in the designated area of the landfarm.

Contaminated materials will be placed in windrows with dimensions about 18 m wide at the base x 1.5 m high x 34 m long. Windrows may be piled wider, higher, or longer as space permits. A record will be kept by the on-site Environmental Coordinator of the amount of contaminated soil placed in the landfarm and the location of each load within it.

Contaminanted Snow

PHC contaminated snow and ice will be placed in a designated area of the landfarm and treated as contact water after snowmelt. After snow melt, the contaminated water will be pumped through the site's oil-water separator to remove PHC residue. The treated water will be discharged to the CP1. In addition, after snowmelt, visible product will be cleaned up with absorbent pads or booms.

7.7.3 Remediation

Remediation of fine grained PHC contaminated soil in landfarms occurs naturally through volatilization and aerobic microbial degradation. Soil aeration and nutrient amendment are recognized as methods of improving rates of remediation. While it is recognized that pH, salinity, moisture content and microbial population density also contribute to rates of degradation, these factors will not be explicitly investigated or managed unless remediation rates are too slow to allow meeting targets set for closure.

Coarse-grained soils are not readily bio-remediated, but concentrations of PHC contaminants may still be reduced through volatilization. Oil absorbent pads will be used to help remove visible product from coarse-grained material. Used absorbent materials will be incinerated.

To promote aerobic conditions throughout the windrows, soil will be mixed mechanically with earth-moving equipment. This turnover of soil piles will occur two to four times per year, during the summer months.

7.7.4 Soil Removal

When sample analyses of the soils indicates that concentration of contaminants are below Government of Nunavut guidelines, a soil pile or the appropriate section of a pile will be deemed acceptable for removal from the facility. The soils can be used for construction purposes, such as normal overburden (*i.e.* part of the cover of the TSF), or stacked in the WRSF.

7.7.5 Water Management

Since the landfarm facility is uncovered to facilitate natural weathering, water accumulating inside the bermed area may come into contact with contaminated material.

Non contaminated snow will be removed as much as possible during winter to minimize the quantity of spring melt water inside the berm. Care will be taken to ensure contaminated snow/soil is not disturbed by leaving a base layer of snow of no less than 10 cm in place. Following snowmelt, any contaminated product left from winter spill clean-up operations will be padded up. The base soil in these areas will be excavated and added to existing remediation windrows as soon as possible after snowmelt to minimize migration into the facility substrate.

Although the landfarm will have an impermeable liner, visual inspections by the Environment Department will be conducted for seepage of contact water coming through the perimeter berm, or the accumulation of water within the containment berm. This will be conducted on a weekly basis starting after freshet and continuing until October when water is likely to be present. In the event of water accumulation or seepage, the ponded water will be pumped through the site's oil-water separator to remove PHC residue and will be analyzed for BTEX, lead, and oil and grease prior to discharge to CP1 or used on the windrows to increase moisture content, as required.

7.8 Hazardous Material Management and Emergency Response

7.8.1 Hazardous Materials Storage

Petroleum products, explosives, sodium cyanide, and miscellaneous hazardous/contaminated materials will be stored in facilities that contain no open drains, and in concrete bermed areas or within sea cans. Storage tanks on-site will be regularly inspected and maintained.

The permanent storage facilities will be clearly identified with proper labelling, such as "storage facilities for hazardous materials". These will be ventilated to prevent the build-up of toxic fumes or dust, which could harm both the personnel present and the environment. The facilities will be secured and only authorized personnel will have access to the areas.

7.8.2 Explosives and Blasting Activities

Explosives will be required for various surface and underground activities. The primary blasthole drills for surface mining will be diesel-powered rigs, whereas electric rigs will be used underground. A number of operating procedures will be implemented to adapt blasting to factors that can affect the operations, notably weather in relation to open pit operations. These procedures may include minimizing the delays between the loading and blasting of holes, ensuring that cuttings are mounded around the hole collar after loading to prevent snow drifting into the holes, and utilizing blasthole covers. Blasting will be carried out by certified blasters who will follow blasting regulations and safe practices. However, there is often a relationship between ammonia and nitrate levels in

surface water runoff and the quantity of ANFO type explosives that haven't detonated during the blast. Well planned blasts and strict control of spillage are keys to reducing ammonia losses.

All products required for blasting activities will be shipped by vessel from the south to Rankin Inlet, loaded onto barges at the vessel anchoring location, and transported to Itivia. Explosives, boosters, and caps will be transported directly to the proposed Mine site after being unloaded from the barges. The bypass road and AWAR will be used to truck explosives and raw materials for manufacturing explosives to designated storage locations at the proposed Mine site. In the event that these products require temporary storage in Rankin Inlet, they will be stored in appropriate storage magazines meeting federal *Explosives Act* and *Regulations*. The temporary storage magazines with remain under constant surveillance by Agnico Eagle personnel while in use.

The Emulsion Plant, raw material storage, and magazines will be safely located away from vulnerable facilities, as stipulated by the federal and territorial *Explosives Use Act* and *Regulations*. The minimum setback distances between the Emulsion Plant, explosives storage facilities and the other proposed Mine site facilities will be governed by the *Quantity-Distance Principles User's Manual,* as published by the Explosives Branch of Natural Resources Canada. Use of these setback distances will ensure that the location of these proposed facilities meet all federal and territorial regulations regarding safe siting of such facilities.

The handling of explosives on-site will be carried out by the supplier and by qualified Agnico Eagle staff (blasters and helper-blasters) under a permit to conduct such work. On the proposed Mine site, raw materials, such as sodium nitrate and ammonium nitrate used in the preparation of emulsion, will be contained in 1.2 t tote bags, and stored in sea cans (capacity of approximately 20,000 kilograms each). Raw materials of different and incompatible types will be stored in separate sea cans to prevent their mixing. Raw materials will also be stored away from any other products as required by explosive regulations.

Blast frequency will be between two and four blasts per day, including underground and surface activities. The quarries, and possibly the borrow pits and stockpiles in some instances, will also require the use of explosives. Blasting will be carried out by certified blasters who will follow blasting regulations and safe practices. The responsibility for blasting will be split between appropriately trained mine personnel and the explosives supplier.

Fisheries and Oceans Canada guidelines developed in 1998 to protect fish and fish habitat from works or undertakings that involve explosives in or near fisheries waters (Wright and Hopky 1998; see Appendix A) have, in part, been superseded by research carried out by Godard et al. (2008). In particular, the recommended maximum instantaneous pressure change has been reduced from 100 to 50 kilopascal (kPa). As a result, Agnico Eagle will adhere to the following guidelines:

- No explosive is to be detonated in or near fish habitat that can produce an instantaneous pressure change greater than 50 kPa in the swim bladder of a fish.

- No explosive is to be detonated that produces a peak particle velocity greater than 13 mm per second in a spawning bed during the period of egg incubation (for lakes near the Project, the fisheries window is from August 15 to June 30 for fall spawning fish [e.g., lake trout]).

7.8.3 Spill Contingencies

In the unlikely event of a spill of potentially hazardous materials, Agnico has prepared a plan to facilitate effective communication and efficient spill cleanup. The objectives of the plan are to:

- comply with federal and territorial laws, regulations, and guidelines;
- identify roles, responsibilities, and reporting procedures;
- detail plans of action to be followed in the event of a spill;
- provide readily accessible emergency information to the cleanup crews, management, and government agencies;
- promote the safe and effective recovery of spilled materials; and
- minimize the environmental impacts of spills to land, water and/or ice and snow.

Prevention and inspections are proactive components of the spill plan. During orientation, all staff, employees, and contractors will be presented the plan and will be made aware of the locations of spill kits, and will be familiarized with the use of spill equipment and responding to spills. As well, all staff will be trained to call the Emergency Response Team in the event of a major spill. Regular worksite inspections will be conducted to identify measures to minimize or prevent the risk of spills. Following the clean-up of a spill, personnel from the Environmental Department will inspect the spill site and, if necessary, collect samples to verify that the clean-up is complete.

All personnel will be trained to be aware of the potential hazards associated with the fuel/chemicals with which they will be assigned to work. In addition to the work site inspections conducted by area specific employees, the Environmental Department staff will conduct weekly inspections to audit facilities where hazardous materials are handled and stored.

The spill plan also includes an action plan in the event of a spill. Specific procedures will vary depending on the season and hazardous materials spilled, as well as on location of the spill (on land, water, ice, or snow). The Material Safety Data Sheet for the material spilled will be consulted to ensure that safety procedures are followed.

7.8.4 Emergency Response

An emergency response plan has been created to enabale Agnico Eagle staff and others to respond quickly and efficiently to foreseeable emergencies that may occur in relation with proposed Project activities, water management and use, and potential impacts to the receiving environment. The plan provides a clear chain of command for health and safety activities, defined corporate expectations

regarding health and safety, comprehensive hazard prevention and control methods and record-keeping requirements to track program progress.

7.9 Road Management

Access, service, and haul roads are needed in the operation of the proposed Project. Access roads will be used by Agnico Eagle but will also have unrestricted access by the public, if it is safe to do so. The only access road will be a 23.8 km AWAR between Rankin Inlet and the proposed Mine site, built in 2013. The bypass road around Rankin Inlet, which remains to be built, will be closed to public use. It will be used by Agnico Eagle and its contractors to transport fuel, supplies, and reagents from Itivia to the AWAR.

Service roads will be exclusively for use by Agnico Eagle and its contractors; the public will not have right of entry to these roads. The proposed service roads will service mine areas. They will be found in and around open pits, leading to waste rock storage facilities, around the mill site, to the landfill and Emulsion Plant to mention a few. Service vehicles, trucks carrying explosives, and small trucks with mine personnel will use the service roads.

Haul roads will primarily be restricted to haul trucks, loaders, and other heavy machinery. Small vehicles operated by Agnico Eagle and its contractors can also use haul roads, but only after driver training and when it is safe to do so. As with service roads, the proposed haul roads will be exclusively for use by Agnico Eagle and its contractors.

Road management will include consideration for sediment control during construction and operations. Construction of the bypass road will take place in winter with all or the majority of the road completed under winter conditions when there is no water to cause sedimentation problems. However, surface dressing may extend into summer.

Various mitigations and best practices that will be followed during road construction to control sedimentation include the following:

- instream construction work will be avoided, or limited, to the minimum extent possible;
- no in-water work will take place from 1 May to 15 July, to protect fish spawning and nursery periods of local fish populations; this would apply to all stream crossings;
- sediment and erosion control measures will be implemented prior to the start of work and maintained during the work phase - these measures will be left in place until all disturbed areas have been stabilized;
- machinery used near stream crossings or working within the drainage of Nipissar Lake will arrive on-site in a clean condition and be maintained free of fluid leaks to keep contaminants out of the drainage basin;
- the equipment will be re-fuelled, serviced, and washed away from the stream crossings to prevent deleterious substances from entering the water;

- fuel, lubricants, hydraulic fluids, etc., will not be stored within 31 m of the high water mark of any waterbody, and will be kept in an area where spillage can be contained, and in a manner inaccessible to wildlife;
- an emergency spill kit will be kept at the work site in case of fluid leaks or spills from machinery; and
- construction runoff will be captured and managed to minimize suspended solids in the watercourses, where applicable.

During operations, routine periodic inspections of the AWAR and Rnkin Inlet Bypass Road will be conducted. These inspections will include looking to identify areas of ponding, erosion, or sedimentation.

Watercourse crossings will be regularly inspected. The Project inspection and maintenance program includes a regular inspection program to identify issues relating to watercourse crossings; an event inspection program to track the impacts of large storm events on watercourse crossings; and a culvert location inspection program to ensure that the culvert(s) have been installed in the right location with respect to the watercourse and that culvert capacity is adequate to ensure that the culvert(s) pass the water under varying hydraulic conditions.

7.9.1 Dust Suppression Using Water

Water remains the most readily available means of controlling dust in Nunavut. It is common at mine sites worldwide to apply water through fantail sprayers or spray bars attached to a haul truck or equivalent fitted with a large tank. Agnico Eagle recognises that water is a temporary dust controlling measure, and reapplications could be necessary to achieve the desired dust control efficiency. The control efficiency of water applications is dependent on the amount of water applied, the time between re-applications, penetration depth of the water into the road surface, the traffic volume, prevailing weather conditions, and the state of the road surface (e.g., excessive fines over coarse material). All these variables need to be considered before selecting water to control dust from roads and other mine areas. If water is selected to suppress dust, Agnico Eagle will use it with a greater frequency near critical areas along the roads, such as near Nipissar Lake on the proposed bypass road.

Watering the roads is only possible during frost-free days. In late spring significant sublimation can be expected when the temperatures remain below freezing, which can lead to dry roads and significant dust potential. If water is applied while the temperature is below freezing, it will turn to ice on the road and pose a safety hazard for travel. Dust suppression using water or chemicals will not be possible at this time of the year.

7.10 Borrow Pit and Quarry Management

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 AWAR between Rankin Inlet and the proposed Project site.

Best management practices will be used in the selection, construction, and operations of proposed borrow pits and quarries for the Project. They include minimizing the surface area and cuts of quarries and borrow pits, where possible; maintaining the floor of the quarries and borrow pits slightly above the elevation of the surrounding area to promote drainage and avoid creating quarry lakes; preventing erosion and sedimentation through appropriate control measures; and carrying out ARD/ML testing and water quality monitoring in support of mitigation measures, if necessary.

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

7.11 Closure and Reclamation

The overall goal of closure and reclamation is to return the proposed Mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities. The overall closure goal is supported by the four closure principles of physical stability, chemical stability, no long-term active care requirements, and compatibility with future land uses for each component of the Project.

Mine closure is integral to the mine design, thus the Closure and Reclamation Plan will be modified in a series of conceptual plans as the proposed Project progresses. Planning for permanent closure is an active and iterative process, the intent of which is to develop a final plan using adaptive management. Adaptive management will enable closure planning and design to evolve as site specific information and monitoring data become available through analyses, testing, monitoring, and progressive reclamation.

Monitoring programs will be initiated during pre-development and operations to provide additional baseline information on which to base updates to the Preliminary Closure and Reclamation Plan. The adaptive management plans to be used in closure will follow the actions completed during operations, and will be co-ordinated with the existing operational monitoring programs (e.g., AEMP, Terrestrial Environment Management and Monitoring Plan) to set appropriate trigger levels, and mitigation plans and actions.

A summary of the preliminary conceptual mine closure concepts is provided in the Preliminary Closure and Reclamation Plan submitted in support of this Type A Water Licence Application.

7.11.1 Underground Mine

At closure, the following closure activities will occur relating to the underground mine:

- Any equipment or infrastructure left underground will be cleaned, drained of fluids, inspected, and remediated as appropriate to eliminate the risk of contaminant leakage.
- Hazardous materials and un-used explosives from underground shops, equipment, and magazines (fuels, oils, glycol, batteries, explosives, etc.) will be removed and disposed off-site at an approved disposal facility.
- Areas with excessive hydrocarbon contamination will be removed and disposed off-site at an approved disposal facility or cleaned in the on-site landfarm if appropriate.
- The underground ramps and portals will be capped to eliminate access to the underground mine workings. The sealed surface opening areas will be contoured to prevent natural surface flows to the underground, and disturbed surface areas will be re-contoured to establish positive natural drainage patterns and blend in with the surrounding topography to the extent possible.
- The underground workings will be flooded by natural groundwater inflows over approximately 6 years. The estimated total flooding volume of the underground workings is approximately 1.34 Mm^3.

7.11.2 Open Pit Mine

At the end of operations, the Tiriganiaq Pit 1 will be approximately 150 m deep with a footprint area of approximately 26.6 ha, while Tiriganiaq Pit 2 will be approximately 100 m deep with a footprint of approximately 8.3 ha.

After the open pit mining is complete and the potential for an extension of the open pit operations has been dismissed, the open pits will be actively flooded for over a period of three years. Flooding will be achieved primarily by active pumping from Meliadine Lake, with the planned pumping period running during the open water season from mid-June to end of September for each year. Water will be pumped (from the existing water intake) at controlled rates from Meliadine Lake. In addition, the natural runoff from the catchment area of each pit will accumulate in the pit during the flooding period.

Preliminary flooding annual rates for each pit from the water balance model are 3.1 Mm^3/year and 0.8 Mm^3/year for Tiriganiaq Pit 1 and Tiriganiaq Pit 2, respectively. Pump sizing for pit flooding and a more accurate estimate for the duration of flooding will be established during the detailed design phase of the Project to optimize pumping costs and reduce potential impacts to Meliadine Lake.

As the pits will be flooded with freshwater from Meliadine Lake, the water quality in both pit lakes during the flooding period (Years 8 to 10) and after completion of the flooding is predicted to meet respective CCME guidelines. No constituent concentrations are predicted to exceed MMER guidelines in either pit lake at the end of mine operations. However, the walls of the open pits will

have been exposed for a number of years during mine operations, and some weathering will have occurred. As the pits flood, the water will contact the weathered rocks, which may affect the water quality by increasing concentrations of dissolved metals. Testing and monitoring will be carried out to assess the open pit water quality as the pits are flooded. The information will be used to develop a strategy to minimize contamination of the regional surface water systems. If required, the flooding plan will be adjusted, while minimizing effects to Meliadine Lake.

All water diversions berms/dikes will be kept intact to provide a barrier between the open pits and surrounding lakes until the pit lake water levels achieve static conditions and the water quality is considered acceptable for release to the environment without treatment. If the water quality is unacceptable for discharge, the water will be treated either in-pit (i.e., in-situ) or through the WTP depending on the specific water quality concerns. The duration of the treatment will be dependent on monitoring results and acceptable discharge criteria.

Once the water in the pits is suitable for direct discharge to the environment, pumping and pipelines systems will be removed. The flooded pits would then drain by way of the natural surface drainage system.

7.11.3 Waste Rock and Overburden Storage Facilities

It is currently proposed to manage the majority of the overburden material and waste rock in WRSFs as it is anticipated that overburden will have geochemical characteristics compatible with waste rock, and the majority of overburden material will not be reused for mine closure.

The WRSFs were designed for long-term stability and no additional re-grading will be carried out at closure. It is anticipated that the native lichen community will naturally re-vegetate the surface of the facilities over time.

Geochemical testing indicates that the waste rock and overburden from the proposed Project is NPAG and non-ML. Kinetic tests completed on all waste rock types and at various scales show that drainage water quality is expected to meet MMER monthly mean effluent limits, including results for arsenic. Therefore, a closure cover system is not proposed for the WRSFs.

The operational contact water management system for the WRSFs will be maintained during the closure period and collected water will be pumped to CP1 for further treatment in the WTP until water quality monitoring demonstrates that water flowing from these facilities is acceptable for direct release to the environment. Once water quality is acceptable for direct release based on criteria established through the water licensing process, the WRSFs contact water management system will be decommissioned.

The temporary overburden stockpile area will be re-graded to promote natural re-vegetation and drainage once the stored overburden material has been used for the construction of the proposed TSF closure cover.

7.11.4 Tailings Storage Facility

The TSF was designed to minimize the impact on the environment and to consider short and long-term stability, limit tailings surface dust generation, control tailings surface erosion, and reduce the closure cost of the TSF. It was also designed to promote tailings freezing, the freeze back of the underlying foundation, and permafrost development within the TSF.

The current geochemistry characterization indicates that the tailings that will be produced by the proposed Project are NPAG, and metal leaching is not predicted to be an issue as there will be limited seepage of tailings pore water at closure (see Section 6.10.1). At the end of operations, the ultimate elevation for the tailings within the three cells will be approximately 104.6 m, which equates to a stacked tailings thickness of approximately 30 m. The TSF will have an approximate ultimate footprint of 35.1 ha. An engineered cover will be progressively placed on the surface of the tailings as the tailings deposit reaches the ultimate elevation. The intent of the engineered cover will be to prevent wind erosion and limit infiltration of water to the tailings surface. The placement of the engineered cover will also help prevent dust production.

The contact water management system for the TSF will be maintained during the closure period, and water collected will be pumped to CP1 for further treatment in the WTP until water quality monitoring demonstrates that water flowing from this facility is acceptable for direct release to the environment. Once water quality is acceptable for direct release based on criteria established through the water licensing process, the TSF contact water management system will be decommissioned.

7.11.5 Transportation Routes

The AWAR will be the year-round access between Rankin Inlet and the proposed Project site and will be a private road constructed primarily on IOL, leased by Agnico Eagle from the KIA, with small sections of the road constructed on Commissioner's land (2.3 km), also leased by Agnico Eagle.

A bypass road will be built around the south of the airstrip to Itivia. The bypass road will allow traffic from Itivia to bypass the hamlet in delivering people, materials and fuel to the proposed Mine site. By building the proposed bypass road, use of municipal roads by Agnico Eagle will be kept to a minimum. The bypass road will be closed to the public.

In addition to the AWAR and bypass road, a network of roads (service roads and haul roads) on the proposed Mine site will be required to connect up the various mining areas and to access the various Project facilities.

The AWAR, bypass road, and all necessary site roads will be active during closure until water quality meets discharge criteria, and dikes/berms are breachedn and access to the Mine site is no longer required. The objective post-closure will be to make the road surface impassable by vehicular traffic (i.e., cars and trucks) by ripping (scarifying) the entire road bed and removing bridges and culverts

along the route. Scarifying the road surfaces will be also promote natural re-vegetation and drainage.

All bridges and culverts will be removed and original drainage patterns restored (not including the Char River bridge as this would become the property of the Hamlet of Rankin Inlet). Stream crossings will be rehabilitated as they are encountered during the progression of the road decommissioning work. Cross-drain structures (cross-ditches) will also be installed where necessary between culvert sites. Where armouring rock (rip-rap) is required, this rock will be non-acid generating and non-metal leaching for the protection of aquatic life. Where affected watercourses are fish bearing, the timing of decommissioning work will be restricted to within the designated DFO fisheries work window.

7.11.6 Landfill and Other Waste Disposal Areas

Leachate from the landfill is anticipated to be of very low ionic strength (dilute) due to controls on materials to be placed in the landfill. Moreover, drainage from the landfill is largely expected to freeze within WRSF1, with little to none reporting to the water collection infrastructure (FEIS Volume 2; Agnico Eagle 2014d). The design, operation, and/or closure of the landfill do not rely on total freezing; however, as an added control strategy, a minimum of 3.7 m thick NPAG and non-metal leaching waste rock cover will be placed over the landfill at closure. The cover thickness of 3.7 m is based on maintaining the active layer within the waste rock so that the materials landfilled will remain frozen. The surface will be left irregular so as to capture snow, windblown sediment, and plant seeds.

Hazardous waste and contaminated soil (soil not treated through the proposed landfarm, i.e., soil contaminated with heavy hydrocarbons or other contaminants not suitable for remediation in the landfarm) will be managed continually during operations and closure by sending the soil to a licensed off-site treatment facility. Therefore, there will be little to no accumulation of such wastes during Mine operations or during closure at the proposed Mine site, subject to seasonal shipping considerations.

After removal of all remediated soil and prior to closure and reclamation of the landfarm, the berm and base will be sampled to determine if these soils are free from PHC contamination. No excavation will be necessary if the soils meet the required criteria. If not, the landfarm will be covered with 2 metres of waste rock or other material used for reclamation. The surrounding berm will be breached to avoid water accumulation on the landfarm.

All disturbed site areas will be re-graded to suit the surrounding topography. In areas where the original ground surface was lowered for site grading or structural requirements, the slopes will be stabilized and contoured. Cover materials may be required for erosion and dust control. Any concrete structures and foundations at the proposed Mine site will be removed or buried to a point

about 1 m below the final ground surface or the final re-graded surface. It is anticipated that a succession of indigenous plant species will naturally re-vegetate the re-graded surfaces over time.

7.11.7 Water Management Facilities

Water Treatment Plant and Meliadine Lake Discharge Point: The WTP will be decommissioned once it is no longer required; when water quality from the proposed mine components meets licence criteria for direct discharge. The WTP and Meliadine Lake effluent diffuser will be maintained for three years after closure. If water quality is acceptable, without treatment, after 3 years it will be dismantled and disposed of in landfill facility either on-site or in Rankin Inlet (if approved). Remaining concrete foundations and slabs from the WTP will be punctured, buried, and re-graded to promote natural drainage and natural re-vegetation.

Dikes/Berms: All water diversions berms/dikes will be kept intact to provide a barrier between the facilities and surrounding lakes until the water quality (seepage and runoff collected from the proposed facilities) is considered acceptable for release to the environment without treatment. Once this is achieved the dikes/berms will be breached Breaching will involve the removal of a portion of the dikes/berms or back to original lake bed levels Consideration will be given to breach staging, with above-water portions of the dike/berm in the breach area removed during winter periods, when there will be little surface water flow, thereby minimizing the potential release of sediments to the neighbouring lakes. The remainder of the breach would be completed during the following freshet so as to allow for the deployment of turbidity curtains to control potential releases of sediment. Exposed till surfaces within the breach opening above normal lake water levels will be covered with NPAG and non-ML materials. These materials will also be used below water surface depending upon availability.

Pit lake water quality will need to meet discharge objectives, including turbidity and TSS, before the dikes are breached. Any fine sediments re-mobilized into the water column during flooding of the pits are expected to have settled out by the time the pit lake areas are reconnected to the surrounding lakes.

Channels, sumps, and ponds: The contact water management system will be maintained as required in closure until site water quality monitoring results indicate that the water can be released directly to the environment without further management. Once the mill site is reclaimed, the local mill sump(s) will be reclaimed and surface runoff will follow natural drainage patterns.

All water management infrastructures that will be maintained for closure and reclamation, including ditches and sumps, will be re-contoured and/or surface-treated according to site-specific conditions to minimize wind-blown dust and erosion from surface runoff and enhance the site area for natural re-vegetation and wildlife habitat post-closure.

Pipelines, culverts, pumps: All proposed pipes, culverts, and pipes will be maintained as required in closure until site water quality monitoring results indicate that the water can be released directly to the environment without further management. All water management infrastructures will be dismantled and salvaged or disposed of in the WRSF1 landfill when they are no longer required. Reclaimed areas will be re-graded to promote natural drainage and natural re-vegetation.

Water quality predictions: The water quality predictions for the open pits and other facilities are discussed in the above sections. The concentrations of some elements during mine closure are predicted to exceed the respective CCME guidelines, mainly due to the assumed constant loadings from the waste rock materials. Water quality monitoring of CP1 to CP6 during mine operations will be completed to track trends in the site water quality and to provide additional information for future closure water quality prediction and planning modifications.

7.11.8 Quarries and Granular Borrow Sites

Quarries and granular borrow sites developed for building the AWAR will be reclaimed following completion of construction of the bypass road and on-site road network when not required for ongoing maintenance of the access roads. Quarries and granular borrow sources will also be needed to build the storage/operation pad(s). The proposed closure activities may commence prior to the end of mining, and will include re-contouring the slopes and bases of the quarries to promote positive drainage. Should acid-generating bedrock be exposed, these areas will be covered with a minimum of a 2 m thick layer of non-acid generating soil or rock.

7.12 Environmental Protection and Monitoring Plans

The EMPP describes the overarching direction for environmental and socio-economic management for the proposed Project. A cyclical feedback loop will be employed where operations are planned and implemented, monitoring data collected and analyzed, and practices adjusted to promptly reduce or eliminate any observed negative impacts throughout the life of the proposed Project. Continual use of this feedback loop will allow adaptive management decisions to be made on an ongoing basis, and shall lead to improvements to the environmental and socio-economic management system as necessary over time.

The EMPP will offer flexibility to respond to changes, for example, in the mining development plan, the regulatory regime, the biophysical and socio-economic environments, technology, research results, and the understanding of the traditional knowledge. Threshold and indicators to trigger management actions will be provided, where applicable, in the plans embedded in the EMPP, along with a system of accountability.

The EMPP also summarizes the required environmental monitoring for the proposed Project, which consists of three forms:

- Regulated discharge monitoring occurs at monitoring points specified in licenses or regulations. It includes discharge limits that must be achieved to maintain compliance with an authorization (i.e., water licence) or regulation (i.e., MMER). Enforcement action may be taken if discharge limits are exceeded for a parameter.
- Verification monitoring is carried out for operational and management purposes by Agnico Eagle. This type of monitoring provides data for decision making and builds confidence in the success of processes being used.
- General monitoring is commonly included in a water licence specifying what is to be monitored according to a schedule. It covers all types of monitoring (i.e., geotechnical, lake levels, etc.).

Proposed water quality monitoring stations during construction, operations and closure are shown in Appendix A, Figure 7.1 and listed in Appendix B, Table 7.1. The list of constituents in each parameter group is provided in Appendix B, Table 7-2, while a summary of the proposed inspections is listed in Appendix B, Table 7-3.

There will be a need to conduct ongoing monitoring throughout the life of the proposed Project, as well as beyond. Long-term monitoring costs have been factored in to the overall Project cost. The format of these long-term monitoring programs will be developed in conjunction with the appropriate regulatory agencies, and will be completed to the current requirements at the time of mine closure.

Monitoring will be conducted for all proposed facilities and is described in the individual plans. Monitored facilities and areas include:

- Water managemenget facilities;
- WRSFs;
- TSF;
- landfill;
- landfarm; and
- hazardous materials storage area.

Specific monitoring details for the aquatic environment are provided below.

7.12.1 Aquatics Monitoring

The effects of the proposed Project infrastructure on aquatic habitat will be manifested in four main areas:

- upper ponds and streams of the H watershed, due to disrupted connectivity to Meliadine Lake and habitat alteration upstream of dikes D-CP1 and D-CP6;
- lower ponds and streams of the H watershed, due to reduction in flows downstream of dikes D-CP1 and D-CP6;

- upper ponds and streams of the A and B watersheds, due to disrupted connectivity to Pond A8 and Lake B7 and habitat alteration upstream of dikes D-CP3, D-CP4 and D-CP5, and berms 2; and
- Meliadine Lake due to habitat loss under the footprint of the freshwater intake structure.

Mitigation measures have been incorporated into the Project design, and will be incorporated into various Project construction activities, to limit changes to fish habitat quantity and quality. In addition to mitigation measures, an aquatics monitoring program has been developed (i.e., the AEMP).

The objective of the aquatics monitoring is to assess potential Mine-related effects on the aquatic ecosystem and to meet regulatory requirements outlined in the Type A Water Licence and MMER, while also meeting commitments made during the environmental permitting process. The monitoring program aims to determine the short- and long-term effects of the proposed Project on the aquatic receiving environment; evaluate the accuracy of predictions made in the FEIS, including the final significance statements regarding impact to the aquatic ecosystem; assess the efficacy of planned mitigation incorporated into the Project design; and collect data required to identify the need for potential additional mitigation of Project effects within a management response framework.

The core components of the AEMP are water quality, sediment quality, benthic invertebrate community, and fish health and tissue chemistry. A conceptual site model was developed as the basis for developing and refining the study design, and for interpretation of results. The conceptual site model is a visual illustration describing the interactions of Mine activities, exposure pathways (water, sediment, biological tissue), and receptors of potential concern (phytoplankton, zooplankton, benthic invertebrates, and fish). Spills, leaks, aerial emissions, and dust deposition can potentially affect the receptors, but release of mine effluent is the primary activity that could affect the biological receptors. Effects from effluent release could result in toxicological impairment (e.g., toxicity due to metals) or nutrient enrichment (increased productivity due to nutrients); the AEMP was designed to consider both lines of chemical stressors.

Two distinct programs are proposed for the AEMP (i.e., the Meliadine Lake study and the Peninsula Lakes study) with the program design dictated by Project design, IQ, consultation, and regulatory requirements. During IQ studies and community consultation for the proposed Project, the importance of clean water and the health of fish and birds was emphasized by the Elders and other people in the communities who rely on these resources for traditional use. Elders have expressed concerns regarding potential adverse effects due to the proposed Project on drinkability of water and fish populations in waterbodies in the entire Meliadine watershed. To focus the study design and analysis of results in the annual monitoring reports, key questions were developed for each monitoring component in each of the two studies.

The Meliadine Lake study was designed around the key aspects of the environmental effects monitoring requirements (e.g., number of stations per area, sample sizes, measurement endpoints, and supporting variables), as Meliadine Lake will receive direct effluent discharge. The core components of the Meliadine Lake study are water quality, sediment quality, benthic invertebrate communities, and fish. A targeted plankton study is also included to investigate the potential for plankton monitoring. For the Meliadine Lake study, up to three within-lake reference areas are included in the design. Within-lake reference areas were chosen because a different small bodied fish assemblage was found in Meliadine Lake compared to other lakes in the region, and effects on water quality are expected to be localized; this allows for the use of reference areas at some distance downstream from the diffuser.

The Peninsula Lakes will not receive direct effluent discharges, thus the study was designed to detect potential indirect effects (i.e., aerial deposition and physical alteration of watersheds). The core component of the Peninsula Lakes study is water quality. Water quality will be monitored on a regular basis, with biological or other studies (i.e., targeted studies) added if the water quality results suggest Mine-related changes have occurred.

A Response Framework was developed to determine the course of action based on different levels of exceedance. The Response Framework is a systematic approach for responding to AEMP results and provides input into mitigation and adaptive management.

7.12.2 Quality Assurance and Quality Control

Quality Assurance and Quality Control (QA/QC) are vitally important to ensuring that the monitoring programs implements yield accurate and reliable results. The objective of the QA/QC plan is to assure that the chemical data collected are representative of the material being sampled, are of known quality, are properly documented, and are scientifically defensible. A QA/QC plan has been developed for the proposed Project to provide procedures and requirements for field sample collection, laboratory requirements and data verification.

Exploration assays will be handled externally; however, the samples will be crushed and prepared at the Project assay laboratory. Most of the environmental assaying will also be done externally. The proposed assay laboratory at the Mine site is not an accredited laboratory but will be used periodically for “real-time” results for some parameters like pH, TSS, and Weak Acid Dissociable Cyanide. These results are for observational purposes and do not meet the standards of an accredited laboratory.

8 WATER LICENCE CONSIDERATIONS

8.1 Proposed Term of Licence

Agnico Eagle is seeking a Type A Water Licence for mining undertaking for a term of 15 years. The term of licence allows for the construction, mining, and closure of the Tiriganiaq deposit. During operations, Agnico Eagle will undertake additional technical study and feasibility analysis for bringing additional deposits online. It is Agnico Eagle's desire to continue profitable mining for as long as possible. Ongoing feasibility assessments of the other deposits currently identified will determine the future mining schedule.It is expected that once the mining schedule is refined, amendment to the Type A licence will be required and management plans updated accordingly.

Agnico Eagle is committed to applying for a licence renewal with appropriate amendments as required subject to positive economic valuation of mining the other deposit. Otherwise, Agnico Eagle is committed to filing a final closure plan at least one year prior to the end of term requested by this Application.

The NPC conformity assessment and the NIRB Part 5 review were undertaken on the Project including Tiriganiaq, Wesmeg, Discovery, F, and Pump zones. It is Agnico Eagle's desire and expectation to mine all the deposits as presented in the FEIS for the Project (Agnico Eagle 2014a).

The term of licence at 15 years is expected to cover construction of the proposed Mine, mining of ore from the Tiriganiaq deposit, monitoring, and closure of the mine site.

Agnico Eagle believes strongly that taking into account it past performance at Meadowbank and the current feasibility assessment for the Project, the company is financially able to complete the undertaking as presented in this Application, to mitigate any adverse impact, and to satisfactorily maintain and restore the proposed Mine site in the event of closure or abandonment of the Project.

8.2 Draft Water Licence

The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and Nunavut Water Regulations require the NWB to hold a public hearing for any Type A Water Licence Application. The NWB may, as stipulated in the Rules of Practice and Procedure for Public Hearings (May 2005), hold a pre-hearing conference and technical meeting to facilitate the final public hearing process and formulate the issues raised by interested parties to be dealt with by Board.

Agnico Eagle, in an effort to assist in resolution and clarification of the issues still to be identified by interested parties throughout the public review process, intends to provide the Board with a Draft water license at the pre-hearing conference and technical meeting for review. The draft water licence would include: the standard NWB licensing requirements applicable to any undertaking; highlight Agnico Eagle's commitments made within the Application and supporting management plans in the context of water licence requirements; and take into account Agnico Eagle's position on issues raised by parties in advance of the pre-hearing conference and technical meeting.

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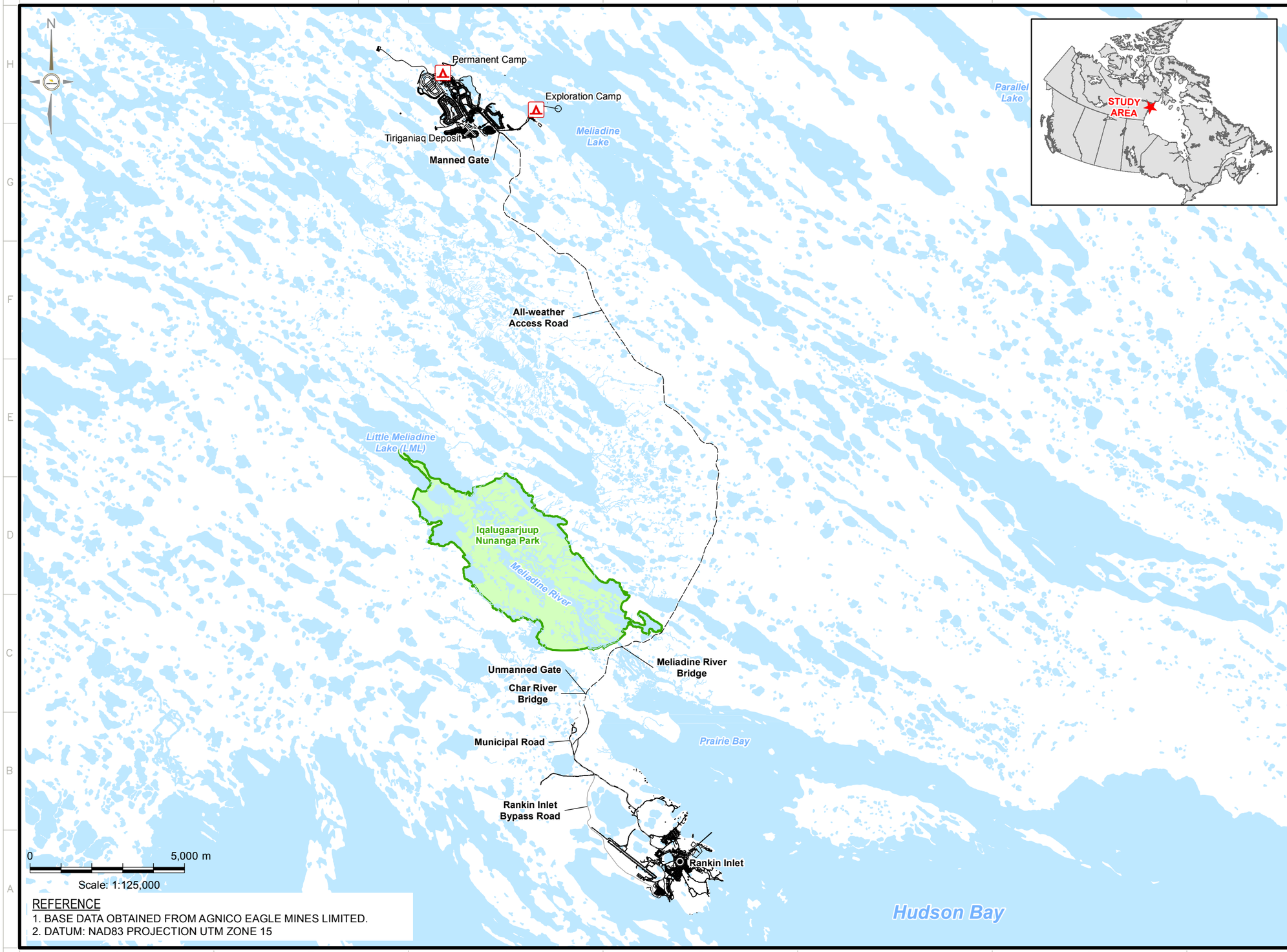
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APPENDIX A - FIGURES

Figure 1.1	General Location Map
Figure 1.2a	Site Layout Plan
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Figure 1.3	Location of the Project, Waste Deposits, and Watercourses
Figure 2.1	Location Map of Concessions, Claims, and Leases
Figure 3.1	Nunavut Mineral Potential
Figure 4.1	Meliadine Project - Water and Waste Management Infrastructure Schedule
Figure 4.2	Current and Potential Rock Quarries and Borrow Pits Investigated
Figure 6.1	Water Balance Block Flow Diagram
Figure 7.1	Proposed Water Quality Monitoring Stations

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LEGEND

- CAMP
- PROPOSED MINE SITE
- ALL-WEATHER ACCESS ROAD (AWAR)
- ROAD - NEW
- ROAD - EXISTING
- WATERCOURSE
- WATERBODY
- TERRITORIAL PARK

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TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.1 GENERAL LOCATION MAP

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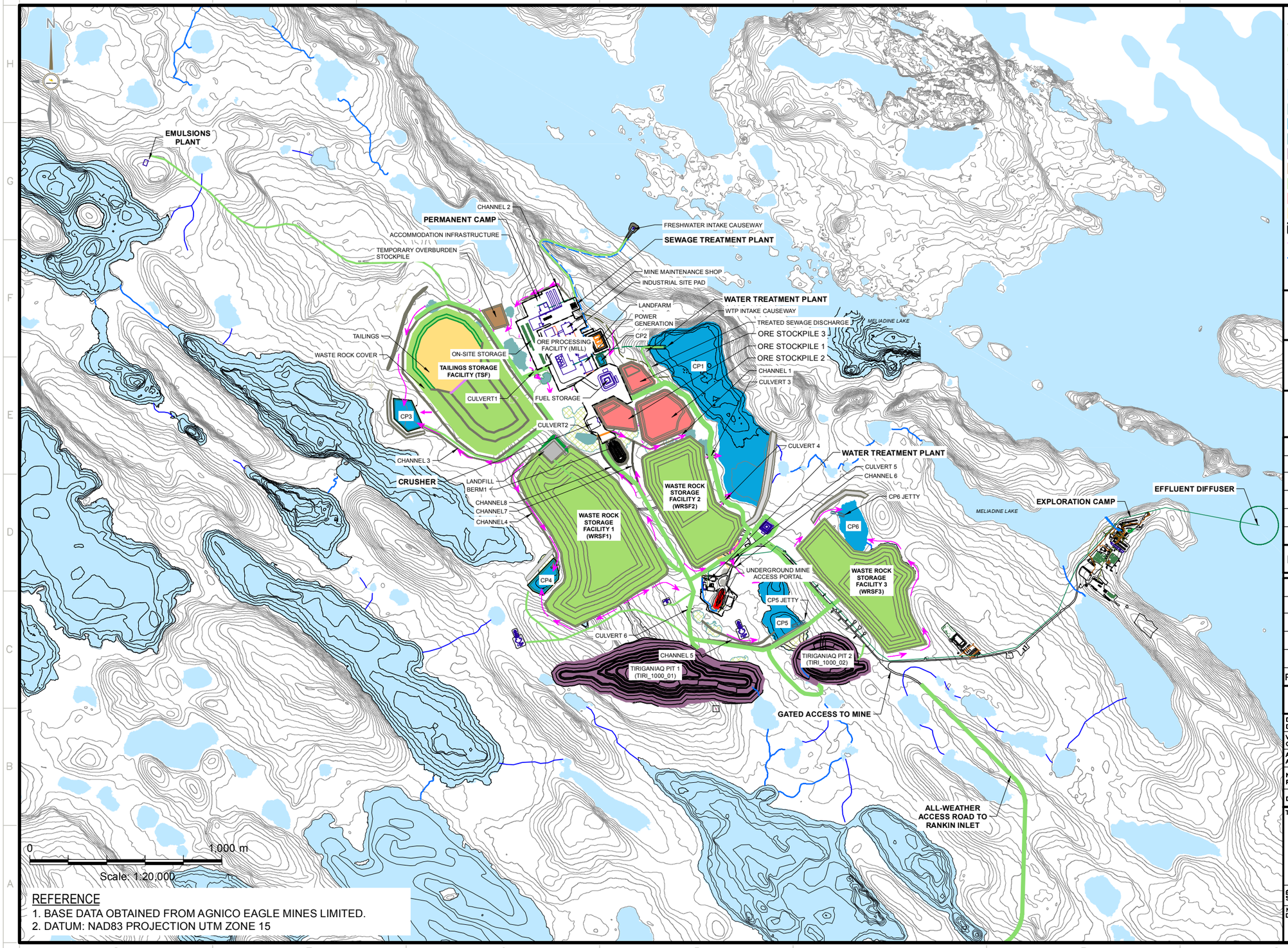
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REFERENCE
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2. DATUM: NAD83 PROJECTION UTM ZONE 15

LEGEND

- SERVICE ROAD
- HAUL ROAD
- TOPOGRAPHIC CONTOUR (5 m INTERVAL
- TOPOGRAPHIC CONTOUR (1 m INTERVAL)
- NON CONTACT WATERBODY
- CONTACT WATERBODY
- WATER COLLECTION POND
- DRAINED POND AREA
- OPEN PIT
- OVERBURDEN
- WASTE ROCK
- ORE
- TAILINGS
- INDUSTRIAL SITE PAD
- CONTACT WATER FLOW DIRECTION
- STREAM

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APPROUVÉ PAR APPROVED BY	DRW		23–03–2015
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AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.2a SITE LAYOUT PLAN

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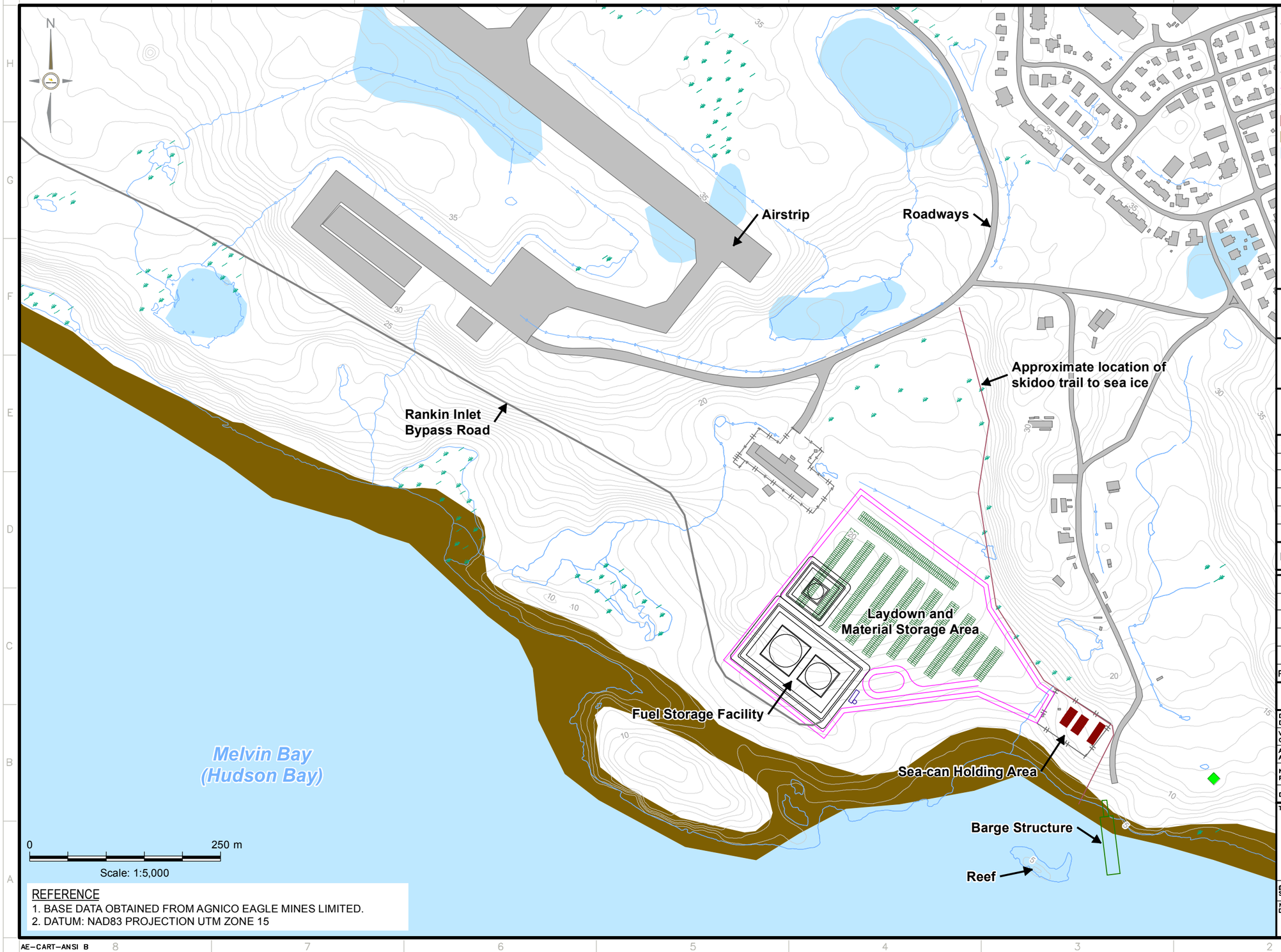
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LEGEND

- ROCK QUARRY
- RANKIN INLET BYPASS ROAD
- FENCE
- TANK FARM AREA
- TOPOGRAPHIC CONTOUR (1 m INTERVAL)
- SEA-CAN HOLDING AREA
- INTERTIDAL AREA
- WATERBODY

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AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.2b SATELLITE RANKIN INLET SITE AND SITE LAYOUT PLAN

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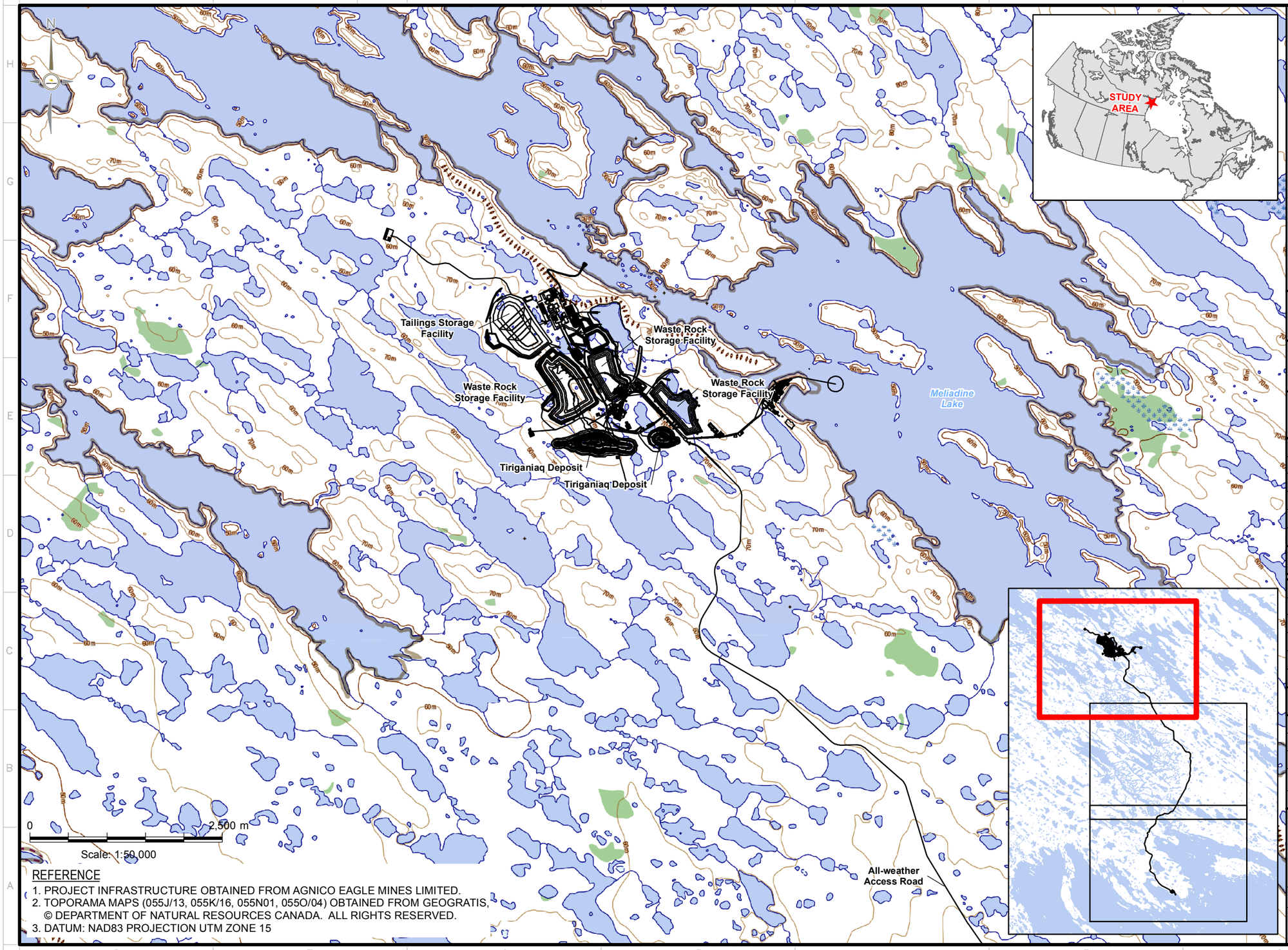
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LEGEND

- PROJECT INFRASTRUCTURE
- ESKER
- WATERCOURSE
- WATERBODY
- WETLAND
- TERRITORIAL PARK

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AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.3 THE LOCATION OF THE PROJECT, WASTE DEPOSITS AND WATERCOURSES

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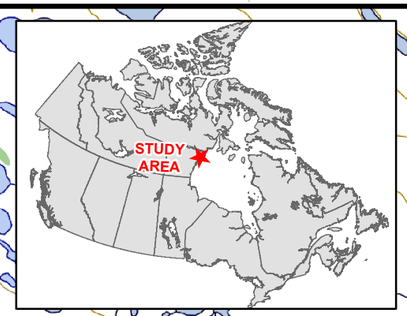
All-weather Access Road

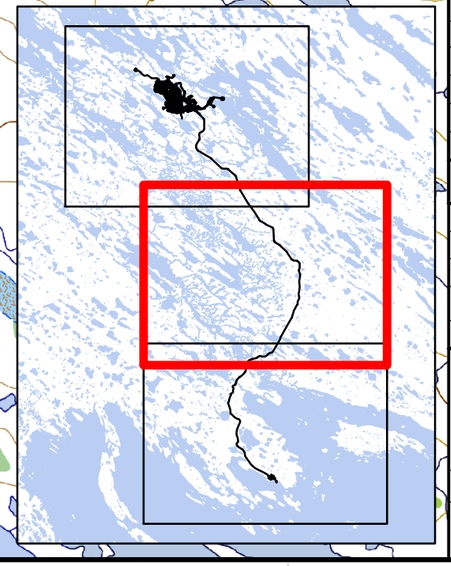
Little Meliadine Lake (LML)

Iqalugaarjuup Nunanga Park

Meliadine River

Meliadine River Bridge





0 2,500 m
Scale: 1:50,000

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LEGEND

- PROJECT INFRASTRUCTURE
- ESKER
- WATERCOURSE
- WATERBODY
- WETLAND
- TERRITORIAL PARK

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AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.3 THE LOCATION OF THE PROJECT, WASTE DEPOSITS AND WATERCOURSES

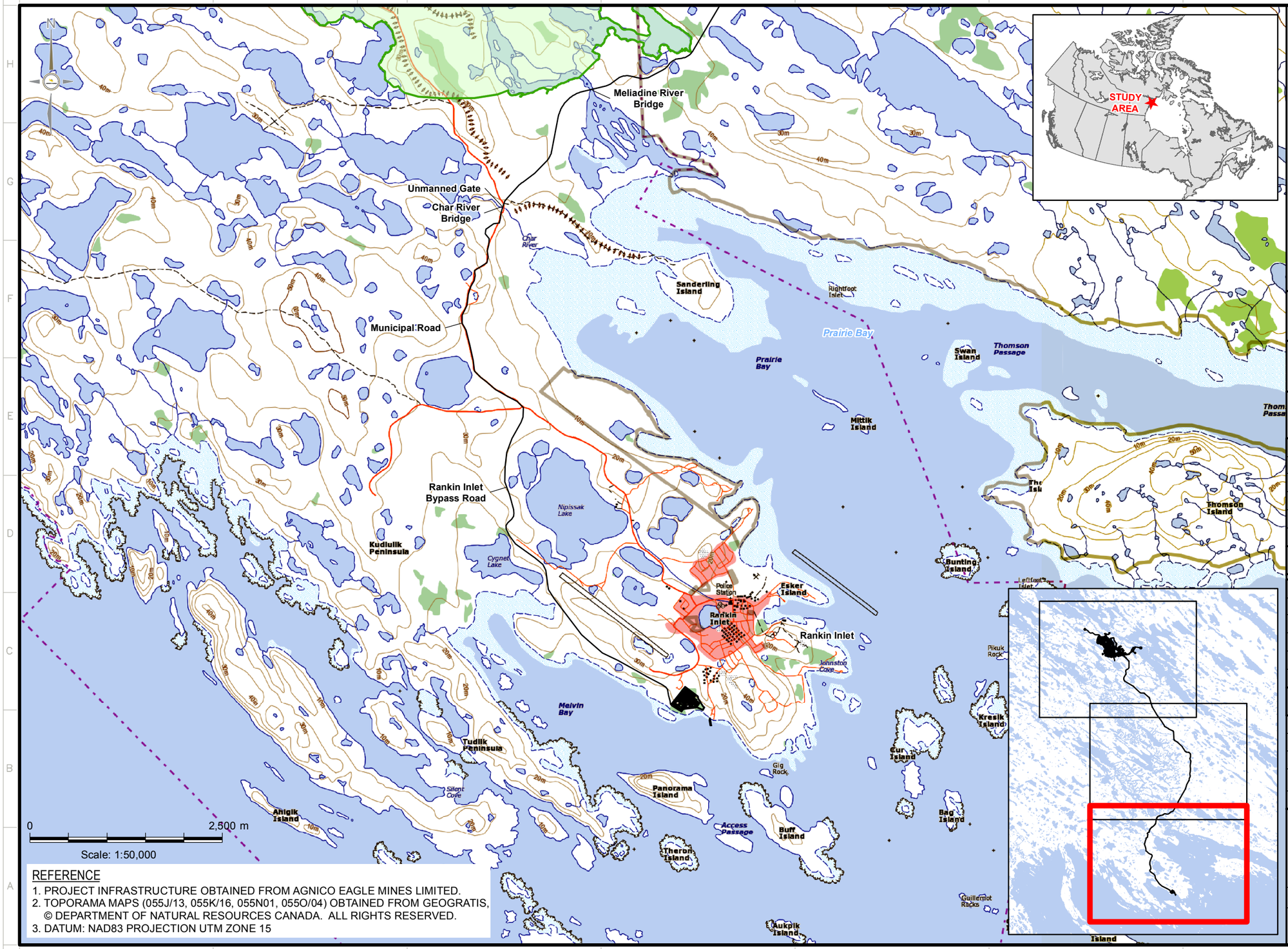
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LEGEND

- PROJECT INFRASTRUCTURE
- ESKER
- WATERCOURSE
- WATERBODY
- WETLAND
- TERRITORIAL PARK

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TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
FIGURE 1.3 THE LOCATION OF THE PROJECT, WASTE DEPOSITS AND WATERCOURSES

ÉCHELLE/ SCALE	1:50,000	FICHIER FILE	.DWG

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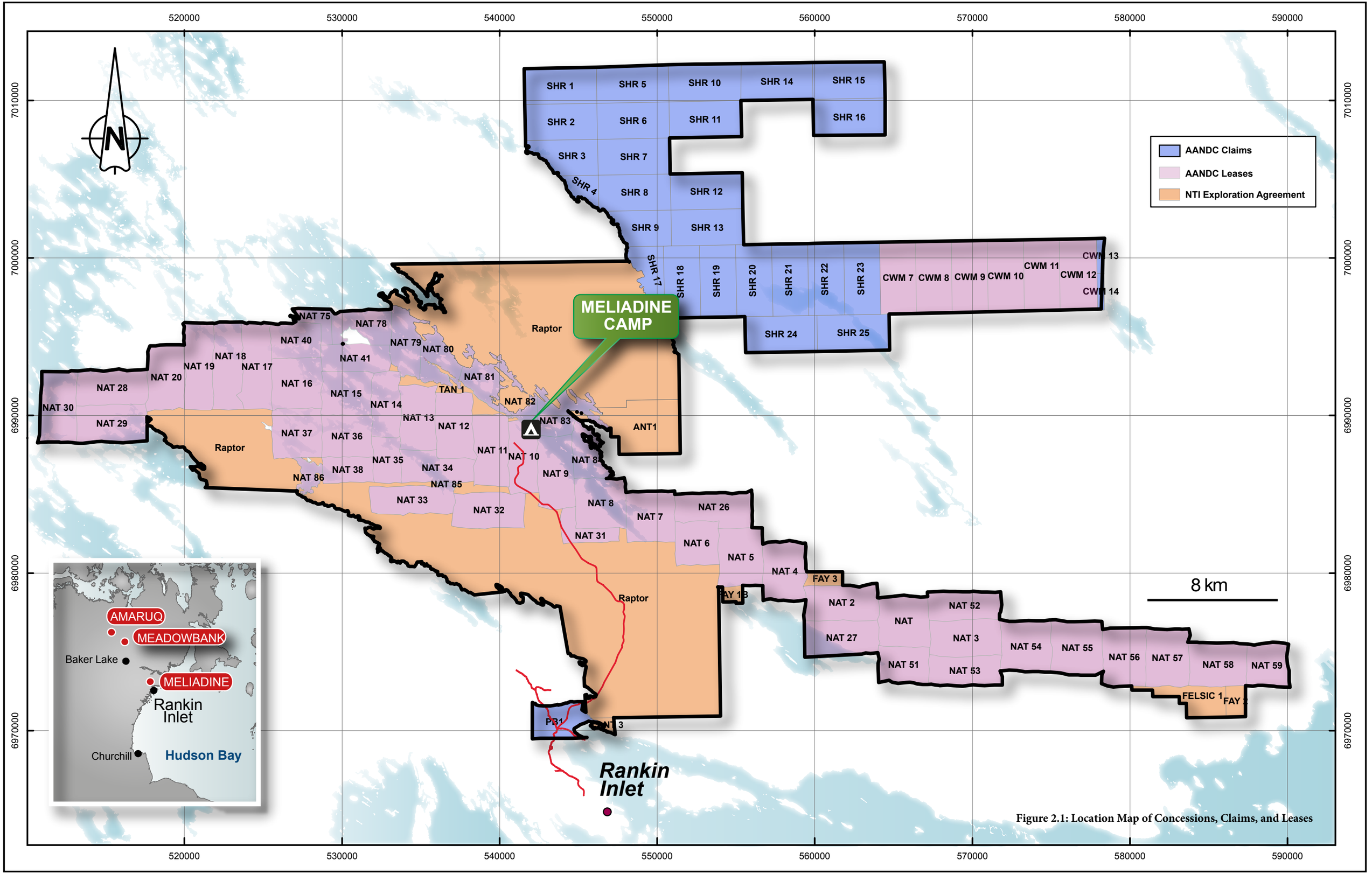


Figure 2.1: Location Map of Concessions, Claims, and Leases

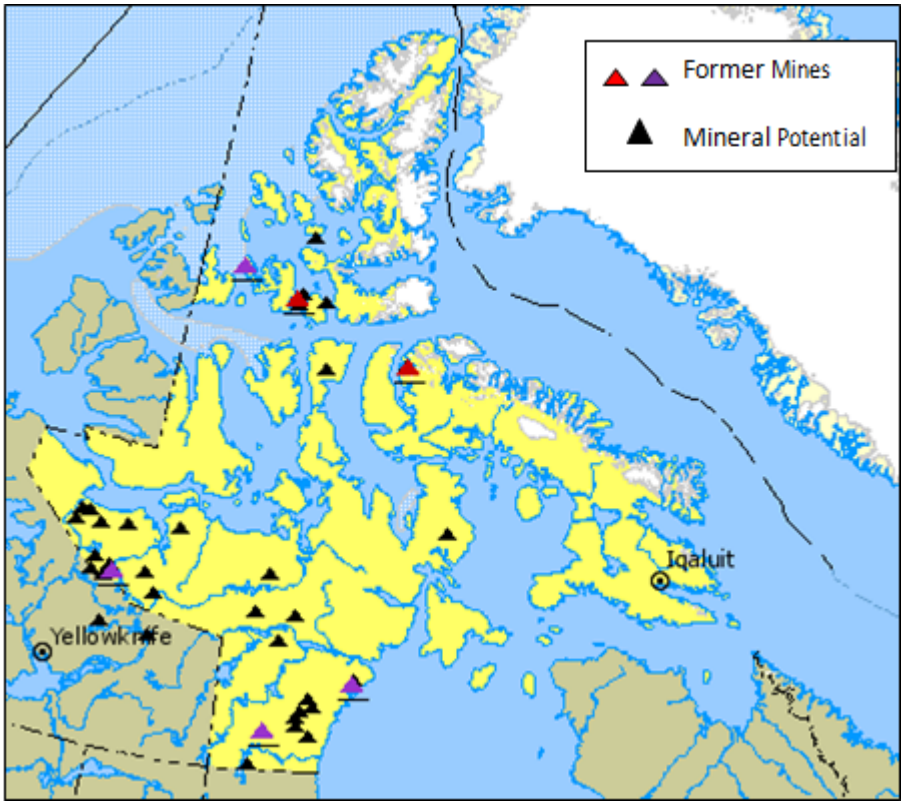


Figure 3.1: Nunavut's Mineral Potential

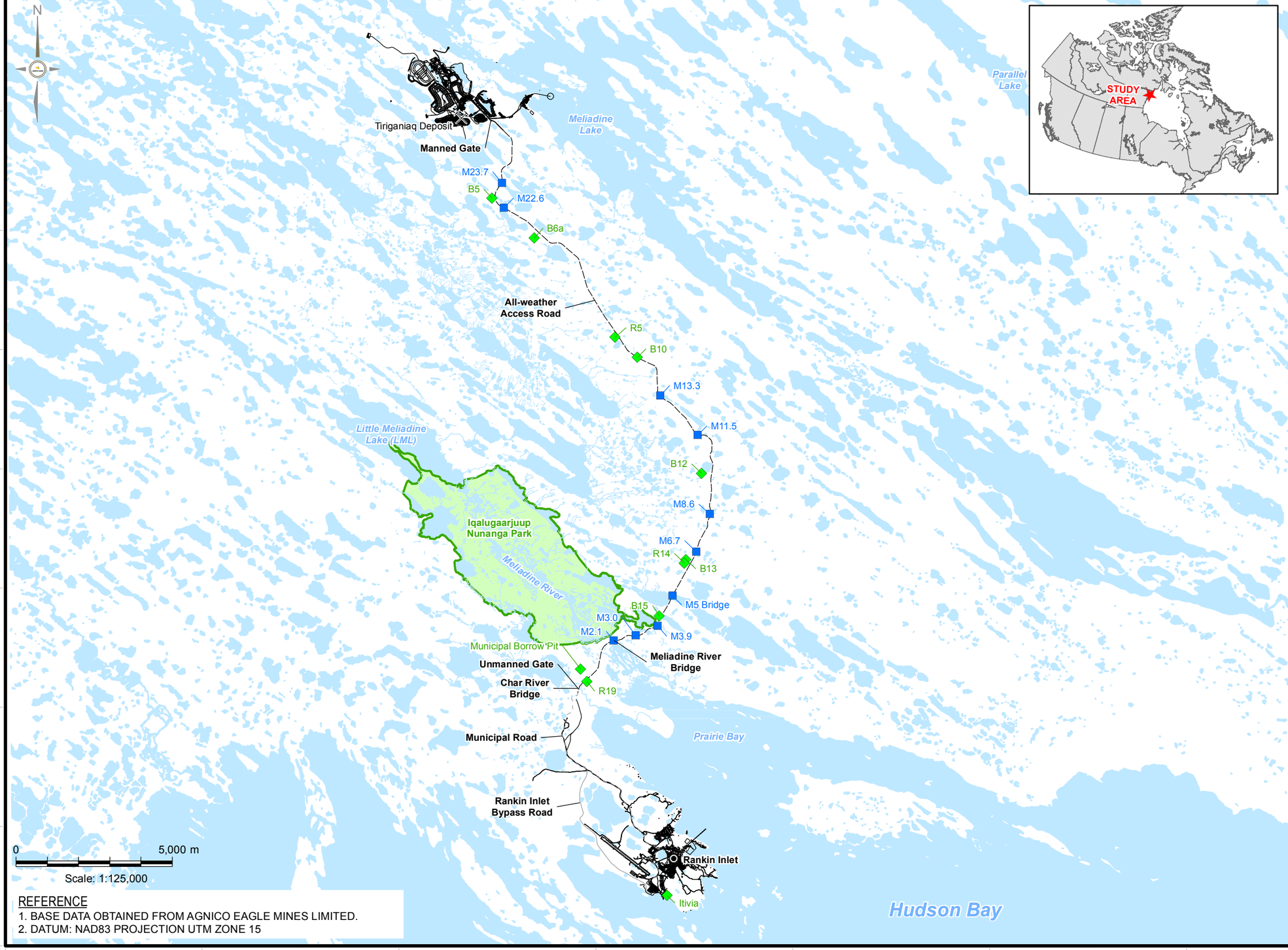
Source: Natural Resources Canada, Minerals and Metals Sector, Minerals and Mining Statistics Division, 1999. *http://atlas.nrcan.gc.ca/site/english/maps/peopleandsociety/nunavut/mining/mineralexploration, accessed September 2012*

Figure 4.1 - Meliadine Project - Water and Waste Management Infrastructure Schedule for Construction and Operations

Project Activity	Project Phases																												
	Pre-construction (-5 only)	Construction (Year -4 to -1)				Operation															Closure			Post-Closure					
Year	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	1	2	3	4	5	5+		
All-weather Access Road																													
Operate all-weather access road																													
Decommission all-weather access road (follows post-closure activities)																													
Rankin Inlet Infrastructure																													
Mitigate designated archeological sites																													
Pre-deliver materials, equipment																													
Start civil works for laydown area, including fuel tank farm																													
Construct Rankin Inlet Bypass Road																													
Construct fuel tank farm and associated infrastructure (Rankin Inlet)																													
Commission laydown area (Ranking Inlet)																													
Receive construction materials, equipment and fuel																													
Receive consumables (materials, equipment, fuel)																													
Decommission Rankin Inlet infrastructure (spud barge, laydown area, tank farm and Bypass Road)																													
Mine Site																													
Mitigate designated archeological sites																													
Start civil works for mine infrastructure																													
Replace fuel tanks with fuel tank farm																													
Construct freshwater intake																													
Construct starter roads to construction areas																													
Build new portal																													
Open pits stripping																													
Construct camp, mill and supporting infrastructure																													
Construct Tailings Storage Facility																													
Underground development																													
Underground mining																													
Open pit mining at Tiriganiaq																													
Milling																													
Mine decommissioning and reclamation																													
Post-closure monitoring																													

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REFERENCE
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2. DATUM: NAD83 PROJECTION UTM ZONE 15

LEGEND

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

AGNICO EAGLE

Golder Associates

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REVISIONS

DESSINÉ PAR DRAWN BY	CDB	DATE 01–12–2014
VÉRIFIÉ PAR CHECKED BY	LY	24–03–2015
APPROUVÉ PAR APPROVED BY	DRW	24–03–2015
No. PROJET PROJECT NO.	1405283	
DATE	–	

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AGNICO EAGLE – MELIADINE DIVISION

FIGURE 4.2 CURRENT AND POTENTIAL ROCK QUARRIES AND BORROW PITS INVESTIGATED

ÉCHELLE/ SCALE 1:125,000	FICHIER FILE .DWG		
No. DESSIN/ DRAWING NO. –		REVISION 0	FEUILLE/SHT 1 / 1

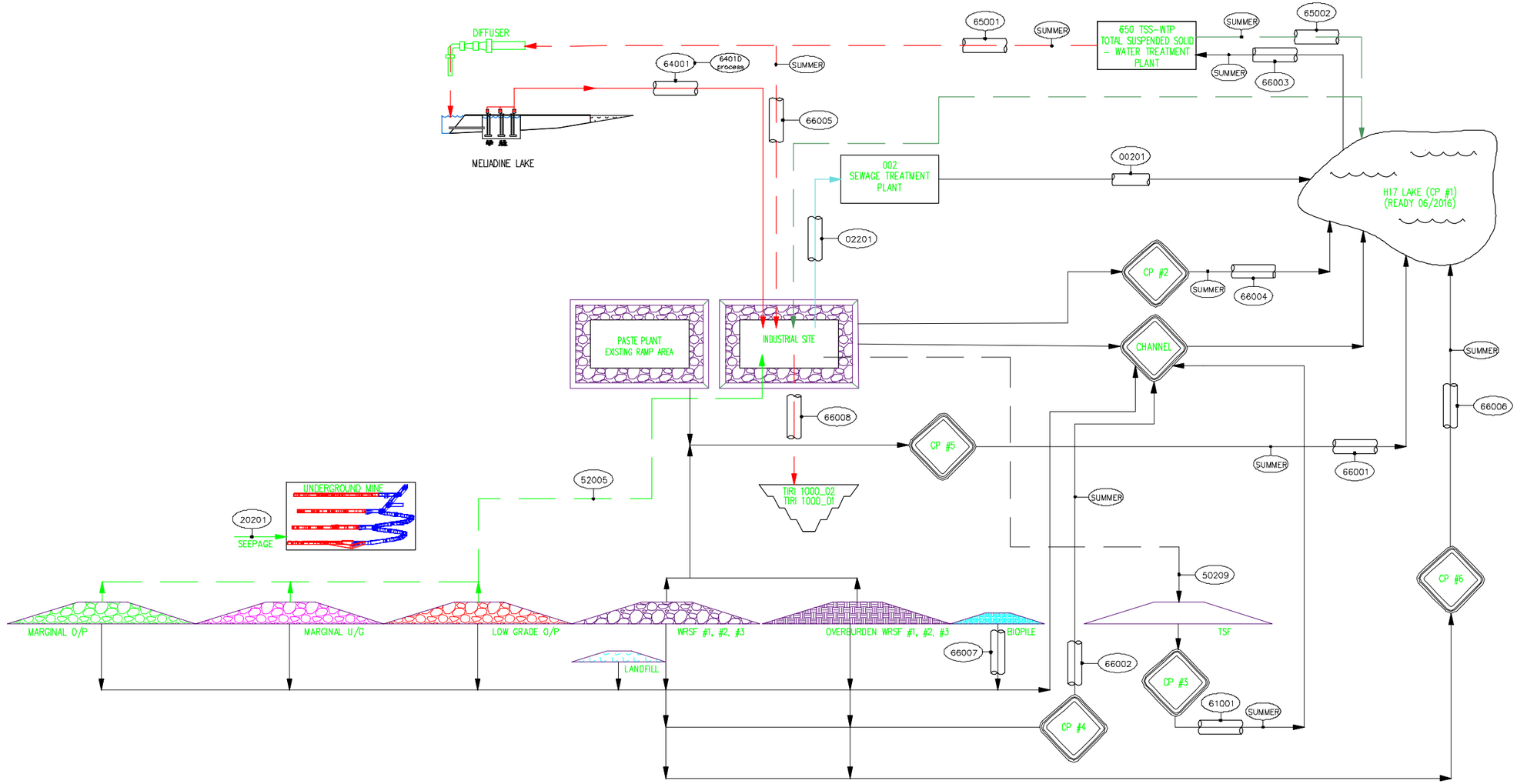
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NO. DESSIN DRAWING NO. 6509-680-200-001_8

FORMAT ARCHD

YEAR 8 (2027)



MAXIMUM ESTIMATED FLOWRATE OVER THE LIFE OF MINE																		
STREAM NO.		00201	02201	20201	50209	52005	61001	64001	65001	65002	66001	66002	66003	66004	66005	66006	66007	66008
WATER	m3/day	146.4	146.4	525.6	960	168	13100	1400	11600	400	37400	15100	12000	1100	900	14900	200	38000

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

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FINAL ISSUE
NOT TO BE USED FOR CONSTRUCTION
DATE : 2014-08-19

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AGNICO EAGLE

REV	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
2	2014-08-19	FLOWRATES/EBA PIPE LD.	SO	FP	
1	2014-07-15	REVISION WITH TETRATECH EBA	SO	FP	
0	2014-07-14		SO	FP	
C	2014-07-08	REVISION WITH TETRATECH EBA	SO	SO	
B	2014-06-16	AEM MARKUP	KBB	SO	

REVISIONS

MELIADINE GOLD PROJECT

Figure 6.1

TITRE / TITLE
AGNICO-EAGLE – MELIADINE DIVISION
680 – WATER MANAGEMENT
200 – FLOWSHEET
DIAGRAM
WATER MANAGEMENT PLAN
PERIOD 6

DESSINÉ PAR DRAWN BY	SERGE OUELLET	DATE 2014-05-2
VÉRIFIÉ PAR CHECKED BY	SERGE OUELLET	2014-0619
APPROUVÉ PAR APPROVED BY	FRANÇOIS PETRUCCI	2014-06-1
ÉCHELLE SCALE	N/A	DATE

NO. DESSIN DRAWING NO. 6509-680-200-001_8

NO PROJET PROJECT NO.	REVISION	FEUILLE / SHT
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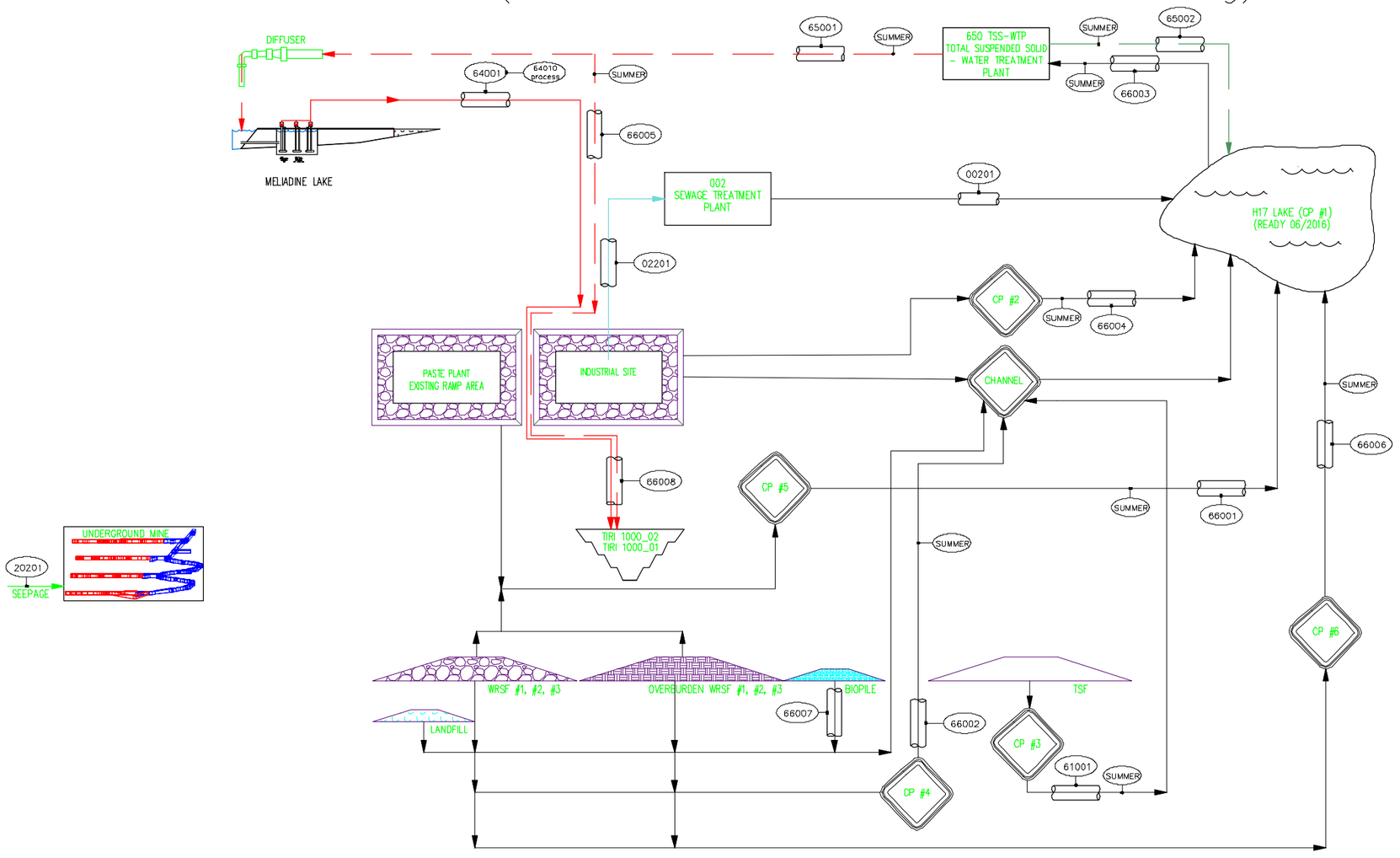
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FILE NO. 6509-680-200-001-9_R2.dwg

NO. DESSIN
DRAWING NO. 6509-680-200-001_9

FORMAT ARCHD

YEAR 9 to 11 (2028 to 2030: Closure and monitoring)



MAXIMUM ESTIMATED FLOWRATE OVER THE LIFE OF MINE																
STREAM NO.		00201	02201	20201	61001	64001	65001	65002	66001	66002	66003	66004	66005	66006	66007	66008
WATER	m3/day	146.4	146.4	525.6	13100	1400	11600	400	37400	15100	12000	1100	900	14900	200	38000

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

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AGNICO EAGLE

REV	DATE	DESCRIPTION	PAR/BY	APP	CLIENT
2	2014-08-19	FLOWRATES/EBA PIPE I.D.	SD	FP	
1	2014-07-15	REVISION WITH TETRATECH EBA	SD	FP	
0	2014-07-14		SD	FP	
C	2014-07-08	REVISION WITH TETRATECH EBA	SD	SO	
B	2014-06-16	AEM MARKUP	KBB	SO	

REVISIONS

MELIADINE GOLD PROJECT

Figure 6.1

TITRE / TITLE
AGNICO-EAGLE – MELIADINE DIVISION
680 – WATER MANAGEMENT
200 – FLOWSHEET
DIAGRAM
WATER MANAGEMENT PLAN
PERIOD 7

DESSINÉ PAR / DRAWN BY	SERGE OUELLET	DATE 2014-06-24
VÉRIFIÉ PAR / CHECKED BY	SERGE OUELLET	2014-06-1[illegible]
APPROUVÉ PAR / APPROVED BY	FRANCOIS PETRUCCI	2014-06-1[illegible]
ÉCHELLE / SCALE	N/A	DATE

NO. DESSIN / DRAWING NO.
6509-680-200-001_9

NO PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
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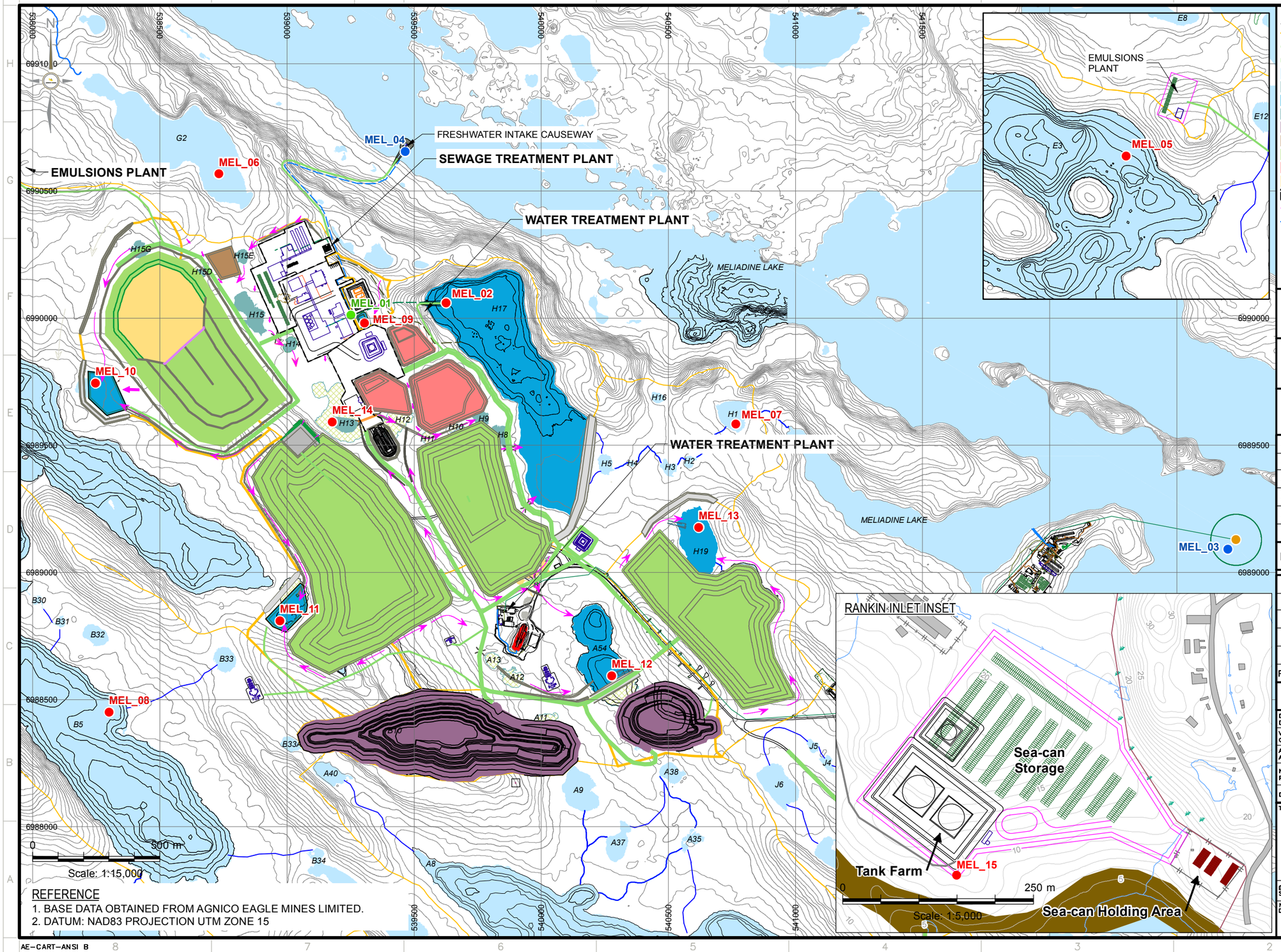
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DRAWING NO.

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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
- CONTACT WATER FLOW DIRECTION
- STREAM
- DIFFUSER LOCATION
- GENERAL AQUATIC MONITORING LOCATION
- REGULATED MONITORING LOCATION
- VERIFICATION MONITORING LOCATION

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TITRE / TITLE	# DWG

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REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	CDB	DATE 05-12-2014
VÉRIFIÉ PAR CHECKED BY	LY	23-03-2015
APPROUVÉ PAR APPROVED BY	DRW	23-03-2015
No. PROJET PROJECT NO.	1405283	
DATE	–	

TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
FIGURE 7.1 PROPOSED WATER QUALITY MONITORING STATIONS

ÉCHELLE/ SCALE	1:12500	FICHIER FILE	.DWG
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Table 1.2	Meliadine Gold Project Contact Information
Table 1.3	Estimate of Government Fiscal Impacts
Table 1.4	Phase 1 Indicated Resources
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Table 1.1 Geographic Extent of the Meliadine Gold Project

Project Area	UTM Zone 15, NAD83		Lat/Long (Degrees/Minutes/Seconds)	
	Easting	Northing	Longitude	Latitude
Mine Site	536850.2545	6991154.059	92° 16' 16.651" W	63° 2' 53.091" N
	542832.6875	6991154.059	92° 9' 10.809" W	63° 2' 50.722" N
	542832.6875	6987772.186	92° 9' 13.978" W	63° 1' 1.463" N
	536850.2545	6987772.186	92° 16' 19.377" W	63° 1' 3.829" N
All-weather Access Road	540959.7405	6988300.4604	92° 11' 26.684" W	63° 1' 19.309" N
	547937.7473	6988300.4604	92° 3' 10.432" W	63° 1' 16.230" N
	547937.7473	6963609.642	92° 3' 36.080" W	62° 47' 58.542" N
	540959.7405	6963609.642	92° 11' 48.601" W	62° 48' 1.592" N
Rankin Inlet Area	545836.0671	6963919.4038	92° 6' 4.112" W	62° 48' 9.519" N
	546355.8607	6963919.4038	92° 5' 27.421" W	62° 48' 9.283" N
	546355.8607	6963413.3418	92° 5' 27.925" W	62° 47' 52.933" N
	545836.0671	6963413.3418	92° 6' 4.610" W	62° 47' 53.169" N

Table 1.2 Meliadine Gold Project Contact Information

Office	Contact	Address	Phone	Fax	Email
Corporate Office		Agnico Eagle Mines Limited 145 King Street East, Suite 400 Toronto, Ontario, M5C 2Y7, Canada	416.947.1212 1.888.822.6714	416.367.4681	info@agnicoeagle.com www.agnicoeagle.com
Project		Meliadine Gold Project – Agnico Eagle 10 200, route de Preissac Rouyn-Noranda, Québec, J0Y 1C0, Canada	819.759.3700	819.759.3663	
Rankin Inlet	Selma Eccles	Meliadine Gold Project – Agnico Eagle P.O. Box 879 Rankin Inlet, Nunavut, X0C 0G0, Canada	867.645.2920		selma.eccles@agnicoeagle.com
Project Management	Alexandre Proulx	Meliadine Gold Project -- Agnico Eagle 10 200, route de Preissac Rouyn-Noranda, Québec, J0Y 1C0, Canada	T: 819.759.3555 x3931 M: 891.860.6398		Alexandre.Proulx@agnicoeagle.com
Exploration	Denis Vaillancourt	765, chemin de la mine Goldex Val-d'Or, Québec, J9P 4N9, Canada	819.874.5980		denis.vaillancourt@agnicoeagle.com
Environment	Stéphane Robert	Meliadine Gold Project -- Agnico Eagle 10 200, route de Preissac Rouyn-Noranda, Québec, J0Y 1C0, Canada	819.759.3700 ext. 5188 819.763.0229		stephane.robert@agnicoeagle.com

Table 1.3 Estimates of Government Fiscal Impacts

Government Fiscal Impacts	Personal Income Tax (PIT)	Corporate Income Tax	Taxes Unincorp-orated Business Profits	Non-Renewable Resource Revenue	Sales and Excise Taxes	Payroll Taxes	Property Taxes	Total Revenue
Construction								
Federal ($M)	81.0	2.68	3.6	na	6.8	na	na	**94.1**
Territorial ($M)	5.8	2.16	1.4	2.7	2.5	5.4	0.3	**20.3**
Total ($M)	**86.8**	**4.84**	**5.0**	**2.7**	**9.3**	**5.4**	**0.3**	**114.4**
Operational								
Federal ($M)	106.9	36.36	3.4	na	11.5	na	na	**158.2**
Territorial ($M)	14.6	29.09	1.3	36.4	3.6	8.2	1.2	**94.4**
Total ($M)	**121.5**	**65.45**	**4.8**	**36.4**	**15.1**	**8.2**	**1.2**	**252.6**

Source: SJ Research Services (2012).

Table 1.4 Indicated Resources

Deposit	Category	Tonnes (000)	Gold grade (g/t)	Contained Gold (000 Oz)
Tiriganiaq	Open Pit	6,365	5.32	1,089
	Underground	14,166	6.87	3,130
Tiri 600	Open Pit	1,815	4.34	253
	Underground	1,665	4.82	258
Tiri 900	Open Pit	877	4.89	138
	Underground	134	4.63	20
Total		**25,002**	**6.08**	**4,889**

oz = ounce

Table 2.1 Summary of 1987 to 2013 Exploration Works on Meliadine Property

Year	Operator	Exploration Activities and Highlights
1987	Asamera	Investigation of gold occurrence at Tonic Lake Sample of quartz vein with arsenopyrite of 5 g/t Au
1989	Asamera/Comaplex (50%-50% JV)	Follow-up on the 5 g/t sample along strike of the iron formation Discovery deposit found with chip sample grades of up to 4.4 g/t Au over 4 m
1990	Asamera/Comaplex (50%-50% JV)	Total of 112 m of channel sampling and 15 diamond drill holes on Discovery deposit Airborne geophysical surveys on Meliadine East
1991	Rio Algom Inc. (60 % JV on Meliadine West)	Drilling on Meliadine West Airborne survey and boulder sampling on Meliadine West where 75 boulders assayed greater than 34 g/t Au
1992	Asamera/Comaplex (50%-50% JV)	Drilling on Meliadine West (Pump and Wolf deposits)
1993 to 1994	Comaplex/Cumberland (50%-50% JV)	Drilling on Meliadine West Discovery of the Tiriganiaq deposit (11.3 g/t Au over 2.2 m), F Zone and Pump deposits
1995	Western Mining Corporation (WMC)	Drilling
1996	WMC	Drilling
1997	WMC	Mapping, geochemical and geophysical exploration Drilling at Pump, F Zone, Tiriganiaq, Wolf and regional targets Ground magnetic and IP surveys
1998	WMC	Drilling at Pump, F Zone, Wolf and Tiriganiaq Ground magnetic survey
1999	WMC	Drilling at Tiriganiaq, F Zone and Discovery
2000	WMC	Drilling at Tiriganiaq and exploration targets within the Meliadine West property
2001 to 2002	WMC	Aeromagnetic surveys
2003	WMC	Drilling exclusively on Tiriganiaq
2004	Comaple Minerals Corp.	Drilling on Meliadine West Best assay results were as high as 153.5 g/t Au over 20.2 m (uncut) on Tiriganiaq
2010	AEM	Acquisition of Meliadine Project
2011	AEM	Bulk sampling program of Meliadine East and West
2012	AEM	Drilling Tiriganiaq, Discovery, F Zone, Pump, and Wesmeg
2013	AEM	Tiriganiaq drilling: 14,608 m in 44 exploration and conversion holes. A total of 72,322 m was drilled in 339 drill holes on the entire Meliadine property during the 2013 campaign.

Table 2.2 Historical Water Licensing Activity for Meliadine Project Operations

Licence Number	WL Type	Date of Issurance	Licensee (Company)	Effective Date	Expiry Date	Version	Location
		June 17, 2008	Meliadine Resources Ltd.	-	October 31, 2013	Original	
2BE-MEP0813	Type B	June 17, 2008	Comaplex Minerals Corp	June 9, 2014	October 31, 2013	The licence was assigned from Meliadine Resources Ltd. to Comaplex Minerals Corp. on June 9, 2014.	Meliadine East Project
2BE-MEP0813	Type B	June 17, 2008	Agnico Eagle Mines Limited	January 10, 2012	October 31, 2013	Amendment 1	Meliadine Gold Project
2BB-MEL0914	Type B	July 31, 2009	Comaplex Minerals Corp.	-	July 31, 2014	Original	Meliadine West Gold Project, Kivalliq Region, Nunavut
2BB-MEL0914	Type B	July 31, 2009	Comaplex Minerals Corp.	June 28, 2010	July 31, 2014	Amendment 1	
2BB-MEL0914	Type B	July 31, 2009	Comaplex Minerals Corp.	July 8, 2010	July 31, 2014	Amendment 2	
2BB-MEL0914	Type B	July 31, 2009	Agnico Eagle Mines Limited	January 6, 2011	July 31, 2014	Amendment 3	
2BB-MEL0914	Type B	July 31, 2009	Agnico Eagle Mines Limited	On Amendment 5, the status of Amendment 4 is "Pending"	July 31, 2014	Amendment 4	
2BB-MEL0914	Type B	July 31, 2009	Agnico Eagle Mines Limited	August 17, 2012	July 31, 2014	Amendment 5	
2BW-MEL1215	Type B	March 13, 2012	Agnico Eagle Mines Limited	-	March 31, 2015	Original	Phase 1 Meliadine All-weather Access Road Project, Kivalliq Region, Nunavut
2BE-MEP1318 (previously 2BE-MEP0813)	Type B	June 17, 2013	Agnico Eagle Mines Limited	-	October 31, 2018	Renewal	Meliadine East Project

Table 2.3 Other Meliadine Project Licenses, Permits, Authorizations, and Agreements

Licence Number	Explanation	Issued By	Issued Date	Expiry Date
Land Use Permits, Leases and Authorizations from Kivalliq Inuit Association (KIA)				
KVL100B195	Land use permit for Inuit Owned Lands (IOL) – Meliadine prospecting and staking	KIA	2000-05-23	2014-10-31
KVL302C268	Nunavut Tunngavik Inc. (NTI) parcel drilling including Tiriganiaq	KIA		2014-07-01
KVCL102J168	Commercial lease for IOL – Meliadine West site including exploration camp, fuel and bulk sample	KIA	2002-07-01	2015-06-30
KVRW98F149	Meliadine right-of-way	KIA		2014-04-30
KVRW07F02	Winter road overland right-of-way	KIA	2010-08-20	2014-10-26
KVCA07Q08	Tiriganiaq esker quarry permit	KIA		2014-09-15
KVCA11Q01	Permanent road quarry permit	KIA	2012-04-19	
KVRW11F02	Permanent right-of-way land use permit	KIA	2012-04-19	2015-04-19
	Meliadine Phase 1 All-weather Access Road (AWAR) water compensation agreement	KIA	2012-04-19	
KVL308C07	Meliadine East exploration land use permit RI01	KIA		2015-06-13
Land Use Leases and Authorizations from Aboriginal Affairs and Northern Development Canada (AANDC)				
N2010C0002	PB1, geotechnical drilling permit	AANDC	10EN006	2014-04-11
N2013-C002	CWM claims drilling	AANDC		2015-05-23
Land Use Leases from Government of Nunavut (GN)				
	Land use lease for Itivia laydown area in Rankin Inlet – land use lease from Nunavut Airports	GN Department of Community and Government Services	2011-07-01	2021-06-30
Water Use Licenses – Type B – Nunavut Water Board (NWB)				
2BB-MEL0914	Type B water license – Meliadine West exploration	NWB	2009-07-31	2014-07-31
2BB-MEL0914	Amendment #1 – Underground bulk sampling program	NWB	2010-06-28	2014-07-31
2BB-MEL0914	Amendment #2 – Geotechnical drilling near Meliadine River crossing	NWB	2010-07-08	2014-07-31
2BB-MEL0914	Amendment #3 – Extension of underground bulk sampling program	NWB	2011-01-06	2014-07-31
2BB-MEL0914	Amendment #4 – Establishment of landfill	NWB	Pending	2014-07-31
2BB-MEL0914	Amendment #5 – Re-allocation of water use	NWB	2012-08-17	2014-07-31
2BE-MEL0813	Type B water license – Meliadine East exploration project	NWB	2008-06-17	2018-10-31
2BE-MEL0813	Amendment #1 – Increase in water use to 299 m^3/day	NWB	2012-01-10	2018-10-31
2BW-MEL1215	Type B water license – Construction of Phase 1 AWAR	NWB	2012-03-12	2015-05-31
Other Licenses/Permits				
03 004014R-M	Baseline data collection	Nunavut Research Institute (NRI)		2014-12-31
	Nunavut archaeological permit	GN Department of Culture, Language, Elders and Youth (CLEY)		Under renewal for 2015

Table 2.3 Other Meliadine Project Licenses, Permits, Authorizations, and Agreements (continued)

Licence Number	Explanation	Issued By	Issued Date	Expiry Date
	Wildlife research permit	GN Department of Environment (DoE)		Under renewal for 2015
	WCB program authorization	Nunavut Workers Compensation Board (WCB)		2015-12-31

Permit/Approval Legislation	Administering Agency	Project Activity
Project Certificate Nunavut Land Claims Agreement (NLCA) (Article 12)	Nunavut Impact Rewiew Board	Project approval. Issued Project Certificate No. 006 on February 26th 2015.
Inuit Impact and Benefit Agreement NLCA (Article 26)	KIA	Project commencement
Mineral Production Lease	Nunavut Tunngavik Inc.	Required for mineral production
Inuit Water Rights Compensation Agreement NLCA (Article 20)	KIA	May be required
Water Licence *Nunavut Waters and Nunavut Surface Rights Tribunal Act*	NWB	Required for water use and waste disposal
Class 1/Class 2 Archaeology Permit *Nunavut Archaeological and Paleontological Sites Regulations*	CLEY	Required to conduct archaeology research and to mitigate archaeological sites to allow development to occur
IOL – Commercial Land Use Lease or Right of Way NLCA	KIA	Long-term land tenure required for land use on IOL; land required for infrastructure, roads and activities associated with construction, operations, and closure phases
IOL – Quarry Lease/Permit NLCA	KIA	Required for quarrying of material on IOL during construction, operation and closure
Crown Land – Lease/Land Use Permit *Territorial Lands Act* *Territorial Land Use Regulations*	AANDC	Required for quarrying of material on Crown land during construction, operation and closure
Approval and/or Exemption *Navigation Protection Act (NPA)* (sections 5, 22 and 23)	Transport Canada	Construction of works in navigable waters. Prescriptions of Sections 22 and 23 of the NPA will be followed as necessary.
Fisheries Authorization for Harmful Alteration, Disruption or Destruction (HADD) of Fish or Fish Habitat *Fisheries Act* (section 35)	Fisheries and Oceans Canada (DFO)	Required if HADD cannot be avoided; if HADD can be avoided, DFO may provide a letter of advice outlining best management practices
Licence for a Factory and Magazine *Explosives Act and Regulations*	Natural Resources Canada	Required for construction of explosives factories and magazine(s) and storage of explosives

Table 2.3 Other Meliadine Project Licenses, Permits, Authorizations, and Agreements (continued)

Permit/Approval Legislation	Administering Agency	Project Activity
Permit to Store Detonators *Explosives Use Act* *Mine Health and Safety Act and Regulations*	Nunavut Mine Health and Safety WCB	Required to store detonators in a magazine
Explosive Use Permit *Explosives Use Act* *Mine Health and Safety Act* and *Regulations*	Nunavut Mine Health and Safety WCB	A permit is required to use explosives unless used in accordance with the regulations
Spill Contingency Plan Approval *Environmental Protection Act* *Spill Contingency Planning and Reporting Regulations*	DoE	A Spill Contingency Plan must be filed with the Chief Environmental Protection Officer to store fuel in an above-ground facility with a 20,000 L capacity or greater
Assorted Scientific Research Permits *Scientist Act* *Wildlife Act*	NRI	Required to conduct some of the environmental monitoring activities

Table 2.4 Claims and Leases Details – Meliadine Gold Project

Number	Name	Status	Recorded	CLSR No.	Lease No.	Area (ha)
F14839	NAT	LEASE		81347	3728	1,021
F00526	NAT 2	LEASE		83022	3838	1,043
F00527	NAT 3	LEASE		82126	3839	1,038
F14842	NAT 4	LEASE		83023	3840	1,001
F14841	NAT 5	LEASE		83024	3841	1,021
F17843	NAT 6	LEASE		83025	3842	758
F18140	NAT 7	LEASE		84522	3925	989
F18141	NAT 8	LEASE		84523	4078	1,017
F18142	NAT 9	LEASE		84495	4079	1,047
F18143	NAT 10	LEASE		82125	3878	841
F18144	NAT 11	LEASE		84506	4080	1,006
F18145	NAT 12	LEASE		84486	4081	989
F18146	NAT 13	LEASE		84496	4082	920
F18147	NAT 14	LEASE		84524	4083	753
F18148	NAT 15	LEASE		84519	4084	878
F18149	NAT 16	LEASE		85649	4085	1,021
F18150	NAT 17	LEASE		85671	4086	1,027
F18151	NAT 18	LEASE		84525	4087	1,004
F18181	NAT 19	LEASE		84520	4088	1,007
F18182	NAT 20	LEASE		84521	4089	964

Table 2.4 Claims and Leases Details – Meliadine Gold Project (continued)

Number	Name	Status	Recorded	CLSR No.	Lease No.	Area (ha)
F18184	NAT 26	LEASE		84115	3886	975
F18190	NAT 27	LEASE		84020	3885	1,025
F19038	NAT 28	LEASE		85983	4259	994
F19039	NAT 29	LEASE		85366	4260	1,055
F19040	NAT 30	LEASE		85650	4261	1,034
F19048	NAT 31	LEASE		85657	4256	449
F19042	NAT 32	LEASE		85670	4257	999
F19043	NAT 33	LEASE		85484	4258	932
F19044	NAT 34	LEASE		88378	4593	817
F19045	NAT 35	LEASE		88379	4594	514
F19046	NAT 36	LEASE		88380	4595	851
F19047	NAT 37	LEASE		88993	4596	980
F19049	NAT 38	LEASE		88377	4597	525
F19620	NAT 40	LEASE		88994	4598	708
F19621	NAT 41	LEASE		88381	4599	756
F29192	NAT 51	LEASE		86060	4561	734
F29193	NAT 52	LEASE		86060	4562	824
F29194	NAT 53	LEASE		86060	4563	853
F29195	NAT 54	LEASE		86061	4564	1,023
F29196	NAT 55	LEASE		86061	4565	1,099
F29197	NAT 56	LEASE		86061	4566	1,019
F29198	NAT 57	LEASE		86061	4567	1,011
F29199	NAT 58	LEASE		86061	4568	1,004
F29200	NAT 59	LEASE		86061	4569	715
F44575	NAT 75	LEASE		88384	4879	298
F44578	NAT 78	LEASE		89212	4686	702
F44579	NAT 79	LEASE		88669	4687	729
F44580	NAT 80	LEASE		88670	4685	631
F51714	NAT 81	LEASE		88995	4874	678
F51715	NAT 82	LEASE		89213	4875	145
F51716	NAT 83	LEASE		89214	4876	775
F51717	NAT 84	LEASE		89315	4877	584
F43244	NAT 85	LEASE		88382	4880	28
F51724	NAT 86	LEASE		88996	4878	205
F64729	CWM 7	LEASE		92616	pending	1,045
F64730	CWM 8	LEASE		92616	pending	1,053

Table 2.4 Claims and Leases Details – Meliadine Gold Project (continued)

Number	Name	Status	Recorded	CLSR No.	Lease No.	Area (ha)
F64731	CWM 9	LEASE		92616	pending	1,035
F64732	CWM 10	LEASE		92616	pending	1,051
F64733	CWM 11	LEASE		92616	pending	1,047
F64734	CWM 12	LEASE		92616	pending	1,038
					Total	**51,286**
F69575	CWM 13	CLAIM	2006-04-19			109
F69576	CWM 14	CLAIM	2006-04-19			109
F69574	PB1	CLAIM	2006-12-29			669
					Total	**887**
					Grand Total	**52,173**

Note: grandfathered leases and claims include NAT 8 to NAT 41 inclusive. Data from AANDC Iqaluit office.

Table 2.5 NTI Concessions – Meliadine Gold Project

Concession Name	IOL Parcel	Recording Date	Area (ha)	Years
ANT 1	RI-01	1999-06-01	1,531	13
ANT 3	RI-01	1999-06-01	106	13
TAN 1	RI-01	1999-06-01	515	13
FAY 1B	RI-01	1999-12-31	139	13
FAY 2	RI-01	1999-12-31	233	13
FAY 3	RI-01	1999-06-01	204	13
FELSIC 1	RI-01	1996-12-31	702	16
Total			**3,430**	

Table 2.6 Community Concerns Related to Water and Waste Disposal

Key Condern	Agnico Eagle's Response	Commitment
Meliadine Lake and the Meliadine River could be at risk of contamination in the event of a disaster or bad practice at the Mine. This would jeopardise the water quality and fish in the Meliadine watershed.	The peculiar drainage configuration for Meliadine Lake was reviewed with the HTO and Elders' Committee who recognised that both major drainages in the Rankin Inlet area, Meliadine Lake and Peter Lake, could be at risk of contamination in the event of disaster or bad practice at the Mine. Since that time, baseline water quality and fish data have been collected for the Meliadine drainage area. Inuit technicians were trained to measure water quality and collect samples. The baseline reports are a record of the water quality and fish health before the Mine begins operation.	The Project will have safeguards to prevent contamination reaching Meliadine Lake. This will include dikes that contain all water coming in contact with the Mine. This water will be tested before being released to Meliadine Lake. Plans for water and water quality management (Water Management Plan) and the Aquatic Effects Monitoring Plan (AEMP) provide more detail on the protection of the aquatic environment.
Effects of surface and underground blasting on lakes and fish.	The physical effects of blasting on the surrounding rock and water at surface is controlled by the placement, sequence, and volume of explosive. This is planned to ensure that the maximum energy from the blast is released into the immediate area of the explosive and not into non-target areas as provided in usage guidelines for explosives (the effects of underground blasting on waterbodies has not been a problem at other operating mines; e.g. Giant and Con at Yellowknife and Lupin near Contwoyto Lake). Experience elsewhere has shown that the particular area of sensitivity is fish eggs, which are sensitive to blasting vibrations in excess of 12 mm/s peak particle velocity. The blasting of rock in or close to a river or lakebed can produce these vibration levels in adjacent waters. However, it is highly unlikely for blasting at the Project to produce these vibration levels in nearby fish-bearing waters.	Agnico Eagle commits to follow Fisheries and Oceans Canada blasting guidelines in the vicinity of, and adjacent to, fish habitat.

Table 2.6 Community Concerns Related to Water and Waste Disposal (continued)

Key Condern	Agnico Eagle's Response	Commitment
The tank farm at Itivia is close to the water and is near the airport.	Agnico Eagle and Nunavut airports selected the location of the tank farm so that it will not interfere with air traffic. The tank farm is 60 metres from the high water mark and the tanks are situated within a lined, bermed area, which can hold 110 percent of the volume of the largest tank.	The tanks will be situated within a bermed area and designed to meet regulations. A Spill Contingency Plan has been developed for the Project.
Lakes will be lost when the Mine is built; what is being done with the fish?	Most of the small lakes and ponds to be lost to mining are shallow and many freeze to the bottom in winter. None of the lakes have Arctic Char and Lake Trout year round.	Agnico Eagle will have a program to either move the fish from the lakes and ponds to be dewatered to another lake, or net the fish and give them to the community for their use.
Nipisar Lake needs to be protected from spills and dust along the Bypass Road.	The Bypass Road will be closed to the public resulting in less traffic. The speed limit near Nipisar Lake will be 30 kph. Trucks will carry spill response equipment and supplies.	The Bypass Road will be maintained in good operating condition and will be closed to the public. The road supervisor will initiate dust suppression as required.

Table 3.1 Estimated Mine Site Monthly Climate Characteristics

Month[a]	Monthly Air Temperature (°C)			Monthly Precipitation (mm)			Lake Evaporation (mm)
	Minimum	Average	Maximum	Rainfall[b]	Snowfall[c]	Total[d]	
January	-37.2	-30.9	-19.8	0.0	12.9	11.1	0
February	-35.3	-30.1	-24	0.0	13.1	11.1	0
March	-30.8	-25.1	-18.8	0.0	18.6	16.1	0
April	-20.2	-15.7	-10.4	1.4	28.8	26.4	0
May	-10.8	-5.9	-1.2	7.7	19.2	25.2	0
June	0.1	4.1	6.7	26.4	7.1	37.0	60.4
July	6.9	10.5	14.9	43.7	0.2	51.2	124.4
August	7.7	9.7	11.2	63.7	0.3	74.6	95.6
September	1.3	3.8	6.8	45.2	5.7	57.8	42.7
October	-9.9	-4.6	1.7	15.5	36.9	50.0	0
November	-23.6	-17.2	-10.2	0.3	33.3	28.5	0
December	-33.3	-25.9	-19.4	0.0	18.9	15.8	0
Annual	-37.2	-10.4	14.9	203.9	195.0	404.8	323.1

[a] Climate characteristics obtained from SD-7-1 Aquatics Synthesis Baseline of the FEIS (Agnico Eagle 2014h).

[b] Rainfall was adjusted to account for under catch by 13%.

[c] Snowfall was adjusted to account for under catch by 50%.

[d] Total precipitation was adjusted to account for under catch by 32%.

Table 3.2 Location of Main Deposits in Nunavut and the Kivalliq Region

Deposit	Mineral	Latitude	Longitude	Kivalliq?
Potentials				
Nueltin Lake	U	60.200	99.300	√
Napajut	Au	61.100	95.200	√
Heninga River	Volcanogenic Massive Sulphide	61.800	96.200	√
Noomut	Au-Cu-Zn-Pb	61.400	96.100	√
Turquetil Lake	Au	62.000	95.900	√
Victory Lake	Au-Cu-Zn-Pb	62.400	95.300	√
Kaminak	Au	62.100	95.000	√
Kiggavik	U	64.300	97.600	√
Sand Lake	U	65.100	99.400	√
Deep Rose	U	66.400	98.400	√
Musk	Volcanogenic Massive Sulphide	65.300	108.000	
Hackett River	Volcanogenic Massive Sulphide	65.900	108.000	
Gondor	Volcanogenic Massive Sulphide	65.600	112.000	
Izok	Volcanogenic Massive Sulphide	65.600	113.000	
Hood River	Volcanogenic Massive Sulphide	66.100	113.000	
Muskox Intrusion	Cr	67.000	115.000	
Doris North	Au	67.300	107.000	
High Lake	Volcanogenic Massive Sulphide	67.400	111.000	
Coppermine River	Cu	67.500	115.000	
Asiak River	U	67.500	114.000	
Boston	Au	67.600	106.000	
Nagavaak	Pb-Zn	67.300	83.400	
Somerset Island	Zn-Cu-Pb	73.100	93.300	
Eclipse	Zn-Pb	75.500	96.100	
Wellington	Pb-Zn	75.300	93.100	
Cornwallis Island	Zn-Cu-Pb	77.400	94.400	
Active Mines				
Meadowbank Mine (2010 to present)	Au	65.100	96.300	√
Closed Mines				
North Rankin (1957 to 1962)	Ni	62.500	92.000	√
Cullaton Lake/Shear Lake (1981 to 1985)	Au	60.200	99.300	√
Lupin Mine (1982 to 2005)	Au	65.400	111.100	
Jericho Diamond Mine (2006 to 2008)	C	65.600	111.300	
Polaris Mine (1982 to 2002)	Zn-Pb	75.500	96.100	
Nanisivik Mine (1976 to 2002)	Zn-Pb	73.000	84.300	

Table 3.3 Ponds in the Upper A, B, and H Watersheds Affected by the Project

Pond	Area (ha)	Max. Depth (m)	Fish Species								
			ARCH	LKTR	ARGR	RNWH	CISC	BURB	SLSC	NNST	THST
A10	0.26	0.67	-	-	-	-	-	-	-	C	-
A11	0.40	0.45	-	-	-	-	-	-	-	-	-
A12	0.47	0.87	-	-	-	-	-	-	-	C	-
A13	0.26	0.30	-	-	-	-	-	-	-	C	-
A17	0.16	0.30	-	-	-	-	-	-	-	C	-
A39	0.12	0.48	-	-	-	-	-	-	-	C	-
A54	5.99	1.30	-	-	-	-	-	-	-	C	-
A58	0.43	0.50	-	-	-	-	-	-	-	C	-
B8	1.43	0.82	-	-	-	-	-	-	-	C	-
B9	0.64	1.40	-	-	-	-	-	-	-	-	-
B10	0.33	0.80	-	-	-	-	-	-	-	-	-
B28	0.45	0.55	-	-	-	-	-	-	-	C	-
H6	0.75	0.58	-	-	-	-	-	-	-	C	-
H7	0.11	0.67	-	-	-	-	-	-	-	C	-
H8	0.38	0.59	-	-	-	-	-	-	-	C	-
H9	0.42	0.40	-	-	-	-	-	-	-	-	-
H10	0.10	0.11	-	-	-	-	-	-	-	C	-
H11	0.28	0.27	-	-	-	-	-	-	-	-	-
H12	0.97	0.81	-	-	-	-	-	-	-	-	-
H13	3.49	1.04	-	-	-	-	-	-	-	C	-
H14A	0.15	0.37	-	-	-	-	-	-	-	-	-
H15D	0.15	0.34	-	-	-	-	-	-	-	-	-
H15G	0.38	0.40	-	-	-	-	-	-	-	C	-
H17	15.80	1.70	-	-	-	-	-	-	-	C	-
H18	0.74	0.67	-	-	-	-	-	-	-	-	-
H19	2.91	1.40	-	-	-	-	-	-	-	-	-
H20	9.58	1.60	-	-	-	-	-	-	-	-	-

ARCH = Arctic char; LKTR = lake trout; ARGR = Arctic grayling; RNWH = round whitefish; CISC = cisco; BURB = burbot; SLSC = slimy sculpin; NNST = ninespine stickleback; THST = threespine stickleback; C = species presence confirmed through capture; - = species presence unlikely; Max. = maximum, u/s = upstream of.

Table 3.4 Summary of Samples with Metal Concentrations in Excess of Aquatic Guidelines

Metal	Meliadine Lake		Peninsula Waterbodies		Regional Waterbodies		Streams		Rivers	
	N	% > GL	N	% > GL	N	% > GL	N	% > GL	N	% > GL
Aluminum (Al) - Total	31	3%	85	0%	12	0%	89	0%	21	0%
Antimony (Sb) - Total	30	0%	81	0%	12	0%	87	0%	21	0%
Arsenic (As) - Total	31	0%	85	1%	12	0%	89	0%	21	0%
Barium (Ba) - Total	31	0%	85	0%	12	0%	89	0%	21	0%
Beryllium (Be) - Total	30	0%	81	0%	12	0%	87	0%	21	0%
Boron (B) - Total	18	0%	57	0%	5	0%	55	0%	5	0%
Cadmium (Cd) - Total	31	19%	85	11%	12	17%	89	3%	21	0%
Chromium (Cr) - Total	31	10%	85	9%	12	25%	89	4%	21	0%
Cobalt (Co) - Total	31	0%	85	0%	12	0%	89	0%	21	0%
Copper (Cu) - Total	31	6%	85	7%	12	0%	89	0%	21	0%
Iron (Fe) - Total	27	0%	79	4%	11	0%	88	5%	21	0%
Lead (Pb) - Total	31	0%	85	5%	12	0%	89	1%	21	0%
Manganese (Mn) - Total	31	0%	85	9%	12	0%	89	1%	21	0%
Mercury (Hg) - Total	31	0%	85	2%	12	0%	89	0%	18	0%
Molybdenum (Mo) - Total	31	0%	85	0%	12	0%	89	0%	21	0%
Nickel (Ni) - Total	31	0%	85	0%	12	0%	89	0%	21	0%
Selenium (Se) - Total	31	0%	85	2%	12	0%	89	0%	21	0%
Silver (Ag) - Total	31	0%	85	0%	12	0%	89	0%	21	0%
Thallium (Tl) - Total	29	0%	77	12%	11	0%	85	4%	20	0%
Titanium (Ti) - Total	16	0%	60	0%	9	0%	81	0%	19	0%
Uranium (U) - Total	30	0%	71	0%	12	0%	87	0%	21	0%
Vanadium (V) - Total	30	0%	81	0%	12	0%	87	0%	21	0%
Zinc (Zn) - Total	31	3%	85	2%	12	0%	89	1%	21	0%

Note: “N” = number of samples; “GL” = guideline as listed in Table 7.4-7 of the FEIS (Agnico Eagle 2014f); “%” = percent of samples with concentrations above guideline

Table 4.1 Key Mine Development and Water Management Activities and Sequence

Mine Year	Mine Development Activities	Water Management Activities
Q4 of -5	• Start to construct the industrial pad • Develop the ramp to Tiriganiaq underground mine • Construct portion of rock pad for OP1 and OP2 stockpiles to store the ore from Tiriganiaq underground ramp development • Install Culvert2	• Start to re-use the underground water • Dewatering top 0.5 to 1.0 m of freshwater in Pond H17 (depending on receipt of Type A Water Licence)
-4	• Continue construction of the industrial pad and start to construct the associated buildings • Construct D-CP1 to impound CP1 and start to collect contact water within CP1 • Construct discharge diffuser in Meliadine Lake • Build WTP and water intake causeway and start to treat the contact water in CP1 • Construct Channel2 and install Culvert1	• Start to pump the water from CP1 to WTP for treatment prior to discharge to the receiving environment via the diffuser in Meliadine Lake • Pump the underflow sludge water from the WTP to CP1. To limit recirculation of the sludge within CP1, the discharge will be located away from the WTP intake • Dewater Pond A54 in Q3 of Year -4 and pump the water to CP1
-3	• Complete the industrial pad • Construct freshwater intake causeway in Meliadine Lake • Construct CP2 and start to collect contact water • Construct Berm3 and Channel5 • Construct D-CP5 to impound CP5 and start to collect contact water • Construct and operate the landfill and landfarm	• Start to supply freshwater from Meliadine Lake to the camp area • Start to treat sewage water and pump the treated sewage water from STP to CP1 • Start to pump contact water from CP2 to CP1 • Start to pump contact water from CP5 to CP1 • Start to pump water from the landfarm to CP1 after pre-treatment for oil • Start to store the excess groundwater from the underground mine at surface
-2	• Expand the pad footprint of OP1 and OP2 to increase the storage capacity • Start to place waste rock in the WRSF1 • Construct Berm1, Channel1, Channel6, Channel7, and Channel8 • Install Culvert3 to Culvert 6	• Start to divert the contact water from industrial pad to CP1 via Channel1

Table 4.1 Key Mine Development and Water Management Activities and Sequence (continued)

Mine Year	Mine Development Activities	Water Management Activities
-1	• Complete the construction of the buildings on the industrial pad • Start process commissioning in Q4 of Year -1 • Start to place dry stack tailings in Cell 1 of TSF in Q4 of Year -1	• Start to pump the treated water from WTP to mill as make-up water • Start to pump the underflow sludge water from WTP to the mill During the open water season, the mill will be supplemented as much as possible with water from the WTP. For the balance of the year, freshwater will be used for ore processing • Start to pump excess truck wash water from the wash bay to CP1
1	• Start full capacity of ore processing • Construct Berm2, Channel3, and Channel4 • Construct D-CP3 to form CP3 and start to collect contact water • Construct D-CP4 to form CP4 and start to collect contact water	• Start to pump contact water in CP3 to the partially drained Pond H13 where the water will flow though Channel1 to CP1 • Start to pump contact water in CP4 to the partially drained Pond H13 where the water will flow though Channel1 to CP1
2	• Start to mine Tiriganiaq Pit 1 • Start to place overburden and waste rock from Tiriganiaq Pit 1 in WRSF1	• Start to pump contact water collected in Tiriganiaq Pit 1 to CP5
3	• Expand process plant to reach the process capacity of 5,000 tpd • Construct temporary overburden stockpile to store the selected ice-poor overburden that will be used for progressive reclamation of TSF	• Dewater Ponds H19 and H20 in Q3 of Year 3 and pump the water to CP1
4	• Increased mill production to 5,000 tpd • Start to mine Tiriganiaq Pit 2 • Start to place waste rock and overburden from Tiriganiaq Pit 2 in WRSF3 • Construct D-CP6 to CP6 and start to collect contact water • Start to place dry stack tailings in Cell 2 of TSF • Start to place low grade ore from the open pits in the OP1 stockpile • Construct rock pad for OP3 to store marginal grade ore from the	• Start to pump contact water collected in Tiriganiaq Pit 2 to CP5 • Start to pump contact water in CP6 to CP1

Table 4.1 Key Mine Development and Water Management Activities and Sequence (continued)

Mine Year	Mine Development Activities	Water Management Activities
	open pits • Stop placing rock and overburden in WRSF1 when WRSF1 reaches design capacity	
5	• Start to place waste rock from Tiriganiaq Pit 1 in WRSF2 • Place final closure cover on top of tailings surface in Cell 1 of TSF (waste rock cover over final Cell 1 perimeter slope to be placed as progressive reclamation as soon as slope reaches final grade)	• Water management plan similar to Year 4
6	• Start to place dry stack tailings in Cell 3 of TSF • Stop placing overburden waste in WRSF3	• Water management plan similar to Year 4
7	• Place final closure cover on top of tailings surface in Cell 2 of TSF (waste rock cover over final Cell 2 perimeter slope to be placed as for progressive reclamation as soon as slope reaches final grade) • Stop mining of Tiriganiaq Pit 1 and Tiriganiaq Pit 2 when the open pits reach design elevation • Stop Tiriganiaq underground operation when underground mine reaches design elevation • Stop placing waste rock and overburden in WRSF2 when WRSF2 reaches design capacity • Stop placing waste rock in WRSF3 when WRSF3 reaches design capacity	• Water management plan similar to Year 4 • Stop pumping water from the open pits when the pits are mined-out at end of year • Stop pumping excess water from underground when underground mine is completed
8	• Process the ore from the OP1, OP2, and OP3 until all stored ore is processed • Decommission underground mine surface openings as needed	• Start to fill the mined-out Tiriganiaq Pits 1 and 2 with active pumping water from Meliadine Lake • Start natural flooding of Tiriganiaq Underground mine with groundwater seepage • Stop pumping water to the process plant when the processing is completed

Table 4.1 Key Mine Development and Water Management Activities and Sequence (continued)

Mine Year	Mine Development Activities	Water Management Activities
Closure (Year 9 to 11)	• Place final closure cover on top of tailing surface in Cell 3 of TSF in Year 9 (waste rock cover over final Cell 3 perimeter slope to be placed as progressive reclamation as soon as slope reaches final grade) • Decommission non-essential mine infrastructure and support buildings in Years 9 and 10 • Continue to fill the mined-out open pits with active pumping of water from Meliadine Lake until Year 10 • Start monitoring and maintenance in Year 9 (start in Year 8 if possible)	• Finish flooding Tiriganiaq Pit 1 and Tiriganiaq Pit 2 by Q4 of Year 10 • Continue to collect and manage the contact water in CP1 to CP6 • Continue to pump the contact water in CP1 to WTP, if required, for treatment before being discharged to the receiving environment • Remove non-essential site infrastructure • Pump the underflow sludge water from WTP to CP1 • Continue natural flooding of Tiriganiaq Underground mine with groundwater seepage • Remove Meliadine Lake pumping system
Post-Closure	• Continue monitoring and maintenance until Year 18	• Treat the contact water until water quality meet direct discharge criteria and then decommission the water management system • Continue natural flooding of Tiriganiaq Underground (progressive reclamation since Year 8) • Breach water retention dikes D-CP1, D-CP3, D-CP4, D-CP5 and D-CP6 once water quality monitoring results meet discharge criteria to allow water to naturally flow to the receiving environment • Remove culverts and breach remaing water retention dikes/berms in Year 18

tpd = tonnes per day; CP = Collection Pond; WRSF = Waste Rock Storage Facility; WTP = Water Treatment Plant; TSF = Tailings Storage Facility

Table 4.2 Milling Schedule and Ore Sources

Mine Year	Ore from Underground Mining (t)	Ore from Tiriganiaq Pit 1 (t)	Ore from Tiriganiaq Pit 2 (t)	Ore from Ore Stockpile 1 (t)	Ore from Ore Stockpile 2 (t)	Ore from Ore Stockpile 3 (t)	Total
Yr-1	202,350[(a)]	0	0	0	0	0	**202,350**
Yr1	1,015,651	0	0	79,349	0	0	**1,095,000**
Yr2	891,829	0	0	203,171	0	0	**1,095,000**
Yr3	1,053,481	0	0	41,519	0	0	**1,095,000**
Yr4	1,094,741	683,168	6,509	24,462	0	0	**1,808,880**
Yr5	1,097,825	665,337	61,837	0	0	0	**1,824,999**
Yr6	967,430	744,902	112,669	0	0	0	**1,825,001**
Yr7	888,008	667,949	238,893	0	30,150	0	**1,825,000**
Yr8	0	0	0	238,419	907,484	174,699	**1,320,602**
Total (t)	**7,211,315**	**2,761,356**	**419,908**	**586,920**	**937,634**	**174,699**	**12,091,832**
Volume (m^3)	**3,835,806**	**1,468,806**	**223,355**	**312,191**	**498,741**	**92,925**	**6,431,824**

[a] For commissioning in the last quarter of Year -1

Table 4.3 Production Schedule and Quantities of Ore by Year

Mine Year	Underground		Tiriganiaq Pit 1		Tiriganiaq Pit 2	
	High Grade (t)	Marginal Grade (t)	High Grade (t)	Low/Marginal Grade (t)	High Grade (t)	Low/Marginal Grade (t)
Yr-5	0	338	0	0	0	0
Yr-4	0	987	0	0	0	0
Yr-3	126	605	0	0	0	0
Yr-2	51,280	69,585	0	0	0	0
Yr-1	465,764	136,676	0	0	0	0
Yr1	1,015,651	169,752	0	0	0	0
Yr2	891,829	159,643	0	0	0	0
Yr3	1,053,481	200,812	0	0	0	0
Yr4	1,094,741	142,766	874,958	30,046	6,509	0
Yr5	1,097,825	56,469	699,642	43,250	61,837	8,749
Yr6	967,430	0	757,226	24,165	112,669	10,339
Yr7	888,008	0	667,949	43,004	238,893	15,147
Yr8	0	0	0	0	0	0
Total (t)	**7,526,135**	**937,633**	**2,999,775**	**140,465**	**419,908**	**34,235**
Volume (M m^3)	**4,003,263**	**498,741**	**1,595,625**	**74,715**	**223,355**	**18,210**

M m^3 = million cubic metres; t= tonnes

Table 4.4 Estimated Waste in Landfill

Project Phase	Waste Not Incinerated (t/year)	Ash From Incinerator (t/year)	Estimated Volume of Non-Hazardous Waste and Ash Produced (m^3/year)	Approximate Treated Soil From Landfarm (m^3/year)	Maximum Accumulated Waste Material in Landfill (m^3)
Construction	100	30	260	0	1,040
Operations	340	102	884	446	37,043
Closure	25	7.5	65	525	25,226
Total					**63,309**

Table 4.5 Estimated Potential Volume of PHC and Ice/Snow to be Managed during the Project

Phase	Volume of PHC (m^3)	Annual volume of snow (m^3)
Current PHC on-site	420 (volume in exploration landfarm to date)[a]	500 m^3 per year
Pre-construction	350	
Construction	1,050	
Operation	2,450	
Closure	700	
Total	**4,970**	

[a] The contaminated soil in the advanced exploration landfarm will be transferred to the mine landfarm upon its completion and commissioning.

Table 4.6 Design Criteria for the Landfarm

Design Criteria	Value	Source
Potential volume of PHC per year during construction, operation and closure	350 m^3	Agnico Eagle (2008)
Potential volume of contaminated snow/ice per year	500 m^3	Agnico Eagle (2008)
Remediation time	3 years	Tetra Tech EBA (2014)
Snow melt water equivalent in spring freshet for a 1 in 100 wet year	171 mm	Tetra Tech EBA (2014)
Thickness of PHC in containment facility	1.5 m	Tetra Tech EBA (2014)
Facility Structure		
Facility base thickness	2.0 m	Tetra Tech EBA (2014)
Side Slopes of Berm	3(H):1(V)	Tetra Tech EBA (2014)
Berm Crest Width (m)	4	Tetra Tech EBA (2014)
Berm Height (m)	Approximately 2	Tetra Tech EBA (2014)
Total Fill Thickness below Liner System (m)	1.6	Tetra Tech EBA (2014)
Total Fill Thickness above Liner System (m)	0.4	Tetra Tech EBA (2014)

Table 4.7 Anticipated STP Treatment Performance

Parameter	WSER[a] (average concentration in the effluent)	STP Treatment Performance
Carbonaceous Biochemical Oxygen Demand	25 mg/L	10 mg/L
Total Suspended Solid	25 mg/L	10 mg/L
Total Residual Chlorine	0.02 mg/L (if chlorine used in treatment of waste water)	No chlorine to be used in treatment
Un-ionized ammonia	1.25 mg/L (expressed as nitrogen at 15 ^{o}C ± 1^{o}C)	<10 mg/L NH4-N, which represents ~<0.03 mg/L un-ionized ammonia (at 15 ^{o}C, pH 7)

[a] Waste Water System Effluent Regulations

Table 4.8 Key Design Parameters for Ore Stockpiles

Parameter	Ore Stockpile 1	Ore Stockpile 2	Ore Stockpile 3
Pad thickness (m)		1	
Bench width from the crest of the pad to the toe of the first lift of the ore (m)		5	
Thickness of first lift (m)		5	
Bench width from the crest of the first lift to the toe of the second lift (m)		10	
Approximate maximum thickness of the second lift (m)	6	6	3
Assumed side slopes for ore and pad		1.3(H):1(V)	
Maximum elevation of ore stockpile (m)	80	79	81
Maximum pad footprint (m^2)	27,711	61,530	19,268
Assumed dry density of ore: 1.88 t/m^3			

Table 4.9 Design Parameters for Waste Rock Storage Facilities

Design Parameters	WRSF1	WRSF2	WRSF3
Height of the first lift above original ground surface (m)		5	
Side slope of each lift of waste rock		1.3(H):1(V)	
Width of the horizontal offset between the first and second lift (m)		15	
Width of the horizontal offset between two adjacent lifts above the second lift (m)	30	20	20
Maximum crest elevation above the sea level (m)	115	102	100
Average overall side slopes of each WRSFs (from bottom toe of first lift to top crest of final lift)	2.5(H):1(V) to 3.4(H):1(V)	2.2(H):1(V) to 2.4(H):1(V)	2.3(H):1(V) to 2.5(H):1(V)
Side slope for each lift of overburden		1.6(H):1(V)	
Internal Overburden setback distance from toe of WRSF for the first lift (m)	120	80	88
Assumed waste rock in place bulk density (t/m^3)		1.88	
Assumed overburden in place bulk density (t/m^3)		1.62	

Table 4.10: Design Parameters for the Tailings Storage Facility Operations

Parameters	Value
Mine design life	8 years
Mill production	3,000 tonnes per day in Years -1 to 3 5,000 tonnes per day in Years 4 to 8
Ore processed	12.1 Mt
Tailings to TSF as dry stack	9.7 Mt (or 80% or total tailings)
Tailings backfilled to underground mine	2.4 Mt (or 20% or total tailings)
Average specific gravity of tailings	2.83
Tailings solid content to TSF	85%
Average tailings dry density	1.71 t/m^3
Maximum height of TSF over original ground surface	30 m
Side slope for the bottom 15 m thick (or below elevation of 84 m)	4H:1V
Side slope for the top 15 m thick (or above elevation of 84 m)	3H:1V
Slope of the final tailings surface at crest	4%
TSF storage capacity	9.7 Mt (5.65 Mm^3)

Table 6.1 Estimated Rates of Passive Groundwater Inflow to Underground Mine

Year	Estimated Passive Inflow (m^3/day)[a]
Yr -5 to First Quarter of Yr -3	0
Second Quarter of Yr-3 to End of Yr-3	420
Yr -2 to Yr 7	526

[a] based on data provided in Agnico Eagle (2014a); to be reassessed based on results from the planned 2015 and 2016 hydrogeological investigation program

Table 6.2 Water Balance Summary

Line	From	To	Winter (W) and/or Summer (S)	Maximum Flow (m^3/h) based on mean year precipitation					
				Yr-3	Yr-2	Yr-1	Yr1	Yr2 to Yr3	Yr4 to Yr7
1	Underground mine	Paste plant	WS	-	-	-	4.9	4.9	4.0
2	Underground mine	H20	WS	15.1	-	-	-	-	-
3	Underground mine	UG-TSS-WTP	WS	-	18.3	18.3	10.0	10.0	13.2
4	H20	UG-TSS-WTP	S	-	46.6	-	-	-	-
5	Pasteplant	Underground mine	WS	-	-	-	16.3	16.3	13.4
6	Underground mine	Process plant	WS	-	-	-	3.9	3.9	3.9
7	Underground mine	WRSF	WS	1.9	3.0	3.0	2.6	2.6	0.3
8	Underground seepage		WS	17.5	21.9	21.9	21.9	21.9	21.9
9	Tiriganiaq 1000_01	H17	S	-	-	-	-	274.1	274.1
10	Tiriganiaq 1000_02	H17	S	-	156.6	156.6	156.6	156.6	156.6
11	Open pits	Process plant	WS	-	-	-	-	-	2.6
12	Meliadine lake	Freshwater tank	WS	-	8.8	8.8	29.4	29.4	41.9
13	Freshwater tank	Laboratory	WS	-	-	-	0.02	0.02	0.02
14	Freshwater tank	Process plant	WS	-	-	-	17.4	17.4	30.1
15	Freshwater tank	Potable water plant	WS	-	6.1	6.1	6.1	6.1	6.1
16	Freshwater tank	Emulsion plant	WS	-	1.6	1.6	1.6	1.6	1.6
17	Freshwater tank	Truck shop	WS	-	1.1	1.1	1.1	1.1	1.1
18	Freshwater tank	Open pits drilling	WS	-	-	-	-	-	0.3
19	Freshwater tank	Paste plant	WS	-	-	-	3.2	3.2	2.7
20	Process plant	Final cyanide destruction plant/H17	WS	-	-	-	0.9	0.9	-
21	Process plant	TSF	WS	-	-	-	12.1	12.1	27.2
22	TSF	H17	S	-	-	-	18.3	18.3	36.7
23	A54	H17	S	198.0	198.0	198.0	401.0	401.0	401.0
24	Sewage treatment plant	H17	WS	-	6.1	6.1	6.1	6.1	6.1
25	Truck shop	H17	WS	-	1.1	1.1	1.1	1.1	1.1
26	H17	WTP	S	812.8	858.4	883.8	1149.6	1466.4	1291.0
27	WTP	Meliadine Lake	S	791.9	836.4	836.4	1120.0	1428.7	1257.8

Table 6.3 Proposed Effluent Quality Criteria Limits for the Project

Constituent	Screening Questions			Propose an EQC?	EQC Limit (mg/L)	
	Is there an MMER[a] Limit?	Is the EOP > WQO?	Is the edge of mixing zone > WQO?		Average Monthly	Maximum Grab
Conventional Constituent						
Total Dissolved Solids	-	no	no	no	-	-
Total Suspended Solids	yes	yes	no	yes	15	30
pH	yes	no		yes	6 - 9.5	6 - 9.5
Major Ions						
Chloride	-	no	no	no	-	-
Fluoride	-	no	no	no	-	-
Sodium	-	no	no	no	-	-
Sulphate	-	no	no	no	-	-
Nutrients						
Total Ammonia as Nitrogen	-	yes	no	no	-	-
Nitrate	-	no	no	no	-	-
Phosphorus (total)	-	yes	no	yes	2	4
Cyanides						
Total cyanide	yes	No	no	yes	1	2
Free cyanide	-			no	-	-
Metals						
Aluminum	-	yes	no	no	-	-
Antimony	-	yes	no	no	-	-
Arsenic	yes	yes	no	yes	0.5	1
Barium	-	no	no	no	-	-
Boron	-	no	no	no	-	-
Cadmium	-	no	no	no	-	-
Chromium	-	no	no	no	-	-
Copper	yes	yes	no	yes	0.3	0.6
Iron	-	yes	no	no	-	-
Lead	yes	yes	no	yes	0.2	0.4
Manganese	-	yes	no	no	-	-
Mercury	-	no	no	no	-	-
Molybdenum	-	no	no	no	-	-
Nickel	yes	no	no	yes	0.5	1
Selenium	-	no	no	no	-	-
Silver	-	yes	no	no	-	-
Thallium	-	no	no	no	-	-
Uranium	-	no	no	no	-	-
Zinc	yes	no	no	yes	0.5	1

Note: "-" no value; EOP = end of pipe; MMER = Metal Mine Effluent Regulations; WQO = water quality objective; EQC = effluent quality criteria.
[a] Government of Canada (2012).

Table 7.1 Proposed Water Quality Regulated, General Aquatic, and Verification Monitoring for the Project during Construction, Operations, and Closure

Monitoring Type	Mine Development Phase	Monitoring Station Number	Station Description	Purpose of Station	UTM Zone 11		Sampling Depth	Sample Type	Number of Samples per Station	Monitoring Parameters/Sampling Group (see Table 7-2)
					Easting	Northing				
Verification	Construction (prior to release), Operations, and Closure	MEL_02	Water treatment plant (pre-treatment) coming from CP1 station will be off the pipe and not in the pond	Test quality of water before treatment (required to evaluate treatment efficiency)	-	-	-	Grab	1	1
Regulated	Construction (upon effluent release), Operations, and Closure	MEL_01[a]	Water treatment plant (post-treatment), end of pipe (before offsite release) in the plant before release.	Test quality of final effluent before release	TBD (in plant area)		From pipe	Grab	1	Full Suite, 3 (MMER), flow
General Aquatic	Construction (upon effluent release), Operations, and Closure	MEL_03	Mixing zone in Meliadine lake, station 1; and MMER exposure stations for final discharge point within mixing zone	Test mixing of effluent in the receiving environment; sample at varied distances and directions from pipe; MMER exposure for final discharge point	TBD	TBD	Depends on presence of a vertical conductivity gradient	Discrete	1 (depth of maximum conductivity, or mid-depth if no conductivity gradient is present)	Full Suite
General Aquatic	Construction, Operations, and Closure	MEL_04	Water intake from Meliadine Lake	Quality of intake water	TBD	TBD	Depth Integrated or from Intake Pipe	Composite	1	Full Suite, flow
Verification	Operations, Closure	MEL_05	Local Lake, E3	Confirm no leakage/runoff from Emulsion Plant	-	-	-	Composite	1	2
Verification	Construction, Operations, Closure	MEL_06	Local Lake G2	Possible seepage or dust loadings from site infrastructure Possible seepage or dust loadings	-	-	-	Composite	1	2
Verification	Construction, Operations, Closure	MEL_07	Local Pond, H1		-	-	-	Composite	1	2
Verification	Construction, Operations, Closure	MEL_08	Local Lake, B5		-	-	-	Composite	1	2
Verification	Construction, Operations, Closure	MEL_09	CP2	Collection of natural catchment drainage from the outer berm slopes of the Landfarm and industrial pad	-	-	-	Grab	1	1
Verification	Operations, Closure	MEL_10	CP3	Collection of drainage from dry stacked tailings	-	-	-	Grab	1	1
Verification	Operations, Closure	MEL_11	CP4	Collection of drainage from WRSF1	-	-	-	Grab	1	1
Verification	Construction, Operations, Closure	MEL_12	CP5	Collection of drainage from WRSF1 and WRSF2	-	-	-	Grab	1	1
Verification	Operations, Closure	MEL_13	CP6	Collection of drainage from WRSF3	-	-	-	Grab	1	1
Verification	Construction, Operations, Closure	MEL_14	Landfill	Located between the landfill and Pond H3 to monitor seepage from the landfill	-	-	-	Grab	1	1
Verification	Construction, Operations, Closure	MEL_15	Tankfarm at the Itivia Oil Handling Facility	Located in the secondary containment area of the tankfarm at Itivia to monitor water quality prior to discharge to land	-	-	-	Grab	1	4

Notes: as per Metal Mining Effluent Regulations (MMER), samples for effluent characterization and receiving environment must be collected quarterly, or at least one month apart while effluent is being deposited.

Grey shading indicates that verification monitoring parameters and locations are internal for Agnico Eagle. A systematic approach will be used in communicating inspections results, likely on an annual basis. This will allow Agnico Eagle to inform government, Inuit associations, and the public of inspection outcomes.

[a] Sampling may not occur during break-up (June)

[b] Constituents in Each Parameter Group provided in Table 7.2

CP = collection pond; WRSF = waste rock storage facility; TBD = to be determined

Table 7-2 List of Constituents in Each Parameter Group

Parameter Group	Parameters
1	pH, turbidity, hardness, alkalinity, chloride, fluoride, sulphate, total dissolved solids (TDS), total suspended solids (TSS), total cyanide, ammonia nitrogen, nitrate, nitrite, phosphorus, ortho-phosphate, total metals (aluminum, arsenic; barium, cadmium, chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, and zinc).
2	**Total and dissolved metals**: aluminum, antimony, arsenic, barium, beryllium, boron cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, and zinc. **Nutrients**: ammonia-nitrogen, total Kjeldahl nitrogen, nitrate-nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorus, total organic carbon, dissolved organic carbon, and reactive silica. **Conventional Parameters**: bicarbonate alkalinity, chloride, carbonate alkalinity, turbidity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, TSS, total cyanide, free cyanide, and weak acid dissociable (WAD) cyanide.
3	**MMER parameters**: total cyanide, arsenic, copper, lead, nickel, zinc, radium-226, TSS, pH, sulphate, turbidity, and aluminum. Effluent volumes and flow rate of discharge, acute toxicity (Rainbow Trout and *Daphnia magna*) and environmental effects monitoring (EEM).
4	Total arsenic, total copper, total lead, total nickel, TSS, ammonia, benzene, toluene, ethylbenzene, xylene, total petroleum hydrocarbons (TPH), and pH.
Full Suite	Group 2, TPH, and turbidity.
Flow	Flow datalogger
Field measurements	Field pH, specific conductivity, dissolved oxygen, and temperature.

MMER = Metal Mining Effluent Regulations; P = phosphorus; N = nitrogen

Table 7.3 Summary of Proposed Inspections

Mine Components / Activities Inspected	Inspection Methods/Procedures/Department Responsible	Qualitative Risk Level - High, medium or low	Department Responsible	Frequency
Dikes	Visual inspection for erosion of or seepage through or under the dikes, including movement of crests and slopes. The environment department would collect samples of any seepage.	High. Failure of a dike could have significant adverse effects on the downstream environment	Engineering	Weekly prior to freshet when the dikes are clear of snow, and weekly over the open water season. Monthly during the winter to check for seepage
Open Pits	Visual inspection for seepage and collection of samples, if it safe to do so	Low. Water seeping into open pits will be controlled and directed to CP1	Open Pits Mining Superintendent	Weekly at freshet and monthly thereafter over the open water season
Waste Rock Storage Facilities	Visual Inspection for seepage and collection of samples, if it safe to do so. Thermistor Installation	Low. Ditches will intercept any seepage from the waste rock and direct the water to CP1. Thermistors monitor the rate of freeze back and permafrost development progress	Open Pits Mining Superintendent	Visual inspection, monthly over the open water season and thermistors monitored four times per year.
Ore Stockpiles	Visual Inspection for seepage and collection of samples, if it safe to do so.	Low. Ditches will intercept any seepage from the ore stockpiles and direct the water to CP1.	Engineering	Visual inspection, monthly over the open water season
Tailings Storage Facility	Thermistor Installation	Low. Thermistor cables will be installed in the TSF to monitor the permafrost development progress within the facility during the operations stage	Engineering	Four times per year
Berms	Visual inspection for erosion of or seepage through or under the berms, including movement of crests and slopes.	High. Failure of berms upstream from pits could pose a safety hazard.	Engineering	Weekly inspection just before, during and just after freshet
Culverts	Visual inspection for snow and/or debris blockage of culverts.	Medium. Snow can be removed from the front and back of the culverts before freshet	Road Superintendent	Just prior to freshet and daily during the first days of freshet; also following major rain events. Monthly after freshet is over in the open water season
Roads	Visual inspection for evidence of seasonal freeze and thaw adjacent to the toe of the road embankment	Low. Affected area will be repaired using granular material and/or crushed rock.	Road Superintendent	Weekly over the summer (approximately mid-May , from the start of the freshet period to October, prior to the fall freeze-up)
Water ponding against roads	Visual inspection of roads after freshet and major rain events.	Low. Ponding can be dealt with by pumping the water or by installing a culvert in the road where water is ponding.	Road Superintendent	Weekly over the open water season and following freshet and major rain events

Table 7.3 Summary of Proposed Inspections (continued)

Mine Components / Activities Inspected	Inspection Methods/Procedures/Department Responsible	Qualitative Risk Level - High, medium or low	Department Responsible	Frequency
Bridges	Visual inspection for snow dams prior to freshet	High. Snow dams could lead to the bridge being overwhelmed at freshet with resultant damage. Snow dams may also result in flooding upstream from the bridge, potentially impacting existing heritage resources.	Road Superintendent	Prior to freshet to allow time for any snow dams to be removed and weekly during freshet to confirm that snow dams were breeched.
Snow removal from roads	Visual inspections to ensure skidoo trails are not being blocked by snow removed from the roads	Low. Pushing snow onto skidoos trails that cross Agnico Eagle's roads will make it difficult for trail users to cross the roads.	Road Superintendent	Following each major winter storm and clearing of snow off the roads.
Road dust	Visual inspection of the road for excessive dust generation.	High. Dust can impact on the environment along the roads, and be a safety risk due to limited visibility.	Road Superintendent	Weekly when roads are very dry and/or when road traffic is heavy. Inspections will be suspended during rainy days and over the winter.
Caribou near or on roads	Visual inspection of hunting activities along the road when large numbers of caribou are near-by.	High. Hunters should observe the 1 km no shooting zone along the road	Environment	Weekly year round and more frequently when large numbers of caribou are near or on the roads
Watercourses and watercourse crossings	Visual inspection of infrastructure to identify defects, cracks or any other risks to structural integrity, sediment or other debris accumulation, or bed erosion or scour	Low. Infrastructure will be repaired after deficiencies are noted, when it is safe to do so.	Road Superintendent	Weekly during the open water, during the freshet period, and unscheduled inspections following a major rain event.
Sumps	Visual inspection of sumps and the measurement of freeboard.	Medium. Sumps need to be pumped down prior to freeze-up to accommodate the coming year's freshet.	Engineering	One inspection before freeze-up to ensure the water level in the sumps is low to allow for inflow during freshet. Daily during freshet, immediately after a major rain event and weekly otherwise over the open water season.
Collection Ponds	Visual inspection and measurement of freeboard in contact ponds	Medium. The storage capacity of the pond needs to be increased before freeze-up to accommodate next year's freshet.	Engineering	One inspection before freeze-up to ensure the water level in the sumps is low to allow for inflow during freshet. Daily during freshet, immediately after a major rain event and weekly otherwise over the open water season.
Diversion Channels	Visual inspection of the channel for permafrost degradation and excess snow and ice accumulamtion leading to potential blockages.	Medium. Permafrost degradation may ressult in bank slumping and channel instability. Diversion channels need to be clear of snow prior to freshet to allow for water flow.	Engineering	(1) Prior to and at freshet; (2) Immediately after a major rain event; and (3) Weekly for the remainder of the ice-free season
Potable Water Treatment Plant	Visual inspection for cleanliness and that the plant is operating as required. Water samples for testing will be collected.	High. Plant provides potable water to the camp and its proper operation is necessary for human health.	Site Services	Ongoing as prescribed by the Dep't of Health or Public Health Authorities. Daily inspections are expected
Sewage Treatment Plant	Visual inspection for cleanliness and collection of samples for testing	Medium. The sewage treatment plant discharges to CP1, which has a dike to control flow to Meliadine Lake. The water in CP1 is reclaimed for use in processing ore, or receives additional treatment if necessary before relase to Meliadine Lake.	Site Services	Weekly
Tank farms at the mine site and at Itivia	Visual inspection of water level within the secondary containment structure, and evidence of any spills or leaks. A geotechnical consultant performs a geotechnical inspection annually of the bulk fuel secondary containment structures.	Low. Due to snow accumulation, melting and precipitation, contact water will unavoidably collect inside the secondary containment area. This water will be sampled and tested before discharge to CP1 Water from the Itivia tank farm will be returned to site, if necessary Spills and leaks will be cleaned up.	Site Services	Weekly by Site Services Supervisor Weekly manual or electronic dip tests are conducted for inventory reconciliation of fuel in the tanks by sites services The geotechnical consultant inspects the tank farms annually.
Diesel Power Generating Plant	Visual inspection. Locate leak(s) and report promptly.	Low. All spills in Generating Plant will be held within the building.	Site Services	Weekly by powerhouse operator
Other Fuelling Stations	Visual Inspection for leaks or spills	Low. Fuelling stations will have an impermeable liner to capture spills or leaks	Site Services	Weekly by Site Services Supervisor
Hazardous Material Storage Areas	Visual inspection for proper storage of hazardous wastes	Low. Hazardous waste will be stored in areas having containment or in sea cans	Site Services	Weekly by Site Services Supervisor
Waste Shipments	Inspect shipping forms to ensure they meet regulatory requirements	Low. Employees or contractor preparing waste for transport will be trained in the transportation of dangerous goods.	Warehouse/ Logistics	Waste will be shipped south during the latter part of the shipping season. The shipping forms will be inspected monthly year round for sea cans that are full and have been sealed for shipment.

Table 7.3 Summary of Proposed Inspections (continued)

Mine Components / Activities Inspected	Inspection Methods/Procedures/Department Responsible	Qualitative Risk Level - High, medium or low	Department Responsible	Frequency
Landfarm	Visual inspection for water ponding outside the perimeter berm and water accumulating within the landfarm.	Low. The landfarm will have an impermeable liner and an oil: water separator will be used to remove excess water from the landfarm.	Environment	At freshet and weekly for the remainder of the summer.
Landfill	Visual inspection for orderly use of the landfill, absence of blowing debris, and leachate at the base of the landfill during the summer.	Low. The landfill has a berm to reduce blowing debris, and a ditch will intercept any leachate coming from the landfill.	Site Services	Weekly over the entire year for the orderly use of the landfill and for evidence of blowing debris. Inspections for leachate following freshet and weekly thereafter over the open water season.
Incinerator	Visual inspection for cleanliness and the proper management of all waste delivered to the facility.	Low. All waste delivered to the facility will either be incinerated or managed for future off site recycling or disposal.	Site Services	Weekly to ensure wastes generated at the mine are being properly managed.
Emulsion Plant	Visual inspection for spillage of NH_4NO_3 outside the explosives factory and at storage locations. All Plant components inspected as per regulations	High. If NH_4NO_3 gets into water, it can negatively affect fish.	Emulsion Plant Manager	Weekly, year round, or at a frequency required by regulation.
Quarries / Borrow Pits	Visual inspection for slumping and seepage from the quarries/borrow pits.	Low. Loose rock will be pulled down from the quarry face. Seepage sampled.	Environment	Weekly at freshet and monthly thereafter over the open water period. Also, after major rain events.
Freshwater Jetty	Visual inspection for erosion and settlement of the jetty	Low. If there is settlement of the jetty, additional clean waste rock will be added.	Engineering	Annually following Meliadine Lake becoming ice free
Pipelines	Visual inspection for leakage or damage to the pipeline	Low. If the freshwater pipeline were to fail, the pumps in Meliadine Lake can be remotely turned off. Other pipelines discharge to or from CP1.	Site Services	Weekly, year round
Spills	Document the recovery of spilled material and clean-up of any remaining residuals	This could range from low to high risk depending on what was spilled, where it occurred, and success of spill recovery efforts.	All departments; Environment to follow-up	Inspections begin when a spill is reported and continues on a regular basis until the spill is cleaned up. The frequency of inspections will be dependent on what was spilled, where it occurred, and success of spill recovery efforts.
Spill Kits	Inventory of spills response equipment and materials in each spill kit	Low. Spills kits will be restocked after use.	Environment	Monthly by Environment Technician
Archaeological Sites	Inspect archaeological sites and report annually	Low	Environment	The location of archaeological sites has been identified and Agnico Eagle will take photos of the sites inspected and include these in the annual report.

APPENDIX C – DOCUMENTS

Document 1.1	Completed Type A General Application Form
Document 1.2	Certificate of Incorporation/Evidence of Registration of the Company
Document 1.3	Letter of Confirmation of Agents
Document 1.4	Sustainable Development Policy
Document 1.5	Agnico Eagle's Audited Financial Statements for 2014 Fiscal Year
Document 2.1	Meliadine Project Site History
Document 4.1	Project Design Considerations

Document 1.1 – Completed Type A General Application Form

ATTACHMENT A:

MELIADINE GOLD PROJECT

Completed General Type A Water Licence Application for New Mining Undertaking

Application Submission Date: May 15, 2015

P.O. BOX 119

GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

kNK5 wmoEp5 vtmp5
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

GENERAL WATER LICENCE APPLICATION
(APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

LICENCE NO:
(for NWB use only)

1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address)

Agnico Eagle Mines Limited
145 King Street East, Suite 400
Toronto, Ontario, M5C 2Y7, Canada
Phone: 416.947.1212 or 1.888.822.6714
Fax: 416.367.4681
e-mail: info@agnicoeagle.com
www.agnicoeagle.com

2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address)

A list of representatives is provided in the accompanying Type A Water Licence Main Application Document, in Appendix C, Document 1.3.

3. NAME OF PROJECT (including the name of the project location)

Meliadine Gold Project, Nunavut

4. LOCATION OF UNDERTAKING

Project Extents

Project Extents	Latitude	Longitude
Mine Site	63° 2' 53.091" N	92° 16' 16.651" W
	63° 2' 50.722" N	92° 9' 10.809" W
	63° 1' 1.463" N	92° 9' 13.978" W
	63° 1' 3.829" N	92° 16' 19.377" W
All-weather Access Road	63° 1' 19.309" N	92° 11' 26.684" W
	63° 1' 16.230" N	92° 3' 10.432" W
	62° 47' 58.542" N	92° 3' 36.080" W
	62° 48' 1.592" N	92° 11' 48.601" W
Itivia, Rankin Inlet Area	62° 48' 9.519" N	92° 6' 4.112" W
	62° 48' 9.283" N	92° 5' 27.421" W

	62° 47' 52.933" N	92° 5' 27.925" W
	62° 47' 53.169" N	92° 6' 4.610" W

Camp Location(s)

Latitude: (63° 2' 24.180" N) Longitude: (92° 13' 44.288" W)

5. **MAP** - Attach a topographical map, indicating the main components of the undertaking.

See Figure 1 attached.

NTS Map Sheet No.: 055J/13; 055K/16; 055N/01; 055O/04 Map Name: _____
Map Scale: 1:50,000

6. **NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

The 'X" below denotes where leases or authorization are required. However, given that Agnico Eagle Mines Limited holds a number of land use permits, leases and authorizations for the Meliadine Gold Project, with the Kivaliq Inuit Association (KIA), Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of Nunavut (GN), a full list of land use permits, leases and authorizations for the Project is provided in the accompanying Type A Water Licence Main Application Document, Appendix B, Table 2.4. This list includes dates of issuance and dates of expiry.

Sub-surface

☒ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☒ Mineral Lease from Aboriginal Affairs and Northern Development Canada (AANDC)
Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☐ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☒ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☒ Other: GN Department of Government and Community Services
Date (expected date) of issuance: _____ Date of expiry: _____

Name of entity(s) holding authorizations: Agnico Eagle Mines Limited

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7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the project is located.

☐ North Baffin	x Keewatin
☐ South Baffin	☐ Sanikiluaq
☐ Akunniq	☐ West Kitikmeot

Is a land use plan conformity determination required?

x Yes ☐ No

If Yes, indicate date issued and attach copy June 8, 2011

Copy is on file with NWB public registry for the Project at the following link:
ftp://ftp.nwb-oen.ca/1%20PRUC%20PUBLIC%20REGISTRY/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEL----%20Agnico/2%20ADMIN/2%20NPC%20NIRB/0%20NPC/110608%202AM-MEL----%20NPC%20Conformity-IMLE.pdf

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

x Yes ☐ No
Project screening was completed in 2011
110708 2AM-MEL----11EN034-NIRB Screening Decision Report – ODTE.pdf
110914 2AM-MEL----Minister to NIRB on Screening Decision – IMLE.pdf

A Part 5 Review by NIRB was required. NIRB issued Project Certificate No. 006 on February 26, 2015.

A copy of the Project Certificate is on file with NWB public registry for the Project at the following link:
ftp://ftp.nwb-oen.ca/1%20PRUC%20PUBLIC%20REGISTRY/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEL----%20Agnico/2%20ADMIN/2%20NPC%20NIRB/1%20NIRB/

If Yes, indicate date issued and attach copy

If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.

Agnico Eagle Mines Limited is developing the Meliadine Gold 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, on Inuit

owned lands. The Project is located within the Meliadine Lake watershed of the Wilson Water Management Area (Nunavut Water Regulations Schedule 4).

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).

Mining facilities include a plant site and accommodation buildings; three ore stockpiles; a temporary overburden stockpile; a tailings storage facility (TSF); three waste rock storage facilities (WRSFs); a water management system that includes collection ponds, water diversion channels, and retention dikes/berms; and a Water Treatment Plant (WTP).

Development of some of the facilities, such as a tank farm and laydown area, will take place at Itivia, south of the Hamlet of Rankin Inlet, where materials will be received by air and sea transport. Year-round access between Rankin Inlet and the mine site will be facilitated by a bypass road around Rankin Intel and an All-weather Access Road (AWAR) to the proposed mine.

Further details of the Project can be found in the accompanying documents:

- Type A Water Licence Main Application Document (Agnico Eagle 2015a); and
- Mine Plan (Agnico Eagle 2015b).

10. **OPTIONS** – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

Alternatives to Project components and activities were assessed by Agnico Eagle using the following criteria: technical feasibility, economic viability, environmental acceptability, community preference, social acceptability, and reclamation and closure. The alternative assessment approach employed by Agnico Eagle recognises that community preferences are important, and that positive and negative effects on Valued Ecosystem Components (VECs) and Valued Socio-Economic Components (VSECs) have to be carefully weighed in selecting the preferred alternative. The process gave due consideration to the vulnerability of the Arctic ecosystem, the potential for extension of the mine life, reclamation and closure, and potential for cumulative effects.

Agnico Eagle completed an explicit analysis of all of the reasonable identified means of carrying out the Project components or activities, including the “no-go” alternative. The alternatives analysis is summarized in the accompanying Type A Water Licence Main Application Document, Section 2.3; additional information on the alternatives considered for the TSF is provided in the Mine Plan (Section 2.7). A full options analysis for the Project was presented in the supporting document entitled “Project Alternatives” (SD 2-1) submitted to NIRB as part of the FEIS (Agnico Eagle 2014).

11. **CLASSIFICATION OF PRIMARY UNDERTAKING -** Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial ☐ Agricultural
x Mining and Milling (includes exploration/drilling/exploration camps)
☐ Conservation
☐ Municipal (includes camps/lodges) ☐ Recreational
☐ Power ☐ Miscellaneous (describe below):

_____

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

☐ Hydrostatic Testing
☐ Tannery
☐ Tourist / Remote Camp
x Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
☐ Onshore Oil and Gas Exploration Drilling
☐ Mineral Exploration / Remote Camp
☐ Advanced Exploration
x Mine Development
☐ Municipal
☐ General Water Works
☐ Power

12. **WATER USE -** Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

x To obtain water for camp/ municipal purposes
x To obtain water for industrial purposes
x To cross a watercourse
x To alter the flow of or store water
x Other: Dewatering Lakes; Impacted Ponds, Groundwater
x To divert a watercourse
x To modify the bed or bank of a watercourse
x Flood control

13. **QUANTITY AND QUALITY OF WATER INVOLVED -** For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Table 1 providing the information stipulated below for each water use identified in Block 12 is attached to this application. For additional information, please refer to the Water Management Plan (Agnico Eagle 2015).

Name of water source(s) (show location(s) on map):
_____

Describe the quality of the water source(s) and the available capacity: _____
_____
_____

Provide the overall estimated quantity of water to be used: _____ m^3/day

Provide the estimated quantity(s) of water to be used from each source:
_____

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)
_____

Describe the method of extraction(s): _____

Estimated quantity(s) of water returned to source(s) _____ m^3/day

Describe the quality of water(s) returned to source(s): _____
_____
_____

14. **WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

x Sewage
x Solid Waste
x Hazardous
x Bulky Items/Scrap Metal
x Animal Waste
x Other (describe): Tailings, Waste Rock, Overburden, Ash
x Waste oil
x Greywater
x Sludges
x Contaminated soil and/or water

15. **QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Table 2 providing the information stipulated below for each waste identified in Block 14 is attached to this application.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method

16. **OTHER AUTHORIZATIONS** – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking.

Agnico Eagle holds a number of Type B Water Licenses for the Meliadine Gold Project, in addition to licenses with the Nunavut Research Institute and GN Departments of Culture, Language, Elders and Youth, and Environment. A number of federal authorizations may be required for the Project from Transport Canada, Department of Fisheries and Oceans Canada (DFO) and Natural Resources Canada, in addition to territorial authorizations from the Nunavut Mine Health and Safety and Nunavut Workers Compensation Board. A full list of existing and required authorizations is provided in the accompanying Type A Water Licence Main Application Document, Appendix B, Table 2.4.

17. **PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** - Describe direct, indirect, and cumulative impacts related to water and waste.

Baseline data collected by Agnico Eagle, predicted environmental impacts of the Project and proposed mitigation measures have been provided in the Final Environmental Impact Statement (FEIS) (Agnico Eagle 2014) and are available to the public, any interested party, or the Nunavut Water Board (NWB) through the NIRB Registry: ftp://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/11MN034-AEM%20MELIADINE/

A summary of the environmental impacts relating to the use of water and disposal of waste is provided in Section 5 of the accompanying Type A Water Licence Main Application Document.

In addition, the Final Hearing Report prepared by NIRB for the Meliadine Gold Project (File # 11MN034; October 2014) summarizes the ecosystemic and socio-economic effects of the Project (Sections 4 and 5). NIRB concludes: "*After due consideration and in accordance with the process and primary objectives of the Nunavut Land Claims Agreement, the Board has determined that Agnico Eagle Ltd.'s Meliadine Gold Project, NIRB File No.: 11MN034 should proceed in accordance with the Board's Final Hearing Report and associated recommendations*." Project Certificate No. 006 was issued for the Meliadine Gold Project on February 26, 2015.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licenses for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

None identified.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users. N/A

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

To date AEM has negotiated a Water Compensation Agreement with the KIA covering the construction, operation and decommissioning of the Phase 1 All-weather Access Road (AWAR) between Rankin Inlet and the Project site. This agreement is in accordance with Article 20 of NLCA addressing Inuit Water Rights.

AEM will require a similar Agreement with the KIA for the construction, operation and decommissioning of the proposed Meliadine Gold Mine project addressing compensation for Inuit Water Rights affected by the proposed Project. AEM is committed to working in good faith with the KIA to ensure a water compensation agreement is in place prior to the Type A Water Licence hearing.

Agnico Eagle knows of no other water rights that must be secured for the proposed Project.

20. CONSULTATION – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

Agnico Eagle has had ongoing discussions and consultations with the GN, KIA, HTO and the Hamlet of Rankin Inlet, to ensure that all parties are kept aware of our development plans for the Project, since 2010. This has enabled the GN, KIA and the Hamlet to incorporate, and where possible, dovetail our development plans with regional economic development plans. This dialogue will continue throughout the life of the Project. Agnico Eagle will continue to meet directly with Hamlet council in Rankin Inlet to discuss all Project-related issues and to cooperate with the Hamlet, where appropriate.

In 2012, Agnico Eagle created (with the assistance of the Hamlet) a Rankin Inlet – Meliadine

Project Community Liaison Committee, made up of representatives from various community groups. This group meets with the Agnico Eagle Project Management team to allow all issues related to the Project development to be aired and discussed in a troubleshooting format. The meeting contents and outcomes are then made public. This committee met several times in 2012 and 2013, and Agnico Eagle is committed to continue meeting in 2015. Committee members suggested that this initiative be replaced with an Inter-Agency Committee to provide more direct linkage with the various community groups rather than just with community individuals. Agnico Eagle is intending to follow this suggestion and plans to re-engage the community in 2015 through an Inter-Agency Liaison Committee or some equivalent acceptable to the community.

With the assistance of KIA, Agnico Eagle has engaged in meetings with the HTO and the Community Lands and Resources Committee (CLARC) to review the proposed Project development and to work on modifying the Project plan to meet issues of concern to local hunters, trappers and other traditional land users. This committee will continue to meet throughout the mine life to address concerns as they arise.

Consultations have been recorded from 1995 to the present and have included information sessions, consultation, informed participation, and negotiation. In its public engagement and consultation, Agnico Eagle focused on those communities in close proximity to the Project (Rankin Inlet and Chesterfield Inlet). Stakeholders were identified and consulted amongst general public, local and regional communities and Inuit organizations, federal and territorial government departments, and government institutes having a mandate relevant to the Project.

Common to all communities were concerns related to caribou preservation, jobs and training. An additional concern raised in 2012 was employee relations, particularly as it relates to the accommodation of different cultures working together. Key community findings and the company's response to address them are outlined in the FEIS (Agnico Eagle 2014). Community findings directly related to water use and waste disposal are summarized in Appendix B, Table 2.7 of the accompanying Type A Water Licence Application Document. The Public Engagement and Consultation Baseline Report (Agnico Eagle 2015) has been updated in support of this Type A Water Licence Application and is also provided in the accompanying documents.

21. SECURITY INFORMATION

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002.

The total estimated financial security for the Project is $47,449,337. Attachment E provides the reclaim model. Further details on the financial security estimate can be found in the accompanying Preliminary Closure and Reclamation Plan, Section 10.

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

A statement of financial responsibility is provided in the accompanying Type A Water Licence Main Application Document, Section 1.3. A copy of Agnico Eagle's audited financial statements for the

2014 fiscal year are provided in the accompanying Type A Water Licence Application Document, Appendix C, Document 1.5.

If the applicant is a business entity, provide a list of the officers of the company.

As of 13 May 2015, the officers of the company are as follows:

CEO – Sean Boyd
President – Ammar Al-Joundi

Directors: James D. Nasso; Sean Boyd, Dr. Leanne M. Baker, Martine A. Celej; Robert J. Gemmell, Bernard Kraft; Mel Leiderman, Deborah McCombe, Dr. Sean Riley, J. Merfyn Roberts, Howard Stockford, and Pertti Voutilainen.

Senior Vice-Presidents: David Smith, Donald G. Allan, Alain Blackburn, Picklu Datta, Louise Grondin, Tim Haldane, R. Gregory Laing, Marc Legault, Jean Luk Pellerin, Jean Robitaille, and Yvon Sylvestre.

Vice Presidents: Luis Felipe Medina Aguirre, Lino Cafazzo, Paul Cousin, Mathew Cook, Brian Christie, Patrice Gilbert, Dominique Girard, Guy Gosselin, Ingmar E. Haga, Michel Leclerc, Christain Provencher, Michael Timmins and Carol Plummer.

Source: http://www.agnicoeagle.com/en/About-Us/Pages/Management.aspx

A list of company representatives for the Application are provided in the accompanying Type A Water Licence Main Application Document, in Appendix C, Document 1.3.

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

A copy of the Certificate of Incorporation is provided in the accompanying Type A Water Licence Main Application Document, Appendix C, Document 1.2.

23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.

A list of key studies, reports and research undertaken for the Project relating to the use of water and disposal of waste is provided below. A full list of studies, reports and research completed for the Project as referenced within the Application and supporting documents can be provided upon request.

- Final Environmental Impact Statement (available on the NIRB public registry)
- Mine Plan
- Water Management Plan
- Ore Storage Management Plan
- Mine Waste Management Plan
- Landfill and Waste Management Plan
- Landfarm Management Plan
- Hazardous Materials Management Plan
- Incineration Management Plan
- Roads Management Plan
- Borrow Pits and Quarries Management Plan
- Explosives Management Plan
- Risk Management and Emergency Response Plan
- Spill Contingency Plan
- Aquatics Effects Monitoring Program Design Plan
- Preliminary Closure and Reclamation Plan
- Environmental Management and Protection Plan

- Quality Assurance/Quality Control Plan
- Public Engagement and Consultation Baseline Report
- Screening Report – Revised Project Design

Studies used to support the design of the above mentioned reports and plans are listed in the full reference lists attached to each plan.

24. **PROPOSED TIME SCHEDULE** – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Pre-Development: (separate Type B Water Licence Application to be filed with NWB May 2015)
Proposed Start Date: September/2015

Construction
Proposed Start Date: April/2016 (month/year) Proposed Completion Date: April/2020 (month/year)
Operation
Proposed Start Date: April/2020 (month/year) Proposed Completion Date: April/2028 (month/year)
Closure
Proposed Start Date: April/2028 (month/year) Proposed Completion Date: April/2031 (month/year)
Post - Closure
Proposed Start Date: April/2031 (month/year) Proposed Completion Date: to be determined (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction
☐ Winter ☐ Spring ☐ Summer ☐ Fall x All season

Operation
☐ Winter ☐ Spring ☐ Summer ☐ Fall x All season

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall x All season

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall x All season

25. **PROPOSED TERM OF LICENCE**

Number of years (maximum of 25 years): 15 years

Requested Date of Issuance: April/2016 (month/year) Requested Expiry Date: April/2031 (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's Guide 5: Processing Water Licence Applications

for more information)

26. **ANNUAL REPORTING –** If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

Agnico Eagle will comply with the reporting format stipulated in Schedule B of the Type A Water Licence.

27. **CHECKLIST –** The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

x Yes ☐ No If no, date expected (see NWB public registry)

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

x Yes ☐ No If no, date expected (see NWB public registry)

Completed General Water Licence Application form.

x Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

x Yes ☐ No If no, date expected _____

English Summary of Application.

x Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

x Yes ☐ No If no, date expected _____

Application Fee of $30.00 CDN (Payee Receiver General for Canada).

x Yes ☐ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes x No If no, date expected Not required, the Meliadine Project is on Inuit Owned Land

28. **SIGNATURE**

Stephane Robert	Manager Regulatory Affairs		May 15, 2015
Name (Print)	**Title (Print)**	**Signature**	**Date**

Document 1.2 – Certificate of Incorporation/Evidence of Registration of the Company

CANADA)

Province of Ontario)

To Wit)

TO ALL WHOM THESE PRESENTS

may come, be seen or known

I, R. Gregory Laing, a Notary Public, in and for the Province of Ontario, by Royal Authority duly appointed, residing at the Town of Oakville in said Province.

DO CERTIFY AND ATTEST that the paper-writing hereto annexed is a true copy of a document produced and shown to me purporting to be a:

> Certificate of Articles of Amalgamation of Agnico-Eagle Mines Limited dated August 1, 2007;

the said copy having been compared by me with the said original document, an act whereof being requested I have granted under my Notarial Form and Seal of Office to serve and avail as occasion shall or may require. This photocopy conforms to the original document that has not been altered in any way. **IN TESTIMONY WHEREOF I** have hereto subscribed my name and affixed my Notarial Seal of Office at Toronto this 17th day of October 2007.

A Notary Public in and for the
Province of Ontario
R. Gregory Laing
240 Dolphin Court
Oakville, Ontario
L6J 5S8
Canada

For Ministry Use Only
À l'usage exclusif du ministère

Ontario Corporation Number
Numéro de la société en Ontario
1742273

1

Ministry of Government Services
Ontario

Ministère des Services gouvernementaux

CERTIFICATE
This is to certify that these articles are effective on

CERTIFICAT
Ceci certifie que les présents statuts entrent en vigueur le

AUGUST 01 AOÛT, 2007

Director / Directrice
Business Corporations Act / Loi sur les sociétés par actions

Form 4
Business Corporations Act

Formule 4
Loi sur les sociétés par actions

ARTICLES OF AMALGAMATION
STATUTS DE FUSION

1. The name of the amalgamated corporation is: (Set out in BLOCK CAPITAL LETTERS)
Dénomination sociale de la société issue de la fusion (écrire en LETTRES MAJUSCULES SEULEMENT) :

AGNICO-EAGLE MINES LIMITED/MIN
ES AGNICO-EAGLE LIMITÉE

2. The address of the registered office is:
Adresse du siège social :

145 King Street East, Suite 400

(Street & Number or R.R. Number & if Multi-Office Building give Room No.)
(Rue et numéro, ou numéro de la R.R. et, s'il s'agit d'un édifice à bureaux, numéro du bureau)

Toronto	**Ontario**	M5C 2Y7
(Name of Municipality or Post Office) (Nom de la municipalité ou du bureau de poste)		(Postal Code / *Code postal*)

3. Number of directors is/are: **or** minimum and maximum number of directors is/are:
Nombre d'administrateurs : **ou** *nombres minimum et maximum d'administrateurs :*

Number **or** Nombre **ou**	minimum *minimum*	and *et*	maximum *maximum*
	5		12

4. The director(s) is/are:
Administrateur(s) :

First name, middle names and surname *Prénom, autres prénoms et nom de famille*	Address for service, giving Street & No. or R.R. No., Municipality, Province, Country and Postal Code *Domicile élu, y compris la rue et le numéro ou le numéro de la R.R., le nom de la municipalité, la province, le pays et le code postal*	Resident Canadian State 'Yes' or 'No' *Résident canadien Oui/Non*
see page 1A attached		

07121 (08/2005)

First name, initials and last name	Residence Address	Resident Canadian yes or no
Pertti Voutilainen	Juannusmaki 11C 02200 Espoo Finland	No
Leanne Baker	480 Ridge Road Tiburon, California USA 94920	No
Douglas R. Beaumont	621 Sir Richards Road Mississauga, Ontario Canada L5C 1A2	Yes
Sean Boyd	1 Blue Ridge Trail, R.R. #3 Newmarket, Ontario Canada L3Y 4W3	Yes
Bernard Kraft	1166 Bay Street, Suite 1804 Toronto, Ontario Canada M5S 2S8	Yes
Mel Leiderman	15 Fifeshire Road Toronto, Ontario Canada M2L 2G4	Yes
James D. Nasso	67 Groomsport Cres. Agincourt, Ontario Canada M1T 2K8	Yes
Eberhard Scherkus	1183 Carey Road Oakville, Ontario Canada L6J 2E3	Yes
Howard Stockford	25 George Street, Suite 805 Toronto, Ontario Canada M5A 4L8	Yes

5. **Check A or B**
Cocher A ou B

☐ A) The amalgamation agreement has been duly adopted by the shareholders of each of the amalgamating corporations as required by subsection 176 (4) of the *Business Corporations Act* on the date set out below.

A) Les actionnaires de chaque société qui fusionnne ont dûment adopté la convention de fusion conformément au paragraphe 176(4) de la Loi sur les sociétés par actions *à la date mentionnée ci-dessous.*

or
ou

☒ B) The amalgamation has been approved by the directors of each amalgamating corporation by a resolution as required by section 177 of the *Business Corporations Act* on the date set out below.

B) Les administrateurs de chaque société qui fusionne ont approuvé la fusion par voie de résolution conformément à l'article 177 de la Loi sur les sociétés par actions *à la date mentionnée ci-dessous.*

The articles of amalgamation in substance contain the provisions of the articles of incorporation of
Les statuts de fusion reprennent essentiellement les dispositions des statuts constitutifs de

AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE

and are more particularly set out in these articles.
et sont énoncés textuellement aux présents statuts.

Names of amalgamating corporations *Dénomination sociale des sociétés qui fusionnent*	Ontario Corporation Number *Numéro de la société en Ontario*	Date of Adoption/Approval *Date d'adoption ou d'approbation* Year / année Month / mois Day / jour
Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée	1495447	2007-Jul-27
Cumberland Resources Ltd.	528134	2007-Jul-27
Agnico-Eagle Acquisition Corporation	1740720	2007-Jul-27
Meadowbank Mining Corporation	1740721	2007-Jul-27

6. Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise.
Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la société.

None

7. The classes and any maximum number of shares that the corporation is authorized to issue:
Catégories et nombre maximal, s'il y a lieu, d'actions que la société est autorisée à émettre :

The Corporation is authorized to issue an unlimited number of shares of one class designated as common shares.

8. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:
Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions qui peut être émise en série :

The holders of the common shares are entitled:

(a) to vote at all meetings of shareholders; and
(b) to receive the remaining property of the Corporation upon dissolution.

9. The issue, transfer or ownership of shares is/is not restricted and the restrictions (if any) are as follows:
L'émission, le transfert ou la propriété d'actions est/n'est pas restreint. Les restrictions, s'il y a lieu, sont les suivantes :

not applicable

10. Other provisions, (if any):
Autres dispositions, s'il y a lieu :

The board of directors may from time to time, in such amounts and on such terms as it deems expedient:

(a) borrow money on the credit of the Corporation;

(b) issue, sell or pledge debt obligations (including bonds, debentures, notes or other similar obligations, secured or unsecured) of the Corporation;

(c) charge, mortgage, hypothecate or pledge all or any of the currently-owned or subsequently-acquired real or personal, moveable or immoveable, property of the Corporation, including book debts, rights, powers, franchises and undertaking to secure any debt obligations or any money borrowed, or other debt or liability of the Corporation.

The board of directors may from time to time delegate to such one or more of the directors and officers of the Corporation as may be designated by the board all or any of the powers conferred on the board above to such extent and in such manner as the board shall determine at the time of each such delegation.

The English form "Agnico-Eagle Mines Limited" and the French form "Mines Agnico-Eagle Limitée" of the name of the Corporation are equivalent and are used separately.

11. The statements required by subsection 178(2) of the *Business Corporations Act* are attached as Schedule "A".
Les déclarations exigées aux termes du paragraphe 178(2) de la Loi sur les sociétés par actions *constituent l'annexe A.*

12. A copy of the amalgamation agreement or directors' resolutions (as the case may be) is/are attached as Schedule "B".
Une copie de la convention de fusion ou les résolutions des administrateurs (selon le cas) constitue(nt) l'annexe B.

These articles are signed in duplicate.
Les présents statuts sont signés en double exemplaire.

Names of the amalgamating corporations and signatures and descriptions of office of their proper officers.
Dénomination sociale des sociétés qui fusionnent, signature et fonction de leurs dirigeants régulièrement désignés.

AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE

by: _____
Name: Robert Gregory Laing
Title: General Counsel, Senior Vice-President, Legal and Corporate Secretary

CUMBERLAND RESOURCES LTD.

by: _____
Name: Robert Gregory Laing
Title: Director

AGNICO-EAGLE ACQUISITION CORPORATION

by: _____
Name: Robert Gregory Laing
Title: Director

MEADOWBANK MINING CORPORATION

by: _____
Name: Robert Gregory Laing
Title: Director

SCHEDULE A

STATEMENT OF DIRECTOR OR OFFICER PURSUANT TO SUBSECTION 178(2) OF THE *BUSINESS CORPORATIONS ACT* (ONTARIO)

I, Robert Gregory Laing, of the Town of Oakville, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am the director, President and Secretary of Agnico-Eagle Acquisition Corporation (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

4. There are reasonable grounds for believing that:

   (a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation, Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée, Meadowbank Mining Corporation and Cumberland Resources Ltd. will be able to pay its liabilities as they become due; and

   (b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation.

This Statement is made this 27th day of July, 2007.

Robert Gregory Laing

SCHEDULE A

STATEMENT OF DIRECTOR OR OFFICER PURSUANT TO SUBSECTION 178(2) OF THE *BUSINESS CORPORATIONS ACT* (ONTARIO)

I, Robert Gregory Laing, of the Town of Oakville, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am the director, President and Secretary of Meadowbank Mining Corporation (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

4. There are reasonable grounds for believing that:

   (a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation, Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée, Agnico-Eagle Acquisition Corporation and Cumberland Resources Ltd. will be able to pay its liabilities as they become due; and

   (b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation.

This Statement is made this 27th day of July, 2007.

Robert Gregory Laing

SCHEDULE A

STATEMENT OF DIRECTOR OR OFFICER PURSUANT TO SUBSECTION 178(2) OF THE *BUSINESS CORPORATIONS ACT* (ONTARIO)

I, Robert Gregory Laing, of the Town of Oakville, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am the director, President and Secretary of Cumberland Resources Ltd. (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

4. There are reasonable grounds for believing that:

(a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation, Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée, Agnico-Eagle Acquisition Corporation and Meadowbank Mining Corporation will be able to pay its liabilities as they become due; and

(b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation.

This Statement is made this 27th day of July, 2007.

Robert Gregory Laing

SCHEDULE A

STATEMENT OF DIRECTOR OR OFFICER PURSUANT TO SUBSECTION 178(2) OF THE *BUSINESS CORPORATIONS ACT* (ONTARIO)

I, Robert Gregory Laing, of the Town of Oakville, in the Province of Ontario, hereby state as follows:

1. This Statement is made pursuant to subsection 178(2) of the *Business Corporations Act* (Ontario) (the "Act").

2. I am the General Counsel, Senior Vice-President, Legal and Corporate Secretary of Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée (the "Corporation") and as such have knowledge of its affairs.

3. I have conducted such examinations of the books and records of the Corporation as are necessary to enable me to make the statements set forth below.

4. There are reasonable grounds for believing that:

   (a) the Corporation is and the corporation to be formed by the amalgamation (the "Amalgamation") of the Corporation, Meadowbank Mining Corporation, Agnico-Eagle Acquisition Corporation and Cumberland Resources Ltd. will be able to pay its liabilities as they become due; and

   (b) the realizable value of such amalgamated corporation's assets will not be less than the aggregate of its liabilities and stated capital of all classes.

5. There are reasonable grounds for believing that no creditor of the Corporation will be prejudiced by the Amalgamation.

6. The Corporation has not been notified by any creditor that it objects to the Amalgamation.

This Statement is made this 27th day of July, 2007.



Robert Gregory Laing

SCHEDULE B

RESOLUTION OF THE DIRECTORS
OF
AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE

"AMALGAMATION WITH AGNICO-EAGLE ACQUISITION CORPORATION, CUMBERLAND RESOURCES LTD. AND MEADOWBANK MINING CORPORATION

WHEREAS subsection 177(1) of the *Business Corporations Act* (Ontario) (the "Act") permits a holding corporation and one or more of its subsidiary corporations to amalgamate and continue as one corporation without complying with sections 175 and 176 of the Act;

AND WHEREAS Agnico-Eagle Acquisition Corporation ("Acquisition"), Cumberland Resources Ltd. ("Cumberland") and Meadowbank Mining Corporation ("Meadowbank") are subsidiary corporations of AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE (the "Corporation");

AND WHEREAS it is considered desirable and in the best interests of the Corporation that the Corporation and each of Acquisition, Cumberland and Meadowbank amalgamate and continue as one corporation pursuant to subsection 177(1) of the Act;

IT IS RESOLVED THAT:

1. the amalgamation (the "Amalgamation") of the Corporation, Acquisition, Cumberland and Meadowbank pursuant to the provisions of subsection 177(1) of the Act is hereby approved;

2. upon the Amalgamation becoming effective, all the shares (whether issued or unissued) of Acquisition, Cumberland and Meadowbank shall be cancelled without any repayment of capital in respect thereof;

3. except as may be prescribed by the Regulation under the Act, the articles of amalgamation of the corporation (the "Amalgamated Corporation") continuing from the Amalgamation shall be the same as the articles of the Corporation;

4. upon the Amalgamation becoming effective, the by-law of the Corporation as in effect immediately prior to the Amalgamation shall be the by-law of the Amalgamated Corporation;

5. no securities shall be issued and no assets shall be distributed by the Amalgamated Corporation in connection with the Amalgamation;

6. any director or officer of the Corporation is hereby authorized and directed, for an in the name of and on behalf of the Corporation, to execute (whether under the corporate seal of the Corporation or otherwise) and deliver all such agreements, instruments, certificates and other documents and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the Amalgamation, including the execution and delivery to the Director appointed under the Act of articles of amalgamation in the prescribed form in respect of the Amalgamation, the execution of any such document or the doing of any such other act or thing being conclusive evidence of such determination."

The undersigned General Counsel, Senior Vice-President, Legal and Corporate Secretary of AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE (the "Corporation") hereby certifies that the foregoing is a true and correct copy of a resolution passed by the directors of the Corporation on July 27, 2007, which resolution is in full force and effect as of the date hereof, unamended.

DATED July 27, 2007.

Robert Gregory Laing
General Counsel, Senior
Vice-President, Legal and
Corporate Secretary

SCHEDULE B

RESOLUTION OF THE DIRECTOR
OF
CUMBERLAND RESOURCES LTD.

AMALGAMATION WITH AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE, AGNICO-EAGLE ACQUISITION CORPORATION AND MEADOWBANK MINING CORPORATION

WHEREAS subsection 177(1) of the *Business Corporations Act* (Ontario) (the "Act") permits a holding corporation and one or more of its subsidiary corporations to amalgamate and continue as one corporation without complying with sections 175 and 176 of the Act;

AND WHEREAS CUMBERLAND RESOURCES LTD. (the "Corporation") is a subsidiary corporation of Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée ("Agnico") and Agnico-Eagle Acquisition Corporation ("Acquisition");

AND WHEREAS it is considered desirable and in the best interests of the Corporation that the Corporation and each of Acquisition, Agnico and Meadowbank Mining Corporation ("Meadowbank") amalgamate and continue as one corporation pursuant to subsection 177(1) of the Act;

IT IS RESOLVED THAT:

1. the amalgamation (the "Amalgamation") of the Corporation, Acquisition, Meadowbank and Agnico pursuant to the provisions of subsection 177(1) of the Act is hereby approved;

2. upon the Amalgamation becoming effective, all the shares (whether issued or unissued) of the Corporation shall be cancelled without any repayment of capital in respect thereof;

3. except as may be prescribed by the Regulation under the Act, the articles of amalgamation of the corporation (the "Amalgamated Corporation") continuing from the Amalgamation shall be the same as the articles of Agnico;

4. upon the Amalgamation becoming effective, the by-law of Agnico as in effect immediately prior to the Amalgamation shall be the by-law of the Amalgamated Corporation;

5. no securities shall be issued and no assets shall be distributed by the Amalgamated Corporation in connection with the Amalgamation; and

6. any director or officer of the Corporation is authorized and directed, for and in the name of and on behalf of the Corporation, to execute (whether under the corporate seal of the Corporation or otherwise) and deliver all such agreements, instruments, certificates and other documents and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the Amalgamation, including the execution and delivery to the Director appointed under the Act of articles of amalgamation in the prescribed form in respect of the Amalgamation, the execution of any such document or the doing of any such other act or thing being conclusive evidence of such determination.

The undersigned, being the sole director of CUMBERLAND RESOURCES LTD., passes the foregoing resolution pursuant to the *Business Corporations Act* (Ontario).

DATED July 27, 2007.

Robert Gregory Laing

SCHEDULE B

RESOLUTION OF THE DIRECTOR
OF
AGNICO-EAGLE ACQUISITION CORPORATION

AMALGAMATION WITH AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE, MEADOWBANK MINING CORPORATION AND CUMBERLAND RESOURCES LTD.

WHEREAS subsection 177(1) of the *Business Corporations Act* (Ontario) (the "Act") permits a holding corporation and one or more of its subsidiary corporations to amalgamate and continue as one corporation without complying with sections 175 and 176 of the Act;

AND WHEREAS AGNICO-EAGLE ACQUISITION CORPORATION (the "Corporation") is a wholly-owned subsidiary corporation of AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE ("Agnico");

AND WHEREAS it is considered desirable and in the best interests of the Corporation that the Corporation and each of Meadowbank Mining Corporation ("Meadowbank"), Agnico and Cumberland Resources Ltd. ("Cumberland") amalgamate and continue as one corporation pursuant to subsection 177(1) of the Act;

IT IS RESOLVED THAT:

1. the amalgamation (the "Amalgamation") of the Corporation, Meadowbank, Cumberland and Agnico pursuant to the provisions of subsection 177(1) of the Act is hereby approved;

2. upon the Amalgamation becoming effective, all the shares (whether issued or unissued) of the Corporation shall be cancelled without any repayment of capital in respect thereof;

3. except as may be prescribed by the Regulation under the Act, the articles of amalgamation of the corporation (the "Amalgamated Corporation") continuing from the Amalgamation shall be the same as the articles of Agnico;

4. upon the Amalgamation becoming effective, the by-law of Agnico as in effect immediately prior to the Amalgamation shall be the by-law of the Amalgamated Corporation;

5. no securities shall be issued and no assets shall be distributed by the Amalgamated Corporation in connection with the Amalgamation; and

6. any director or officer of the Corporation is hereby authorized and directed, for and in the name of and on behalf of the Corporation, to execute (whether under the corporate seal of the Corporation or otherwise) and deliver all such agreements, instruments, certificates and other documents and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the Amalgamation, including the execution and delivery to the Director appointed under the Act of articles of amalgamation in the prescribed form in respect of the Amalgamation, the execution of any such document or the doing of any such other act or thing being conclusive evidence of such determination.

The undersigned, being the sole director of AGNICO-EAGLE ACQUISITION CORPORATION, passes the foregoing resolution pursuant to the *Business Corporations Act* (Ontario).

DATED July 27, 2007.

Robert Gregory Laing

SCHEDULE B

RESOLUTION OF THE DIRECTOR
OF
MEADOWBANK MINING CORPORATION

AMALGAMATION WITH AGNICO-EAGLE MINES LIMITED/MINES AGNICO-EAGLE LIMITÉE, AGNICO-EAGLE ACQUISITION CORPORATION AND CUMBERLAND RESOURCES LTD.

WHEREAS subsection 177(1) of the *Business Corporations Act* (Ontario) (the "Act") permits a holding corporation and one or more of its subsidiary corporations to amalgamate and continue as one corporation without complying with sections 175 and 176 of the Act;

AND WHEREAS MEADOWBANK MINING CORPORATION (the "Corporation") is a wholly-owned subsidiary corporation of CUMBERLAND RESOURCES LTD. ("Cumberland");

AND WHEREAS it is considered desirable and in the best interests of the Corporation that the Corporation and each of Agnico-Eagle Acquisition Corporation ("Acquisition"), Agnico-Eagle Mines Limited/Mines Agnico-Eagle Limitée ("Agnico") and Cumberland amalgamate and continue as one corporation pursuant to subsection 177(1) of the Act;

IT IS RESOLVED THAT:

1. the amalgamation (the "Amalgamation") of the Corporation, Acquisition, Cumberland and Agnico pursuant to the provisions of subsection 177(1) of the Act is hereby approved;

2. upon the Amalgamation becoming effective, all the shares (whether issued or unissued) of the Corporation shall be cancelled without any repayment of capital in respect thereof;

3. except as may be prescribed by the Regulation under the Act, the articles of amalgamation of the corporation (the "Amalgamated Corporation") continuing from the Amalgamation shall be the same as the articles of Agnico;

4. upon the Amalgamation becoming effective, the by-law of Agnico as in effect immediately prior to the Amalgamation shall be the by-law of the Amalgamated Corporation;

5. no securities shall be issued and no assets shall be distributed by the Amalgamated Corporation in connection with the Amalgamation; and

6. any director or officer of the Corporation is hereby authorized and directed, for and in the name of and on behalf of the Corporation, to execute (whether under the corporate seal of the Corporation or otherwise) and deliver all such agreements, instruments, certificates and other documents and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the Amalgamation, including the execution and delivery to the Director appointed under the Act of articles of amalgamation in the prescribed form in respect of the Amalgamation, the execution of any such document or the doing of any such other act or thing being conclusive evidence of such determination.

The undersigned, being the sole director of MEADOWBANK MINING CORPORATION, passes the foregoing resolution pursuant to the *Business Corporations Act* (Ontario).

DATED July 27, 2007.

Robert Gregory Laing

Document 1.3 – Confirmation of Agents and Representatives of Agnico Eagle

Agnico Eagle – Engineering:	Agnico Eagle Mines Limited Centre of support and Development (CSD) 10 200 route de Preossac, Rouyn-Noranda, QC, Canada J0Y 1C0 Ph. 819-759-3700
Manager:	Francois Petrucci, Meliadine Study Manager 10 200 route de Preossac, Rouyn-Noranda, QC, Canada J0Y 1C0 Ph: 819.759.3700 (ext. 5298) M : 819.279.9568 Email: francois.petrucci@agnico-eagle.com Alexandre Proulx, Meliadine Program Manager 10 200, route de Preissac Rouyn-Noranda, QC, Canada J0Y 1C0 Ph: 819.759.3555 (ext. 3931) M: 819.860.6389 Email: alexandre.proulx@agnico-eagle.com
Manager of Regulatory Affairs:	Stephane Robert 10 200, route de Preissac Rouyn-Noranda, QC, Canada J0Y 1C0 Ph : 819.759.3555 (ext. 5188) M : 819.763.0229 Email : stephane.robert@agnicoeagle.com
Environmental Manager:	Blandine Arsenault, Environment Superintendent 10 200, route de Preissac Rouyn-Noranda, QC, Canada J0Y 1C0 Ph : 819.759.3700 (ext. 5827) M: 819.354.6663 Email: blandine.arsenault@agnicoeagle.com John Witteman M : 819.277.5444 Email: john.witteman@agnicoeagle.com
Primary Consultants:	Golder Associates Ltd. 16820 107 Avenue, Edmonton, AB, Canada, T5P 4C3 Tetra Tech - EBA Engineering Practice 14940 - 123 Avenue, Edmonton, AB T5V 1B4 | www.eba.ca

Document 1.4 – Sustainable Development Policy

Agnico Eagle Mines Limited - Sustainable Development Policy

Our Commitment

At the core of our Policy we are committed to creating value for our shareholders by operating in a safe, socially and environmentally responsible manner while contributing to the prosperity of our employees, their families and the communities in which we operate. This has translated into the four fundamental values of our Sustainable Development Policy: operate safely, protect the environment, and treat our employees and communities with respect.

This means we commit to:

- Promote leadership, personal commitment and accountability to these principles from all employees and contractors, both on and off the job;
- Assess potential impacts and risks associated with our activities throughout the life cycle of our projects or operations, including impacts of purchasing or acquisition decisions on the basis of our sustainability values;
- Ensure sufficient resources are allocated to implement and manage these commitments;
- Design and operate our facilities to ensure that effective controls and technologies are in place to minimize and mitigate the identified risks;
- Evaluate, control, eliminate or minimize risks through the implementation of a Responsible Mining Management System;
- Verify regularly our performance;
- Strive for continuous improvement by setting targets, measuring results against those targets and recognizing and rewarding performance;
- Comply in full with our internal policies and Code of Business Conduct and with the laws and regulations in each country in which we operate;
- Implement emergency response plans to eliminate or minimize and mitigate the impacts of unforeseen events;
- Engage in open and transparent communication and reporting of our policies, programs, payments to government and performance to our stakeholders;
- Provide appropriate planning and supervision to ensure that our policies, procedures and Responsible Mining Management System are implemented by all.

James D. Nasso
Chairman
March 2013

Sean Boyd
President & CEO
March 2013

AGNICO EAGLE



Respect for our Employees

We aim to maintain a safe and healthy workplace that is based on mutual respect, fairness and integrity.

To achieve this we:

- Ensure that no discriminatory conduct is tolerated in the workplace;
- Provide a fair and nondiscriminatory employee grievance system;
- Value diversity and treat all employees and contractors fairly, providing equal opportunity at all levels of the organization without bias;
- Employ and promote employees on the basis of merit;
- Provide fair and competitive compensation;
- Enforce a drug and alcohol free workplace;
- Maintain the confidentiality of collected personal and private information about employees;
- Recognize the right of employees to freedom of association;
- Provide appropriate training and development opportunities;
- Consult, communicate and provide appropriate support to employees during their association with AEM.





Operate Safely

We believe that all loss due to accidents/incidents is preventable. We aim to operate a safe and healthy work place that is injury and fatality free. We believe that if we all work together, we can achieve zero accidents in the work place and enhance the well-being of employees, contractors and communities.

To achieve a safe and healthy workplace we:

- Use sound engineering principles in the design and operation of our facilities;
- Provide appropriate training for all employees, at all levels of exploration, development, construction, and operations;
- Minimize the generation of hazardous conditions and ensure controls are in place;
- Maintain occupational health and industrial hygiene programs;
- Provide appropriate tools to carry out the work safely and efficiently;
- Maintain a high degree of emergency preparedness to effectively respond to emergencies.



Protect the Environment

We aim to minimize the effects of our operations on the environment and maintain its viability and its diversity.

To achieve this we :

- Minimize the generation of waste and ensure its proper disposal;
- Manage tailings, waste rock and overburden to ensure environmental protection;
- Implement measures to conserve natural resources such as energy and water;
- Implement measures to reduce emissions to air, water and land, and to minimize our footprint;
- Implement measures to reduce our greenhouse gas emissions and address climate change;
- Integrate biodiversity conservation and land use planning considerations through all stages of business and production activities;
- Rehabilitate sites to ensure physical and chemical stability and in consultation with the communities in a timely manner.





Respect for our Communities

We aim to contribute to the social and economic development of sustainable communities associated with our operations

To achieve this we:

- Provide a confidential complaint reporting mechanism to report unethical, illegal or irresponsible behaviour;
- Ensure that no child labour and any form of forced and compulsory labour are permitted in the workplace;
- Uphold fundamental human rights and respect cultures, customs and values of all affected by our activities;
- Foster an open, transparent and respectful dialogue with all communities of interest and ensure that activities on private lands and indigenous lands are performed with the free prior informed consent of the land owners;
- Support local communities and their sustainability through measures such as development programs, locally sourcing of goods and services and employing local people;
- Provide assurance that our operations will not support, benefit or contribute to unlawful armed conflict, serious human rights abuses, or breaches of international humanitarian law.

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Document 1.5 - Agnico Eagle's Audited Financial Statements for 2014 Fiscal Year



AGNICO EAGLE

Annual Audited Consolidated Financial Statements

(Prepared in accordance with United States GAAP)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Board of Directors (the "Board") and Shareholders of Agnico Eagle Mines Limited:

We have audited Agnico Eagle Mines Limited's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992 (the "COSO criteria"). Agnico Eagle Mines Limited's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management certification report on internal control over financial reporting. Our responsibility is to express an opinion on Agnico Eagle Mines Limited's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that revenues and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Agnico Eagle Mines Limited maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013 based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Agnico Eagle Mines Limited as of December 31, 2013 and December 31, 2012, and the consolidated statements of income (loss) and comprehensive income (loss), shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2013, and our report dated March 21, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Chartered Accountants
Licensed Public Accountants

Toronto, Canada
March 21, 2014

MANAGEMENT CERTIFICATION

Management of Agnico Eagle Mines Limited (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the Company's Chief Executive Officer and Chief Financial Officer and effected by the Company's Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, the Company's management used the criteria outlined by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework* issued in 1992. Based on its assessment, management concluded that, as of December 31, 2013, the Company's internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report that appears herein.

Toronto, Canada
March 21, 2014

By /s/ Sean Boyd

Sean Boyd
Vice Chairman, President and Chief Executive Officer

By /s/ David Smith

David Smith
Senior Vice-President, Finance and Chief Financial Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board and Shareholders of Agnico Eagle Mines Limited:

We have audited the accompanying consolidated balance sheets of Agnico Eagle Mines Limited as of December 31, 2013 and December 31, 2012, and the related consolidated statements of income (loss) and comprehensive income (loss), shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Agnico Eagle Mines Limited at December 31, 2013 and December 31, 2012 and the consolidated results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2013 in conformity with United States generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Agnico Eagle Mines Limited's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992 and our report dated March 21, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Chartered Accountants
Licensed Public Accountants

Toronto, Canada
March 21, 2014

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These consolidated financial statements of Agnico Eagle Mines Limited ("Agnico Eagle" or the "Company") are expressed in thousands of United States dollars ("US dollars", "US$" or "$"), except where noted, and have been prepared in accordance with United States generally accepted accounting principles ("US GAAP"). Certain information in the consolidated financial statements is presented in Canadian dollars ("C$"). As a precise determination of assets and liabilities depends on future events, the preparation of consolidated financial statements for a period necessarily involves the use of estimates and approximations. Actual results may differ from such estimates and approximations. The consolidated financial statements have, in management's opinion, been prepared within reasonable limits of materiality and within the framework of the significant accounting policies referred to below.

Basis of consolidation

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries and entities in which it has a controlling financial interest, after the elimination of intercompany accounts and transactions. The Company has a controlling financial interest if it owns a majority of the outstanding voting common stock or has significant control over an entity through contractual arrangements or economic interests of which the Company is the primary beneficiary.

Cash and cash equivalents

Cash and cash equivalents include cash on hand and short-term investments in money market instruments with remaining maturities of three months or less at the date of purchase. Short-term investments are designated as held to maturity for accounting purposes and are carried at amortized cost, which approximates market value given the short-term nature of these investments. Agnico Eagle places its cash and cash equivalents and short-term investments in high quality securities issued by government agencies, financial institutions and major corporations and limits the amount of credit exposure by diversifying its holdings.

Inventories

Inventories consist of ore stockpiles, concentrates, dore bars and supplies. Inventory amounts are reduced based on average cost or in the case of supplies, the lower of average cost and replacement cost. The current portion of stockpiles, ore on leach pads and inventories are determined based on the expected amounts to be processed within the next twelve months. Stockpiles, ore on leach pads and inventories not expected to be processed or used within the next twelve months are classified as long term.

Ore Stockpiles

Stockpiles consist of coarse ore that has been mined and hoisted from underground or delivered from an open pit that is available for further processing and in-stope ore inventory in the form of drilled and blasted stopes ready to be mucked and hoisted to the surface. The stockpiles are measured by estimating the tonnage, contained ounces (based on assays) and recovery percentages (based on actual recovery rates for processing similar ore). Specific tonnages are verified and compared to original estimates once the stockpile is milled. Ore stockpiles are valued at the lower of net realizable value and mining costs incurred up to the point of stockpiling the ore. The net realizable value of stockpiled ore is calculated by subtracting the estimated future processing and selling costs from the estimated revenue from the ore, which is based on the estimated tonnage and grade of stockpiled ore.

Mining costs include all costs associated with mining operations and are allocated to each tonne of stockpiled ore. Costs fully absorbed into inventory values include direct and indirect materials and consumables, direct labour, utilities and amortization of mining assets incurred up to the point of stockpiling the ore. Royalty expenses and production taxes are included in production costs, but are not capitalized into inventory. Stockpiles are generally processed within twelve months of extraction, with certain exceptions. Due to the structure of certain ore bodies, a significant amount of drilling and blasting may be undertaken in the early years of a mine's life, which can result in a long-term stockpile. The decision to process stockpiled ore is based on a net smelter return analysis. The Company processes its stockpiled ore if its estimated revenue, on a per tonne basis and net of estimated smelting and refining costs, is greater than the related mining and milling costs. The Company has never elected to not process stockpiled ore and does not anticipate departing from this practice in the future. Stockpiled ore on the surface is exposed to the elements, but the Company does not expect its condition to deteriorate significantly as a result.

Pre-production stripping costs are capitalized until an "other than *de minimis*" level of mineral is produced, after which time such costs are either capitalized to inventory or expensed. The Company considers various relevant criteria to assess when an "other than *de minimis*" level of mineral is produced. The criteria considered include: (1) the number of ounces mined compared to total ounces in mineral reserves; (2) the quantity of ore mined compared to the total quantity of ore expected to be mined over the life of the mine; (3) the current stripping ratio compared to the expected stripping ratio over the life of the mine; and (4) the ore grade compared to the expected ore grade over the life of the mine.

Major development expenditures, including stripping costs to prepare unique and identifiable areas outside the current mining area for future production that are considered to be pre-production mine development, are capitalized.

Concentrates and dore bars

Concentrate and dore bar inventories consist of concentrates and dore bars for which legal title has not yet passed to third-party smelters. Concentrate and dore bar inventories are measured based on assays of the processed concentrates and are valued based on the lower of net realizable value and the fully absorbed mining and milling costs associated with extracting and processing the ore.

Supplies

Supplies, consisting of mine stores inventory, are valued at the lower of average cost and replacement cost.

Mining properties, plant and equipment and mine development costs

Significant payments related to the acquisition of land and mineral rights are capitalized as mining properties at cost. If a mineable ore body is discovered, such costs are amortized to income when production begins, using the units-of-production method, based on estimated proven and probable mineral reserves. If no mineable ore body is discovered, such costs are expensed in the period in which it is determined that the property has no future economic value.

Expenditures for new facilities and improvements that can extend the useful lives of existing facilities are capitalized as plant and equipment at cost. Interest costs incurred for the construction of significant projects are capitalized.

Mine development costs incurred after the commencement of production are capitalized or deferred to the extent that these costs benefit the mining of the entire ore body. Costs incurred to access single ore blocks are expensed as incurred; otherwise, such vertical and horizontal development is classified as mine development costs.

Agnico Eagle records amortization on mine development costs used in commercial production on a units-of-production basis based on the estimated tonnage of proven and probable mineral reserves of the mine. The units-of-production method defines the denominator as the total tonnage of proven and probable mineral reserves. Plant and equipment is amortized on a straight-line basis over its specifically identified useful life.

Repairs and maintenance expenditures are charged to income as production costs. Assets under construction are not depreciated until the end of the construction period. Upon achieving commercial production, the capitalized construction costs are transferred to the appropriate category of plant and equipment.

Mineral exploration costs are charged to income in the year in which they are incurred. When it is determined that a mining property can be economically developed as a result of established proven and probable mineral reserves, the costs of drilling and development to further delineate the ore body on such property are capitalized. The establishment of proven and probable mineral reserves is based on results of final feasibility studies that indicate whether a property is economically feasible. Upon commencement of the commercial production of a development project, these costs are transferred to the appropriate asset category and are amortized to income using the methodology described above. Mine development costs, net of salvage values, relating to a property that is abandoned or considered uneconomic for the foreseeable future are written off.

The carrying values of mining properties, plant and equipment and mine development costs are periodically reviewed for possible impairment, when impairment factors exist, based on the future undiscounted net cash flows of the operating mine or development property. If it is determined that the estimated net recoverable amount is less than the carrying value, then a write down to the estimated fair value amount is made with a charge to income. Estimated future cash flows of operating mines and development properties include estimates of recoverable ounces of gold based on proven and probable mineral reserves. To the extent that economic value exists beyond the proven and probable mineral reserves of an operating mine or development property, this value is included as part of the estimated future cash flows. Estimated

future cash flows also involve estimates regarding metal prices (considering current and historical prices, price trends and related factors), production levels, capital and reclamation costs, and related income and mining taxes, all based on detailed life-of-mine plans. Cash flows are subject to risks and uncertainties and changes in the estimates of the cash flows may affect the recoverability of long-lived assets.

Goodwill

Business combinations are accounted for using the purchase method whereby assets acquired and liabilities assumed are recorded at their fair values as of the date of acquisition and any excess of the purchase price over such fair values is recorded as goodwill. Goodwill is not amortized.

The Company performs goodwill impairment tests on an annual basis as well as when events and circumstances indicate that the carrying amounts may no longer be recoverable. In performing the impairment tests, the Company estimates the fair values of its reporting units that include goodwill and compares those fair values to each reporting unit's carrying amount. If a reporting unit's carrying amount exceeds its fair value, the Company compares the implied fair value of the reporting unit's goodwill to the carrying amount and any excess of the carrying amount of goodwill over the implied fair value is charged to income.

Financial instruments

Agnico Eagle uses derivative financial instruments (primarily option and forward contracts) to manage exposure to fluctuations in byproduct metal prices, interest rates and foreign currency exchange rates and may use such means to manage exposure to certain input costs. Agnico Eagle does not hold financial instruments or derivative financial instruments for trading purposes.

The Company recognizes all derivative financial instruments in the consolidated financial statements at fair value regardless of the purpose or intent for holding the instrument. Changes in the fair value of derivative financial instruments are either recognized periodically in the consolidated statements of income (loss) and comprehensive income (loss) or in shareholders' equity as a component of accumulated other comprehensive loss, depending on the nature of the derivative financial instrument and whether it qualifies for hedge accounting. Financial instruments designated as hedges are tested for effectiveness on a quarterly basis. Gains and losses on those contracts that are proven to be effective are reported as a component of the related transaction.

Revenue recognition

Revenue is recognized when the following conditions are met:

(a) persuasive evidence of an arrangement to purchase exists;

(b) the price is determinable;

(c) the product has been delivered; and

(d) collection of the sales price is reasonably assured.

Revenue from gold and silver in the form of dore bars is recorded when the refined gold or silver is sold and delivered to the customer. Generally, all the gold and silver in the form of dore bars recovered in the Company's milling process is sold in the period in which it is produced.

Under the terms of the Company's concentrate sales contracts with third-party smelters, final prices for the metals contained in the concentrate are determined based on the prevailing spot market metal prices on a specified future date, which is established as of the date that the concentrate is delivered to the smelter. The Company records revenues under these contracts based on forward prices at the time of delivery, which is when transfer of legal title to concentrate passes to the third-party smelters. The terms of the contracts result in differences between the recorded estimated price at delivery and the final settlement price. These differences are adjusted through revenue at each subsequent financial statement date.

Revenues from mining operations consist of gold revenues, net of smelting, refining, transportation and other marketing charges. Revenues from byproduct metals sales are shown net of smelter charges as part of revenues from mining operations.

Foreign currency translation

The functional currency for each of the Company's operations is the US dollar. Monetary assets and liabilities of Agnico Eagle's operations denominated in a currency other than the US dollar are translated into US dollars using the exchange rate in effect at period end. Non-monetary assets and liabilities are translated at historical exchange rates, while revenues and expenses are translated at the average exchange rate during the period, with the exception of amortization, which is translated at historical exchange rates. Exchange gains and losses are included in income, except for gains and losses on foreign currency contracts used to hedge specific future commitments in foreign currencies. Gains and losses on these contracts are accounted for as a component of the related hedge transactions.

Reclamation costs

On an annual basis, the Company assesses cost estimates and other assumptions used in the valuation of asset retirement obligations ("AROs") at each of its mineral properties to reflect events, changes in circumstances and new information available. Changes in these cost estimates and assumptions have a corresponding impact on the fair value of the AROs. For closed mines, any change in the fair value of AROs results in a corresponding charge or credit to income, whereas at operating mines the charge is recorded as an adjustment to the carrying amount of the corresponding asset.

AROs arise from the acquisition, development, construction and operation of mining properties and plant and equipment due to government controls and regulations that protect the environment on the closure and reclamation of mining properties. The major parts of the carrying amount of AROs relate to tailings and heap leach pad closure and rehabilitation, demolition of buildings and mine facilities, ongoing water treatment and ongoing care and maintenance of closed mines. The fair values of AROs are measured by discounting the expected cash flows using a discount factor that reflects the credit-adjusted risk-free rate of interest. The Company prepares estimates of the timing and amount of expected cash flows when an ARO is incurred. Expected cash flows are updated to reflect changes in facts and circumstances. The principal factors that can cause expected cash flows to change are the construction of new processing facilities, changes in the quantities of material in proven and probable mineral reserves and a corresponding change in the life-of-mine plan, changing ore characteristics that impact required environmental protection measures and related costs, changes in water quality that impact the extent of water treatment required and changes in laws and regulations governing the protection of the environment. When expected cash flows increase, the revised cash flows are discounted using a current discount factor, whereas when expected cash flows decrease, the reduced cash flows are discounted using the historical discount factor used in the original estimation of the expected cash flows. In either case, any change in the fair value of the ARO is recorded. Agnico Eagle records the fair value of an ARO when it is incurred. AROs are adjusted to reflect the passage of time (accretion), which is calculated by applying the discount factor implicit in the initial fair value measurement to the beginning of period carrying amount of the AROs. For producing mines, accretion expense is recorded in the cost of goods sold each period. Upon settlement of an ARO, Agnico Eagle records a gain or loss if the actual cost differs from the carrying amount of the ARO. Settlement gains/losses are recorded in income.

Environmental remediation liabilities ("ERLs") are differentiated from AROs in that they do not arise from environmental contamination in the normal operation of a long-lived asset or from a legal obligation to treat environmental contamination resulting from the acquisition, construction or development of a long-lived asset. The Company is required to recognize a liability for obligations associated with ERLs arising from past acts. ERL fair value is measured by discounting the expected related cash flows using a discount factor that reflects the credit-adjusted risk-free rate of interest. The Company prepares estimates of the timing and amount of expected cash flows when an ERL is incurred. On an annual basis, the Company assesses cost estimates and other assumptions used in the valuation of ERLs to reflect events, changes in circumstances and new information available. Changes in these cost estimates and assumptions have a corresponding impact on the fair value of the ERL. Any change in the fair value of ERLs results in a corresponding charge or credit to income. Upon settlement of an ERL, Agnico Eagle records a gain or loss if the actual cost differs from the carrying amount of the ERL. Settlement gains/losses are recorded in income.

Other environmental remediation costs that are not AROs or ERLs as defined by the Financial Accounting Standards Board's Accounting Standards Codification ("ASC") 410-20 – *Asset Retirement Obligations* and 410-30 – *Environmental Obligations*, respectively, are expensed as incurred.

Income and mining taxes

Agnico Eagle follows the liability method of tax allocation in accounting for income taxes. Under this method of tax allocation, deferred income and mining tax assets and liabilities are measured using the enacted tax rates and laws expected to be in effect when the temporary differences are expected to reverse.

The Company's operations involve dealing with uncertainties and judgments in the application of complex tax regulations in multiple jurisdictions. The final taxes paid are dependent upon many factors, including negotiations with taxation authorities in various jurisdictions and resolution of disputes arising from federal, provincial, state and international tax audits. The Company recognizes the effect of uncertain tax positions and records tax liabilities for anticipated tax audit issues in Canada and other tax jurisdictions where it is more likely than not based on technical merits that the position would not be sustained. The Company recognizes the amount of any tax benefits that have a greater than fifty percent likelihood of being ultimately realized upon settlement.

Changes in judgment related to the expected ultimate resolution of uncertain tax positions are recognized in the year of such change. Accrued interest and penalties related to unrecognized tax benefits are recorded in income tax expense. The Company adjusts these reserves in light of changing facts and circumstances. However, due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from the Company's estimate of the tax liabilities. If the Company's estimate of tax liabilities proves to be less than the ultimate assessment, an additional charge to expense would result. If the estimate of tax liabilities proves to be greater than the ultimate assessment, a tax benefit would result.

Stock-based compensation

The Company's Employee Stock Option Plan provides for the granting of options to directors, officers, employees and service providers to purchase common shares. Options have exercise prices equal to the market price on the day prior to the date of grant. The fair value of these options is recognized in the consolidated statements of income (loss) and comprehensive income (loss) or in the consolidated balance sheets if capitalized as part of property, plant and mine development over the applicable vesting period as a compensation cost. Any consideration paid by employees on exercise of options or purchase of common shares is credited to share capital.

Fair value is determined using the Black-Scholes option valuation model, which requires the Company to estimate the expected volatility of the Company's share price and the expected life of the stock options. Limitations with existing option valuation models and the inherent difficulties associated with estimating these variables create difficulties in determining a reliable single measure of the fair value of stock option grants. The dilutive impact of stock option grants is factored into the Company's reported diluted net income (loss) per share.

Net income (loss) per share

Basic net income (loss) per share is calculated on net income (loss) for the year using the weighted average number of common shares outstanding during the year. The weighted average number of common shares used to determine diluted net income (loss) per share includes an adjustment, using the treasury stock method, for stock options outstanding and warrants outstanding. Under the treasury stock method:

- the exercise of options or warrants is assumed to occur at the beginning of the period (or date of issuance, if later);
- the proceeds from the exercise of options or warrants plus the future period compensation expense on options granted are assumed to be used to purchase common shares at the average market price during the period; and
- the incremental number of common shares is (the difference between the number of shares assumed issued and the number of shares assumed purchased) is included in the denominator of the diluted net income (loss) per share calculation.

Pension costs and obligations and post-retirement benefits

In Canada, Agnico Eagle maintains a defined contribution plan covering all of its employees (the "Basic Plan"). The Basic Plan is funded by Company contributions based on a percentage of income for services rendered by employees. In addition, the Company has a supplemental plan for designated executives at the level of Vice-President or above (the "Supplemental Plan"). Under the Supplemental Plan, an additional 10% of the designated executives' income is contributed by the Company. The Company does not offer any other post-retirement benefits to its employees.

Agnico Eagle also provides a non-registered supplementary executive retirement defined benefit plan for certain senior officers (the "Executives Plan"). The Executives Plan benefits are generally based on the employee's years of service and level of compensation. Pension expense related to the Executives Plan is the net of the cost of benefits provided, the interest cost of projected benefits, return on plan assets and amortization of experience gains and losses. Pension fund assets are measured at current fair values. Actuarially determined plan surpluses or deficits, experience gains or losses and the cost of pension plan improvements are amortized on a straight-line basis over the expected average remaining service life of the employee group.

Commercial production

The Company assesses each mine construction project to determine when a mine moves into the production stage. The criteria used to assess the start date are determined based on the nature of each mine construction project, such as the complexity of a plant and its location. The Company considers various relevant criteria to assess when the mine is substantially complete and ready for its intended use and moved into the production stage. The criteria considered include: (1) the completion of a reasonable period of testing of mine plant and equipment; (2) the ability to produce minerals in saleable form (within specifications); and (3) the ability to sustain ongoing production of minerals. When a mine construction project moves into the production stage, the capitalization of certain mine construction costs ceases and costs are either capitalized to inventories or expensed, except for sustaining capital costs related to mining properties, plant and equipment or mine development.

OTHER ACCOUNTING DEVELOPMENTS

Recently adopted accounting pronouncements

Disclosures about Offsetting Assets and Liabilities

In November 2011, ASC guidance was issued relating to disclosure on offsetting financial instrument and derivative financial instrument assets and liabilities. Under the updated guidance, entities are required to disclose gross information and net information about both instruments and transactions eligible for offset in the consolidated balance sheets and instruments and transactions subject to an agreement similar to a master netting arrangement. The Company adopted this updated guidance, effective for the fiscal year beginning January 1, 2013. See notes 4 and 15 for disclosure on offsetting financial instrument and derivative financial instrument assets and liabilities.

Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Loss

In February 2013, ASC guidance was issued relating to the reporting of amounts reclassified out of accumulated other comprehensive loss. Under the updated guidance, entities are required to provide information about the amounts reclassified out of accumulated other comprehensive loss by component and by consolidated statement of income (loss) line item, as required under US GAAP. The Company adopted this updated guidance, effective for the fiscal year beginning January 1, 2013. See the Company's consolidated statements of income (loss) and comprehensive income (loss) for reporting of amounts reclassified out of accumulated other comprehensive loss.

Recently Issued Accounting Pronouncements and Developments

Under Securities and Exchange Commission ("SEC") Staff Accounting Bulletin 74, the Company is required to disclose information related to new accounting standards that have not yet been adopted. Agnico Eagle has evaluated newly issued accounting standards that have not yet been adopted and does not expect them to significantly impact the Company's consolidated financial statements.

International Financial Reporting Standards

As permitted by both the SEC in the United States and the Canadian Securities Administrators ("CSA") in Canada, Agnico Eagle currently prepares and files its consolidated financial statements in accordance with US GAAP. Generally accepted accounting principles for Canadian publicly accountable enterprises became International Financial Reporting Standards ("IFRS") in 2011 and the SEC now accepts financial statements prepared in accordance with IFRS without reconciliation to US GAAP from foreign private issuers. Accordingly, Agnico Eagle has decided to convert its basis of accounting to IFRS to enhance the comparability of its financial statements to the Company's peers in the mining industry.

The Company has commenced the process of converting its basis of accounting from US GAAP to IFRS with a transition date of January 1, 2013. Agnico Eagle anticipates reporting under IFRS for interim and annual periods beginning in the third quarter of 2014, with comparative information restated under IFRS.

The adoption of IFRS may require the Company to make changes in accounting policies that may have an impact on its reported financial position and results of operations. Where accounting policy alternatives are available, Agnico Eagle's primary objective will be the selection of IFRS accounting policies that provide meaningful and transparent information to shareholders.

The Company has developed a detailed IFRS conversion plan which includes the following three phases and the key activities to be performed in each phase:

- **Assessment phase:** During this now completed phase, the Company established a steering committee and IFRS working group, developed a detailed project plan, designed and implemented internal controls over the IFRS conversion plan and evaluated the high level differences between US GAAP and IFRS that may have an impact on the Company.
- **Impact analysis and design phase:** This phase involves the detailed analysis and quantification of the differences between Agnico Eagle's accounting policies under US GAAP and IFRS, the selection of IFRS accounting policies, the assessment of the impact on financial information systems and the development of a strategy for capturing IFRS comparative financial information, the incorporation of IFRS accounting policy and process changes into the Company's internal controls, the assessment of contractual arrangements and budgeting processes for IFRS conversion impacts and the provision of technical training to key finance and other personnel. This phase is in process and is expected to be completed during the second quarter of 2014.
- **Implementation phase:** This phase involves the implementation of changes to the Company's accounting policies and business processes as identified through the impact analysis and design phase and the revision of the Company's Accounting Policies and Procedures Manual to reflect these changes. The implementation phase will culminate in the preparation of IFRS consolidated financial statements including first-time adoption reconciliations from US GAAP in the third quarter of 2014.

Significant identified differences between US GAAP and IFRS and available IFRS accounting policy choices that may have an impact on the Company's consolidated financial statements are outlined below. These differences should not be regarded as a complete list of changes that will result from the transition to IFRS, rather they encompass management's high level evaluation of significant differences between US GAAP and IFRS and available IFRS accounting policy choices as they currently exist. At this stage in the IFRS conversion plan, the Company has not quantified the anticipated impact of these differences on our consolidated financial statements nor has the Company selected the IFRS accounting policies it will adopt.

First-time adoption of IFRS

IFRS 1 First-time Adoption of International Financial Reporting Standards ("IFRS 1") provides guidance for an entity's initial adoption of IFRS. IFRS 1 generally requires that IFRS effective at the end of an entity's first IFRS reporting period be applied retrospectively, with specific mandatory exceptions and certain optional exemptions. In accordance with its IFRS conversion plan, Agnico Eagle's first IFRS reporting period will be the third quarter of 2014.

Impairment

Under US GAAP, a two-step approach is used for long-lived asset impairment testing whereby long-lived assets are first tested for recoverability based on their expected undiscounted cash flows. If a long-lived asset's expected undiscounted cash flow exceeds the recorded carrying amount, no impairment charge is required. If the expected undiscounted cash flow is lower than the recorded carrying amount, the long-lived assets are written down to their estimated fair value. US GAAP does not permit the reversal of impairment losses.

Under IFRS, IAS 36 Impairment of Assets ("IAS 36") prescribes a one-step approach for asset impairment testing and measurement whereby an asset's recoverable amount is compared directly against its recorded carrying amount. Under IAS 36, an asset's recoverable amount is determined as the higher of the estimated fair value less costs to sell or value in use (which is measured using discounted cash flows). If an asset's recoverable amount is less than the recorded carrying amount, an impairment charge is required. IAS 36 also requires the reversal of previously recorded impairment losses where circumstances have changed such that the impairments have been reduced.

The difference in the approach to asset impairment testing and measurement may result in more frequent impairment charges under IFRS, where asset carrying values previously supported under US GAAP on an undiscounted cash flow basis cannot be supported on a discounted cash flow basis. However, the impact of any additional asset impairments recorded under IFRS may be partially offset by the requirement to reverse previously recorded impairment losses where circumstances have changed.

Production stripping costs

Under US GAAP, the cost of removing overburden and waste materials to expose ore and access mineral deposits for extraction during the production phase of a surface mine ("production stripping costs") are accounted for as production costs and are included in the cost of the inventory produced during the period in which the stripping costs are incurred.

Under IFRS, IFRIC Interpretation 20 Stripping Costs in the Production Phase of a Surface Mine ("IFRIC 20") requires that production stripping costs relating to improved access to ore be capitalized as part of a non-current stripping activity asset if probable future economic benefits will be realized, the costs can be reliably measured and the component of an ore body for which access has been improved can be identified. To the extent that ore is extracted and inventory is produced in the current period, IFRIC 20 instead prescribes that production stripping costs be accounted for as part of the cost of the inventory produced.

The difference in approach to accounting for production stripping costs will result in a decrease in direct production costs and an increase in amortization expense relating to the recognition of non-current stripping activity assets under IFRS.

Exploration and evaluation

Under US GAAP, the Company accounts for exploration and evaluation ("E&E") expenditures as current period operating expenses until it is determined that a mining property can be economically developed as a result of established proven and probable reserves. Once proven and probable reserves are established based on the results of a final feasibility study, the costs of drilling and development to further delineate the ore body are capitalized.

IFRS 6 Exploration for and Evaluation of Mineral Resources ("IFRS 6") provides guidance related to expenditures incurred during the E&E phase. IFRS 6 requires entities to select and consistently apply an accounting policy that specifies which expenditures are capitalized as E&E assets. However, IFRS 6 provides no specific guidance as to when E&E expenditures are to be capitalized.

Agnico Eagle is in the process of defining the E&E phase within the context of IFRS 6 and developing an accounting policy that outlines the point at which specific types of E&E expenditures will be capitalized.

Revenue Recognition

Revenue recognition criteria under IAS 18 Revenue ("IAS 18") include the probability that economic benefits associated with the transaction will flow to the entity and that the revenue can be measured reliably. The Company does not expect that the point at which it recognizes revenue will change under IFRS.

Property, Plant and Equipment

Under IFRS, IAS 16 Property, Plant and Equipment requires the separate identification and measurement of significant individual components of property, plant and equipment, with individual components depreciated based on their individual useful lives. The Company identified significant individual components of property, plant and equipment under US GAAP in 2013 and will assess whether an adjustment relating to the retrospective application and depreciation of these components is required to its opening January 1, 2013 balance sheet under IFRS.

COMPARATIVE FIGURES

Certain figures in the comparative consolidated financial statements have been reclassified from statements previously presented to conform to the presentation of the 2013 consolidated financial statements.

AGNICO EAGLE MINES LIMITED
CONSOLIDATED BALANCE SHEETS

(thousands of United States dollars, except share amounts, US GAAP basis)

	As at December 31,	
	2013	2012
ASSETS		
Current		
Cash and cash equivalents	$ 139,101	$ 298,068
Short-term investments	2,217	8,490
Restricted cash (note 14)	28,723	25,450
Trade receivables (notes 1 and 4)	67,300	67,750
Inventories:		
Ore stockpiles	39,941	52,342
Concentrates and dore bars	58,543	69,695
Supplies	253,160	222,630
Income taxes recoverable (note 9)	18,682	19,313
Available-for-sale securities (notes 2(b) and 4)	74,581	44,719
Fair value of derivative financial instruments (notes 4 and 15)	5,590	2,112
Other current assets (note 2(a))	116,993	92,977
Total current assets	804,831	903,546
Other assets (note 2(c))	66,394	55,838
Goodwill (notes 10 and 19)	39,017	229,279
Property, plant and mine development (note 3)	4,049,117	4,067,456
	$4,959,359	$5,256,119
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current		
Accounts payable and accrued liabilities (note 11)	$ 173,374	$ 185,329
Reclamation provision (note 6(a))	3,452	16,816
Dividends payable	–	37,905
Interest payable (note 5)	13,803	13,602
Income taxes payable (note 9)	7,523	10,061
Capital lease obligations (note 13(a))	12,035	12,955
Fair value of derivative financial instruments (notes 4 and 15)	467	277
Total current liabilities	210,654	276,945
Long-term debt (note 5)	1,000,000	830,000
Reclamation provision and other liabilities (note 6)	178,236	127,735
Deferred income and mining tax liabilities (note 9)	593,320	611,227
SHAREHOLDERS' EQUITY		
Common shares (notes 7(a), 7(b) and 7(c)):		
Outstanding – 174,181,163 common shares issued, less 227,188 shares held in trust	3,294,007	3,241,922
Stock options (note 8(a))	174,470	148,032
Warrants (note 7(b))	–	24,858
Contributed surplus	37,254	15,665
Retained earnings (deficit)	(513,441)	7,046
Accumulated other comprehensive loss (note 7(d))	(15,141)	(27,311)
Total shareholders' equity	2,977,149	3,410,212
	$4,959,359	$5,256,119
Contingencies and commitments (notes 6, 9, 12, 13(b) and 21)		

On behalf of the Board:

Sean Boyd CPA, CA, Director

Mel Leiderman CPA, CA, Director

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)
(thousands of United States dollars, except per share amounts, US GAAP basis)

	Year ended December 31,		
	2013	2012	2011
REVENUES			
Revenues from mining operations (note 1)	$1,638,406	$1,917,714	$1,821,799
COSTS, EXPENSES AND OTHER INCOME			
Production[(i)]	924,927	897,712	876,078
Exploration and corporate development	44,236	109,500	75,721
Amortization of property, plant and mine development (note 3)	296,078	271,861	261,781
General and administrative (note 16)	115,800	119,085	107,926
Impairment loss on available-for-sale securities (notes 2(b) and 4)	34,272	12,732	8,569
Provincial capital tax	(1,504)	4,001	9,223
Interest expense (note 5)	57,999	57,887	55,039
Interest and sundry expense	8,824	2,389	5,188
(Gain) loss on derivative financial instruments (note 15)	(1,509)	819	(3,683)
Gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Impairment loss (note 18)	537,227	–	907,681
Loss on Goldex mine (note 17)	–	–	302,893
Foreign currency translation (gain) loss	(7,188)	16,320	(1,082)
Income (loss) before income and mining taxes	(370,682)	435,141	(778,628)
Income and mining taxes expense (recovery) (note 9)	35,844	124,225	(209,673)
Net income (loss) for the year	$ (406,526)	$ 310,916	$ (568,955)
Attributed to non-controlling interest	$ –	$ –	$ (60)
Attributed to common shareholders	$ (406,526)	$ 310,916	$ (568,895)
Net income (loss) per share – basic (note 7(e))	$ (2.35)	$ 1.82	$ (3.36)
Net income (loss) per share – diluted (note 7(e))	$ (2.35)	$ 1.81	$ (3.36)
Cash dividends declared per common share (note 7(a))	$ 0.66	$ 1.02	$ –
COMPREHENSIVE INCOME (LOSS)			
Net income (loss) for the year	$ (406,526)	$ 310,916	$ (568,955)
Other comprehensive income (loss):			
Available-for-sale securities and other investments:			
Unrealized loss	(22,553)	(27,029)	(35,444)
Reclassification to impairment loss on available-for-sale securities (notes 2(b) and 4)	34,272	12,732	8,569
Reclassification to realized gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Derivative financial instruments (note 15):			
Unrealized (loss) gain	(284)	6,882	(5,863)
Reclassification to production costs	(117)	(2,738)	1,459
Pension benefits (note 6(b)):			
Unrealized gain (loss)	375	531	(1,595)
Reclassification to general and administrative expense	637	617	540
Income tax expense (recovery) impact of reclassification items (note 9)	(137)	558	(556)
Income tax expense (recovery) impact of other comprehensive income (loss) items (note 9)	51	(2,025)	2,301
Other comprehensive income (loss) for the year	12,170	(20,205)	(35,496)
Comprehensive income (loss) for the year	$ (394,356)	$ 290,711	$ (604,451)
Attributed to non-controlling interest	$ –	$ –	$ (60)
Attributed to common shareholders	$ (394,356)	$ 290,711	$ (604,391)

Note:

(i) Exclusive of amortization, which is shown separately.

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(thousands of United States dollars, except share and per share amounts, US GAAP basis)

	Common Shares Outstanding							
	Shares	Amount	Stock Options	Warrants	Contributed Surplus	Retained Earnings (Deficit)	Accumulated Other Comprehensive Income (Loss)	Non-Controlling Interest
Balance December 31, 2010	168,720,355	$3,078,217	$ 78,554	$ 24,858	$ 15,166	$ 440,265	$ 28,390	$ –
Shares issued under employee stock option plan (note 8(a))	308,688	18,094	(4,396)	–	–	–	–	–
Stock options (note 8(a))	–	–	43,536	–	–	–	–	–
Shares issued under the incentive share purchase plan (note 8(b))	360,833	19,229	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	176,110	10,130	–	–	–	–	–	–
Shares issued for purchase of mining property (notes 7(c) and 10)	1,250,477	56,146	–	–	–	–	–	–
Non-controlling interest addition upon acquisition (note 10)	–	–	–	–	–	–	–	12,251
Net loss for the year attributed to common shareholders	–	–	–	–	–	(568,895)	–	–
Net loss for the year attributed to non-controlling interest	–	–	–	–	–	–	–	(60)
Dividends declared (nil per share) (note 7(a))	–	–	–	–	–	(391)	–	–
Other comprehensive loss for the year	–	–	–	–	–	–	(35,496)	–
Restricted share unit plan (note 8(c))	(2,727)	(435)	–	–	–	–	–	–
Balance December 31, 2011	170,813,736	$3,181,381	$117,694	$ 24,858	$ 15,166	$(129,021)	$ (7,106)	$ 12,191
Shares issued under employee stock option plan (note 8(a))	416,275	$ 22,968	$ (4,759)	$ –	$ –	$ –	$ –	$ –
Stock options (note 8(a))	–	–	35,097	–	–	–	–	–
Shares issued under the incentive share purchase plan (note 8(b))	507,235	21,671	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	444,555	18,907	–	–	–	–	–	–
Shares issued for purchase of mining property (notes 7(c) and 10)	68,941	2,447	–	–	499	–	–	–
Non-controlling interest eliminated upon acquisition (note 10)	–	–	–	–	–	–	–	(12,191)
Net income for the year	–	–	–	–	–	310,916	–	–
Dividends declared ($1.02 per share) (note 7(a))	–	–	–	–	–	(174,849)	–	–
Other comprehensive loss for the year	–	–	–	–	–	–	(20,205)	–
Restricted share unit plan (note 8(c))	(147,872)	(5,452)	–	–	–	–	–	–
Balance December 31, 2012	172,102,870	$3,241,922	$148,032	$ 24,858	$ 15,665	$ 7,046	$(27,311)	$ –
Shares issued under employee stock option plan (note 8(a))	213,500	$ 9,765	$ (3,292)	$ –	$ –	$ –	$ –	$ –
Stock options (note 8(a))	–	–	29,730	–	–	–	–	–
Shares issued under incentive share purchase plan (note 8(b))	812,946	23,379	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	858,107	25,837	–	–	–	–	–	–
Warrant expiry (note 7(b))	–	–	–	(24,858)	21,589	–	–	–
Net loss for the year	–	–	–	–	–	(406,526)	–	–
Dividends declared ($0.66 per share) (note 7(a))	–	–	–	–	–	(114,118)	–	–
Other comprehensive income for the year	–	–	–	–	–	–	12,170	–
Restricted share unit plan (note 8(c))	(33,448)	(6,896)	–	–	–	157	–	–
Balance December 31, 2013	173,953,975	$3,294,007	$174,470	$ –	$ 37,254	$(513,441)	$(15,141)	$ –

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(thousands of United States dollars, US GAAP basis)

	Year Ended December 31,		
	2013	2012	2011
Operating activities			
Net income (loss) for the year	$(406,526)	$ 310,916	$(568,955)
Add (deduct) items not affecting cash:			
Amortization of property, plant and mine development (note 3)	296,078	271,861	261,781
Deferred income and mining taxes (note 9)	(16,550)	72,145	(275,773)
Gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Stock-based compensation (note 8)	44,904	47,632	51,873
Impairment loss on available-for-sale securities (note 2(b))	34,272	12,732	8,569
Impairment loss (note 18)	537,227	–	907,681
Loss on Goldex mine (note 17)	–	–	302,893
Foreign currency translation (gain) loss	(7,188)	16,320	(1,082)
Other	23,817	16,048	22,992
Adjustment for settlement of environmental remediation	(9,081)	(21,449)	(7,616)
Changes in non-cash working capital balances:			
Trade receivables	450	8,149	37,050
Income taxes	717	13,304	(29,867)
Inventories	(23,232)	(44,145)	(43,066)
Other current assets	(23,447)	18,909	(25,838)
Accounts payable and accrued liabilities	(12,695)	(20,928)	31,837
Interest payable	(376)	4,246	(387)
Cash provided by operating activities	438,296	696,007	667,185
Investing activities			
Additions to property, plant and mine development (note 3)	(577,789)	(445,550)	(482,831)
Acquisition of Urastar Gold Corporation, net (note 10)	(10,051)	–	–
Acquisition of Grayd Resource Corporation (note 10)	–	(9,322)	(163,047)
Decrease (increase) in short-term investments	6,273	(1,920)	5
Net proceeds from sale of available-for-sale securities (note 2(b))	171	73,358	9,435
Purchase of available-for-sale securities and warrants (note 2(b))	(59,804)	(2,713)	(91,115)
(Increase) decrease in restricted cash (note 14)	(3,273)	9,991	(32,931)
Cash used in investing activities	(644,473)	(376,156)	(760,484)
Financing activities			
Dividends paid	(126,266)	(118,121)	(98,354)
Repayment of capital lease obligations (note 13(a))	(10,605)	(12,063)	(13,092)
Sale-leaseback financing (note 13(a))	10,928	–	–
Proceeds from long-term debt (note 5)	290,000	315,000	475,000
Repayment of long-term debt (note 5)	(120,000)	(605,000)	(205,000)
Notes issuance (note 5)	–	200,000	–
Long-term debt financing costs (note 5)	–	(3,133)	(2,545)
Repurchase of common shares for restricted share unit plan (note 8(c))	(19,000)	(12,031)	(3,723)
Common shares issued	23,672	32,742	26,536
Cash provided by (used in) financing activities	48,729	(202,606)	178,822
Effect of exchange rate changes on cash and cash equivalents	(1,519)	1,376	(1,636)
Net (decrease) increase in cash and cash equivalents during the year	(158,967)	118,621	83,887
Cash and cash equivalents, beginning of year	298,068	179,447	95,560
Cash and cash equivalents, end of year	$ 139,101	$ 298,068	$ 179,447
Supplemental cash flow information			
Interest paid	$ 58,152	$ 52,213	$ 52,833
Income and mining taxes paid	$ 56,478	$ 56,962	$ 110,889

See accompanying notes

1. TRADE RECEIVABLES AND REVENUES FROM MINING OPERATIONS

Agnico Eagle is a gold mining company with mining operations in Canada, Mexico and Finland. The Company earns a significant proportion of its revenues from the production and sale of gold in both dore bar and concentrate form. The remainder of revenue and cash flow is generated by the production and sale of byproduct metals. The revenue from byproduct metals is primarily generated by production at the LaRonde mine in Canada (silver, zinc and copper) and the Pinos Altos mine in Mexico (silver).

Revenues are generated from operations in Canada, Mexico and Finland. The cash flow and profitability of the Company's operations are significantly affected by the market price of gold and, to a lesser extent, silver, zinc, copper and lead. The prices of these metals can fluctuate significantly and are affected by numerous factors beyond the Company's control.

As gold can be sold through numerous gold market traders worldwide, the Company is not economically dependent on a limited number of customers for the sale of its product.

Trade receivables are recognized once the transfer of ownership for the metals sold has occurred and reflect the amounts owing to the Company in respect of its sales of dore bars or concentrates to third parties prior to the satisfaction in full of the payment obligations of the third parties.

	Year Ended December 31,		
	2013	**2012**	**2011**
Revenues from mining operations:			
Gold	$1,500,354	$1,712,665	$1,563,760
Silver	100,895	140,221	171,725
Zinc	16,685	45,797	70,522
Copper	20,653	19,019	14,451
Lead[(i)]	(181)	12	1,341
	$1,638,406	$1,917,714	$1,821,799

Note:

(i) In 2013, lead revenues of $0.9 million were nettled against lead concentrate direct fees of $1.1 million. Revenues from other metals contained in lead concentrate are included in their respective categories in the above table.

In 2013, precious metals (gold and silver) accounted for 98% of Agnico Eagle's revenues from mining operations (2012 – 97%; 2011 – 95%). The remaining revenues from mining operations consisted of net byproduct metals revenues. In 2013, these net byproduct metals revenues as a percentage of total revenues from mining operations were 1% from zinc (2012 – 2%; 2011 – 4%) and 1% from copper (2012 – 1%; 2011 – 1%).

2. OTHER ASSETS

(a) Other current assets

	As at December 31,	
	2013	**2012**
Federal, provincial and other sales taxes receivable	$ 71,053	$ 36,400
Prepaid expenses	35,396	36,119
Insurance receivable	1,369	6,553
Receivables from employees	780	1,800
Retirement compensation arrangement plan refundable tax receivable	–	4,044
Other	8,395	8,061
	$116,993	$ 92,977

(b) Available-for-sale securities

The Company's investments in available-for-sale securities consist primarily of investments in common shares of entities in the mining industry. The cost basis of available-for-sale securities is determined using the average cost method and they are carried at fair value. Detail on the Company's available-for-sale securities holdings is set out below:

	As at December 31,	
	2013	**2012**
Available-for-sale securities in an unrealized gain position:		
Cost (net of impairments)	$30,583	$ 4,352
Unrealized gains in accumulated other comprehensive loss	11,530	1,902
Estimated fair value	42,113	6,254
Available-for-sale securities in an unrealized loss position:		
Cost (net of impairments)	39,933	48,047
Unrealized losses in accumulated other comprehensive loss	(7,465)	(9,582)
Estimated fair value	32,468	38,465
Total estimated fair value of available-for-sale securities	**$74,581**	**$44,719**

In 2013, the Company received proceeds of $0.2 million (2012 – $73.4 million; 2011 – $9.4 million) and recognized a gain before income taxes of $0.1 million (2012 – $9.7 million; 2011 – $4.9 million) on the sale of certain available-for-sale securities.

2. OTHER ASSETS (Continued)

During the course of the year, certain available-for-sale securities fell into an unrealized loss position. In each case, the Company evaluated the near-term prospects of the issuers in relation to the severity and duration of the impairment. During the year ended December 31, 2013, the Company recorded a $34.3 million (2012 – $12.7 million; 2011 – $8.6 million) impairment loss on certain available-for-sale securities that were determined to be other-than-temporarily impaired.

At December 31, 2013, the fair value of available-for-sale securities in an unrealized loss position was $32.5 million (December 31, 2012 – $38.5 million) with total unrealized losses in accumulated other comprehensive loss of $7.5 million (December 31, 2012 – $9.6 million). Based on an evaluation of the severity and duration of the impairment of these available-for-sale securities (less than three months) and on the Company's intent to hold the investments for a period of time sufficient for a recovery of fair value, the Company does not consider these available-for-sale securities to be other-than-temporarily impaired as at December 31, 2013.

(c) Other assets

	As at December 31,	
	2013	**2012**
Deferred financing costs, less accumulated amortization of $11,420 (December 31, 2012 – $8,888)	$12,644	$15,836
Long-term ore in stockpile[(i)]	46,191	32,711
Other	7,559	7,291
	$66,394	$55,838

Note:
(i) Due to the ore body structures at the Pinos Altos, Kittila and Meadowbank mines, the Creston Mascota deposit at Pinos Altos and the La India project, a significant amount of drilling and blasting was undertaken early in their mine lives, resulting in long-term ore in stockpile. At December 31, 2013, long-term ore in stockpile was valued at $2.5 million (December 31, 2012 – $4.1 million) at the Pinos Altos mine, $26.7 million (December 31, 2012 – $7.7 million) at the Kittila mine, $7.8 million (December 31, 2012 – $10.2 million) at the Meadowbank mine, $8.2 million (December 31, 2012 – $10.7 million) at the Creston Mascota deposit at Pinos Altos and $1.0 million (December 31, 2012 – nil) at the La India project.

3. PROPERTY, PLANT AND MINE DEVELOPMENT

	As at December 31, 2013			As at December 31, 2012		
	Cost	**Accumulated Amortization**	**Net Book Value**	**Cost**	**Accumulated Amortization**	**Net Book Value**
Mining properties	$1,361,867	$ 89,700	$1,272,167	$1,356,227	$ 86,839	$1,269,388
Plant and equipment	2,286,887	662,394	1,624,493	2,538,328	617,826	1,920,502
Mine development costs	1,038,564	239,898	798,666	918,482	237,967	680,515
Construction in progress:						
Meliadine project	192,413	–	192,413	133,840	–	133,840
La India project	161,378	–	161,378	32,553	–	32,553
Goldex mine M and E Zones[(i)]	–	–	–	30,658	–	30,658
	$5,041,109	$ 991,992	$4,049,117	$5,010,088	$942,632	$4,067,456

Note:
(i) Upon achieving commercial production at the Goldex mine M and E Zones in October 2013, related costs accumulated in construction in progress were reclassified to mine development costs within property, plant and mine development.

3. PROPERTY, PLANT AND MINE DEVELOPMENT (Continued)

Geographic Information:

	As at December 31,	
	2013	**2012**
Northern Business:		
Canada	$2,312,166	$2,543,171
Finland	763,711	704,031
Southern Business:		
Mexico	962,971	809,556
United States	10,269	10,698
Total	$4,049,117	$4,067,456

In 2013, Agnico Eagle capitalized $2.5 million (2012 – $1.3 million) and expensed $1.4 million (2012 – $1.2 million) of computer software expenditures. The unamortized capitalized cost for computer software at December 31, 2013 was $6.8 million (December 31, 2012 – $5.7 million).

The unamortized capitalized cost for leasehold improvements at December 31, 2013 was $3.3 million (December 31, 2012 – $3.4 million), which is being amortized on a straight-line basis over the life term of the lease plus one renewal period.

The amortization of assets recorded under capital leases is included in the amortization of property, plant and mine development line item of the consolidated statements of income (loss) and comprehensive income (loss).

4. FAIR VALUE MEASUREMENT

ASC 820 – *Fair Value Measurement and Disclosure* defines fair value, establishes a framework for measuring fair value under US GAAP, and requires expanded disclosures about fair value measurements including the following three fair value hierarchy levels:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability; and

Level 3 – Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

Fair value is the value at which a financial instrument could be closed out or sold in a transaction with a willing and knowledgeable counterparty over a period of time consistent with the Company's investment strategy. Fair value is based on quoted market prices, where available. If market quotes are not available, fair value is based on internally developed models that use market-based or independent information as inputs. These models could produce a fair value that may not be reflective of future fair value.

4. FAIR VALUE MEASUREMENT (Continued)

The following table sets out the Company's financial assets and liabilities measured at fair value as at December 31, 2013 using the fair value hierarchy:

	Level 1	Level 2	Level 3	Total
Financial assets:				
Trade receivables[(i)]	$ –	$67,300	$ –	$ 67,300
Available-for-sale securities[(ii)]	74,581	–	–	74,581
Fair value of derivative financial instruments[(iii)]	–	5,590	–	5,590
	$74,581	$72,890	$ –	$147,471
Financial liabilities:				
Fair value of derivative financial instruments[(iii)]	$ –	$ 467	$ –	$ 467

The following table sets out the Company's financial assets and liabilities measured at fair value as at December 31, 2012 using the fair value hierarchy:

	Level 1	Level 2	Level 3	Total
Financial assets:				
Trade receivables[(i)]	$ –	$67,750	$ –	$ 67,750
Available-for-sale securities[(ii)]	44,719	–	–	44,719
Fair value of derivative financial instruments[(iii)]	–	2,112	–	2,112
	$44,719	$69,862	$ –	$114,581
Financial liabilities:				
Fair value of derivative financial instruments[(iii)]	$ –	$ 277	$ –	$ 277

Notes:

(i) Trade receivables from provisional invoices for concentrate sales are valued using quoted forward rates derived from observable market data based on the month of expected settlement (classified within Level 2 of the fair value hierarchy).

(ii) Available-for-sale securities are recorded at fair value using quoted market prices (classified within Level 1 of the fair value hierarchy).

(iii) Derivative financial instruments are recorded at fair value using external broker-dealer quotations (classified within Level 2 of the fair value hierarchy).

In the event that a decline in the fair value of an investment in available-for-sale securities occurs and the decline in value is considered to be other-than-temporary, an impairment charge is recorded in the consolidated statements of income (loss) and comprehensive income (loss) and a new cost basis for the investment is established. The Company assesses whether a decline in value is considered to be other-than-temporary by considering available evidence, including changes in general market conditions, specific industry and investee data, the length of time and the extent to which the fair value has been less than cost, the financial condition of the investee and the near-term prospects of the individual investment. New evidence may become available in future periods which would affect this assessment and thus could result in

4. FAIR VALUE MEASUREMENT (Continued)

material impairment charges with respect to those investments in available-for-sale securities for which the cost basis exceeds its fair value.

As at December 31, 2013, the Company recorded impairment losses related to property, plant and mine development and goodwill (see note 18 for details). The estimated fair values of property, plant and mine development and goodwill used in determining the impairment losses followed the discounted cash flow approach. The total impairment loss recorded during 2013 was $436.3 million, net of tax (2012 – nil; 2011 – $644.9 million). The discounted cash flow approach uses significant unobservable inputs and is therefore considered a Level 3 fair value measurement under the fair value hierarchy.

5. LONG-TERM DEBT

Credit Facility

On June 22, 2010, the Company amended and restated one of its two unsecured revolving bank credit facilities (the "Credit Facility") and terminated its other unsecured revolving bank credit facility, increasing the amount available from an aggregate of $900.0 million to $1,200.0 million.

On July 20, 2012, the Company further amended the Credit Facility, extending the maturity date from June 22, 2016 to June 22, 2017 and amending pricing terms.

At December 31, 2013, the Credit Facility was drawn down by $200.0 million (December 31, 2012 – $30.0 million). Amounts drawn down, together with outstanding letters of credit under the Credit Facility, resulted in Credit Facility availability of $998.9 million at December 31, 2013.

2012 Notes

On July 24, 2012, the Company closed a $200.0 million private placement of guaranteed senior unsecured notes (the "2012 Notes") which, on issuance, had a weighted average maturity of 11.0 years and a weighted average yield of 4.95%.

The following table sets out details of the individual series of the 2012 Notes:

	Principal	Interest Rate	Maturity Date
Series A	$100,000	4.87%	7/23/2022
Series B	100,000	5.02%	7/23/2024
	$200,000		

2010 Notes

On April 7, 2010, the Company closed a $600.0 million private placement of guaranteed senior unsecured notes (the "2010 Notes") which, on issuance, had a weighted average maturity of 9.84 years and a weighted average yield of 6.59%.

5. LONG-TERM DEBT (Continued)

The following table sets out details of the individual series of the 2010 Notes:

	Principal	Interest Rate	Maturity Date
Series A	$115,000	6.13%	4/7/2017
Series B	360,000	6.67%	4/7/2020
Series C	125,000	6.77%	4/7/2022
	$600,000		

Covenants

Payment and performance of Agnico Eagle's obligations under the Credit Facility, 2012 Notes and 2010 Notes is guaranteed by each of its significant subsidiaries and certain of its other subsidiaries (the "Guarantors").

The Credit Facility contains covenants that limit, among other things, the ability of the Company to incur additional indebtedness, make distributions in certain circumstances and sell material assets.

The 2012 Notes and 2010 Notes contain covenants that restrict, among other things, the ability of the Company to amalgamate or otherwise transfer its assets, sell material assets and carry on a business other than one related to mining and the ability of the Guarantors to incur indebtedness.

The Credit Facility, 2012 Notes and 2010 Notes also require the Company to maintain a total net debt to EBITDA ratio below a specified maximum value as well as a minimum tangible net worth.

The Company was in compliance with all covenants contained in the Credit Facility, 2012 Notes and 2010 Notes as at December 31, 2013.

Interest on long-term debt

For the year ended December 31, 2013, total interest expense was $58.0 million (2012 – $57.9 million; 2011 – $55.0 million) and total cash interest payments were $58.2 million (2012 – $52.2 million; 2011 – $52.8 million). In 2013, cash interest on the Credit Facility was $1.8 million (2012 – $3.6 million; 2011 – $1.7 million), cash standby fees on the Credit Facility were $4.8 million (2012 – $4.2 million; 2011 – $8.6 million) and cash interest on the 2010 Notes and 2012 Notes was $49.4 million (2012 – $39.5 million; 2011 – $39.5 million). In 2013, interest expenditures of $3.5 million (2012 – $1.5 million; 2011 – $1.0 million) were capitalized to construction in progress.

The Company's weighted average interest rate on all of its long-term debt as at December 31, 2013 was 5.37% (December 31, 2012 – 6.02%; December 31, 2011 – 5.02%).

6. RECLAMATION PROVISION AND OTHER LIABILITIES

Reclamation provision and other liabilities consist of the following:

	As at December 31,	
	2013	2012
Reclamation provision (note 6(a))	$150,849	$101,753
Long-term portion of capital lease obligations (note 13(a))	11,843	12,108
Pension benefits (note 6(b))	15,278	13,734
Other	266	140
Total	$178,236	$127,735

(a) Reclamation provision

Agnico Eagle's reclamation provision includes both asset retirement obligations and environmental remediation liabilities. Reclamation provision estimates are based on current legislation, third party estimates, management's estimates and feasibility study calculations.

The following table reconciles the beginning and ending carrying amounts of the Company's asset retirement obligations:

	2013	2012
Asset retirement obligations – long-term, beginning of year	$ 89,720	$86,386
Asset retirement obligations – current, beginning of year	4,630	–
Current year additions and changes in estimate, net	44,898	1,495
Current year accretion	4,624	5,068
Liabilities settled	(853)	(254)
Foreign exchange revaluation	(3,678)	1,655
Reclassification from long-term to current, end of year	(1,029)	(4,630)
Asset retirement obligations – long-term, end of year	$138,312	$89,720

Due to the suspension of mining operations on the Goldex Extension Zone ("GEZ") at the Goldex mine on October 19, 2011 (see note 17 for details), Agnico Eagle recognized an environmental remediation liability. The

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

following table reconciles the beginning and ending carrying amounts of the Goldex mine's environmental remediation liability:

	2013	2012
Environmental remediation liability – long-term, beginning of year	$12,033	$ 19,057
Environmental remediation liability – current, beginning of year	12,186	26,069
Current year additions and changes in estimate, net	1,005	(36)
Liabilities settled	(9,045)	(21,450)
Foreign exchange revaluation	(1,219)	579
Reclassification from long-term to current, end of year	(2,423)	(12,186)
Environmental remediation liability – long-term, end of year	$12,537	$ 12,033

(b) Pension benefits

Agnico Eagle provides the Executives Plan for certain senior officers. The funded status of the Executives Plan is based on actuarial valuations performed as of July 1, 2013, projected to December 31, 2013 and covering the period through June 30, 2014.

The components of Agnico Eagle's net pension benefits expense relating to the Executives Plan are as follows:

	Year Ended December 31,		
	2013	2012	2011
Service cost – benefits earned during the year	$ 457	$ 650	$ 996
Interest cost on projected benefit obligation	431	489	663
Amortization of net transition asset	164	169	171
Prior service cost	25	26	26
Loss due to settlement	–	2,921	–
Recognized net actuarial loss	379	340	245
Net pension benefits expense	$1,456	$4,595	$2,101

Assets for the Executives Plan consist of deposits on hand with regulatory authorities that are refundable when benefit payments are made or on the ultimate wind-up of the plan. The accumulated benefit obligation for the Executives Plan at December 31, 2013 was $9.6 million (December 31, 2012 – $9.7 million).

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

The funded status of the Executives Plan for 2013 and 2012 is as follows:

	2013	2012
Reconciliation of the market value of plan assets:		
Fair value of plan assets, beginning of year	$ 2,373	$ 2,952
Agnico Eagle's contribution	374	839
Benefit payments	(244)	(520)
Settlements	–	(961)
Effect of exchange rate changes	(157)	63
Fair value of plan assets, end of year	2,346	2,373
Reconciliation of projected benefit obligation:		
Projected benefit obligation, beginning of year	10,818	14,370
Service cost	456	650
Interest cost	431	489
Net actuarial loss	573	675
Benefit payments	(244)	(520)
Settlements	–	(5,148)
Effect of exchange rate changes	(736)	302
Projected benefit obligation, end of year	11,298	10,818
Deficiency of plan assets compared with projected benefit obligation	$ (8,952)	$ (8,445)

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

The Executives Plan is comprised of the following net amounts recognized in the consolidated balance sheets:

	As at December 31,	
	2013	2012
Accrued employee benefit liability	$5,733	$5,008
Accumulated other comprehensive loss:		
Transition obligation	159	341
Prior service cost	24	52
Net actuarial loss	3,036	3,044
Net liability	$8,952	$8,445
Assumptions:		
Weighted average discount rate – net periodic pension cost	4.00%	4.45%
Weighted average discount rate – projected benefit obligation	4.90%	4.00%
Weighted average rate of compensation increase	3.00%	3.00%
Estimated average remaining service life for the plan (in years)[(i)]	5.0	6.0

Note:
(i) Estimated average remaining service life for the Executives Plan was developed for individual senior officers.

Executives Plan components expected to be recognized in accumulated other comprehensive loss in 2014:

Transition obligation	$159
Prior service cost	24
Net actuarial loss	476
	$659

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

Estimated benefit payments from the Executives Plan over the next ten years are set out below:

Year ended December 31,:	Estimated Executives Plan Benefit Payments
2014	$ 109
2015	$ 107
2016	$ 105
2017	$ 103
2018	$ 102
2019 – 2023	$5,295

In addition to the Executives Plan, the Company maintains the Basic Plan and the Supplemental Plan. Under the Basic Plan, Agnico Eagle contributes 5% of certain employees' base employment compensation to a defined contribution plan. In 2013, $12.5 million (2012 – $11.9 million; 2011 – $10.7 million) was contributed to the Basic Plan. Effective January 1, 2008, the Company adopted the Supplemental Plan for designated executives at the level of Vice-President or above. The Supplemental Plan is funded by the Company through notional contributions equal to 10% of the designated executive's earnings for the year (including salary and short-term bonus). In 2013, the Company made $1.2 million (2012 – $0.8 million; 2011 – $0.9 million) in notional contributions to the Supplemental Plan. The Supplemental Plan is accounted for as a cash balance plan.

7. SHAREHOLDERS' EQUITY

(a) Common shares

The Company's authorized share capital includes an unlimited number of common shares. As at December 31, 2013, Agnico Eagle's issued common shares totaled 174,181,163 (December 31, 2012 – 172,296,610), less 227,188 common shares held by a trust in connection with the Company's restricted share unit ("RSU") plan (December 31, 2012 – 193,740 common shares held in trust). The trust is treated as a variable interest entity and, as a result, its holdings of shares are offset against the Company's issued shares in its consolidated financial statements (see note 8(c) for details).

In 2013, the Company declared dividends on its common shares of $0.66 per share (2012 – $1.02 per share; 2011 – nil per share).

(b) Private placements and warrants

On December 3, 2008, the Company closed a private placement of 9.2 million units, with each unit consisting of one common share and one-half of one common share purchase warrant. Each whole warrant entitled the holder to purchase one common share of the Company at a price of $47.25 per share at any time during the five-year term of the warrant. As consideration for the lead purchaser's commitment, the Company issued to the lead purchaser an additional 4.0 million warrants. The net proceeds of the private placement were approximately $281.0 million, after deducting share issue costs of $8.8 million. The warrants expired unexercised on December 3, 2013.

7. SHAREHOLDERS' EQUITY (Continued)

(c) Issuance of common shares on take-over bid

On November 18, 2011, the Company issued 1,250,477 common shares with a market value of $56.1 million in connection with the acquisition of 94.77% of the outstanding shares of Grayd Resource Corporation ("Grayd") under a take-over bid. On January 23, 2012, the Company issued an additional 68,941 common shares with a market value of $2.4 million in connection with the compulsory acquisition of the remaining outstanding shares of Grayd it did not already own (see note 10 for details).

(d) Accumulated other comprehensive loss

The following table sets out the changes in accumulated other comprehensive loss by component for the year ended December 31, 2013:

	Cumulative Translation Adjustment	Available-for-sale Securities and Other Investments	Derivative Financial Instruments	Pension Benefits	Total
Accumulated other comprehensive (loss) income, December 31, 2012	$ (16,206)	$ (7,680)	$ 72	$ (3,497)	$(27,311)
Unrealized other comprehensive (loss) gain	–	(22,553)	(284)	375	(22,462)
Income tax expense (recovery) impact	–	–	150	(99)	51
Reclassifications from accumulated other comprehensive (loss) income to the Consolidated Statements of Income (Loss)	–	34,198	(117)	637	34,718
Income tax expense (recovery) impact	–	–	31	(168)	(137)
Other comprehensive income (loss) for the year	–	11,645	(220)	745	12,170
Accumulated other comprehensive (loss) income, December 31, 2013	$ (16,206)	$ 3,965	$ (148)	$ (2,752)	$(15,141)

7. SHAREHOLDERS' EQUITY (Continued)

The following table sets out the changes in accumulated other comprehensive loss by component for the year ended December 31, 2012:

	Cumulative Translation Adjustment	Available-for-sale Securities and Other Investments	Derivative Financial Instruments	Pension Benefits	Total
Accumulated other comprehensive (loss) income, December 31, 2011	$ (16,206)	$ 16,350	$ (2,913)	$ (4,337)	$ (7,106)
Unrealized other comprehensive (loss) gain	–	(27,029)	6,882	531	(19,616)
Income tax recovery impact	–	–	(1,885)	(140)	(2,025)
Reclassifications from accumulated other comprehensive (loss) income to the Consolidated Statements of Income (Loss)	–	2,999	(2,738)	617	878
Income tax expense (recovery) impact	–	–	721	(163)	558
Other comprehensive income (loss) for the year	–	(24,030)	2,985	840	(20,205)
Accumulated other comprehensive (loss) income, December 31, 2012	$ (16,206)	$ (7,680)	$ 72	$ (3,497)	$(27,311)

(e) Net income (loss) per share

The following table sets out the weighted average number of common shares used in the calculation of basic and diluted net income (loss) per share:

	Year Ended December 31,		
	2013	2012	2011
Weighted average number of common shares outstanding – basic	172,892,654	171,250,179	169,352,896
Dilutive impact of shares related to RSU plan	–	235,436	–
Weighted average number of common shares outstanding – diluted	172,892,654	171,485,615	169,352,896

Diluted net income (loss) per share has been calculated using the treasury stock method. In applying the treasury stock method, employee stock options and warrants with an exercise price greater than the average quoted market price of the common shares for the period outstanding are not included in the calculation of diluted net income (loss) per share as the impact is anti-dilutive. In 2011, the impact of any additional shares issued under the employee stock option plan, as a result of the conversion of warrants or related to the RSU plan would have been anti-dilutive as a result of the net loss recorded for the year. Consequently, diluted net loss per share was calculated in the same manner as basic net loss per share in 2011. In 2012, 7,742,151 employee stock options and all warrants were excluded from the calculation of diluted net income per share as their impact would have been anti-dilutive. In 2013, the impact of any additional shares issued under the employee stock option plan or related to the RSU plan would have been anti-dilutive as a result of the net loss recorded for the

7. SHAREHOLDERS' EQUITY (Continued)

year. Consequently, diluted net loss per share was calculated in the same manner as basic net loss per share in 2013.

8. STOCK-BASED COMPENSATION

(a) Employee Stock Option Plan ("ESOP")

The Company's ESOP provides for the granting of stock options to directors, officers, employees and service providers to purchase common shares. Under the ESOP, stock options are granted at the fair market value of the underlying shares on the day prior to the date of grant. The number of common shares that may be reserved for issuance to any one person pursuant to stock options (under the ESOP or otherwise), warrants, share purchase plans or other arrangements may not exceed 5% of the Company's common shares issued and outstanding at the date of grant.

On April 24, 2001, the Compensation Committee of the Board of Directors adopted a policy pursuant to which stock options granted after that date have a maximum term of five years. In 2011, the shareholders approved a resolution to increase the number of common shares reserved for issuance under the ESOP by 3,000,000 to 23,300,000. In 2012 and 2013 the shareholders approved a further 2,500,000 and 2,000,000 common shares for issuance under the ESOP, respectively.

Of the 2,803,000 stock options granted under the ESOP in 2013, 700,750 stock options vested immediately. The remaining stock options, all of which expire in 2018, vest in equal installments on each anniversary date of the grant over a three year period. Of the 3,257,000 stock options granted under the ESOP in 2012, 814,250 stock options vested immediately. The remaining stock options, all of which expire in 2017, vest in equal installments on each anniversary date of the grant over a three year period. Of the 2,630,785 stock options granted under the ESOP in 2011, 657,696 stock options vested immediately. The remaining stock options, all of which expire in 2016, vest in equal installments on each anniversary date of the grant over a three year period. Upon the exercise of stock options under the ESOP, the Company issues new common shares to settle the obligation.

The following summary sets out activity with respect to Agnico Eagle's outstanding stock options:

	2013		2012		2011	
	Number of Stock Options	Weighted Average Exercise Price	Number of Stock Options	Weighted Average Exercise Price	Number of Stock Options	Weighted Average Exercise Price
Outstanding, beginning of year	10,587,126	C$ 56.60	8,959,051	C$ 62.88	6,762,704	C$ 56.94
Granted	2,803,000	52.13	3,257,000	36.99	2,630,785	76.12
Exercised	(213,500)	37.06	(416,275)	43.51	(308,688)	43.62
Forfeited	(540,206)	58.15	(731,000)	59.72	(125,750)	67.47
Expired	(1,352,885)	54.67	(481,650)	47.49	–	–
Outstanding, end of year	11,283,535	C$ 56.02	10,587,126	C$ 56.60	8,959,051	C$ 62.88
Options exercisable at end of year	7,248,295		6,510,464		5,178,172	

8. STOCK-BASED COMPENSATION (Continued)

The following table sets out 2013 activity with respect to Agnico Eagle's non-vested stock options:

	2013	
	Number of Stock Options	Weighted Average Grant Date Fair Value
Non-vested, beginning of year	4,076,662	C$13.33
Granted	2,803,000	11.21
Vested	(2,661,216)	12.84
Forfeited (non-vested)	(183,206)	11.38
Non-vested, end of year	4,035,240	C$11.44

Cash received for stock options exercised in 2013 was $8.0 million (2012 – $18.2 million; 2011 – $13.6 million).

The total intrinsic value of stock options exercised in 2013 was C$3.1 million (2012 – C$3.6 million; 2011 – C$8.0 million).

The weighted average grant date fair value of stock options granted in 2013 was C$11.21 (2012 – C$8.29; 2011 – C$17.05). The total grant date fair value of stock options vested during 2013 was $34.2 million (2012 – $41.0 million; 2011 – $46.7 million).

The following table summarizes information about Agnico Eagle's stock options outstanding and exercisable at December 31, 2013:

	Stock Options Outstanding			Stock Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
C$33.39 – C$59.71	7,341,556	2.81 years	C$48.28	3,851,056	C$50.50
C$60.72 – C$83.08	3,941,979	1.14 years	70.43	3,397,239	69.46
C$33.39 – C$83.08	11,283,535	2.23 years	C$56.02	7,248,295	C$59.39

The weighted average remaining contractual term of stock options exercisable at December 31, 2013 was 1.6 years.

The Company has reserved for issuance 11,283,535 common shares in the event that these stock options are exercised.

The number of common shares available for the granting of stock options under the ESOP as at December 31, 2013, December 31, 2012 and December 31, 2011 was 4,807,876, 3,717,785, and 3,262,135, respectively.

8. STOCK-BASED COMPENSATION (Continued)

Subsequent to the year ended December 31, 2013, on January 2, 2014, 3,177,500 stock options were granted under the ESOP, of which 794,375 stock options vested immediately. The remaining stock options, all of which expire in 2019, vest in equal installments on each anniversary date of the grant over a three year period.

Agnico Eagle estimated the fair value of stock options under the Black-Scholes option pricing model using the following weighted average assumptions:

	2013	2012	2011
Risk-free interest rate	1.50%	1.26%	1.95%
Expected life of stock options (in years)	2.6	2.8	2.5
Expected volatility of Agnico Eagle's share price	35.0%	37.5%	34.70%
Expected dividend yield	1.82%	2.14%	0.89%

The Company uses historical volatility to estimate the expected volatility of Agnico Eagle's share price. The expected term of stock options granted is derived from historical data on employee exercise and post-vesting employment termination experience.

The aggregate intrinsic value of stock options outstanding and exercisable at December 31, 2013 was nil.

The total compensation expense for the ESOP recorded in the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) for 2013 was $26.4 million (2012 – $33.8 million; 2011 – $42.2 million). The total compensation cost related to non-vested stock options not yet recognized is $21.2 million as at December 31, 2013 and the weighted average period over which it is expected to be recognized is 1.7 years. Of the total compensation cost for the ESOP, $3.3 million was capitalized as part of the property, plant and mine development line item of the consolidated balance sheets in 2013 (2012 – $1.3 million; 2011 – $1.4 million).

(b) Incentive Share Purchase Plan

On June 26, 1997, the Company's shareholders approved an incentive share purchase plan (the "Purchase Plan") to encourage directors, officers and employees ("Participants") to purchase Agnico Eagle's common shares at market value. In 2009, the Purchase Plan was amended to remove non-executive directors as eligible Participants.

Under the Purchase Plan, Participants may contribute up to 10% of their basic annual salaries and the Company contributes an amount equal to 50% of each Participant's contribution. All common shares subscribed for under the Purchase Plan are issued by the Company. The total compensation cost recognized in 2013 related to the Purchase Plan was $7.8 million (2012 – $7.2 million; 2011 – $6.4 million).

In 2013, 812,946 common shares were subscribed for under the Purchase Plan (2012 – 507,235; 2011 – 360,833) for a value of $23.4 million (2012 – $21.7 million; 2011 – $19.2 million). In May 2008, the Company's shareholders approved an increase in the maximum number of common shares reserved for issuance under the Purchase Plan to 5,000,000 from 2,500,000. As at December 31, 2013, Agnico Eagle has reserved for issuance 829,907 common shares (2012 – 1,642,853; 2011 – 2,150,088) under the Purchase Plan.

8. STOCK-BASED COMPENSATION (Continued)

(c) Restricted Share Unit Plan

In 2009, the Company implemented the RSU plan for certain employees. Effective January 1, 2012, the RSU plan was amended to include directors and senior executives of the Company.

A deferred compensation balance is recorded for the total grant date value on the date of each RSU plan grant. The deferred compensation balance is recorded as a reduction of shareholders' equity and is amortized as compensation expense over the applicable vesting period.

In 2013, the Company funded the RSU plan by transferring $19.0 million (2012 – $12.0 million; 2011 – $3.7 million) to an employee benefit trust (the "Trust") that then purchased shares of the Company in the open market. The Trust is funded once per year during the first quarter of each year. For accounting purposes, the Trust is treated as a variable interest entity and consolidated in the accounts of the Company. The common shares purchased and held by the Trust are treated as not outstanding for the basic earnings per share ("EPS") calculations but are included in the basic EPS calculations once they have vested. All of the non-vested common shares held by the Trust are included in the diluted EPS calculations, unless the impact is anti-dilutive.

Compensation expense related to the RSU plan was $12.1 million in 2013 (2012 – $6.6 million; 2011 – $3.3 million). Compensation expense related to the RSU plan is included as part of the production, general and administrative and exploration and corporate development line items of the consolidated statements of income (loss) and comprehensive income (loss), consistent with the classification of other elements of compensation expense for those employees who held RSUs.

Subsequent to the year ended December 31, 2013, 293,041 RSUs were granted under the RSU plan which vest in 2017.

9. INCOME AND MINING TAXES

Income and mining taxes expense (recovery) is comprised of the following geographic components:

	Year Ended December 31,		
	2013	**2012**	**2011**
Current income and mining taxes:			
Canada	$ 7,934	$ 8,750	$ 62,382
Mexico	29,968	33,531	3,496
Finland	14,492	9,799	222
	52,394	52,080	66,100
Deferred income and mining taxes:			
Canada	(95,344)	26,041	(341,038)
Mexico	93,665	25,284	54,996
Finland	(14,871)	20,820	10,269
	(16,550)	72,145	(275,773)
Income and mining taxes	$ 35,844	$124,225	$(209,673)

9. INCOME AND MINING TAXES (Continued)

Cash income and mining taxes paid in 2013 were $56.5 million (2012 – $57.0 million; 2011 – $110.9 million).

The income and mining taxes expense (recovery) is different from the amount that would have been calculated by applying the Canadian statutory income tax rate as a result of the following:

	2013	2012	2011
Combined federal and composite provincial tax rates	26.3%	26.3%	27.8%
Increase (decrease) in tax rates resulting from:			
Provincial mining duties	1.4	3.6	5.9
Tax law changes	(13.6)	–	(2.7)
Impact of foreign tax rates	2.4	(1.5)	(0.2)
Permanent differences	(25.1)	1.0	(1.6)
Valuation allowances	(0.9)	1.2	(0.3)
Impact of changes in income tax rates	(0.2)	(2.1)	(2.0)
Actual rate as a percentage of pre-tax income	(9.7)%	28.5%	26.9%

The following table sets out the components of Agnico Eagle's deferred income and mining tax liabilities (assets):

	Liabilities (Assets) as at December 31,	
	2013	2012
Mining properties	$ 808,449	$ 761,508
Net operating and capital loss carryforwards	(129,019)	(102,005)
Mining duties	(68,728)	(36,158)
Reclamation provisions	(44,242)	(42,688)
Valuation allowance	26,860	30,570
Deferred income and mining tax liabilities	$ 593,320	$ 611,227

All of Agnico Eagle's deferred income and mining tax assets and liabilities are denominated in the local currency based on the jurisdiction in which the Company paid taxes, except for Canada, and were translated into US dollars using the exchange rate in effect at the applicable consolidated balance sheet dates. For Canadian income tax purposes, for December 31, 2008 and subsequent years, the Company elected to use the US dollar as its functional currency.

The Company operates in different jurisdictions and, accordingly, it is subject to income and other taxes under the various tax regimes in the countries in which it operates. The tax rules and regulations in many countries are highly complex and subject to interpretation. The Company may be subject in the future to a review of its historic income and other tax filings

9. INCOME AND MINING TAXES (Continued)

and in connection with such reviews, disputes can arise with the taxing authorities over the interpretation or application of certain tax rules and regulations to the Company's business conducted within the country involved.

A reconciliation of the beginning and ending amounts of the unrecognized tax benefits is set out below:

	2013	2012	2011
Unrecognized tax benefits, beginning of year	$10,867	$ 1,200	$1,630
Additions (reductions)	–	9,667	(430)
Unrecognized tax benefit, end of year	$10,867	$10,867	$1,200

The full amount of unrecognized tax benefits, if recognized, would reduce the Company's annual effective tax rate. The Company does not expect its unrecognized tax benefits to change significantly over the next year.

The Company is subject to taxes in Canada, Mexico and Finland, each with varying statutes of limitations. The 2007 through 2013 taxation years generally remain subject to examination.

10. ACQUISITIONS

Urastar Gold Corporation

On May 16, 2013, the Company completed the acquisition of all of the issued and outstanding common shares of Urastar Gold Corporation ("Urastar") pursuant to a court-approved plan of arrangement under the *Business Corporations Act* (British Columbia) for cash consideration of $10.1 million. The Urastar acquisition was accounted for as a business combination and goodwill of $9.8 million was recognized on the Company's consolidated balance sheets.

The transaction costs associated with the acquisition totaling $0.7 million were expensed through the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) during the year ended December 31, 2013.

10. ACQUISITIONS (Continued)

The following table sets out the allocation of the purchase price to assets acquired and liabilities assumed, based on management's estimates of fair value:

Total purchase price:	
Cash paid for acquisition	$10,127
Fair value of assets acquired and liabilities assumed:	
Mining properties	$ 1,994
Goodwill	9,802
Cash and cash equivalents	76
Trade receivables	731
Other current assets	12
Plant and equipment	2
Accounts payable and accrued liabilities	(791)
Other liabilities	(1,573)
Deferred tax liability	(126)
Net assets acquired	$10,127

The Company believes that goodwill for the Urastar acquisition arose principally because of the following factors: (1) the going concern value implicit in the Company's ability to sustain and/or grow its business by increasing mineral reserves and mineral resources through new discoveries; and (2) the requirement to record a deferred tax liability for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in a business combination at amounts that do not reflect fair value.

Pro forma results of operations for the Company assuming the acquisition of Urastar described above had occurred as of January 1, 2012 are detailed below. On a *pro forma* basis, there would have been no effect on the Company's consolidated revenues.

	Year Ended December 31, 2013	Year Ended December 31, 2012
	Unaudited	
Pro forma net income (loss) for the period	$(409,020)	$307,274
Pro forma net income (loss) per share – basic	$ (2.37)	$ 1.79

Grayd Resource Corporation

In September 2011, Agnico Eagle entered into an acquisition agreement with Grayd, a Canadian-based natural resource company listed on the TSX Venture Exchange, pursuant to which the Company agreed to make an offer to acquire all of the

10. ACQUISITIONS (Continued)

issued and outstanding common shares of Grayd. On October 13, 2011, the Company made the offer by way of a take-over bid circular, as amended and supplemented on October 21, 2011.

On November 18, 2011, Agnico Eagle acquired 94.77% of the outstanding shares of Grayd on a fully-diluted basis, under the take-over bid. The November 18, 2011 purchase price of $222.1 million was comprised of $166.0 million in cash and 1,250,477 Agnico Eagle common shares issued from treasury.

Transaction costs associated with the acquisition totalling $3.8 million were expensed through the interest and sundry expense (income) line item of the consolidated statements of income (loss) and comprehensive income (loss) during the fourth quarter of 2011. The Company has accounted for the purchase of Grayd as a business combination.

The following table sets out the allocation of the purchase price to assets acquired and liabilities assumed, based on management's estimates of fair value.

Total purchase price:	
Cash paid for acquisition	$165,954
Agnico Eagle common shares issued for acquisition	56,146
Total purchase price to allocate	$222,100
Fair value of assets acquired and liabilities assumed:	
Mining properties	$282,000
Goodwill	29,215
Cash and cash equivalents	2,907
Trade receivables	469
Other current assets	1,700
Equipment	56
Accounts payable and accrued liabilities	(9,767)
Deferred tax liability	(72,229)
Non-controlling interest	(12,251)
Net assets acquired	$222,100

The Company believes that goodwill for the Grayd acquisition arose principally because of the following factors: (1) the going concern value implicit in the Company's ability to sustain and/or grow its business by increasing mineral reserves and mineral resources through new discoveries; and (2) the requirement to record a deferred tax liability for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in a business combination at amounts that do not reflect fair value.

10. ACQUISITIONS (Continued)

Pro forma results of operations for Agnico Eagle assuming the acquisition of Grayd described above had occurred as of January 1, 2011 are set out below. On a *pro forma* basis, there would have been no effect on Agnico Eagle's consolidated revenues:

	Year Ended December 31, 2011
	Unaudited
Pro forma net loss attributed to common shareholders	$(582,762)
Pro forma net loss per share – basic	$ (3.42)

On January 23, 2012, the Company acquired the remaining outstanding shares of Grayd it did not already own, pursuant to a previously announced compulsory acquisition carried out under the provisions of the *Business Corporations Act* (British Columbia). The January 23, 2012 purchase price of $11.8 million was comprised of $9.3 million in cash and 68,941 newly issued Agnico Eagle common shares.

Summit Gold Project

On December 20, 2011, the Company completed the acquisition of 100% of the Summit Gold project from Columbus Gold Corporation, subject to a 2% net smelter returns mineral production royalty reserved by Cordilleran Exploration Company. The Nevada based project's purchase price of $8.5 million, including transaction costs, was comprised entirely of cash. This transaction was accounted for as an asset acquisition.

11. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	As at December 31,	
	2013	2012
Trade payables	$ 80,242	$ 89,289
Wages payable	35,881	35,752
Accrued liabilities	16,366	27,372
Other liabilities	40,885	32,916
	$173,374	$185,329

In 2013 and 2012, the other liabilities balance consisted primarily of various employee payroll tax withholdings and other payroll taxes.

12. COMMITMENTS AND CONTINGENCIES

As part of its ongoing business and operations, the Company has been required to provide assurance in the form of letters of credit for environmental and site restoration costs, custom credits, government grants and other general corporate purposes. As at December 31, 2013, the total amount of these guarantees was $174.3 million.

12. COMMITMENTS AND CONTINGENCIES (Continued)

Certain of the Company's properties are subject to royalty arrangements. The following are the most significant royalty arrangements:

The Company has a royalty agreement with the Finnish government relating to the Kittila mine. Starting 12 months after Kittila mine operations commenced, the Company is required to pay 2.0% on net smelter returns, defined as revenue less processing costs. The royalty is paid on a yearly basis the following year.

The Company is committed to pay a royalty on production from certain properties in the Abitibi area. The type of royalty agreements include, but are not limited to, net profits interest royalties and net smelter return royalties, with percentages ranging from 2.5% to 5.0%.

The Company is committed to pay a royalty on production from certain properties in the Pinos Altos mine area. The type of royalty agreements include, but are not limited to, net profits interest royalties and net smelter return royalties, with percentages ranging from 2.5% to 3.5%.

The Company regularly enters into various earn-in and shareholder agreements, often with commitments to pay net smelter return and other royalties.

The Company had the following purchase commitments as at December 31, 2013:

	Purchase Commitments
2014	$13,023
2015	8,373
2016	5,832
2017	4,290
2018	4,290
Thereafter	7,272
Total	$43,080

13. LEASES

(a) Capital leases

The Company has entered into sale-leaseback agreements with third parties for various fixed and mobile equipment within Canada. These arrangements represent sale-leaseback transactions in accordance with ASC 840-40 – *Sale-Leaseback Transactions*. The sale-leaseback agreements have an average effective annual interest rate of 5.9% and the average length of the contracts is 4.7 years.

All of the sale-leaseback agreements have end of lease clauses that qualify as bargain purchase options that the Company expects to execute. As at December 31, 2013, the total gross amount of assets recorded under sale-leaseback capital leases amounted to $37.6 million (2012 – $33.9 million).

The Company has agreements with third party providers of mobile equipment that are used at the Meadowbank mine. These arrangements represent capital leases in accordance with the guidance in ASC 840-30 – *Capital Leases*. The leases for mobile equipment at the Meadowbank mine are for five years and the effective annual interest rate on these leases is 5.5%.

13. LEASES (Continued)

The following is a schedule of future minimum lease payments under capital leases together with the present value of the net minimum lease payments as at December 31, 2013:

	Minimum Capital Lease Payments
2014	$12,776
2015	5,678
2016	2,268
2017	2,268
2018	2,268
Thereafter	–
Total minimum lease payments	25,258
Less amount representing interest	1,380
Present value of net minimum lease payments	$23,878

The Company's capital lease obligations are comprised of the following:

	As at December 31,	
	2013	2012
Total future lease payments	$25,258	$26,668
Less: interest	1,380	1,605
	23,878	25,063
Less: current portion	12,035	12,955
Long-term portion of capital lease obligations	$11,843	$12,108

At December 31, 2013, the gross amount of assets recorded under capital leases, including sale-leaseback capital leases was $51.8 million (2012 – $51.0 million; 2011 – $56.9 million). The charge to income resulting from the amortization of assets recorded under capital leases is included in the amortization of property, plant and mine development line item of the consolidated statements of income (loss) and comprehensive income (loss).

(b) Operating leases

The Company has a number of operating lease agreements involving office space. Some of the leases for office facilities contain escalation clauses for increases in operating costs and property taxes. Future minimum lease

13. LEASES (Continued)

payments required to meet obligations that have initial or remaining non-cancellable lease terms in excess of one year as at December 31, 2013 are as follows:

	Minimum Operating Lease Payments
2014	$1,783
2015	1,032
2016	822
2017	816
2018	836
Thereafter	2,470
Total	$7,759

The portion of operating leases relating to rental expense was $1.6 million in 2013 (2012 – $1.1 million; 2011 – $0.9 million).

14. RESTRICTED CASH

As part of the Company's insurance programs fronted by a third party provider and reinsured through the Company's internal insurance program, the third party provider requires that cash of $6.9 million be restricted as at December 31, 2013 (December 31, 2012 – $4.7 million).

As part of the Company's tax planning, $32.0 million was contributed to a qualified environmental trust ("QET") in December 2011 to fulfill the requirement of financial security for costs related to the environmental remediation of the Goldex mine. During the year ended December 31, 2013, $2.8 million (2012 – $12.0 million) was withdrawn from the QET to fund the environmental remediation expenditures. As at December 31, 2013, $16.8 million (December 31, 2012 – $20.7 million) remained in the QET.

On December 30, 2013, the Company deposited $5.0 million into a restricted account in connection with a Subscription Agreement to acquire 5,000 shares of Tocqueville Bullion Reserve, Ltd. at a price of $1,000 per share. The acquisition was completed subsequent to year end on January 2, 2014.

15. FINANCIAL INSTRUMENTS

From time to time, Agnico Eagle has entered into financial instruments with financial institutions in order to hedge underlying cash flow and fair value exposure arising from changes in commodity prices, interest rates, equity prices or foreign currency exchange rates.

Currency risk management

In 2013 and 2012, financial instruments that subjected Agnico Eagle to market risk and concentration of credit risk consisted primarily of cash and cash equivalents and short-term investments. Agnico Eagle places its cash and cash equivalents and short-term investments in high quality securities issued by government agencies, financial institutions and major corporations and limits the amount of credit exposure by diversifying its holdings.

15. FINANCIAL INSTRUMENTS (Continued)

Agnico Eagle generates almost all of its revenues in US dollars. The Company's Canadian operations, which include the LaRonde, Goldex, Lapa and Meadowbank mines and the Meliadine project have Canadian dollar requirements for capital, operating and exploration expenditures.

The Company uses foreign exchange hedges to reduce the variability in expected future cash flows arising from changes in foreign currency exchange rates. The hedged items represent a portion of the Canadian dollar denominated cash outflows arising from Canadian dollar denominated expenditures in 2013.

As at December 31, 2013, the Company had outstanding foreign exchange zero cost collars with a cash flow hedging relationship that did qualify for hedge accounting under ASC 815 – *Derivatives and Hedging*. The purchase of US dollar put options was financed through selling US dollar call options at a higher level such that the net premium payable to the different counterparties by the Company was nil. At December 31, 2013, the zero cost collars hedged $60.0 million of 2014 expenditures and the Company recognized mark-to-market adjustments in accumulated other comprehensive loss.

Amounts deferred in accumulated other comprehensive loss are reclassified to the production costs line item on the consolidated statements of income (loss) and comprehensive income (loss), as applicable, when the hedged transaction has occurred. Mark-to-market gains (losses) related to foreign exchange derivative financial instruments are recorded at fair value based on broker- dealer quotations that utilize period end forward pricing of the currency hedged.

The Company's other foreign currency derivative strategies in 2013 consisted mainly of writing US dollar call options with short maturities to generate premiums that would, in essence, enhance the spot transaction rate received when exchanging US dollars to Canadian dollars. All of these derivative transactions expired prior to year end such that no derivatives were outstanding as at December 31, 2013. The call option premiums were recognized in the loss (gain) on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss).

Commodity price risk management

The Company uses intra-quarter zinc, copper and silver derivative financial instruments associated with the timing of sales of the related products that were recognized in the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss). There were no zinc, copper or silver intra-quarter derivative financial instruments outstanding at December 31, 2013 or December 31, 2012.

To mitigate the risks associated with fluctuating diesel fuel prices, the Company uses derivative financial instrument contracts to hedge the price on a portion of diesel fuel costs associated with the Meadowbank mine's diesel fuel exposure as it relates to operating costs. Financial contracts that expired in 2013 and totaled 10.5 million gallons of heating oil were entered into at an average price of $2.99 per gallon, which is approximately 55.0% of the Meadowbank mine's expected 2013 diesel fuel operating costs. These contracts did qualify for hedge accounting and the related market-to-market adjustments prior to settlement were recognized in accumulated other comprehensive loss. All heating oil derivative financial instrument contracts settled in 2013.

Amounts deferred in accumulated other comprehensive loss are reclassified to the production costs line item on the consolidated statements of income (loss) and comprehensive income (loss), as applicable, when the derivative financial instrument has settled. Mark-to-market gains (losses) related to heating oil derivative financial instruments are based on broker-dealer quotations that utilize period end forward pricing to calculate fair value.

As at December 31, 2013 and 2012, there were no metal derivative positions. The Company may from time to time utilize short-term (including intra-quarter) financial instruments as part of its strategy to minimize risks and optimize returns on its byproduct metal sales.

Other required derivative disclosures can be found in note 7(d), accumulated other comprehensive loss.

15. FINANCIAL INSTRUMENTS (Continued)

The following table provides a summary of the amounts recognized in the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss):

	Year Ended December 31,		
	2013	2012	2011
Premiums realized on written foreign exchange call options	$3,375	$1,505	$4,995
Realized loss on foreign exchange forwards	–	–	(1,407)
Realized gain on zinc derivative financial instruments	60	430	3,419
Realized gain on copper derivative financial instruments	–	63	79
Realized loss on silver derivative financial instruments	–	–	(3,403)
Mark-to-market gain on derivative equity contracts[(i)]	1,389	–	–
Mark-to-market loss on warrants[(i)]	(488)	(1,294)	–
Realized loss on warrants	(2,827)	–	–
Realized loss on heating oil derivative financial instruments	–	(1,523)	–
Gain (loss) on derivative financial instruments	$1,509	$(819)	$3,683

Note:

(i) Mark-to-market gains and losses on financial instruments that did not qualify for hedge accounting are recognized through the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss) and through the other line item of the consolidated statements of cash flow.

Agnico Eagle's exposure to interest rate risk at December 31, 2013 relates to its cash and cash equivalents, short-term investments and restricted cash totaling $170.0 million (2012 – $332.0 million) and the Credit Facility. The Company's short-term investments and cash equivalents have a fixed weighted average interest rate of 0.53% (2012 – 0.47%).

The fair values of Agnico Eagle's current financial assets and liabilities approximate their carrying values as at December 31, 2013.

16. GENERAL AND ADMINISTRATIVE

As a result of a kitchen fire at the Meadowbank mine in March 2011, the Company recognized a loss on disposal of the kitchen of $6.9 million, incurred related costs of $7.4 million and recognized an insurance receivable of $11.2 million. The difference of $3.1 million was recognized in the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) in the first quarter of 2011.

During the subsequent months of 2011, the Company received $2.4 million of insurance proceeds and had a remaining insurance receivable of $8.8 million recorded in the other current assets line item of the consolidated balance sheets as at December 31, 2011. During the year ended December 31, 2012, the Company received $2.2 million of insurance proceeds and had a remaining insurance receivable of $6.6 million as at December 31, 2012. During the year ended December 31, 2013, the Company received $5.2 million of insurance proceeds and had a remaining insurance receivable of $0.7 million as at December 31, 2013.

17. LOSS ON GOLDEX MINE

On October 19, 2011, the Company announced that it was suspending mining operations and gold production at the Goldex mine in Quebec, Canada, effective immediately. This decision followed the receipt of an opinion from a second rock mechanics consulting firm which recommended that underground mining operations be halted. It appeared that a weak volcanic rock unit in the hanging wall above the GEZ of the Goldex mine deposit had failed. This rock failure was thought to extend between the top of the deposit and surface. As a result, this structure allowed an increase in ground water to flow into the mine.

As at September 30, 2011, Agnico Eagle had written off its investment in the Goldex mine (net of expected residual value), written off the underground ore stockpile and recorded a provision for the anticipated costs of environmental remediation. Given the amount of uncertainty in estimating the fair value of the Goldex mine property, plant, and mine development, the Company determined that the fair value was equal to the residual value. All of the remaining 1.6 million ounces of proven and probable mineral reserves at the Goldex mine, other than the ore stockpiled on surface, were reclassified as mineral resources effective September 30, 2011.

The mill processed feed from the remaining surface stockpile at the Goldex mine in October 2011.

Impairment loss on Goldex mine property, plant, and mine development	$237,110
Loss on underground ore stockpile	16,641
Supplies inventory obsolescence provision	1,915
Increase in environmental remediation liability	47,227
Loss on Goldex mine (before income and mining taxes) for the year ended December 31, 2011	$302,893

The environmental remediation liability for the anticipated costs of remediation associated with the suspension of operations at the Goldex mine has required management to make estimates and judgments that affect the reported amount. In making judgments in accordance with US GAAP, the Company uses estimates based on historical experience and various assumptions that are considered reasonable in the circumstances. Actual results may differ from these estimates.

In July 2012, the Company's Board approved the development of the M and E Zones at the Goldex mine. The operations in the GEZ remain suspended indefinitely.

18. IMPAIRMENT LOSS

As at December 31, 2013

As at December 31, 2013, the Company identified the continued decline in the market price of gold as an indicator of potential impairment for the Company's long-lived assets and goodwill. As a result of the identification of this indicator, the Company evaluated its long-lived assets and goodwill for impairment on an asset group and reporting unit basis, respectively, using updated assumptions and estimates.

18. IMPAIRMENT LOSS (Continued)

The following impairment losses were recorded as at December 31, 2013 as a result of the impairment evaluation:

	As at December 31, 2013			
	Pre-impairment Carrying Value	Impairment Loss	Post-impairment Carrying Value	Impairment Loss (net of tax)
Property, plant and mine development:				
Meadowbank mine	$732,499	$(269,269)	$463,230	$(194,511)
Lapa mine	136,766	(67,894)	68,872	(41,687)
	$869,265	$(337,163)	$532,102	$(236,198)
Goodwill:				
Meliadine project	$200,064	$(200,064)	$–	$(200,064)
		$(537,227)		$(436,262)

Estimated fair values for the Meadowbank mine and Lapa mine were calculated by discounting the estimated future net cash flows using discount rates of 6.5% and 5.5% (in nominal terms), respectively, commensurate with their individual estimated levels of risk. These calculations were based on estimates of future production levels applying gold prices of $1,238 to $1,300 per ounce (in real terms), foreign exchange rates of US$0.90:C$1.00 to US$0.93:C$1.00, inflation rates of 2.0% and capital, operating and reclamation costs based on updated life-of-mine plans. Average gold recovery rates applied were 92.3% and 78.3% for the Meadowbank mine and Lapa mine, respectively.

Estimated after-tax discounted future net cash flows of reporting units with goodwill were calculated as at December 31, 2013. These calculations were based on estimates of future production levels applying long-term gold prices of $1,238 to $1,300 per ounce (in real terms), foreign exchange rates of US$0.90:C$1.00 to US$0.93:C$1.00, inflation rates of 2.0% and capital, operating and reclamation costs based on updated life-of-mine plans. The average gold recovery rate applied to the Meliadine project was 95.1%. A discount rate of 8.0% was used to calculate the estimated after-tax discounted future net cash flows of the Meliadine project reporting unit, commensurate with its individual estimated level of risk.

Discount rates were based on each asset group's weighted average cost of capital, of which the two main components are the cost of equity and the after-tax cost of debt. Cost of equity was calculated based on the capital asset pricing model, incorporating the risk-free rate of return based on Government of Canada marketable bond yields as at the valuation date, the Company's beta coefficient adjustment to the market equity risk premium based on the volatility of the Company's return in relation to that of a comparable market portfolio, plus a size premium and Company-specific risk factor. Cost of debt was determined by applying an appropriate market indication of the Company's borrowing capabilities and the corporate income tax rate applicable to each asset group's jurisdiction.

Management's estimate of future net cash flows is subject to risk and uncertainties. Therefore, it is reasonably possible that changes could occur which may affect the recoverability of the Company's long-lived assets and goodwill. This may have a material effect on the Company's consolidated financial statements.

As at December 31, 2011

As at December 31, 2011, the Company performed a full review of the Meadowbank mine operations and updated the related life-of-mine plan. This review considered the exploration potential of the area, the mineral reserves and resources,

18. IMPAIRMENT LOSS (Continued)

the projected operating costs in light of the persistently high operating costs experienced since commencement of commercial operations, metallurgical performance and gold price. These served as inputs into pit optimizations to determine which reserves and resources could be economically mined and be considered as mineable mineral reserves. As a result of these factors, an updated mine plan with a shorter mine life was developed and cash flows calculated, resulting in the following impairment losses being recorded as at December 31, 2011:

	As at December 31, 2011			
	Pre-impairment Carrying Value	Impairment Loss	Post-impairment Carrying Value	Impairment Loss (net of tax)
Property, plant and mine development:				
Meadowbank mine	$1,670,838	$(907,681)	$763,157	$(644,903)

The estimated fair value of the Meadowbank mine was calculated as at December 31, 2011 by discounting the estimated future net cash flows using a 7.0% discount rate (in nominal terms), commensurate with the estimated level of risk. This calculation was based on estimates of future gold production applying long-term gold prices of $1,250 to $1,553 per ounce (in real terms), foreign exchange rates of US$0.92:C$1.00 to US$0.97:C$1.00, an inflation rate of 2.0%, increased cost estimates based on revised operating levels and an average gold recovery of 92.9%. Future expected operating costs, capital expenditures and asset retirement obligations were based on the updated life-of-mine plan.

Management's estimate of future cash flows is subject to risk and uncertainties. Therefore, it is reasonably possible that changes could occur which may affect the recoverability of the Company's long-lived assets and may have a material effect on the Company's consolidated financial statements.

19. SEGMENTED INFORMATION

Agnico Eagle operates in a single industry, namely exploration for and production of gold. The Company's primary operations are in Canada, Mexico and Finland. The Company identifies its reportable segments as those operations whose operating results are reviewed by the Chief Executive Officer and that represent more than 10% of the combined revenue, profit or loss or total assets of all operating segments. Each of the Company's significant operating mines and projects are considered to be separate segments. Certain operating segments that do not meet the quantitative thresholds are still disclosed when the Company believes that the information is useful. Segment results for 2012 and 2011 have been retrospectively revised to reflect organizational changes in 2013 that created three business units consisting of the Northern business unit, the Southern business unit, and the Exploration business unit. However, under this revised organizational structure the Chief Executive Officer also reviews segment income (defined as revenues from mining operations less production costs, exploration and corporate development and impairment losses) on a mine-by-mine basis. The following are the Company's reportable segments organized according to their relationship with the Company's three business units and reflect how the Company manages its business and how it classifies its operations for planning and measuring performance:

Northern Business:	LaRonde mine, Lapa mine, Goldex mine, Meadowbank mine, Meliadine project and Kittila mine
Southern Business:	Pinos Altos mine, Creston Mascota deposit at Pinos Altos and La India project
Exploration:	United States Exploration office, Europe Exploration office, Canada Exploration offices and Latin America Exploration office

The accounting policies of the reportable segments are the same as those described in the accounting policies note. There are no transactions between the reportable segments affecting revenue. Production costs for the reportable segments are net of intercompany transactions.

19. SEGMENTED INFORMATION (Continued)

Corporate and other (including Urastar) assets and specific income and expense items are set out separately below.

The Creston Mascota deposit at Pinos Altos achieved commercial production on March 1, 2011. The LaRonde mine extension achieved commercial production on December 1, 2011. The Goldex mine achieved commercial production on October 1, 2013.

Year ended December 31, 2013	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Impairment Loss	Segment Income (Loss)
Northern Business:					
LaRonde mine	$ 329,900	$(229,911)	$ —	$ —	$ 99,989
Lapa mine	141,167	(69,532)	—	(67,894)	3,741
Goldex mine	21,418	(13,172)	—	—	8,246
Meadowbank mine	591,473	(363,894)	—	(269,269)	(41,690)
Meliadine project	—	—	—	(200,064)	(200,064)
Kittila mine	209,723	(98,446)	—	—	111,277
Total Northern Business	$1,293,681	$(774,955)	$ —	$(537,227)	$ (18,501)
Southern Business:					
Pinos Altos mine	$ 303,203	$(130,129)	$ —	$ —	$ 173,074
Creston Mascota deposit at Pinos Altos	41,522	(19,843)	—	—	21,679
Total Southern Business	$ 344,725	$(149,972)	$ —	$ —	$ 194,753
Exploration	$ —	$ —	$(44,236)	$ —	$ (44,236)
Segment income (loss)	$1,638,406	$(924,927)	$(44,236)	$(537,227)	$ 132,016

Segment income	$ 132,016
Corporate and other:	
Foreign currency translation gain	7,188
Amortization of property, plant and mine development	(296,078)
Interest and sundry expense	(8,824)
Gain on sale of available-for-sale securities	74
Gain on derivative financial instruments	1,509
General and administrative	(115,800)
Impairment loss on available-for-sale securities	(34,272)
Provincial capital tax	1,504
Interest expense	(57,999)
Loss before income and mining taxes	$(370,682)

19. SEGMENTED INFORMATION (Continued)

Year ended December 31, 2012	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Segment Income (Loss)
Northern Business:				
LaRonde mine	$ 399,243	$(225,647)	$ —	$173,596
Lapa mine	173,753	(73,376)	—	100,377
Goldex mine	—	—	(37,627)	(37,627)
Meadowbank mine	609,625	(347,710)	—	261,915
Kittila mine	284,429	(98,037)	—	186,392
Total Northern Business	$1,467,050	$(744,770)	$ (37,627)	$684,653
Southern Business:				
Pinos Altos mine	$ 363,113	$(128,618)	$ —	$234,495
Creston Mascota deposit at Pinos Altos	87,551	(24,324)	—	63,227
Total Southern Business	$ 450,664	$(152,942)	$ —	$297,722
Exploration	$ —	$ —	$ (71,873)	$ (71,873)
Segment income (loss)	$1,917,714	$(897,712)	$(109,500)	$910,502

Segment income	$ 910,502
Corporate and other:	
Foreign currency translation loss	(16,320)
Amortization of property, plant and mine development	(271,861)
Interest and sundry expense	(2,389)
Gain on sale of available-for-sale securities	9,733
Loss on derivative financial instruments	(819)
General and administrative	(119,085)
Impairment loss on available-for-sale securities	(12,732)
Provincial capital tax	(4,001)
Interest expense	(57,887)
Income before income and mining taxes	$ 435,141

19. SEGMENTED INFORMATION (Continued)

Year ended December 31, 2011	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Loss on Goldex Mine	Impairment Loss	Segment (Loss) Income
Northern Business:						
LaRonde mine	$ 398,609	$(209,947)	$ —	$ —	$ —	$ 188,662
Lapa mine	167,536	(68,599)	—	—	—	98,937
Goldex mine	217,662	(56,939)	—	(302,893)	—	(142,170)
Meadowbank mine	434,051	(284,502)	—	—	(907,681)	(758,132)
Kittila mine	225,612	(110,477)	—	—	—	115,135
Total Northern Business	$1,443,470	$(730,464)	$ —	$(302,893)	$(907,681)	$(497,568)
Southern Business:						
Pinos Altos mine	$ 321,074	$(131,044)	$ —	$ —	$ —	$ 190,030
Creston Mascota deposit at Pinos Altos	57,255	(14,570)	—			42,685
Total Southern Business	$ 378,329	$(145,614)	$ —	$ —	$ —	$ 232,715
Exploration	$ —	$ —	$(75,721)	$ —	$ —	$ (75,721)
Segment income (loss)	$1,821,799	$(876,078)	$(75,721)	$(302,893)	$(907,681)	$(340,574)

Segment loss	$(340,574)
Corporate and other:	
Foreign currency translation gain	1,082
Amortization of property, plant and mine development	(261,781)
Interest and sundry expense	(5,188)
Gain on sale of available-for-sale securities	4,907
Gain on derivative financial instruments	3,683
General and administrative	(107,926)
Impairment loss on available-for-sale securities	(8,569)
Provincial capital tax	(9,223)
Interest expense	(55,039)
Loss before income and mining taxes	$(778,628)

19. SEGMENTED INFORMATION (Continued)

	Total Assets as at December 31,	
	2013	**2012**
Northern Business:		
LaRonde mine	$ 878,719	$ 849,304
Lapa mine	78,293	168,712
Goldex mine	120,601	56,819
Meadowbank mine	711,387	1,005,890
Meliadine project	877,923	1,015,485
Kittila mine	870,332	837,002
Total Northern Business	$3,537,255	$3,933,212
Southern Business:		
Pinos Altos mine	$ 537,560	$ 610,217
Creston Mascota deposit at Pinos Altos	86,185	68,735
La India project	512,450	377,049
Total Southern Business	1,136,195	1,056,001
Exploration	19,838	19,225
Corporate and other	266,071	247,681
Total	$4,959,359	$5,256,119

19. SEGMENTED INFORMATION (Continued)

	Capital Expenditures Year Ended December 31,		
	2013	**2012**	**2011**
Northern Business:			
LaRonde mine	$ 84,292	$ 75,214	$ 90,735
Lapa mine	22,738	18,475	18,397
Goldex mine	65,063	26,822	42,232
Meadowbank mine	76,811	105,095	116,860
Meliadine project	61,412	83,343	73,944
Kittila mine	83,770	60,036	86,514
Total Northern Business	$394,086	$368,985	$428,682
Southern Business:			
Pinos Altos mine	$ 42,835	$ 24,212	$ 32,407
Creston Mascota deposit at Pinos Altos	17,582	5,777	7,559
La India project	116,786	39,236	—
Total Southern Business	$177,203	$ 69,225	$ 39,966
Exploration	$ —	$ 55	$ 8,561
Corporate and other	$ 6,500	$ 7,285	$ 5,622
Total	$577,789	$445,550	$482,831

19. SEGMENTED INFORMATION (Continued)

The following table sets out the changes in the carrying amount of goodwill by segment:

	Meliadine project	La India project	Corporate and other	Total
Cost				
Balance at January 1, 2013	$ 200,064	$ 29,215	$ –	$ 229,279
Purchase of Urastar Gold Corporation (note 10)	–	–	9,802	9,802
Balance at December 31, 2013	$ 200,064	$ 29,215	$ 9,802	$ 239,081
Accumulated impairment				
Balance at January 1, 2013	$ –	$ –	$ –	$ –
Impairment loss	(200,064)	–	–	(200,064)
Balance at December 31, 2013	$(200,064)	$ –	$ –	$(200,064)
Carrying amount	$ –	$ 29,215	$ 9,802	$ 39,017

20. SUBSEQUENT EVENTS

On January 13, 2014, the Company executed an Asset Purchase Agreement with Alexandria Minerals Corporation ("AMC") to purchase the Akasaba West Property in Quebec, Canada for cash consideration of C$5.0 million. Agnico Eagle assumes pre-existing underlying royalty obligations under the Asset Purchase Agreement relating to specific Akasaba West Property mining claims ranging from a 2% net smelter returns production royalty to a 20% net proceeds of production royalty. The Company also entered into a 2% Net Smelter Return Royalty ("Royalty") Agreement with AMC on January 13, 2014 relating to all Akasaba West Property mineral and metal production after 210,000 ounces of gold has been produced. The Company has the right to purchase one-half of the Royalty from AMC at any time for cash consideration of C$7.0 million.

On January 28, 2014, the Company purchased common shares and warrants in a mining industry entity for total consideration of C$9.3 million.

On February 12, 2014, Agnico Eagle announced that the Board approved the payment of a quarterly cash dividend of $0.08 per common share, payable on March 17, 2014 to holders of record of the common shares of the Company on March 3, 2014.

21. SECURITIES CLASS ACTION LAWSUITS

On November 7, 2011 and November 22, 2011, the Company and certain current and former senior officers, some of whom also are or were directors of the Company, were named as defendants in two putative class action lawsuits, styled *Jerome Stone v. Agnico-Eagle Mines Ltd.*, et al., and *Chris Hastings v. Agnico-Eagle Mines Limited, et al.*, respectively, which were filed in the United States District Court for the Southern District of New York. On February 6, 2012, the Court ordered that the two complaints be consolidated under the caption *In re Agnico-Eagle Mines Ltd. Securities Litigation*, and lead counsel was appointed. On April 6, 2012, a Consolidated Complaint was issued against the Company and certain of its current and former senior officers and directors. The Consolidated Complaint alleges that the Company had violated

21. SECURITIES CLASS ACTION LAWSUITS (Continued)

federal securities law in connection with its disclosure related to the Goldex mine. The Consolidated Complaint seeks, among other things, damages on behalf of persons who purchased or acquired securities of the Company during the period July 28, 2010 to October 19, 2011. The Consolidated Complaint has not been certified as a class action, and the Company intends to vigorously defend it. On January 14, 2013, Judge Oetken granted the Company's motion to dismiss the Consolidated Complaint and all claims therein and denied the plaintiffs' request for leave to amend the Consolidated Complaint. On February 12, 2013, the plaintiffs filed a Notice of Appeal to the United States Court for Appeals for the Second Circuit. The appeal was heard on September 23, 2013, and on October 3, 2013 the Court of Appeals for the Second Circuit affirmed the decision below dismissing the Consolidated Complaint. The time for the plaintiffs to file a petition for a writ of certiorari, requesting a review by the United States Supreme Court, has expired and the judgment dismissing the plaintiffs' Consolidated Complaint is now final and no longer appealable.

On March 8, 2012 and April 10, 2012, a Notice of Action and Statement of Claim (collectively, the "Ontario Claim") were issued by William Leslie, AFA Livforsakringsaktiebolag and certain other entities against the Company and certain of its current and former officers, some of whom also are or were directors of the Company. On September 27, 2012, the plaintiffs issued a Fresh as Amended Statement of Claim. The Fresh as Amended Statement of Claim alleges that the Company's public disclosure concerning water flow issues at its Goldex mine was misleading. The Ontario Claim was issued by the plaintiffs on behalf of all persons and entities who acquired securities of the Company during the period March 26, 2010 to October 19, 2011, excluding persons resident or domiciled in the Province of Quebec at the time they purchased or acquired such securities. The plaintiffs seek, among other things, damages of C$250.0 million and to certify the Ontario Claim as a class action. On April 17, 2013 an Order was granted on consent certifying a class action proceeding and granting leave for the claims under Section 138 of the *Securities Act* (Ontario) to proceed. The Company intends to vigorously defend the action on the merits.

On April 12, 2012, two senior officers of the Company, who also are or were directors of the Company, were served with a Motion for Leave to Institute a Class Action and for the Appointment of a Representative Plaintiff (the "Quebec Motion"). The action is on behalf of all persons and entities with fewer than 50 employees resident in Quebec who acquired securities of the Company between March 26, 2010 and October 19, 2011. The proposed class action is for damages of C$100.0 million arising as a result of allegedly misleading disclosure by the Company concerning its operations at the Goldex mine. On October 15, 2012, the plaintiffs served an amended Quebec Motion seeking leave to commence an action under the *Securities Act* (Quebec) in addition to seeking authorization to institute a class action. On October 1, 2013, the Quebec court certified the class action on terms identical to those set out in the consent Order granted in Ontario on April 17, 2013. No date has been set for the hearing to argue the class action on the merits. The Company intends to vigorously defend the action on the merits.

Document 2.1 – Meliadine Project Site History

The Project history dates back to the early 1970's, when multiple companies were involved in the exploration of Meliadine resources. Historically, the Meliadine property was divided as the Meliadine West property and Meliadine East property.

The first mineral claims in the Project area were staked by Comaplex Minerals Corp. and Asamera Minerals Ltd. in 1987. The Discovery deposit was found on the eastern half of the property in late 1989. The exploration works on the Meliadine West property from 1987 to 2005 are shown in Table 2.1. Table 2.2 provides summary of drilling undertaken for the Project and Tiriganiaq deposit.

Table 2.1: Summary of 1987 to 2005 Exploration Works on Meliadine West Property

Year	Operator	Exploration Activities and Highlights
1987	Asamera	Investigation of gold occurrence at Tonic Lake Sample of quartz vein with arsenopyrite of 5 g/t Au
1989	Asamera/Comaplex (50%-50% JV)	Follow-up on the 5 g/t sample along strick of the iron formation They found Discovery deposit with chip sample grades of up to 4.4 g/t AU over 4 m
1990	Asamera/Comaplex (50%-50% JV)	Total of 112 m of chahhel sampling and 15 DDH on Discovery deposit Airborne geophysical surveys on Meliadine East
1991	Rio Algom Inc (60% JV on Meliadine West)	Drilling on Meliadine West Airborne survey and boulder sampling on Meliadine West where 75 boulders assayed greater than 34 g/t Au
1992	Asamera/Comaplex (50%-50% JV)	Drilling on Meliadine West (Pump and Wolf deposits)
1993-1994	Comaplex/Cumberland (50%-50% JV)	Drilling on Meliadine West Discovery of the Tiriganiaq deposit (11.3 g/t Au over 2.2 m), F Zone, and Pump deposits
1995	Western Mining Corporation (WMC)	Drilling
1996	WMC	Drilling
1997	WMC	Mapping, geochemical, and geophysical exploration Drilling at Pump, F Zone, Tirganiaq, Wolf, and regional targets Ground magnetic and IP surveys
1998	WMC	Drilling at Pump, F Zone, Wolf, and Tirganiaq Ground magnetic survey
1999	WMC	Drilling at Tiriganiaq, F Zone, and Discovery
2000	WMC	Drilling at Triiganiaq and exploration targets within the Meliadine West property
2001-2002	WMC	Aeromagnetic surveys
2003	WMC	Drilling exclusively to Tiriganiaq
2004	Comaplex	Drilling on Meliadine West Best assay results were as high as 153.5 g/t AU over 20.2 m (uncut) on Tiriganiaq
2010	Agnico Eagle	Acquisition of Project

Table 2.2: Summary of Drilling Undertaken for the Project and Tiriganiaq Deposit

Meliadine Project			Tiriganiaq	
Year	**Holes**	**Metres Drilled**	**Holes**	**Metres Drilled**
Pre-1995	112	10,059	1	80
1995	33	7,161	12	2,553
1996	78	18,212	42	10,737
1997	124	32,774	54	16,467
1998	166	40,652	66	14,731
1999	128	20,741	123	20,124
2000	49	10,753	31	6,360
2001*	0	0	0	0
2002*	0	0	0	0
2003	22	5,421	22	5,421
2004	24	9,264	20	8,498
2005	50	14,871	36	13,918
2006	77	18,033	64	16,120
2007	104	21,799	90	21,527
2008	84	24,607	57	21,802
2009	124	24,981	39	17,373
2010	209	34,112	83	22,166
2011	412	104,536	130	40,091
2012	603	146,610	114	48,777
2013	339	72,322	44	14,608
Total	**2,738**	**218,982**	**1,028**	**301,348**

* = No drilling

Although exploration started in early 1980's, the first resource estimates were determined in 2005 by Comaplex (Table2.3), and estimates were completed annually thereafter until Agnico Eagle acquired the property. For comparison mineral resource estimates for January 2010 are provided in Table 2.4. In July 2010, Agnico Eagle completed the purchase of Comaplex Minerals Corp. making the Project a wholly owned part of Agnico Eagle Mines Limited.

Table 2.3: Mineral Resource Statement, Tiriganiaq Deposit, Meliadine Project as of January 2005

Resource Category	Tonnage (000)	Gold grade (g/t)	Contained gold (000 oz)
Indicated mineral resource			
Tiriganiaq **Main zone**	2,467	10.8	853
Inferred mineral resource			
Tiriganiaq Main zone	421	12.9	175
Tiriganiaq West zone	725	13.4	311

Table 2.4: Mineral Resource and Mineral Reserve Statement, Tiriganiaq, Discovery, F Zone, Pump and Wolf Deposits, Meliadine Project as of January, 2010

Resource Category	Tonnage (000)	Gold grade (g/t)	Contained gold (000 oz)
Total measured mineral resource	295	10.6	101
Total indicated mineral resource	12,652	7.9	3,191
Measured + indicated mineral resource	12,947	7.9	3,292
Total inferred resource	8,388	6.4	1,731

In February 2011, Agnico Eagle published a 43-101 Technical Report (Agnico Eagle 2011) reporting the mineral reserves and mineral resources for the Tiriganiaq and F Zone deposits, and the mineral resources for Wesmeg, Discovery, Pump and Wolf deposits.

Bulk Sampling Campaigns

Two bulk sampling programs were advanced during the past years. Comaplex undertook the first one in 2008 which targeted the 1000 and 1100 lodes at depths of 120 m (10,000 Level) and 70 m (9,950 Level) below surface, respectively. In 2011 Agnico Eagle undertook an additional bulk sample to gain greater confidence in the predictability of the Tiriganiaq mineralization (Agnico Eagle 2012). The 2011 sampling data and results are presented in Table 2.5 and Table 2.6, respectively.

Prior to the 2011 bulk sample program, the areas were sampled by diamond drilling on 15 m spacings. Each development round was also sampled individually through the on-site sampling tower and the samples were shipped to an independent laboratory for assaying. The results of the program were compared with the December 31, 2011 reserve and resource estimate. Agnico Eagle stockpiled the bulk sample ore material and published it as Proven Mineral Reserve.

Table 2.5: Underground Development and Bulk Sampling Completed in 2011

Opening	Nominal Size	Length	Bulk Sampling		Underground Sampling		
	Width x Height (m)	(m)	Tonnes	Number of Rounds	Muck Samples	Chip-Panel Samples	Channel Samples
Development on 10 000 Level							
1050 Lode Drift	5 x 2.8	23	1,040	14	88	63	26
1100 X-Cut	4 x 2.8	15	672	8	62	30	14
1100 Lode Drift	5 x 2.8	57	2,741	31	172	212	99
Development on 9 950 Level							
1000 Lode Drift	4 x 2.8	100	3,111	46	277	203	100
1000 N X-Cut	4 x 2.8	21	585	9	56	40	20
Clean-Ups			11		33		
Total Both Levels		**216**	**8,161**	**108**	**688**	**548**	**259**

Table 2.6: Comparison of Block Model and Bulk Sample Results

Lode and (Level)		Block Model			Bulk Sample		
	Drill holes	Tonnes	Grade (g/t Au)	Ounces (Au)	Tonnes	Grade (g/t Au)	Ounces (Au)
1000 (9 950 L)	23	5,984	17.4	3,348	4,890	18.5	2,906
1100 (10 000 L)	27	6,652	9.7	2,083	6,396	9.6	1,981
1000 (10 000 L)	19	605	9.0	175	649	2.7	56
Low-grade (both levels)	58	6,917	0.9	206	6,816	1.3	274
Subtotal 2008	*127*	*20,158*	*9.0*	*5,811*	*18,751*	*8.7*	*5,217*
1000 (9 950 L)	20	2,391	9.4	720	2,158	10.0	691
1100 (10 000 L)	13	2,555	14.0	1,149	2,415	16.7	1,298
Low-grade (both levels)	77	2,207	5.0	352	2,169	2.3	161
Subtotal 2011	*110*	*7,153*	*9.7*	*2,221*	*6,743*	*9.9*	*2,150*
Total	**237**	**27,311**	**9.1**	**8,032**	**25,527**	**9.0**	**7,367**

The results of the 2011 bulk sampling confirmed the resource estimation model that has been developed for the two principal zones (Zones 1000 and 1100) at Tiriganiaq, and indicated approximately 8% less gold than had been predicted by the block model for these areas. The 2011 bulk sample program also confirmed the previous assessment of Agnico Eagle's block model in terms of grade continuity, consistency and distribution, and the evaluation of related mining properties through geological mapping; underground chip, channel and muck-sampling; and geotechnical observations.

Based on these observations, the existing underground exploration decline at the Tiriganiaq deposit was further developed in 2013. Construction of a permanent portal (Portal 1) with upgraded infrastructure was completed in the third quarter of 2013, and the existing 80 m depth was further developed during the year. The capital cost for the decline development in 2013 was $9.4 million.

Extension of the decline is continuing, with a further 1,363 m of development (to a depth of 225 m below surface) completed in 2014 at a cost of $18.8 million. The decline will eventually allow cost-effective exploration and conversion drilling of the deeper parts of the Tiriganiaq and Wesmeg zones.

References for Document 2.1

Agnico Eagle (Agnico Eagle Mines Limited). 2011. Technical Report on the December 31, 2010, Mineral Resource and Mineral Reserve Estimate, Meliadine Gold Project, Nunavut, Canada. 16 February 2011.

Agnico Eagle. 2012. Technical Report (2008-2011) Underground bulk sample programs, Tiriganiaq gold deposit, Meliadine West Property, Nunavut, Canada. June 2012.

Document 4.1 - Project Design Considerations

Climate

The Project infrastructure will require special cold climate and permafrost design considerations. The climate data used for this study were based on the values specified in the National Building Code of Canada (NRC 2010; summarized in Table 1) and on experience building Agnico Eagle's Meadowbank Mine.

Table 1: Climate Design Criteria

Temperature	Value
January-2.5% design	−40°C Extreme
low	−48.8°C July-2.5 % design
20°C Extreme high	31.4°C
Precipitations	
Average annual total precipitation	250 mm
Snow Load	
Ground snow load, S_s	3.0kPa Rain load,
S_r	0.2 kPa **Hourly Wind**
Pressures	
1/10 year probability	0.47 kPa
1/30 year probsbility	0.60 kPa

Note: All data from National Building Code of Canada (2010), for Rankin Inlet location.

The Arctic design of the buildings will be reflected notably in heavy insulation and special foundation requirements, use of heated utilidors (insulated, enclosed utilities corridors) to connect the buildings and extreme space-heating requirements. A single process plant structure is proposed to reduce heating needs. The power plant will be separated from the process plant but connected by a heated corridor. This will reduce the need for sound attenuation measures and firewalls. Space-heating requirements will be met through recovery of exhaust waste heat from the diesel engines driving the power generators. Auxiliary glycol/water-heating boilers will be provided for heating requirements in extreme conditions and emergencies. Another climate-driven feature will be heat-tracing of fuel, water, and tailings lines.

Permafrost

The Project area is in a zone of continuous permafrost, down to about 360 to 495 m. The active layer of annual freeze/thaw in the overburden is within 1 to 3 m of surface; consequently, where the bedrock is less than 2 m below surface, the foundations of buildings and heavy equipment will rest directly on bedrock without the need for piles or extensive structural fill. For concrete foundations, experience has shown that bedrock tends to shatter when excavated in Arctic climates. Therefore, allowances will be made for pouring lean concrete and using rock dowels to stabilize

these foundations. Where the bedrock is deeper than 3 m, the foundations will be supported by pilings.

In addition to Meliadine Lake, some wide lakes and ponds, such as B7, D7, and A8, may be underlain by a continuous talik, or zone of permanently unfrozen ground (Agnico Eagle 2014). The final design avoids direct impact to lakes that may be underlain with a talik or zone of permanently unfrozen ground. Results of geotechnical drilling, thermistor data, groundwater sampling, and geomorphological mapping of the collected periglacial environment data indicate that perennially cryotic ground (the zero isotherm) at the site extends to a depth of between 360 m and 495 m. However, due to the salinity of groundwater at depth, there is freezing point depression and unfrozen water (the basal cryopeg) is estimated to occur at a depth of between about 350 and 375 m at the site. There is further uncertainty related to these estimates as the permafrost and basal cryopeg limits are not regular surfaces and may vary locally.

Hydrogeology

Hydrogeological investigations were carried out in the vicinity of the Tiriganiaq deposit in 2009 and 2011 and near the Discovery deposit in 2013. The hydrogeological testing programs were designed to obtain information on the hydraulic conductivity of the bedrock below the permafrost and within an open talik, and were required in support of the geotechnical and environmental programs for the Project. The investigations included single-well response testing in three boreholes around Tiriganiaq, as well as the collection of a groundwater sample and the installation of a 200-m thermistor in borehole GT09-19 (Agnico Eagle 2014). The Figure 1, shows the location of the geotechnical drill holes and thermistors in 2012, additional geotechnical information has been acquired in 2013 and 2014; currently 35 short or long thermistors are active over the Meliadine property. At the Project site, the freezing point depression was calculated to be equivalent to -3.3°C (Agnico Eagle 2014). The portion of the permafrost, where groundwater may be partially or wholly unfrozen due to the freezing point depression, has been estimated to be at a depth of 350 to 375 m (Agnico Eagle 2014).

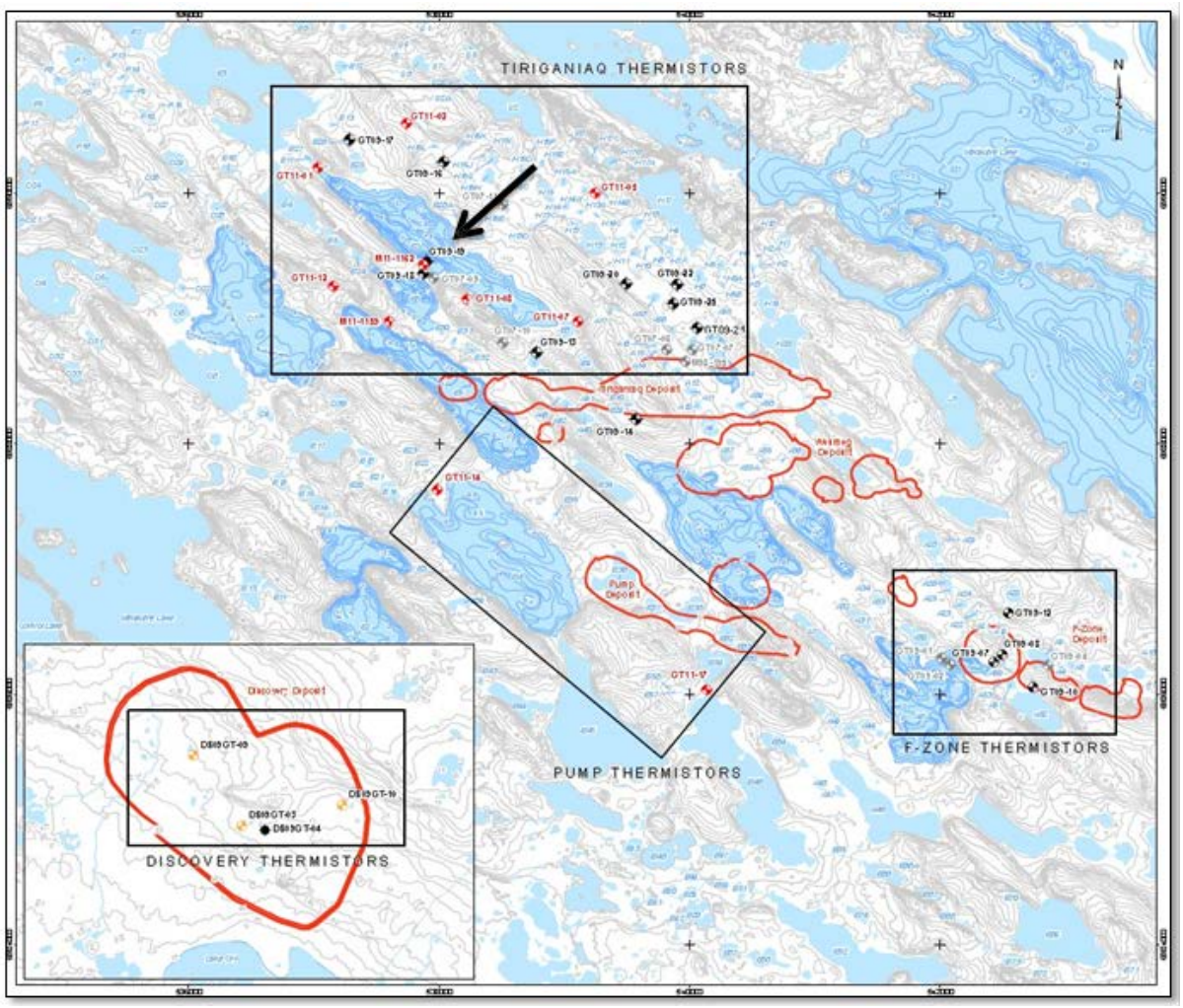


Figure 1: Locations of Geotechnical Boreholes and Instrumentation (Golder 2012)

Strength Estimates

Overburden

The overburden soils in the area of the main Tiriganiaq deposit consist primarily of blankets and veneers of washed till, marine sediments, and localized beach ridges. The washed till is mainly "poor to imperfectly" drained but ranges up to "well to moderately well" drained. The marine sediments are "well to moderately well" drained, and the beach ridges are "well" drained. The till can be described as a sandy silt or silty sand. The till thickness is relatively uniform and varies from less than about 1 m (veneer) to greater than a meter (blanket) in depth, reaching up to about 20 m. In places, the till overlies gravel, cobble and boulder material. The overburden thickness in the Tiriganiaq deposit area varies from 3 to 21 m above the proposed pit.

Overburden shear strength parameters were estimated from historic direct shear testing. Material strength parameters estimated from this data are summarized in Table 2.

Table 2: Summary of overburden direct shear testing results (Golder 2013a)

Strength Condition	Cohesion (kPa)	Friction Angle (°)
Peak	24	36
Residual	24	34

Intact Rock Strength

The property is underlain by a sequence of greywacke and siltstones, iron formation and mafic volcanics or volcaniclastics. Gabbros intruded as sills, are structurally parallel to the turbidite, volcaniclastic and iron formation sequences. All have undergone multiple deformation events related to southwest and northeast vergence thrusts. At the Tiriganiaq deposit, gold is hosted in interbedded layers of banded chert and oxide iron formation, and in quartz veins.

The main geotechnical rock mass domains and lithology groups are summarized in Table 3.

Table 3: Geotechnical Rock Mass Domains and Main Lithologies

Formation/Domain	Lithology	Main Rock Codes
Sam	Greywacke	Kwa
	Siltstone	Ks
Upper Oxide (UO)	Iron formation	N
	Graphitic mudstone	Kmg
Wesmeg	Mafic volcanic	M
Dykes	Gabbro	Mg
	Lamprophyre	aUa
Ultramafic Volcanics		U

Laboratory tests on core samples from Tiriganiaq and other deposits in the Meliadine camp were conducted in 2000, 2009, 2011, and 2013 (Golder 2000) (Golder 2010a) (Golder 2010b) (Université Laval 2012a) (Université Laval 2012b) (Golder 2013b) and (Queen's University 2013). Laboratory testing has included Unconfined Compressive Strength (UCS) testing of intact core and Direct Shear (DS) tests of discontinuities. Field Strength Index and Point Load Testing (PLT) were conducted for several geotechnical field campaigns.

Unconfined laboratory testing results for the Tiriganiaq deposit are available from geotechnical campaign results in Golder (Golder 2000) (Golder 2010a) (Golder 2010b) and Université Laval (Université Laval 2012a) (Université Laval 2012b). Additional testing was conducted with the 2013 geotechnical campaign, but this work focused on the other deposits on the Meliadine property

(Pump, F Zone, Wesmeg, and Discovery). The compiled results for the Tiriganiaq deposit are presented in Figure 2, Figure 3 and Figure 4 and summarized in Table 4 for each of the main formations, Sam, Upper Oxide (UO), Wesmeg and gabbro dykes.

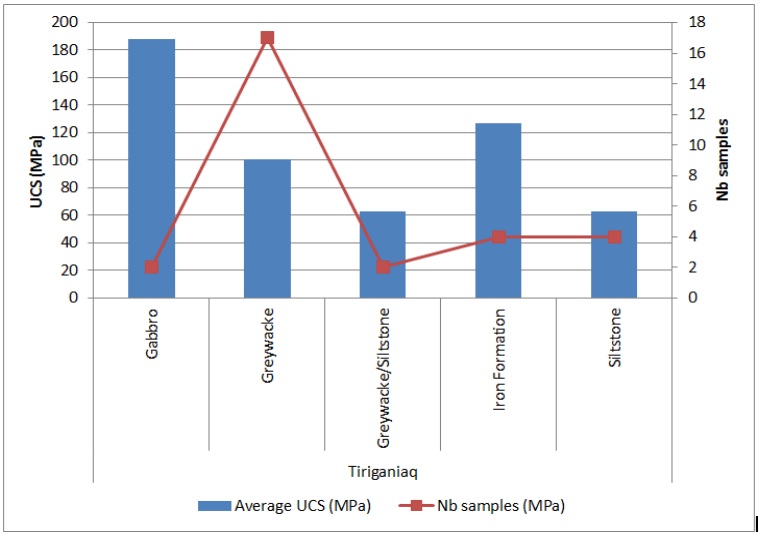


Figure 2: Average UCS for Lithology Encountered in the Sam Formation Rocks at Tiriganiaq

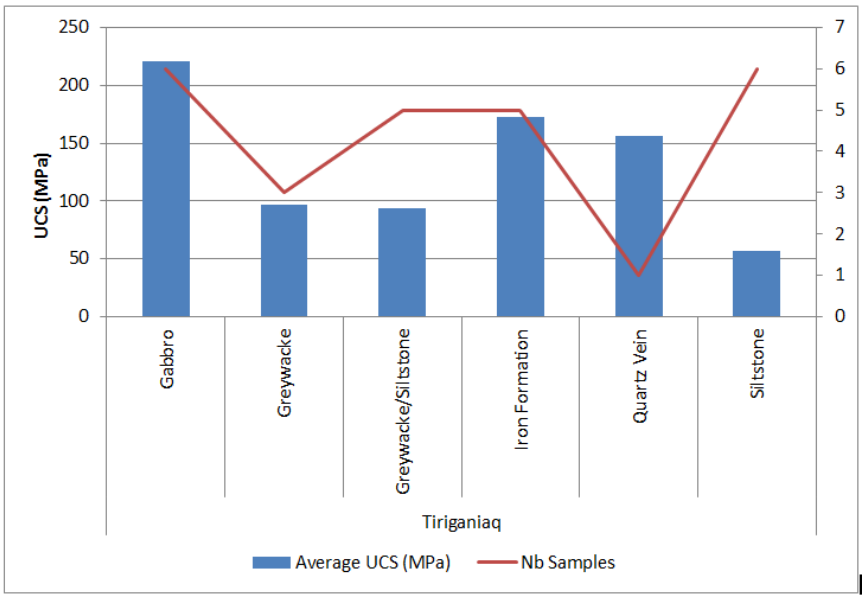


Figure 3: Average UCS for Lithology Encountered in the UO Formation Rocks at Tiriganiaq

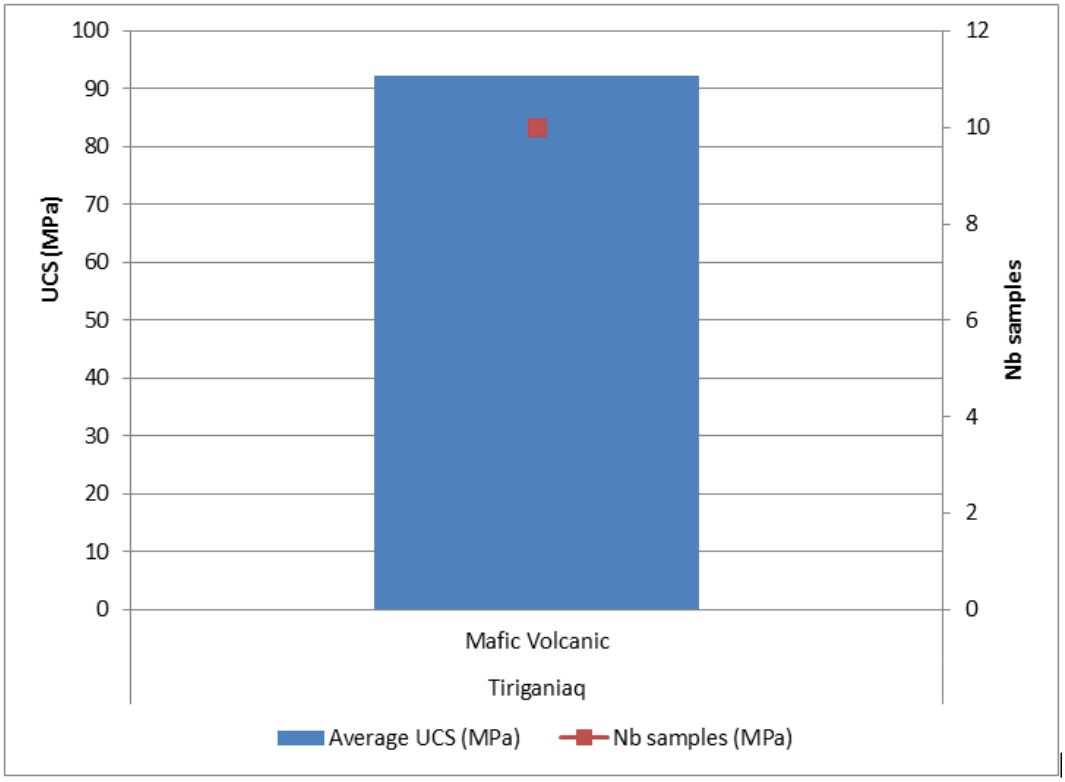


Figure 4: Average UCS for Lithology Encountered in the Wesmeg Formation Rocks at Tiriganiaq

Table 4: Average UCS and Intact Rock Modulus Ei, for Rock Types Encountered in each Formation/Domain

Formation/ Domain	Lithology	UCS (MPa)	Number of Samples	Ei (GPa)	Number of Samples
Sam	Greywacke	101.3	17	65.5	8
	Greywacke/Siltstone	62.6	2		
	Siltstone	63.0	4		
	Iron Formation	119.8	4	78.9	4
	Gabbro	188.0	2		
Upper Oxide	Greywacke	96.6	3	55.4	1
	Greywacke-Siltstone	94.0	5		
	Siltstone	56.8	6	57.6	2
	Iron Formation	172.4	5	55.5	2
	Quartz Vein	156.2	1	53.8	1
	Gabbro	220.6	6	80.0	5
Wesmeg	Mafic Volcanics	92.3	10	50.8	5

At Tiriganiaq, greywacke has an average UCS of 101 MPa, siltstone is weaker at about 59 MPa and greywacke/siltstone has an average strength of about 85 MPa. The mafic volcanics of the Wesmeg Formation have an average strength of 92 MPa. The iron formation and the quartz veins are the strongest rocks in the package with respective average strengths of 141 MPa and 156 MPa. The gabbro dykes are consistently the strongest rocks with average strengths of 212 MPa in all formations.

In summary, the rocks at Tiriganiaq are typically Strong (ISRM R4) to Very Strong (ISRM R5). The ore zone (iron formation and quartz veins) is stronger than both the hanging wall (Sam Formation) and footwall (Wesmeg Formation). The gabbro dykes are categorized as Very Strong.

The values of the intact rock modulus Ei indicate that the intact rock units are all relatively stiff. The gabbro and iron formation are the stiffest units and the footwall mafic volcanics appear to be the least stiff.

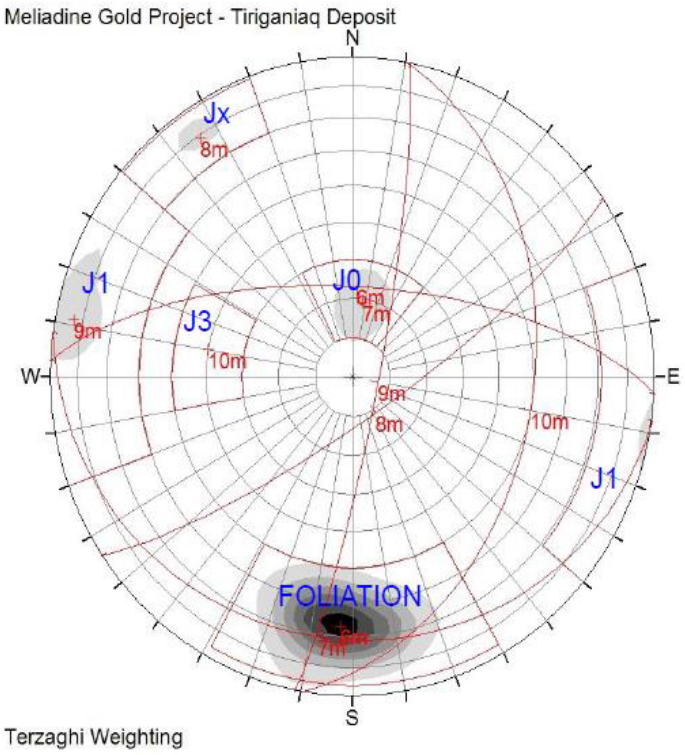
Discontinuity Strength

The dominant structural orientations in the ore deposit area are related to the east-west trending Tiriganiaq Shear, which is a splay of the northwest-southeast trending Pyke Fault, a regional fault/shear zone trending along the length of the Meliadine property, just south of the Tiriganiaq deposit. The foliation and/or bedding around the Tiriganiaq deposit are sub-parallel to the Tiriganiaq Shear Zone, which dips approximately 60° to 70° to the north. The base of the Tiriganiaq deposit is defined by the Lower Fault Zone, a splay off the main Pyke Fault.

The Tiriganiaq deposit area is defined by a single structural domain consisting of north dipping foliation, south dipping J0, east dipping J1/J3 and Jx joint sets as detailed in Table 5 and Figure 5 (Golder 2013c).

Table 5: Structural Orientations for Tiriganiaq Deposit

Structure	Dip (°)	Dip Direction (°)	Comments
Foliation	67	002	Major, moderate north-dipping set; continuous
J0	19	189	Major, shallow south-dipping set; continuous
J1	84	102	Subordinate, steep east-dipping set; discontinuous
J3	40	100	Subordinate, moderate east-dipping set; discontinuous
Jx	79	147	Subordinate, steep southeast-dipping set; discontinuous
J2		Diffuse; removed from previous work	



Structure	Dip (degrees)	Dip Direction
Foliation	68	002
J0	19	189
J1	84	102
J3	40	100
Jx	79	147

Equal Area
Lower Hemisphere
4429 Poles
4429 Entries

Figure 5: Structural Orientations for the Tiriganiaq Deposit (Golder 2013c)

The joint sets have been described as continuous or discontinuous (Golder 2013c) for the purpose of open pit slope stability analysis, where structures that are less than bench scale in length have a limited impact on slope stability. For the purpose of underground stability analysis, however, joints that have continuity on the scale of a 5 m wide excavation must be considered in the analyses. All joints and foliations are therefore considered for underground kinematic analysis.

Laboratory testing included Direct Shear testing of discontinuities during field investigations carried out by Golder (Golder 2010a and b; Golder 2013b and c) and Université Laval (Université Laval 2012b). In total, 72 direct shear tests were carried out on discontinuities from all deposits and on both foliation and joints. Table 6 presents a summary of testing by deposit, rock, and discontinuity type.

Table 6: Summary of Direct Shear Tests at Meliadine

Deposit	Rock Type	Discontinuity Type		Total Tests
		Foliation	Joint	
Discovery	Argillite	1	1	2
	Greywacke	10	10	20
	Iron Formation	1	0	1
		12	*11*	*23*
F Zone	Iron Formation	4	0	4
	Metavolcanics	4	3	7
	Mafic Volcanics	2	0	2
		10	*3*	*13*
Normeg	Mafic Volcanics	1	2	3
Pump	Mafic Volcanics	2	2	4
Tiriganiaq	Iron Formation	4	1	5
	Mafic Volcanics	7	3	10
	Siltstone	0	1	1
		19	*10*	*29*

At Tiriganiaq, 19 tests were conducted on foliation and 10 on jointsFor design purposes, peak shear strength is considered for joints, using a cohesion value 0 kPa. Residual shear strength for foliation is considered appropriate for design purposes (Golder 2013c).

Rock Mass Classification

The rock mass quality was assessed following Bieniawski's (Bieniawski 1976) Rock Mass Rating (RMR_{76}) classification system and the NGI's Q rating (Barton et al. 1974). The data from geotechnical drilling and mapping campaigns is summarized in the FEIS. It ranged from Good (most) to Good to Fair to Fair/Poor (Graphitic Mudstone).

The 2011 results are considered more conservative due to the inexperience of the logger and the fact that logging was conducted at the core shack and not at the drill as was done in previous geotechnical campaigns.

For underground mining, available geotechnical data from drill holes were used to assess the rock mass quality in the proximity of stoping areas defined by the Mineral Shape Optimizer (MSO) ®. During the underground geotechnical mapping campaign conducted in 2008 and through a review of core photographs, it was noted that the immediate stope hanging wall and footwall ('proximal' HW and FW) is sometimes more fractured than the typical rock mass farther away from the stopes ('distal' HW and FW). In the case of the 1000 lode, the footwall of the stopes lies against the Lower Fault and in some cases it lies against the graphitic mudstone. The results are compiled in Figure 5 and Figure 6.

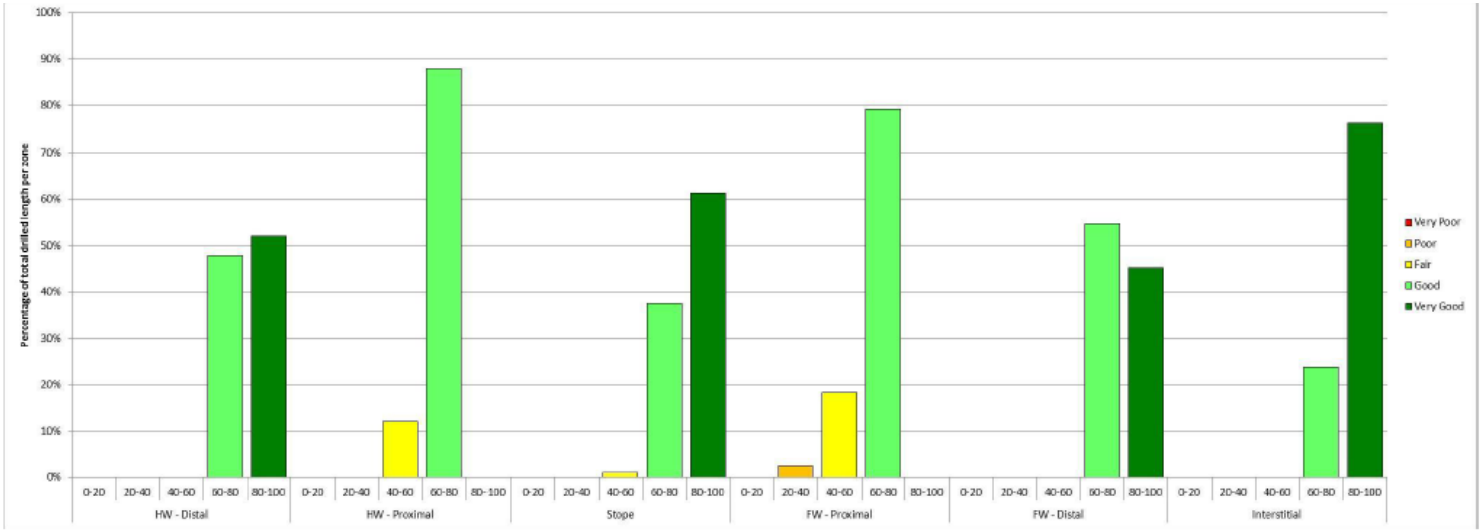


Figure 5a: Distribution of rock mass rating (RMR_{76}) per zone (including all Lodes)

Table 5b: Rock Mass Rating (RMR_{76}) per Lodes and Zones

Lode	HW Distal			HW Proximal			Stope			FW Proximal			FW Distal		
	Low Bound	Average (count)	High Bound	Low Bound	Average (count)	High Bound	Low Bound	Average (count)	High Bound	Low Bound	Average (count)	High Bound	Low Bound	Average (count)	High Bound
1000	74	79 (9)	83	55	65 (3)	76	66	74 (9)	81	32	53 (9)	73	72	77 (9)	81
1050	74	77 (4)	80	-	-	-	77	79 (4)	81	-	-	-	79	82 (4)	86
1100	78	83 (8)	88	66	70 (2)	73	79	86 (8)	93	66	74 (8)	81	78	82 (8)	87
1153	80	83 (4)	85	-	-	-	84	86 (4)	88	-	75 (1)	-	81	88 (4)	94
1252	77	81 (8)	85	-	-	-	76	82 (8)	88	-	-	-	75	78 (8)	82
1256	77	80 (4)	83	-	71 (1)	-	68	78 (4)	88	69	72 (4)	74	78	82 (4)	86
1260	-	88 (1)	-	-	-	-	-	94 (1)	-	-	-	-	-	91 (1)	-

Table 5c: Rock Mass Rating (RMR_{76}) for Interstitial Zone

Lode	Low Bound	Average (count)	High Bound
All Lodes	76	83 (15)	90

Figure 5: Distribution of RMR_{76} Around the Potential Stoping Areas

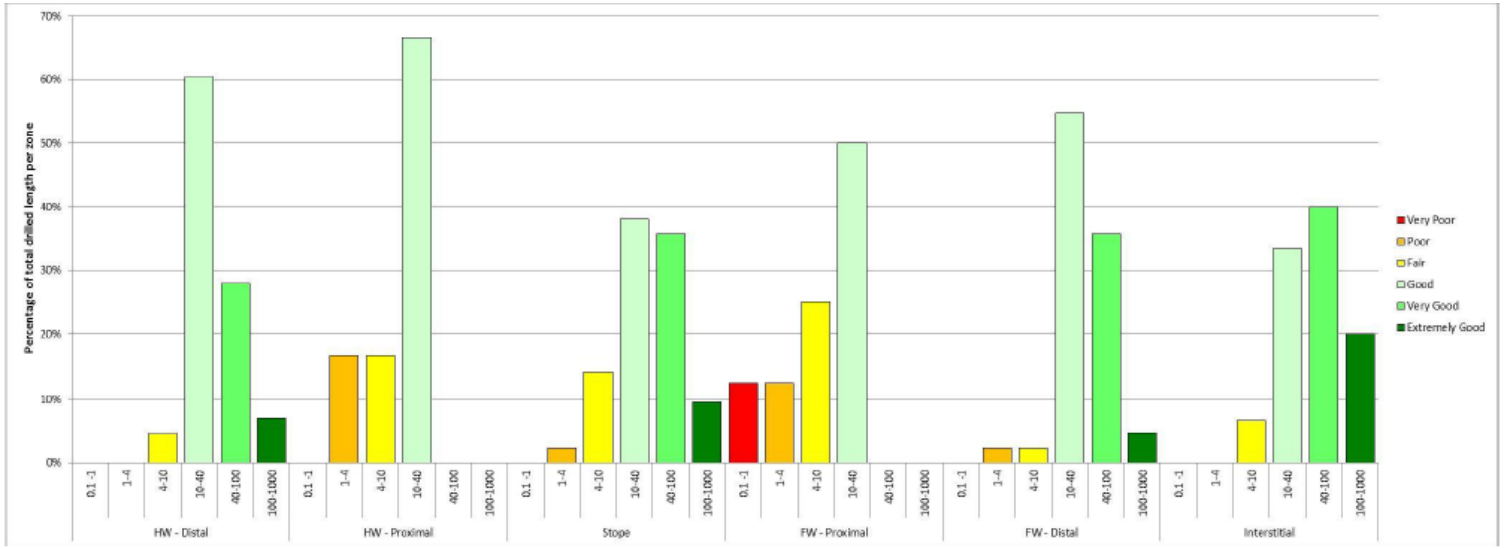


Figure 6a: Distribution of Q' value per zone (including all Lodes)

Table 6b: Rock Mass Quality Q' (NGI system – Q') per Lodes and Zones

Lode	HW Distal			HW Proximal			Stope			FW Proximal			FW Distal		
	Low Bound	Geo. Mean (count)	High Bound	Low Bound	Geo. Mean (count)	High Bound	Low Bound	Geo. Mean (count)	High Bound	Low Bound	Geo. Mean (count)	High Bound	Low Bound	Geo. Mean (count)	High Bound
1000	15	27 (9)	50	1	4.9 (3)	19	6	15 (9)	37	0	1.1 (4)	14	13	22 (9)	38
1050	14	26 (3)	46	-	-	-	22	29 (4)	37	-	-	-	28	43 (4)	66
1100	27	49 (8)	90	6	9 (2)	14	30	70 (8)	165	6	15 (2)	40	29	46 (8)	73
1153	34	45 (4)	61	-	-	-	50	65 (4)	84	-	17 (1)	-	39	83 (4)	176
1252	23	36 (8)	59	-	-	-	19	42 (8)	94	-	-	-	19	27 (8)	39
1256	21	31 (4)	46	-	11 (1)	-	15	33 (4)	72	9	12 (2)	15	25	42 (4)	70
1260	-	90 (1)	-	-	-	-	-	181 (1)	-	-	-	-	-	123 (1)	-

Table 6c: Rock Mass Quality, Q' Values (NGI system – Q') for Interstitial Zone

Lode	Low Bound	Geometric Mean (count)	High Bound
All Lodes	20	50 (15)	123

Figure 6: Distribution of Q' Around the Potential Stoping Areas

The following observations are based on the results from both the RMR_{76} and Q' classification systems and data analysis:

- There is no significant difference between HW distal, FW distal and stope rock mass quality. The rock mass quality is Good to Very Good for all lodes except the 1000 lode where rock mass quality is Good.
- A proximal zone is encountered in both the HW and FW in 44% of drill holes crossing the 1000 lode. For the 1100 lode and other lodes, HW and FW proximal zones were intersected in 10% and 17% of the drill holes, respectively. The rock mass quality of HW and FW proximal zones is lower (Fair to Good) than the host rock distal zones and stope zones.
- The average quality of the FW proximal zone of the 1000 lode is Fair in RMR76 and Poor in the Q' system. Field estimates also indicate the intact rock strength is significantly lower in this zone.
- The quality of the proximal zones of lode 1100 is Good (RMR76) and Fair to Good (Q' system). The difference between both systems may reflect the presence of weaker discontinuities between lodes 1000 and 1100.
- An attempt was made to assess the quality of the interstitial zones between lodes. The data is limited but, at the moment, there is no significant difference between the interstitial zones and the surrounding rock mass.
- The proximal zone thickness ranges from 0.4 to 3 m, perpendicular to the stope block contacts, with a majority (80%) at 2 m thick.
- Two types of proximal zones were identified from observations of core photographs: strongly fractured zones and highly altered and fractured zones. The geotechnical behavior with regards to the effect on dilution may differ between the two types of proximal zones.

Anticipated Geotechnical Conditions for Excavations

Overburden

Overburden should be as much as possible excavated during the winter months with rip-rapping of bench faces immediately after excavation to preserve the permafrost conditions within the overburden. A wider bench should be constructed at the overburden-rock interface.

Open Pit Mining

The rock mass rating of the various rock types to be mined by open pit in the Tiriganiaq deposit area is Good. The bench design criteria are based on structurally-controlled failure mechanisms (plane failure, wedge failure, and toppling failure), and not on overall rock mass failure. The rock mass is sufficiently strong that overall rock mass failure is not expected for the relatively shallow pits. The main structural control in the deposit area is the north dipping continuous foliation. Foliation-parallel shearing is observed in drill core. The remaining joint systems that will contribute to local

bench scale instability are considered to be discontinuous with variable but limited continuity based on surface and underground mapping data.

All structurally-controlled failure modes are aggravated by groundwater pressures within the slope, and toppling failures are particularly sensitive to groundwater pressure. The Tiriganiaq pit is expected to be developed entirely within permafrost, so groundwater pressures are not considered in the analyses.

Underground Mining

The rock masses at Tiriganiaq are typically strong with good rock mass quality except for proximal zones on the hanging wall and footwall of the 1000 lode. The maximum mining depth is in the order of 625 m. Rock mass damage initiation is not anticipated above a depth of about 400 m given the strength of the rocks at Tiriganiaq. Significant stress induced rock mass damage is not expected for the current mining plan, based on anticipated rock mass quality, strength and in situ stress assumptions. Rock mass conditions will be structurally controlled and ground support is designed to maintain stability particularly for large excavation spans and areas of confinement loss such as secondary stopes. Joints and foliation are expected to be continuous and excavation boundaries will tend to break along these natural features.

Dilution from stope hanging walls and footwalls is expected due to the relatively shallow dip of about 62°, strong foliation and locally lower rock mass quality in the stopes proximal to the HW and FW.

The orebody consists of several parallel en-echelon lodes which will be mined in a retreat manner from hanging wall to footwall with inter-lode pillars. The stability of these pillars will influence the dilution to be expected in the footwall stopes.

Tailings Faciltiy Design

Tailings Physical and Geotechnical Properties

Tetra Tech EBA (EBA 2013) carried out a laboratory test program on the tailings for the slurry tailings option with solids contents of 65% and 72%. The test program included the physical index tests, gradation analysis test, settling tests, thermal conductivity tests, consolidated-undrained triaxial test, consolidation test, hydraulic conductivity test, and direct shear test. The tailings index and gradation analysis tests indicated that the tailings are inorganic silt with low plasticity and low compressibility and consist of 17%, 81%, and 2% of sand, silt, and clay size particles, respectively. Tailings have the gradation curve of 98% passing 150 µm, 83% passing 75 µm, 40% passing 20 µm, and 5% passing 3 µm. Additional tailings laboratory geotechnical tests were carried out in 2014 for the dry stack tailings option with a tailings solid content of 85% at disposal. The test included moisture-density relationship (Standard Proctor), consolidation test, soil water characteristic curve,

direct shear test, and hydraulic conductivity test. The results were documented in Tetra Tech EBA (2014) and briefly summarized below:

- The moisture-density relationship (Standard Proctor, ASTM D698) test indicated that the maximum dry density of the tailings was 1,800 kg/m_3 under an optimum moisture content of 14.9%.
- The coefficient of consolidation (c_v) of the tailings ranged from 24.6 to 29.8 (m_2/year) under various pressures from 10 to 1,600 kPa.
- The tailings had a soil water characteristic curve with an air entry value of 20 kPa and a residual suction of 900 kPa.
- The shear strength parameters were determined to be an inferred internal angle of friction of 33.5° and an apparent cohesion of 9.9 kPa for the tailings samples with a dry density of 1,708 kg/m_3.
- The saturated hydraulic conductivity of the tailings sample was 2.91E-05 cm/sec or 2.91E-07 m/sec for the tailings sample with a dry density of 1,700 kg/m_3.

Tailings Density

The target dry density of the compacted tailings is 1,710 kg/m_3, which is 95% of the maximum dry density of 1,800 kg/m_3 of the tailings sample tested in one moisture-density relationship (Standard Proctor, ASTM D698) test (Tetra Tech EBA 2014).

Original Ground Geotechincal Information

A total of seven boreholes were drilled within the proposed footprint of the TSF during the previous site investigations. Table 7 summarizes the key geotechnical information of the overburden soils in the TSF area.

Table 7: Geotechnical Information of Overburden Soils in TSF Area

Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Types	Ice Conditions	Depth to Bedrock (m)
GT07-11	~0.20	Sand; ice-rich fine-grained materials; till materials (not logged in detail)	~2.25 m (from 0.75 to 2.0 m) ice-rich fine-grained materials with up to 75% Ice	~5.5
GT09-15	0.30	Low recovery; gravel; silty sand	Thawed during drilling	3.5
GT11-10	0.75	Silty peat; ice and silt; gravelly sandy silt	1.75 m ice and silt from 0.75 to 2.5 m	6.3
GT12-18	-	Gravelly silty sand; gravelly sandy silt; gravelly silt and sand	Vs from 1 to 2 m	7.3
GT12-19	-	Gravelly silty sand; sandy silt; silty sand	Vs to Vc, Vr from 2 to 2.7 m	3.1
GT13-07	0.10	Boulder; sand and silt	Thawed during drilling	1.3
GT14-13	0.10	Silty gravelly sand; sand and silt	Up to 10% Vx, Vc, 5% Vs from 1.8 to 3.2 m	3.2

Thermal Evaluations

Thermal analyses were conducted to estimate the thermal conditions of the tailings and foundations during the mine operation and after the closure. The thermal conditions within the TSF will depend on the actual tailings placement plan and schedule, tailings temperatures when placed, and thermal conditions of the original ground before the tailings are placed. Based on the tailings placement plan and schedule presented in Section 5.5 and the assumed conservative initial tailings temperatures (15°C to 25°C) when placed, the following results were obtained:

- The original overburden ground below the tailings can freeze back and then be maintained frozen thereafter; the estimated temperatures of the tailings foundation overburden would be around -4°C in the long term;
- The majority of the tailings placed would become frozen after a winter and would remain frozen, except for the top thick layer placed during late stages of the cell or the layer placed within the active layer;
- Almost all the tailings will become frozen after several winters after the closure cover is placed;
- The design tailings closure cover would maintain the dry stack tailings and foundations in permafrost conditions in the long term; and

- The predicted temperatures of the placed tailings typically range from -1°C to -4°C after 100 years of climate change conditions assumed.

Stability Evaluations

Limit equilibrium stability analyses were conducted to determine the factor of safety against slope failure during construction, operation, and long term after closure of the TSF. Various analysis cases were evaluated for the typical cross-section of the TSF under the following conditions:

- Static loading during short-term stage-construction;
- Static loading under long-term post-construction conditions;
- Seismic (pseudo-static) loading during long term after construction; and
- Other parametric sensitivity analysis cases.

In the slope stability analyses, both frozen and unfrozen conditions of dry stack tailings and foundation soils were considered. The analyses indicate that the calculated minimum factors of safety for the TSF meet or exceed the acceptable factors of safety adopted for the TSF design for both frozen and unfrozen conditions.

Waste Rock Storage Facilities and Overburden Design

Waste Rock and Overburden Materials

The majority of the waste rock is greywacke from Sam formation and upper oxide formation, and mafic rock from Wesmeg formation. The waste rock types were generally classified as medium to very strong with uniaxial compressive strength of 25 to 250 MPa (Golder 2010b).

The waste rock materials are assumed to have a specific gravity of 2.82 and an in-place density of 1.88 t/m_3 after being placed in waste rock piles. The overburden materials are assumed to have a specific gravity of 2.70 and an in-place density of 1.62 t/m_3 after being placed. These values were provided by Agnico Eagle. These in-place density values are considered to be on the conservative (lower) side for waste rock and overburden management. The actual densities could be higher; therefore, less storage capacities may be required than planned.

Original Ground Geotechincal Information

A number of boreholes were drilled within the proposed footprints of the WRSFs during the previous site investigations. Table 8 summarizes the key geotechnical information of the overburden soils in the WRSF areas.

Table 8: Geotechnical Information of Overburden Soils in WRSF Areas

WRSF Areas	Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Types	Ice Conditions	Depth to Bedrock (m)
WRSF1	GT11-06	-	Low recovery; sand; sand and silt	Vs from 2.5 to 2.75 m	13.6
	GT11-07	0.60	Low recovery; silty sand and gravel	Vx from 1.5 to 6.1	6.1
	GT11-11	0.06	Gravelly sand; ice and silty sand;silty sandy gravel	1.5 m ice and silty sand from 2.25 to 3.75 m	8.4
	GT12-14	0.02	Sandy silty gravel	Not logged	8.5
	GT12-15	0.08	Silty sand; sandy silt; gravelly sand and silt	Vr from 1.6 to 3.5 m	12.7
	GT12-16	-	Low recovery; sand and gravel; gravelly silty sand; sandy silty gravel	Thawed during drilling	10.4
	GT12-17	0.05	Low recovery; silty sand; boulders and cobbles; gravelly sandy silt	Thawed during drilling	8.5
	GT13-01	0.20	Sand and silt; gravelly sand	Up to 30% Vx, Vr from 0.6 to 1.2 m; 0.2 m ice and sand from 1.6 to 1.8 m	5.8
	GT13-08	0.15	Low recovery; boulders and cobbles	Thawed during drilling	10.4
	GT13-09	0.08	Low recovery; gravel; boulders	Thawed during drilling	9.5
	GT14-09	0.52	Peat; sand; sandy silt; ice and silt	0.6 m ice and silt from 2.9 to 3.5 m	4.0
WRSF2	GT09-22	0.70	Sandy peat; sand and gravel; gravel and cobble (low recovery)	0.1 m ice and sand and gravel from 1.1 to 1.2 m	4.0
	GT09-23	0.50	Peat; silty sand; sand and gravel	0.3 m ice and sand from 0.95 to 1.25 m; 0.1 m ice from 1.25 to 1.35 m; 0.1 m ice and sand/gravel from 1.9 to 2 m	2.4
	GT09-24	0.10	Low recovery; gravel	Thawed during drilling	1.5
	GT09-25	0.10	Sand; silty sand and gravel; silty	0.1 m ice and sand/gravel from	2.0

Thermal Evaluations

Thermal analyses were conducted to estimate the thermal conditions of the wastes and foundations during the mine operation and after the closure. The thermal conditions within the WRSFs will depend on the actual waste placement plan and schedule, initial waste temperatures when placed, and thermal conditions of the original ground before the waste materials are placed. The waste placement schedule will depend on the specific location in each WRSF and vary with locations.

The initial temperature for the overburden placed in WRSF1 was assumed to be -5°C in winter (October to May) and 5°C in summer (June to September). The initial temperature for waste rock placed in the WRSFs was assumed to be -5°C in winter and 10°C in summer. These assumed initial temperatures are generally on the conservative side (i.e., leading to warmer predicted waste rock and overburden temperatures) for the thermal analyses. The large portion of the WRSF3 footprint will cover the drained lakebed of Lake H20; as a result, the original ground temperature could be warmer with a deep active layer. This condition was considered in the thermal analyses for WRSF3.

Stability Evaluations

Limit equilibrium stability analyses were conducted to determine the factor of safety against slope failure during construction and long term after closure for the WRSFs. Various analysis cases were evaluated for the most critical sections of WRSF1 and WRSF3 under the following conditions:

- Static loading during stage-construction;
- Static loading under long-term post-construction conditions;
- Seismic (pseudo-static) loading during long-term after construction; and
- Other parametric sensitivity analysis cases.

The design geometry and concept for WRSF2 are similar to those for WRSF3; therefore, no separate stability analysis was conducted for WRSF2.

In the slope stability analyses, both frozen and unfrozen conditions of mine waste materials and foundation soils were considered. The analyses indicate that the calculated minimum factors of safety for the WRSFs meet or exceed the acceptable factors of safety adopted for the WRSF design for both frozen and unfrozen conditions.

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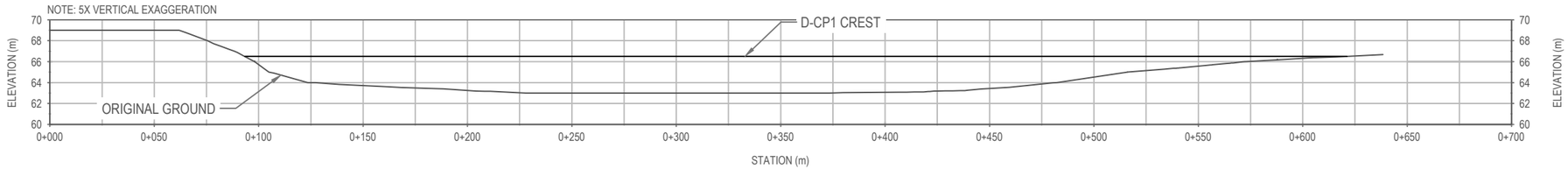
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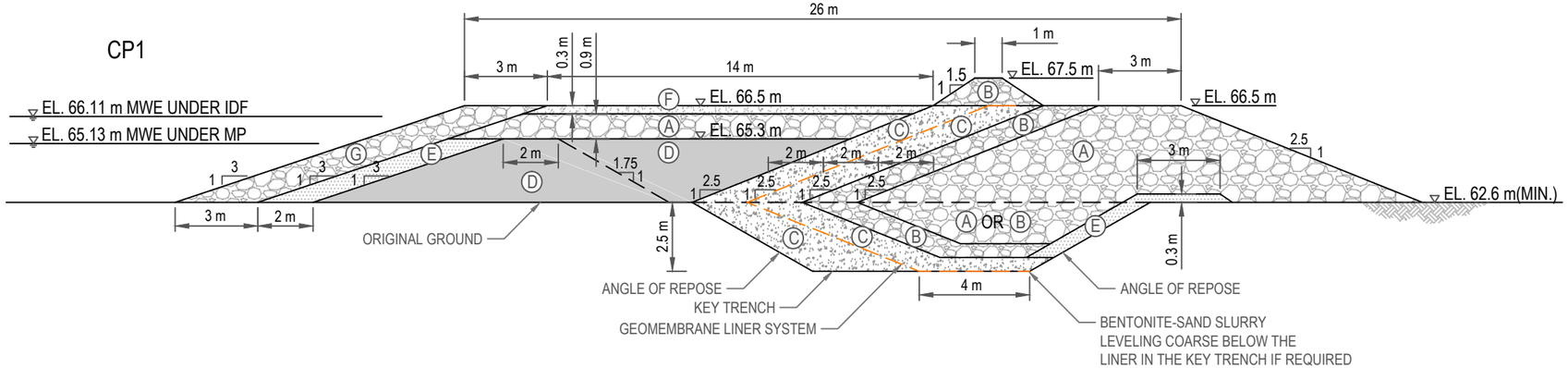
APPENDIX D – DESIGN DRAWINGS

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PROFILE THROUGH CENTRELINE OF D–CP1



TYPICAL DESIGN SECTION – D–CP1

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

MWE: MAXIMUM WATER ELEVATION
IDF: INFLOW DESIGN FLOOD
MP: MEAN PRECIPITATION

AGNICO EAGLE

TETRA TECH EBA

ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NWT/NU
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LICENSEE
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REVISIONS

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VÉRIFIÉ PAR / CHECKED BY	GZ/HX		2014–08–29
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No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND TYPICAL DESIGN SECTION FOR D–CP1

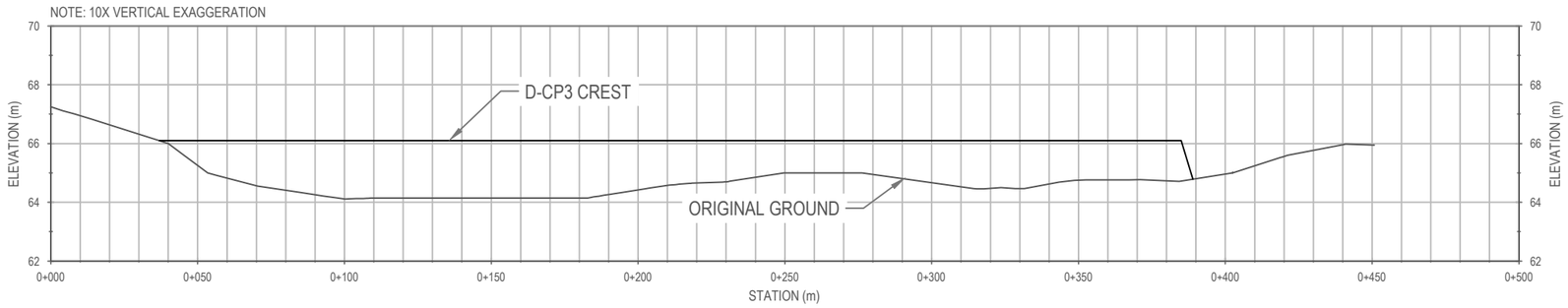
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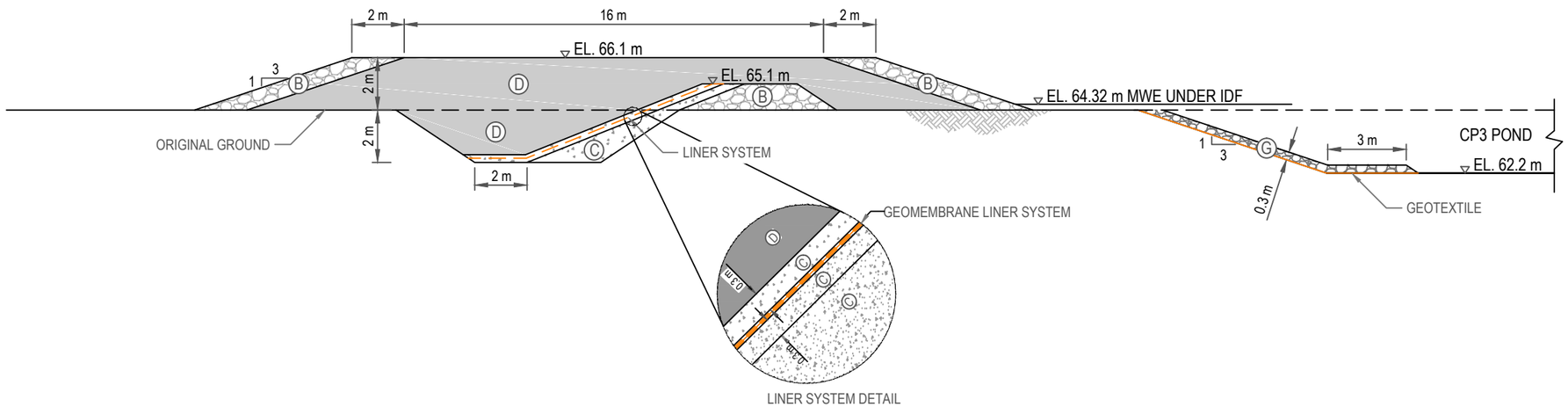
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DRAWING NO.

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PROFILE THROUGH CENTRELINE OF D–CP3



TYPICAL DESIGN SECTION – D–CP3

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AGNICO EAGLE
DATE : 8–5–2015

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

MWE: MAXIMUM WATER ELEVATION
IDF: INFLOW DESIGN FLOOD

AGNICO EAGLE

TETRA TECH EBA

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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND TYPICAL DESIGN SECTION FOR D–CP3

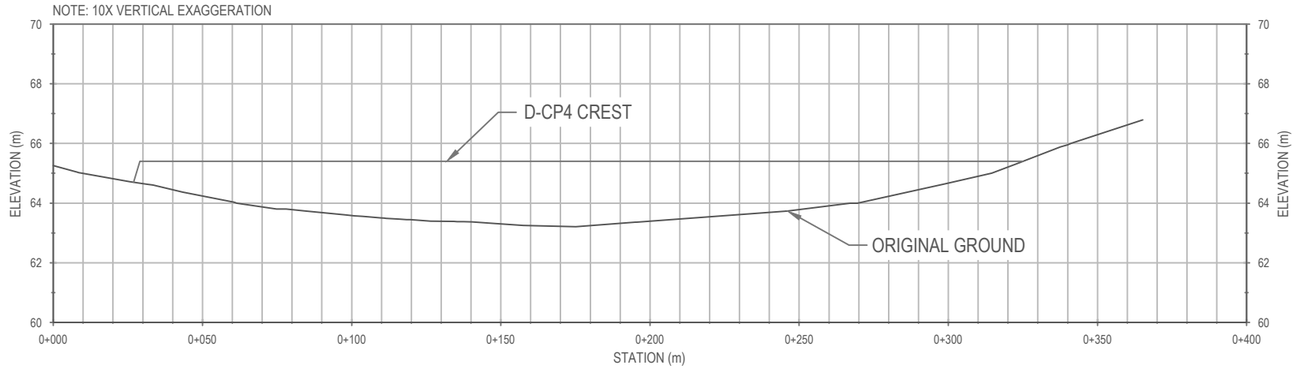
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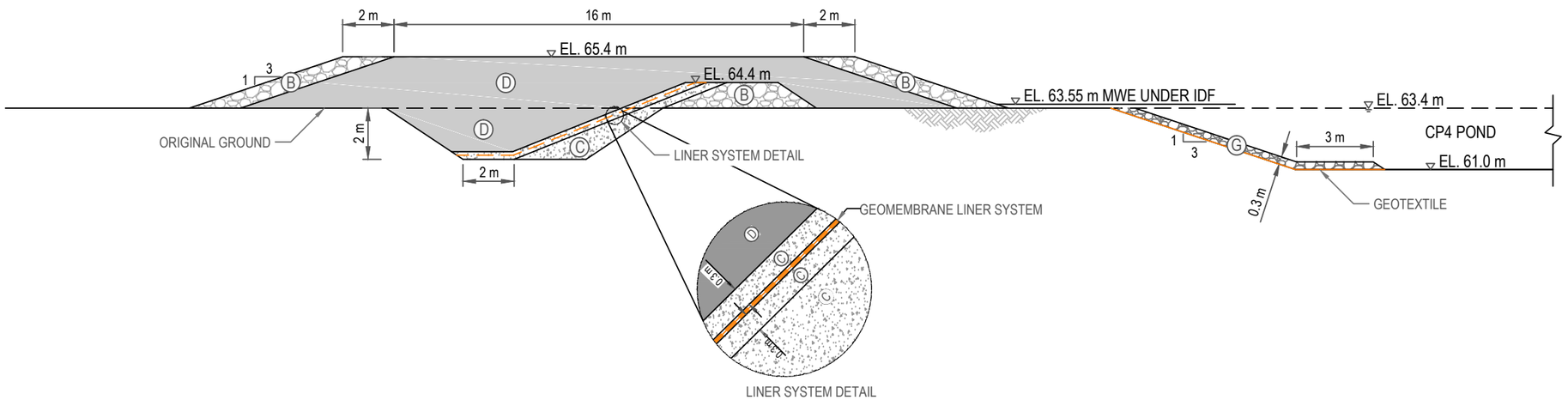
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PROFILE THROUGH CENTRELINE OF D–CP4



TYPICAL DESIGN SECTION – D–CP4

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NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

MWE: MAXIMUM WATER ELEVATION
IDF: INFLOW DESIGN FLOOD

AGNICO EAGLE
TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND TYPICAL DESIGN SECTION D–CP4

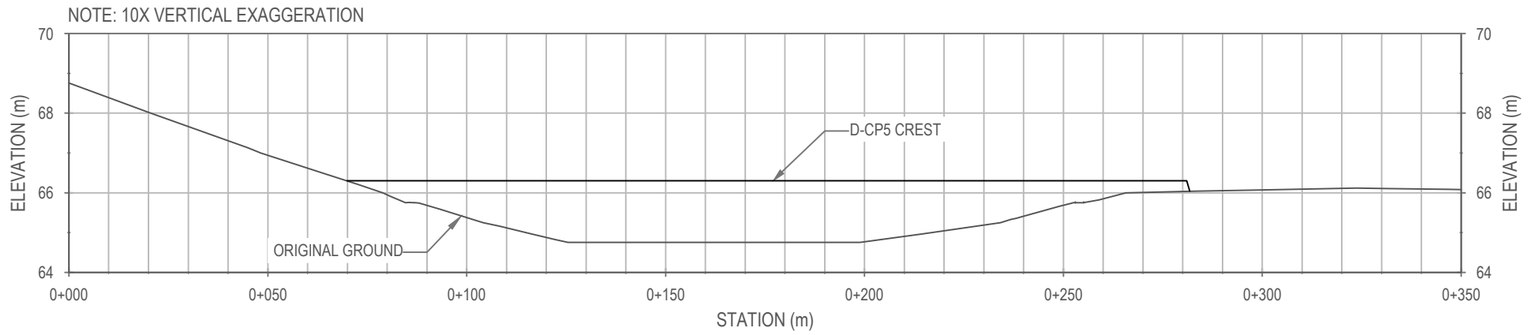
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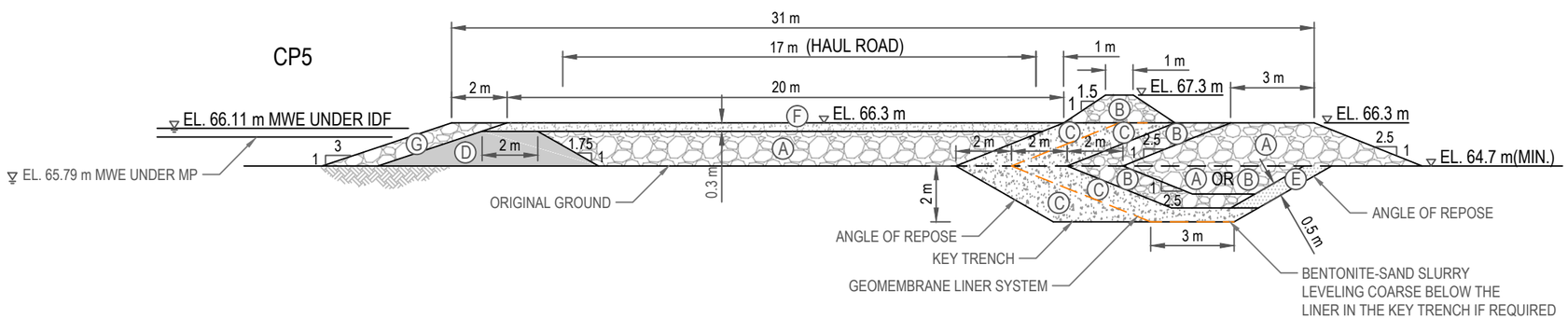
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PROFILE THROUGH CENTRELINE OF D–CP5



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Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

MWE: MAXIMUM WATER ELEVATION
IDF: INFLOW DESIGN FLOOD
MP: MEAN PRECIPITATION

AGNICO EAGLE
TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
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TITRE / TITLE
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PROFILE AND TYPICAL DESIGN SECTION FOR D–CP5

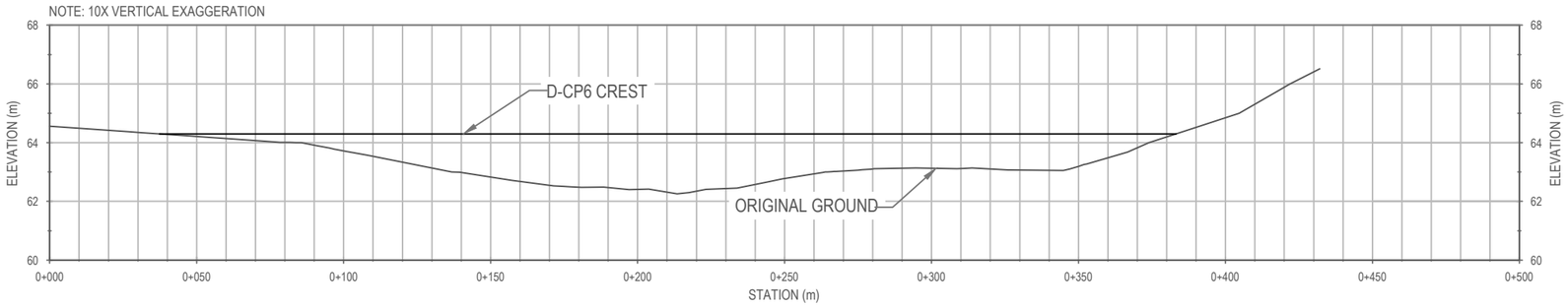
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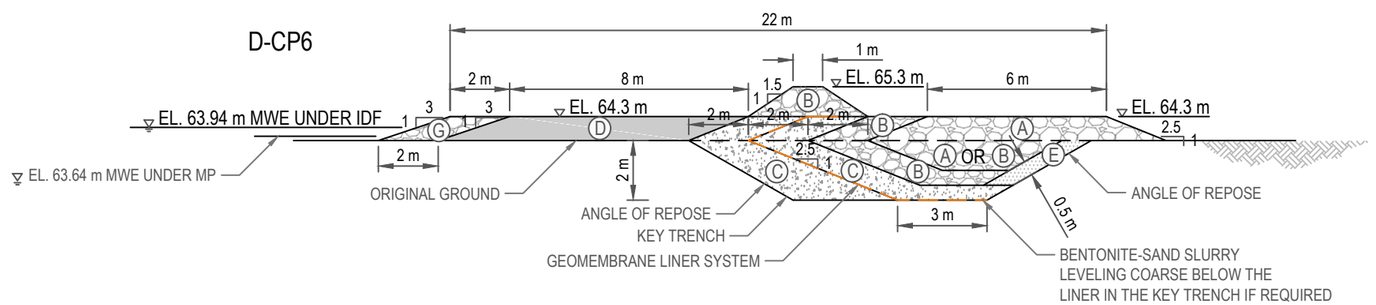
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PROFILE THROUGH CENTRELINE OF D–CP6



TYPICAL DESIGN SECTION – D–CP6

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NOTES:

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Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

MWE: MAXIMUM WATER ELEVATION
IDF: INFLOW DESIGN FLOOD
MP: MEAN PRECIPITATION

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TETRA TECH EBA

G. ZHANG
LICENSEE
May 9, 2014
REGISTERED PROFESSIONAL ENGINEER
NWT/NU

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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND TYPICAL DESIGN SECTION FOR D–CP6

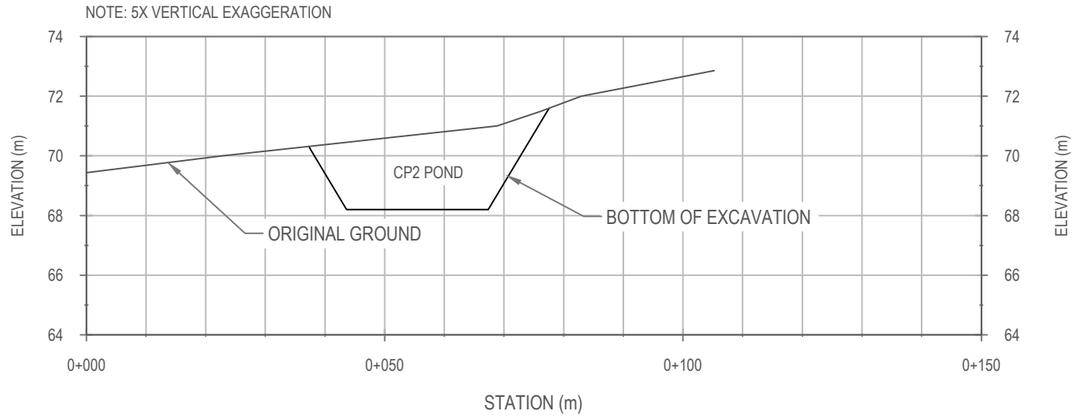
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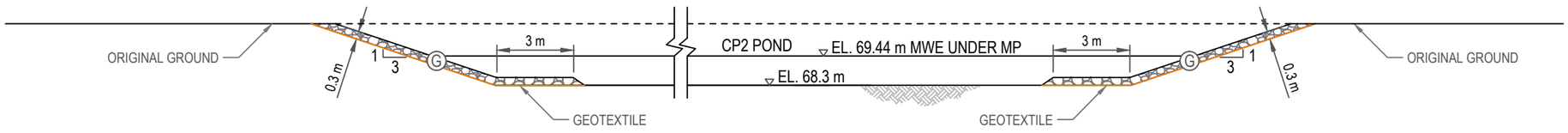
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SECTION THROUGH CP2



TYPICAL DESIGN SECTION – CP2

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NOTES:

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Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

MWE: MAXIMUM WATER ELEVATION
MP: MEAN PRECIPITATION

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G. ZHANG
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May 27, 2015

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No. PROJET PROJECT NO.

DATE

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTIONS FOR CONTACT WATER POND CP2

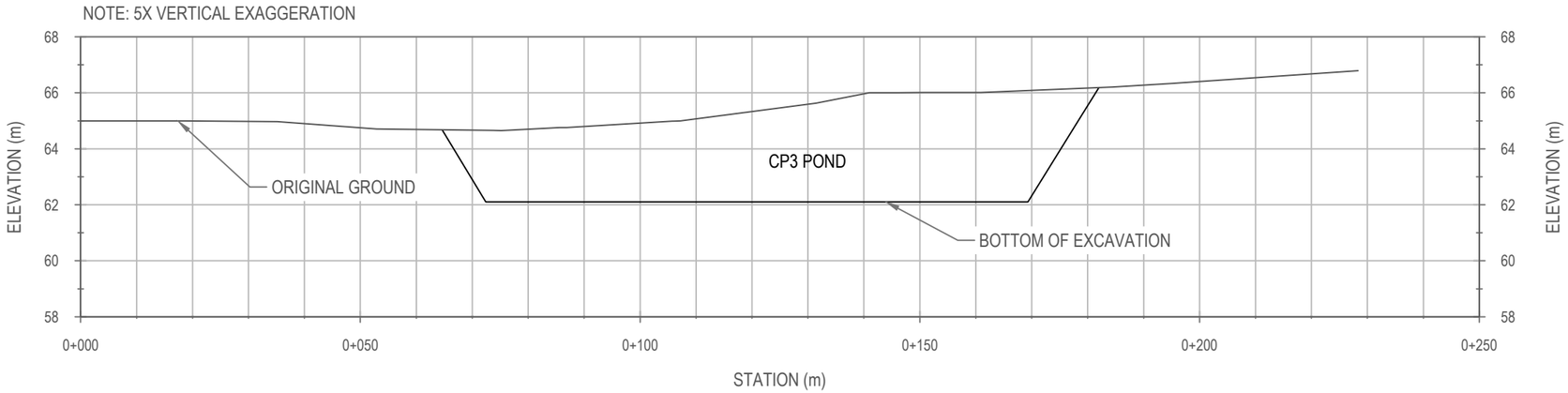
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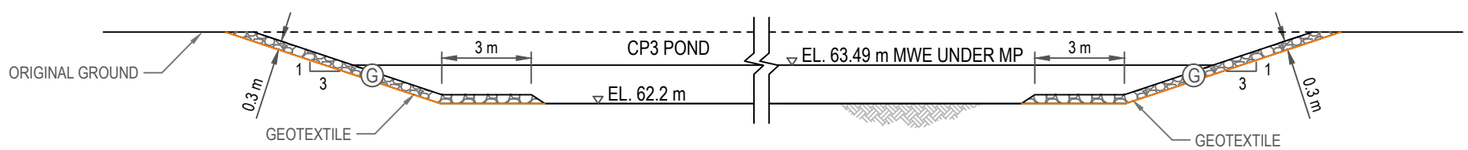
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SECTION THROUGH CP3



TYPICAL DESIGN SECTION – CP3

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AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

MWE: MAXIMUM WATER ELEVATION
MP: MEAN PRECIPITATION

AGNICO EAGLE
TETRA TECH EBA

G. ZHANG
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No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTIONS FOR CONTACT WATER POND CP3

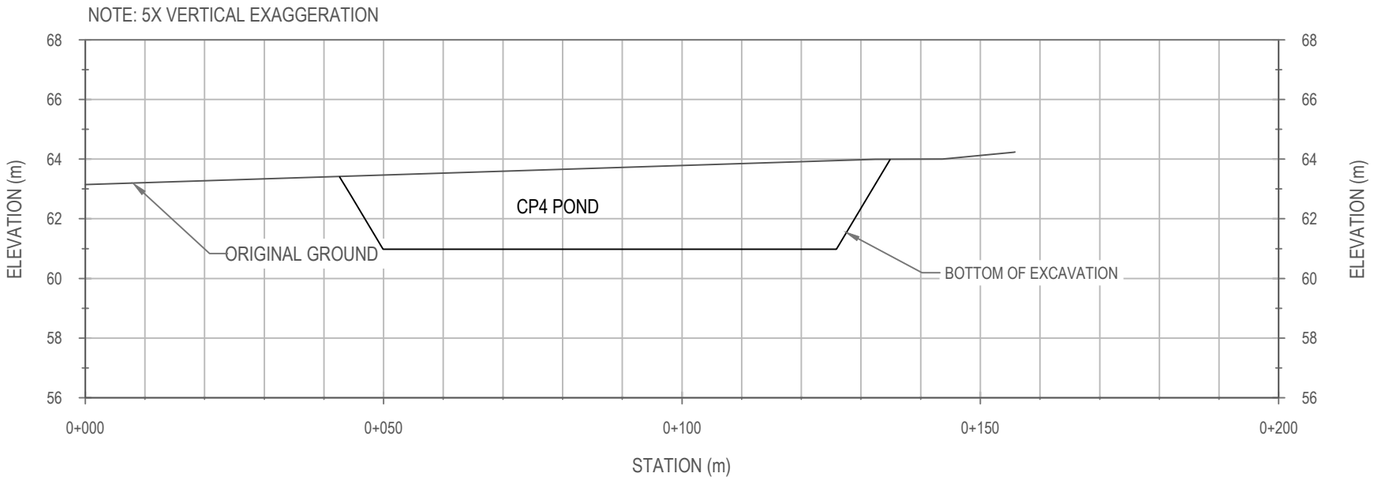
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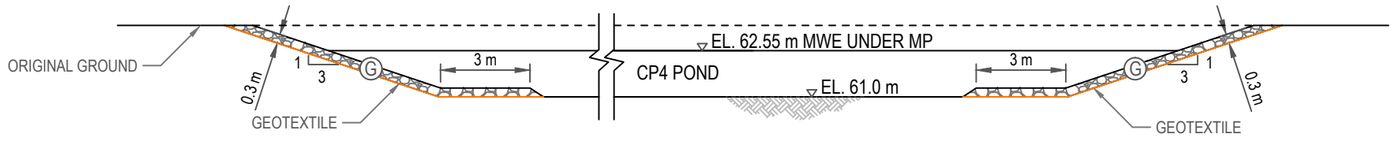
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SECTION THROUGH CP4



TYPICAL DESIGN SECTION – CP4

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

MWE: MAXIMUM WATER ELEVATION
MP: MEAN PRECIPITATION

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	EP	DATE 2014–08–29
VÉRIFIÉ PAR CHECKED BY	GZ/HX	2014–08–29
APPROUVÉ PAR APPROVED BY		
No. PROJET PROJECT NO.		
DATE		

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTIONS FOR CONTACT WATER POND CP4

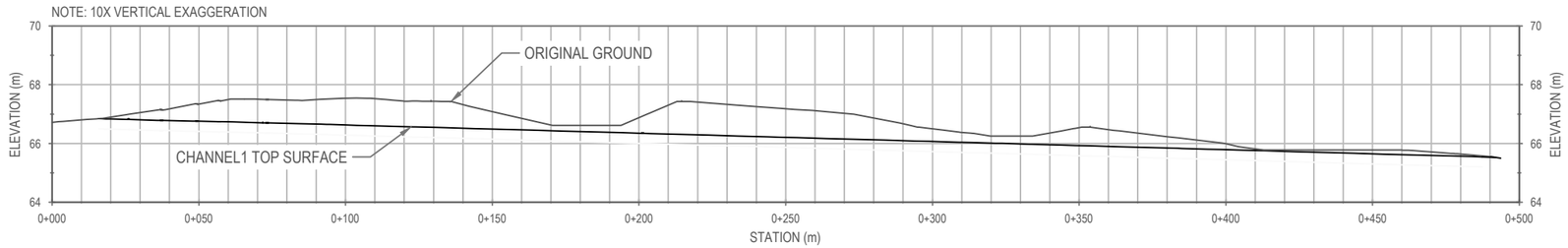
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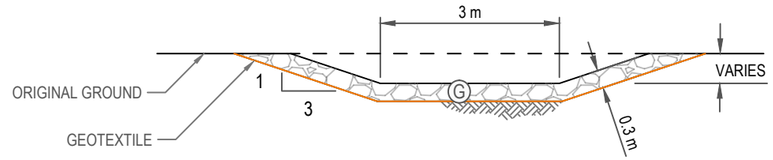
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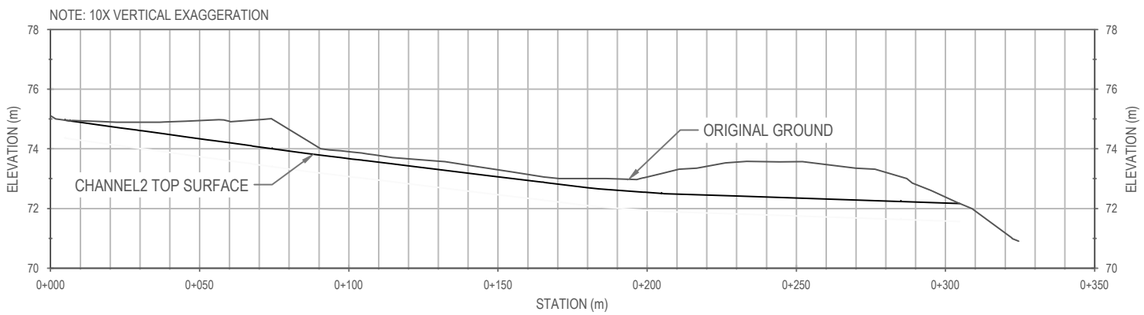
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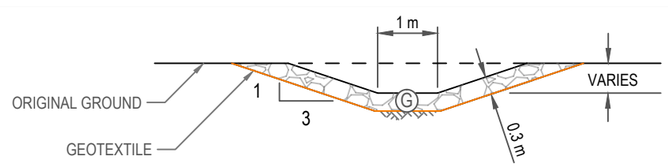
PROFILE THROUGH CENTRELINE OF CHANNEL1



TYPICAL DESIGN SECTION – CHANNEL1



PROFILE THROUGH CENTRELINE OF CHANNEL2



TYPICAL DESIGN SECTION – CHANNEL2

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE

TETRA TECH EBA

ASSISTENGED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR / DRAWN BY	EP	DATE	2014–08–29
VÉRIFIÉ PAR / CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR / APPROVED BY			
No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILES AND SECTIONS FOR CHANNEL1 AND CHANNEL2

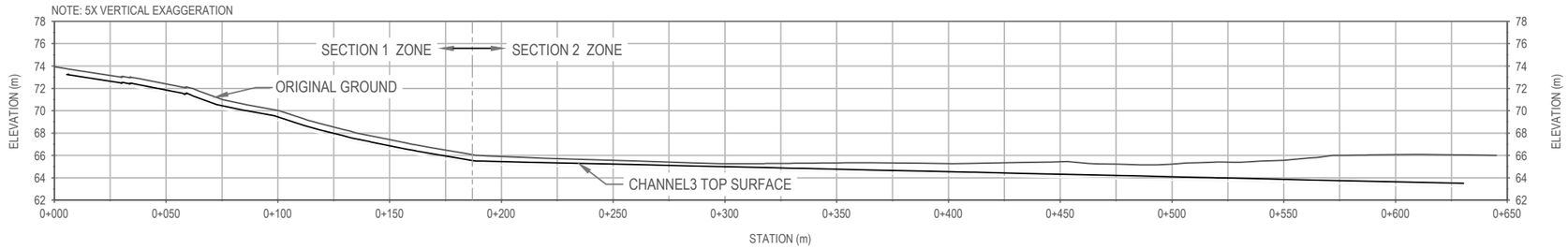
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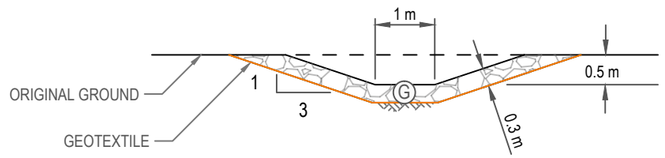
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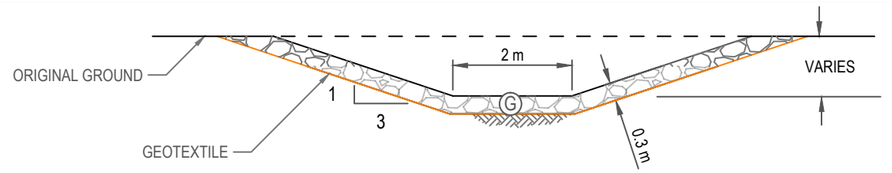
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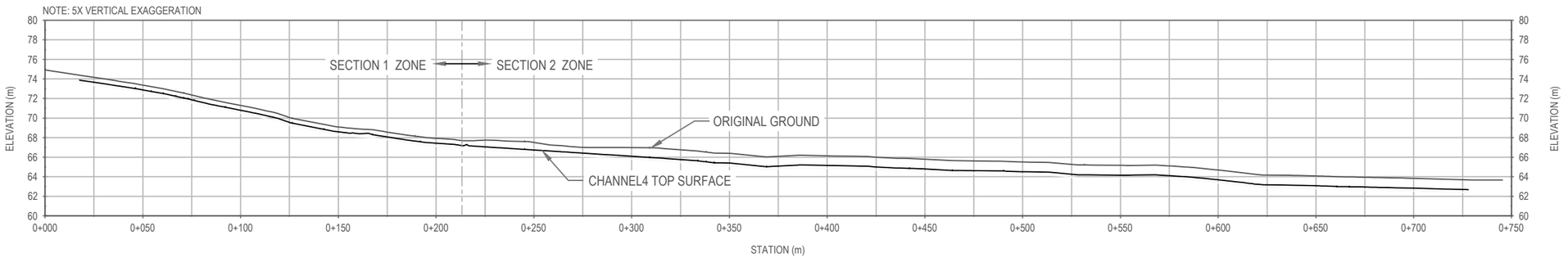
PROFILE THROUGH CENTRELINE OF CHANNEL3



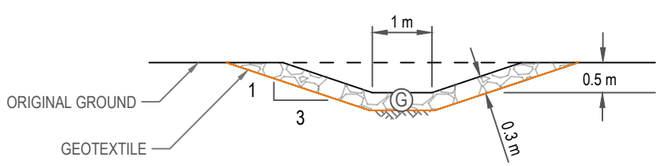
TYPICAL DESIGN SECTION–1– CHANNEL3



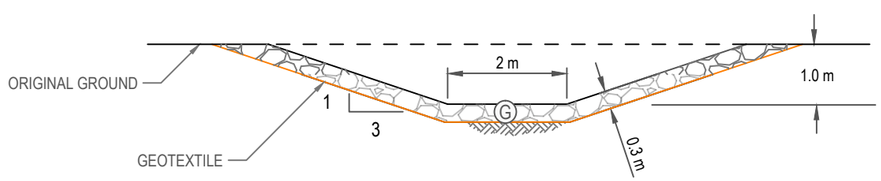
TYPICAL DESIGN SECTION–2– CHANNEL3



PROFILE THROUGH CENTRELINE OF CHANNEL4



TYPICAL DESIGN SECTION–1– CHANNEL4



TYPICAL DESIGN SECTION–2– CHANNEL4

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE
TETRA TECH EBA

ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS
G. ZHANG
LICENSEE
NWT/NU

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REVISIONS

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VÉRIFIÉ PAR CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILES AND SECTIONS FOR CHANNEL3 AND CHANNEL4

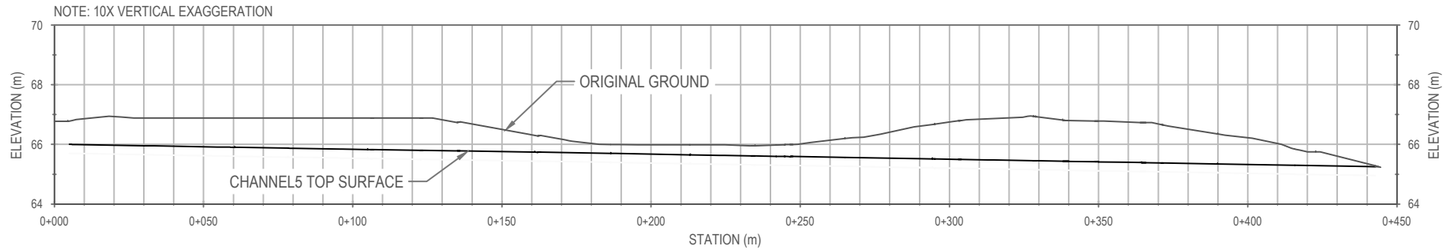
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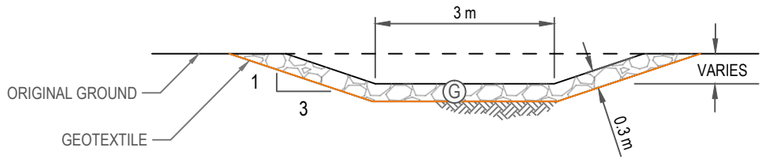
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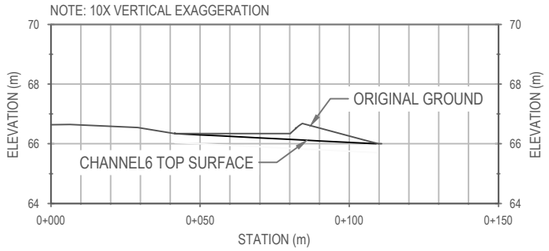
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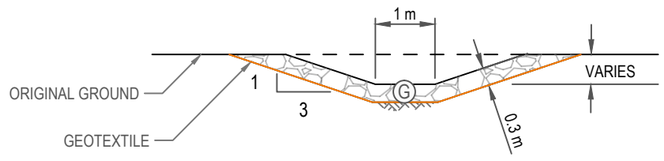
PROFILE THROUGH CENTRELINE OF CHANNEL5



TYPICAL DESIGN SECTION – CHANNEL5



PROFILE THROUGH CENTRELINE OF CHANNEL6



TYPICAL DESIGN SECTION – CHANNEL6

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	EP	DATE	2014–08–29
VÉRIFIÉ PAR CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE

AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILES AND SECTIONS FOR CHANNEL5 AND CHANNEL6

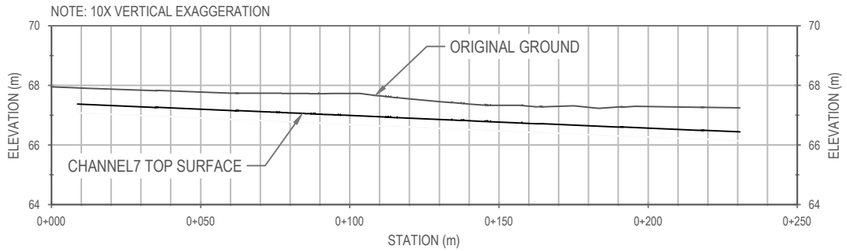
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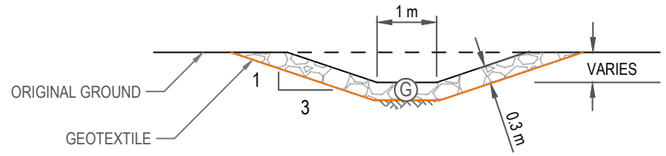
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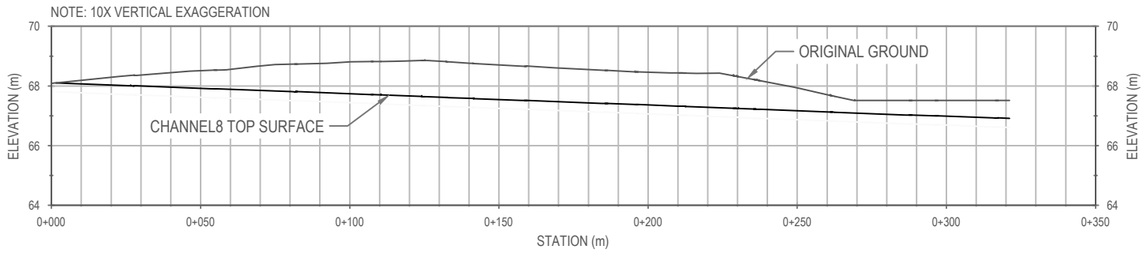
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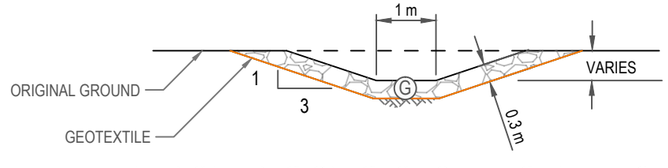
PROFILE THROUGH CENTRELINE OF CHANNEL7



TYPICAL DESIGN SECTION – CHANNEL7



PROFILE THROUGH CENTRELINE OF CHANNEL8



TYPICAL DESIGN SECTION – CHANNEL8

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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VÉRIFIÉ PAR / CHECKED BY	GZ/HX	2014–08–29
APPROUVÉ PAR / APPROVED BY		
No. PROJET / PROJECT NO.		
DATE		

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILES AND SECTIONS FOR CHANNEL7 AND CHANNEL8

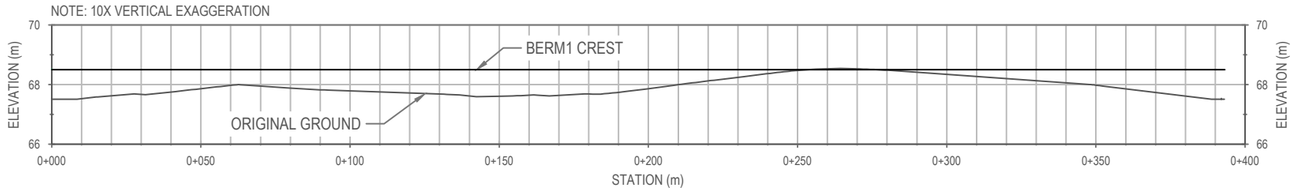
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AE–CART–ANSI B

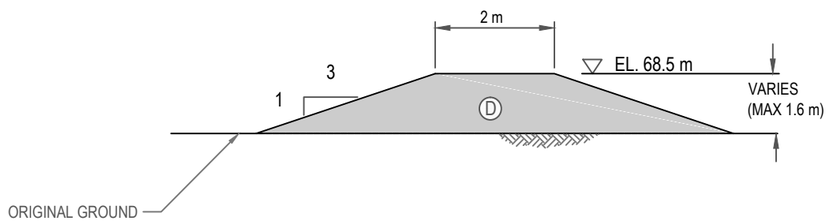
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DRAWING NO.

FORMAT ANSI B–11x17



PROFILE THROUGH CENTRELINE OF BERM1



TYPICAL DESIGN SECTION – BERM1

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE

TETRA TECH EBA

ASSISTENGED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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VÉRIFIÉ PAR / CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR / APPROVED BY			
No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND SECTION FOR BERM1

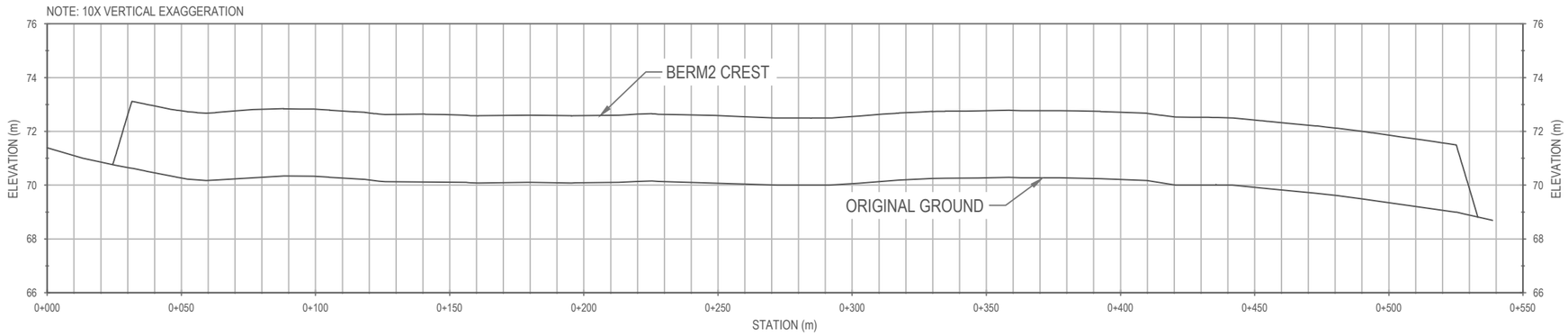
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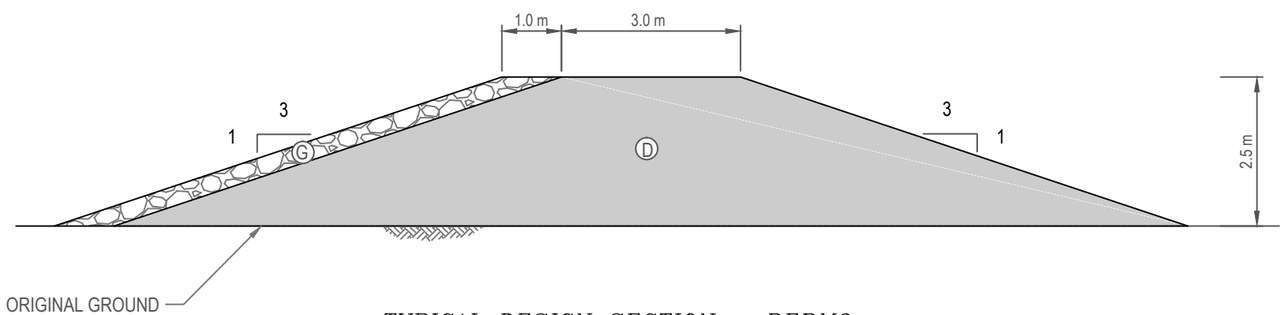
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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



PROFILE THROUGH CENTRELINE OF BERM2



TYPICAL DESIGN SECTION – BERM2

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AGNICO EAGLE
DATE : 8–5–2015

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

AGNICO EAGLE
TETRA TECH EBA

G. ZHANG
LICENSEE
NWT/NU

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VÉRIFIÉ PAR / CHECKED BY	GZ/HX		2014–08–29
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No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND SECTION FOR BERM2

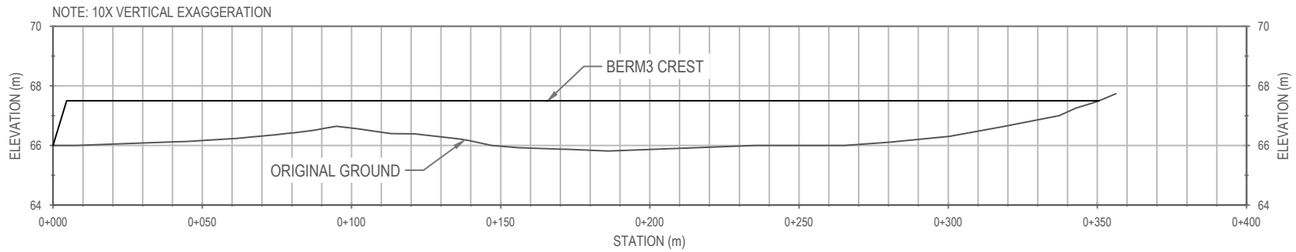
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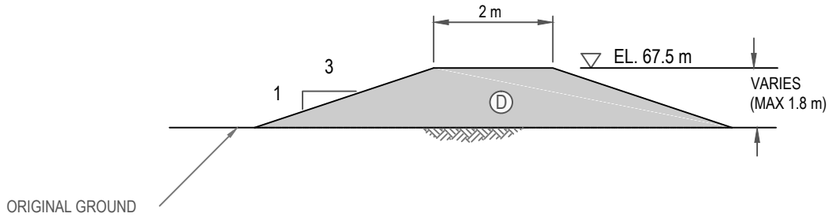
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DRAWING NO.

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PROFILE THROUGH CENTRELINE OF BERM3



TYPICAL DESIGN SECTION – BERM3

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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DESSINÉ PAR DRAWN BY	EP	DATE	2014–08–29
VÉRIFIÉ PAR CHECKED BY	GZ/HX		2014–08–29
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No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND SECTION FOR BERM3

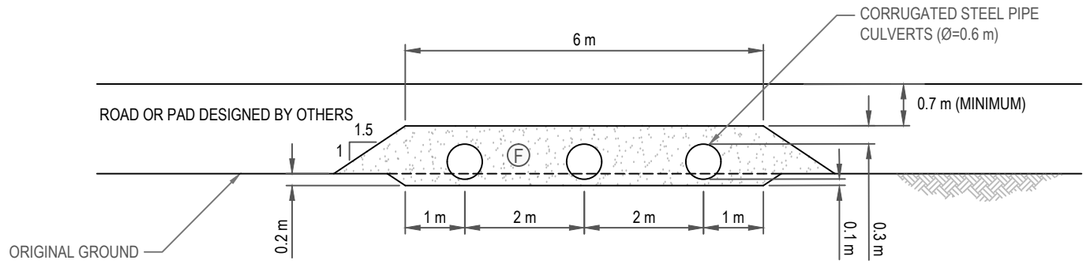
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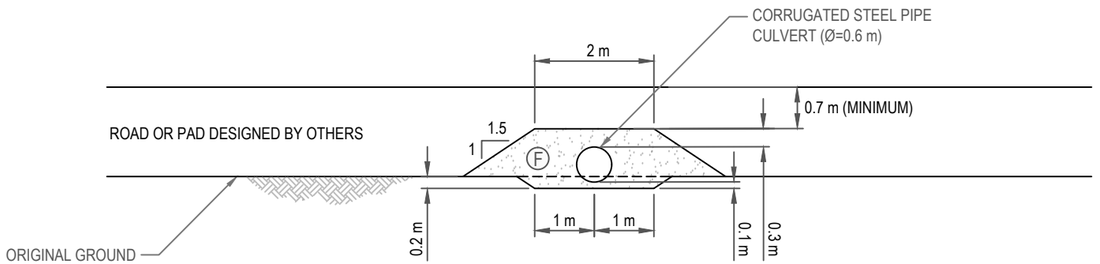
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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



TYPICAL DESIGN SECTION – CULVERT2 AND CULVERT3



TYPICAL DESIGN SECTION – CULVERT1, AND CULVERT4 TO CULVERT6

NOTES:

(A) PIT-RUN OR QUARRY ROCKFILL
(B) TRANSITION ROCKFILL
(C) LINER BEDDING TILL
(D) TILL FILL
(E) TILL FILTER FILL
(F) ROAD SURFACE FILL
(G) RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTIONS FOR CULVERT1 TO CULVERT6

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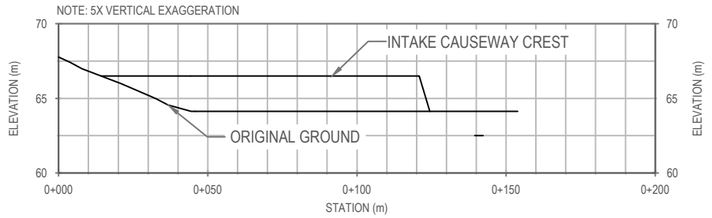
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AGNICO EAGLE
DATE : 8–5–2015

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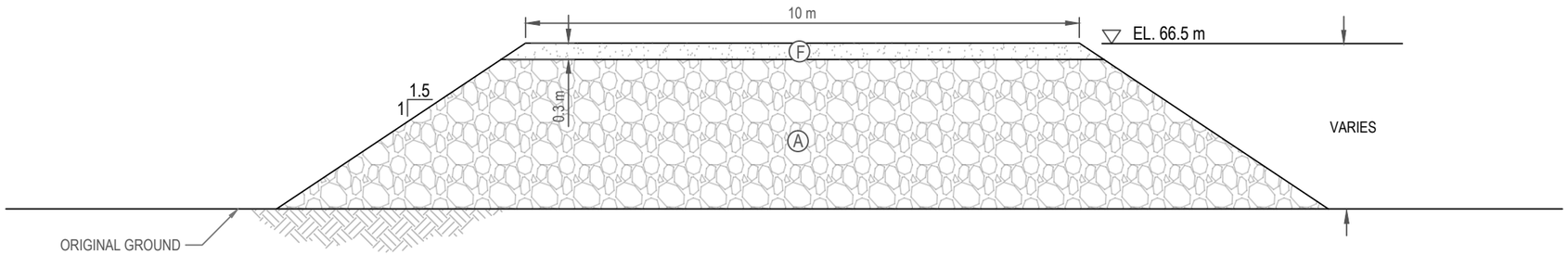
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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



PROFILE – WTP INTAKE CAUSEWAY



TYPICAL DESIGN SECTION – WTP INTAKE CAUSEWAY

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
May 9, 2
NWT/NU

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VÉRIFIÉ PAR / CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR / APPROVED BY			
No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

PROFILE AND TYPICAL SECTION
FOR WTP INTAKE CAUSEWAY

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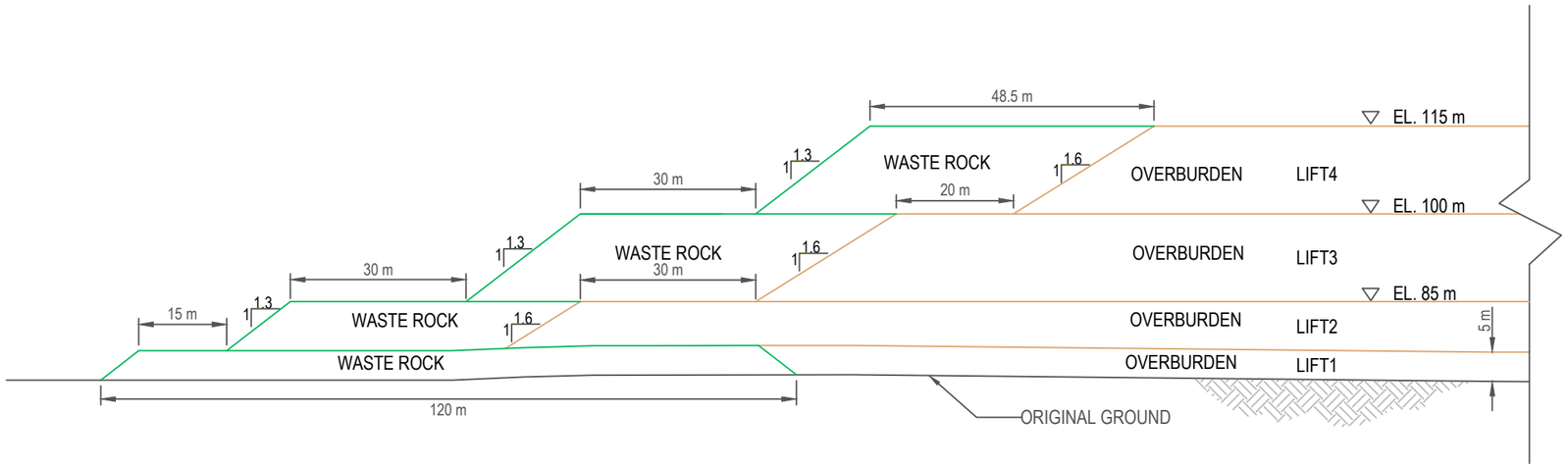
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AGNICO EAGLE DATE : 8–5–2015

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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



TYPICAL DESIGN SECTION FOR WRSF1

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTION FOR
WASTE ROCK STORAGE FACILITIES–WRSF1

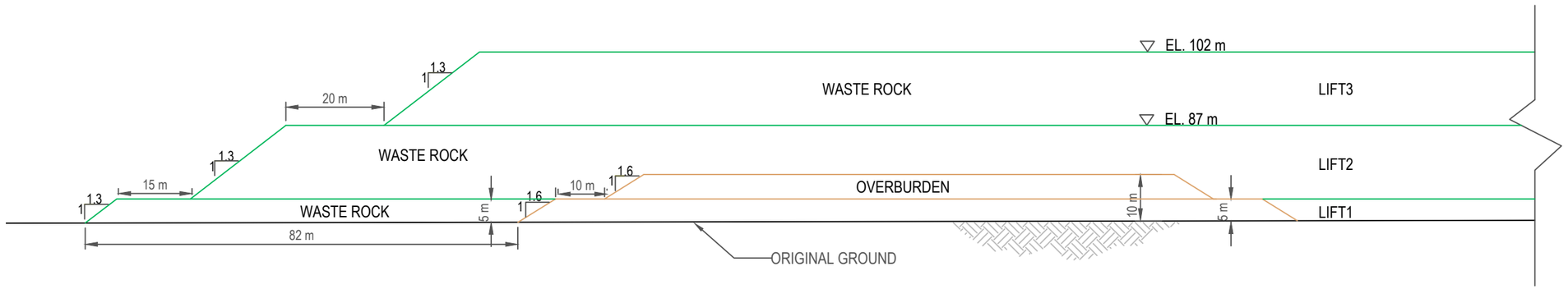
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DRAWING NO.

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TYPICAL DESIGN SECTION FOR WRSF2

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

AGNICO EAGLE

TETRA TECH EBA

G. ZHANG
LICENSEE
NWT/NU
PROFESSIONAL ENGINEERS

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APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTION FOR
WASTE ROCK STORAGE FACILITIES–WRSF2

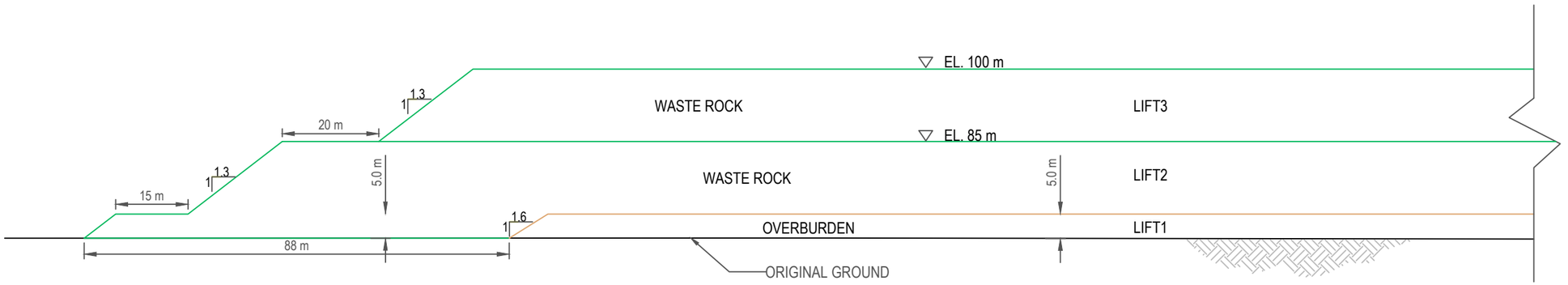
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DRAWING NO.

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TYPICAL DESIGN SECTION FOR WRSF3

ISSUED FOR PERMITTING
DATE : 8–5–2015

NOTES:

AGNICO EAGLE

TETRA TECH EBA

G. ZHANG
LICENSEE
NWT/NU

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No. PROJET / PROJECT NO.		
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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTION FOR
WASTE ROCK STORAGE FACILITIES–WRSF3

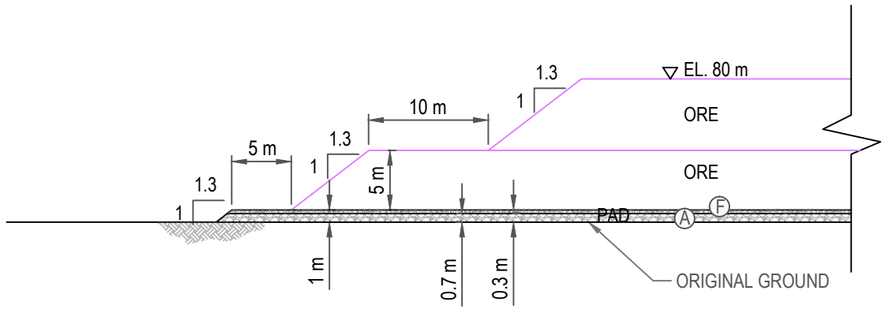
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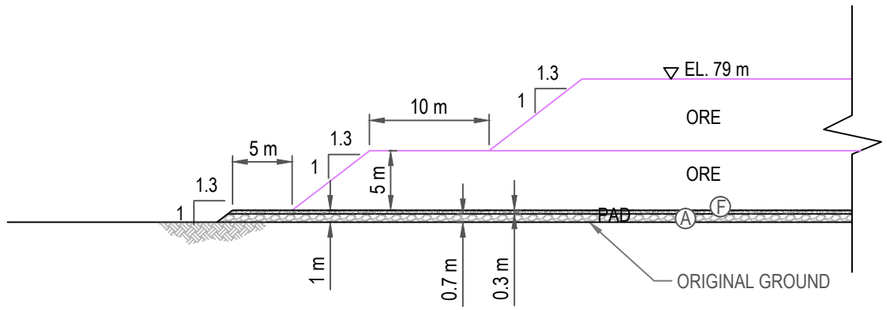
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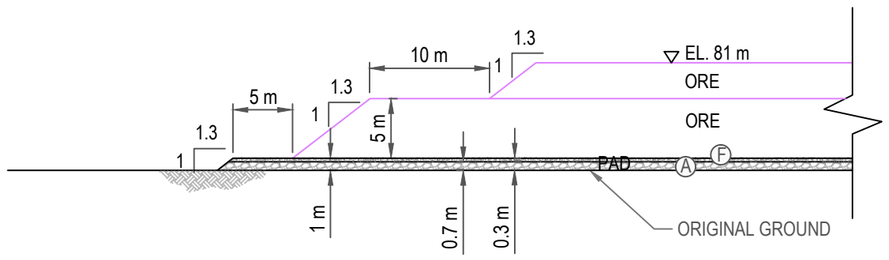
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TYPICAL DESIGN SECTION FOR OP1



TYPICAL DESIGN SECTION FOR OP2



TYPICAL DESIGN SECTION FOR OP3

NOTES:

- (A) PIT-RUN OR QUARRY ROCKFILL
- (B) TRANSITION ROCKFILL
- (C) LINER BEDDING TILL
- (D) TILL FILL
- (E) TILL FILTER FILL
- (F) ROAD SURFACE FILL
- (G) RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL SECTIONS FOR OP1, OP2 AND OP3

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

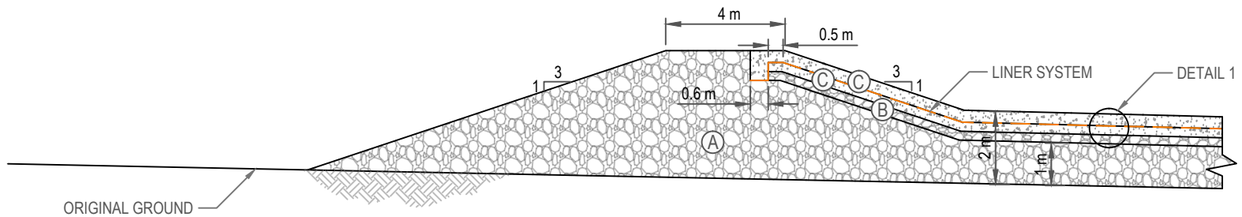
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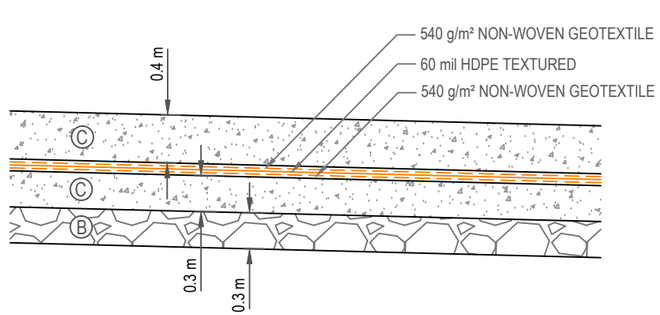
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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17





DETAIL 1 (NTS)

TYPICAL DESIGN SECTION – LANDFARM

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE

TETRA TECH EBA

REGISTERED PROFESSIONAL ENGINEER
G. ZHANG
LICENSEE
NWT/NU

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TITRE / TITLE	# DWG

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APPROUVÉ PAR / APPROVED BY			
No. PROJET / PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL DESIGN SECTION FOR LANDFARM

ÉCHELLE/ SCALE	FICHIER / FILE .DWG		
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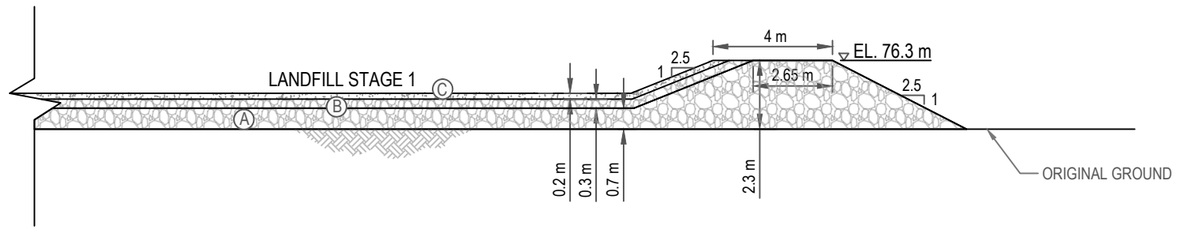
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AGNICO EAGLE
DATE : 8–5–2015

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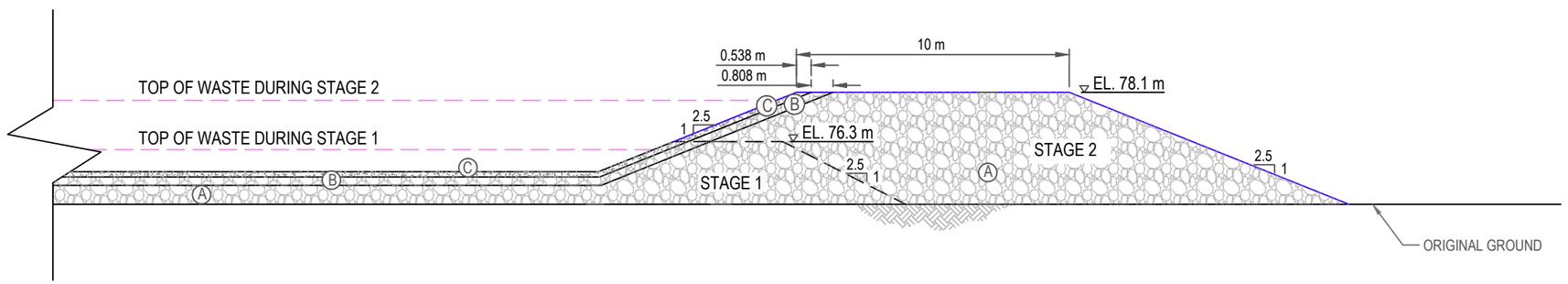
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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



TYPICAL DESIGN SECTION – LANDFILL (STAGE 1)



TYPICAL DESIGN SECTION – LANDFILL (STAGE 2)

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

Ⓐ PIT-RUN OR QUARRY ROCKFILL
Ⓑ TRANSITION ROCKFILL
Ⓒ LINER BEDDING TILL
Ⓓ TILL FILL
Ⓔ TILL FILTER FILL
Ⓕ ROAD SURFACE FILL
Ⓖ RIP RAP

AGNICO EAGLE
TETRA TECH EBA

ASSISTANT PROFESSIONAL ENGINEERS
G. ZHANG
LICENSEE
NWT/NU

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	EP	DATE	2014–08–29
VÉRIFIÉ PAR CHECKED BY	GZ/HX		2014–08–29
APPROUVÉ PAR APPROVED BY			
No. PROJET PROJECT NO.			
DATE			

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL DESIGN SECTIONS FOR LANDFILL

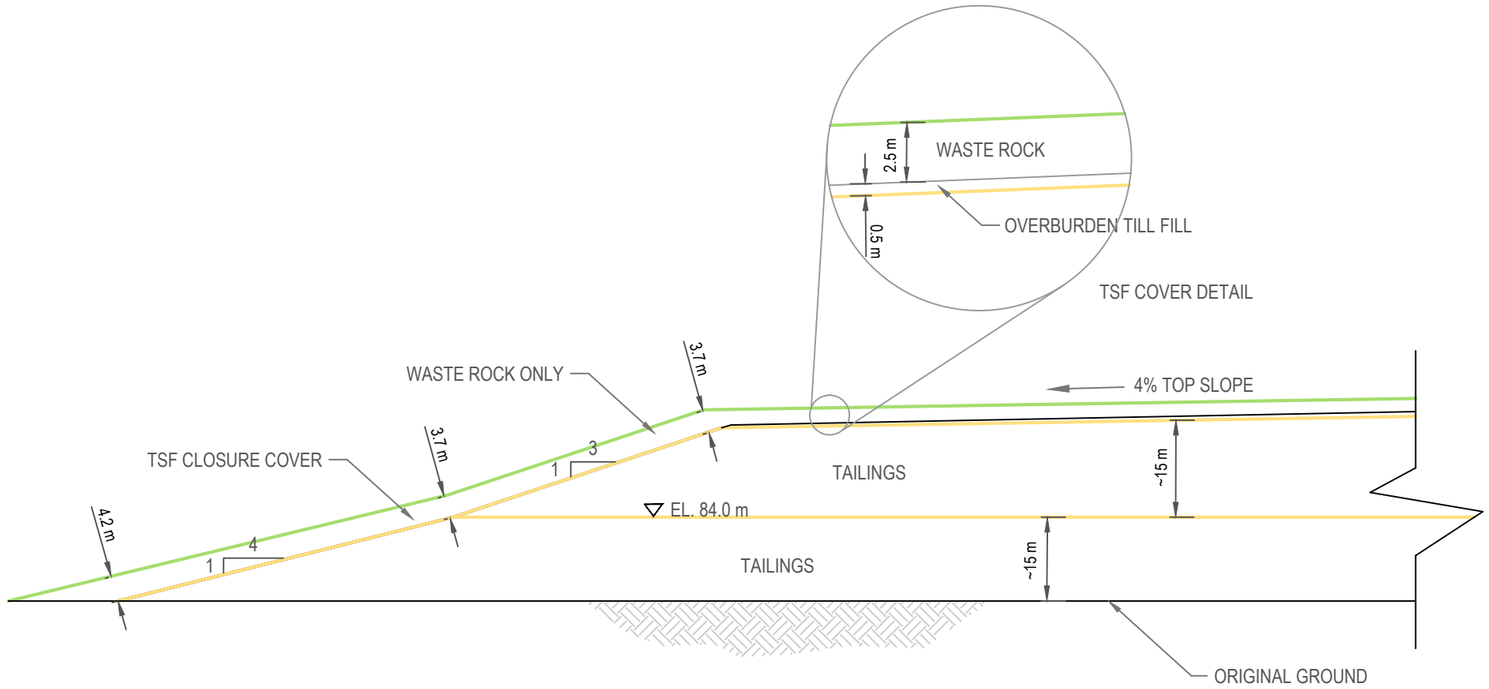
ÉCHELLE/ SCALE	FICHIER FILE .DWG		
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6509–666–210–200–004		0	1 / 1

AE–CART–ANSI B

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NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



TYPICAL DESIGN SECTION FOR TSF

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 8–5–2015

NOTES:

AGNICO EAGLE

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR / DRAWN BY	EP	DATE 2014–08–29
VÉRIFIÉ PAR / CHECKED BY	GZ/HX	2014–08–29
APPROUVÉ PAR / APPROVED BY		
No. PROJET / PROJECT NO.		
DATE		

TITRE / TITLE
AGNICO EAGLE – MELIADINE GOLD PROJECT

TYPICAL DESIGN SECTION FOR DRY STACK TSF

ÉCHELLE/ SCALE	FICHIER / FILE .DWG		
No. DESSIN/ DRAWING NO.		REVISION	FEUILLE/SHT
6509–610–210–202		0	1 / 1

AE–CART–ANSI B

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