APPENDIX 28-8. SPILL CONTINGENCY PLAN

AGNICO EAGLE

MELIADINE GOLD MINE

Spill Contingency Plan

March 2024
VERSION 15
6513-MPS-05

ᓇᐃᓈᖅᓯᒪᔪᖅ

ᑯᕕᔪᖅᑲᖅᐸᑦ ᓂᕆᐅᓇᙱᑦᑐᓕᕆᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ (ᐸᕐᓇᐅᑎ) ᐊᒡᓃᑯ ᐄᒍ ᐅᔭᕆᒃᑕᕆᐊᓕᕆᔩᒃᑯᓐᓄᑦ (ᐊᒡᓃᑯᒃᑯᑦ) ᑕᓯᕐᔪᐊᕐᒥᑦ ᒦᓗᒧᑦ ᐱᓕᕆᐊᖕᒐᑦ (ᐱᓕᕆᐊᖅ) ᐱᔾᔪᑎᖃᖅᑐᖅ: ᑕᓯᕐᔪᐊᖅ, ᑲᙵᖅᓱᓂᕐᒥᑦ ᐃᑎᕙᐊᒦᑦᑐᓄᑦ ᐱᕐᑯᑎᓂᒃ, ᐅᑭᐅᓗᒃᑖᖅ ᐊᑉᕐᑯᑎ (AWAR) ᐃᓚᒋᔭᐅᔪᓪᓗ ᐊᑉᕐᑯᑏᑦ ᐃᓂᐅᔪᒥᑦ ᓯᓚᑖᓂᓪᓗ, ᐃᓚᐅᑉᓗᓂ ᑲᙵᖅᓱᓂᕐᒥᑦ ᐊᑉᕐᑯᑎ.

ᑖᒻᓇ ᐸᕐᓇᐅᑎ ᐊᒡᓃᑯᒃᑯᓐᓂᑦ ᐃᒃᐱᒍᓱᖕᓂᖃᖅᑎᑦᑎᔪᖅ ᐊᑐᖅᑐᓗᒃᑖᓂᒃ ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᒪᓕᒐᕐᓂᒃ, ᒪᓕᒐᕿᓂᒃ, ᐊᒻᒪᓗ ᒪᓕᒃᑕᐅᔪᒃᓴᓂᒃ ᑯᕕᔪᓄᑦ ᓄᓇᒧᑦ, ᐃᒪᕐᒧᑦ ᐊᒻᒪᓗ/ᐅᕙᓘᓐᓃᑦ ᓯᑯᒧᑦ. ᑯᕕᔪᑦ ᐃᓱᒪᒋᔭᐅᔪᑦ, "ᐅᖃᐅᓯᕆᔭᕆᐊᖃᖅᑐᑦ ᑯᕕᔪᑦ" ᒪᓕᒃᓱᒋᑦ ᐊᑐᖅᑐᑦ ᒪᓕᒐᐃᑦ ᐊᒻᒪᓗ ᒪᓕᒐᕿᑦ ᐊᒡᓃᑯᒃᑯᑦ ᐅᖃᐅᓯᕆᓂᐊᖅᑕᙱᑦ ᓄᓇᑦᑎᐊᕐᒥᑦ-ᓄᓇᕗᒻᒥ 24 ᐃᑲᕐᕿᓄᑦ ᑯᕕᔪᖅᑲᖅᐸᑦ ᐅᖃᓗᒃᕙᐅᔪᙳᖅᑐᒧᑦ, ᑲᓇᑕᒥᑦ-ᓄᓇᖃᖅᑳᖅᑐᓄᑦ ᓄᓇᕐᑯᑎᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑲᒪᔩᒃᑯᑦ, ᑲᓇᑕᒥᑦ ᐊᕙᑎᒥᒃ ᐊᒻᒪᓗ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᔪᓕᕆᔩᒃᑯᑦ, ᐃᖃᓗᓕᕆᔩᒃᑯᑦ, ᑭᕙᓪᓕᕐᒥᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒋᒃᑯᑦ, ᐊᒻᒪᓗ ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔩᒃᑯᑦ.

ᑐᑦᓵᐅᔪᖅ ᐸᕐᓇᐅᑎᒧᑦ ᒥᑭᓛᒃᑰᖅᑎᓪᓗᒋᑦ ᐊᒃᑐᖅᓯᓂᐅᔪᑦ ᑯᕕᔪᓂᒃ ᓴᖅᑭᑦᑎᓗᓂ ᖃᐅᔨᔭᐅᓯᒪᕖᖅᑐᒥᒃ ᐅᐸᓗᐊᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᒃᓴᓂᒃ ᐊᒻᒪᓗ ᒥᐊᓂᕆᓂᐊᕐᓗᒋᑦ ᐱᓕᕆᔩᑦ ᐅᓗᕆᐊᓇᖅᑐᒦᖁᓇᒋᑦ, ᑳᑐᑦᓵᒃᖃᖅᑐᑦ ᐊᒻᒪᓗ ᐃᓄᓗᒃᑖᑦ ᑯᕕᔪᖅᑲᖅᐸᑦ. ᑐᑦᓵᐅᔪᖅ ᑎᑭᐅᑎᔭᐅᓂᐊᖅᑐᖅ ᐊᑐᖃᑦᑕᕐᓗᒋᑦ ᐱᐅᓛᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ, ᐅᔾᔨᕈᓱᒃᑎᑦᑎᑦᑎᓗᓂ ᐊᕙᑎᒥᒃ ᐅᓗᕆᐊᓇᖅᑐᖃᙱᓐᓂᕐᒥᒃ, ᐃᑲᔪᖅᑐᐃᓗᓂ ᐱᑕᖃᖅᑕᐃᓕᑎᑦᑎᓂᕐᒥᒃ ᐊᒻᒪᓗ ᐱᓕᕆᐊᖃᖃᑦᑕᖅᑕᕐᓂᕐᒥᒃ, ᐊᒻᒪᓗ ᓴᓗᒻᒪᖅᓴᐃᑦᑎᐊᖃᑦᑕᕐᓗᓂ ᑯᕕᔪᓂᒃ, ᓴᐳᑦᑕᐅᔪᓂᒃ, ᐅᕙᓘᓐᓃᑦ ᓄᓇᒧᑦ ᑯᕕᖅᑕᖅᑐᓂᒃ, ᐃᒪᕐᒧᑦ, ᓯᑯᒧᑦ ᐊᒻᒪᓗ ᐊᐳᑎᒧᑦ.

ᐃᓚᒋᔭᐅᔪᑦ ᐸᕐᓇᐅᑎᒥᑦ ᑯᕕᔪᑦ ᑐᑭᓕᐅᖅᑕᐅᓯᒪᓂᙳᑐᑦ MDMER-ᒥᑦ, ᓱᓇᑐᐃᓐᓇᐃᑦ ᐅᖅᓯᓃᑦ, ᑭᓂᖅᑐᑦ ᐊᒻᒪᓗ ᓯᑎᔪᑦ ᐋᓂᕈᑕᐅᔪᙳᖅᑐᑦ ᐃᓚᒋᔭᐅᔪᑦ, ᑕᕆᐅᓕᒃ ᐃᒪᖅ ᐊᒻᒪᓗ ᐳᐸᓚᙳᖅᑎᑕᐅᓯᒪᔪᖅ ᐅᖅᓱᖅ. ᐊᓯᖕᒋᑦ ᑯᕕᓂᐅᔪᑦ ᓲᕐᓗ ᑯᕕᔪᑦ ᐃᒪᖅᑲᐅᓯᕙᙵᓂᑦ ᐅᕙᓘᓐᓃᑦ ᐃᒥᑕᐅᔪᓂᑦ ᐊᒃᑐᖅᓯᓂᖃᕈᓐᓇᖅᑐᑦ ᐅᔭᕆᒃᑕᕆᐋᙲᑦᑐᓂᒃ ᐆᒪᔪᑦ ᐃᒃᐱᒋᓂᖅᑐᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᒋᔭᐅᖏᔪᑦ.

ᑯᕕᔪᓄᑦ ᑐᐊᕕᓇᖅᑐᓗᒃᑖᓄᑦ, ᓯᕗᓪᓕᖅᐹᖅ ᖃᓄᐃᓕᐅᕈᑕᐅᔪᑦ ᐅᑯᐊ: (1) ᐊᑦᑕᕐᓇᖅᑐᖃᙱᑦᑎᑦᑎᓗᓂ, (2) ᐱᐊᓚᔪᒥᒃ ᐅᐸᓗᐊᓗᓂ, ᐊᒻᒪᓗ (3) ᐅᖃᐅᓯᕆᓗᒍ ᑯᕕᔪᖅ. ᐸᕐᓇᐅᑎᒥᑦ ᑎᑎᕋᖅᓯᒪᔪᖅ ᐅᐸᓗᐊᓂᕐᒧᑦ ᐋᖅᑭᒃᓯᒪᔪᖅ ᐊᒻᒪᓗ ᑐᓴᖅᑎᑦᑎᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᓇᐊᖅᑲᕐᓂᐅᔪᑦ, ᑎᑎᕋᖅᓯᒪᑉᓗᑎᒃ ᑐᐊᕕᓇᖅᑐᖅᑲᖅᐸᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ ᖃᐅᔨᑎᑕᐅᔾᔪᓯᐃᑦ. ᐃᓄᒃ, ᑲᒪᔩᐅᔪᖅ ᑯᕕᔪᖅᑲᖅᐸᑦ, ᐅᕙᓘᓐᓃᑦ ᓯᕗᓪᓕᖅᐹᖑᔪᖅ ᖃᐅᔨᔪᖅ ᑯᕕᔪᖅᑲᖅᑎᓪᓗᒍ, ᓯᕗᓪᓕᖅᐸᐅᔪᖅ ᐅᐸᓗᐊᐸᓗᓂ. ᓯᕗᓪᓕᖅᐸᐅᔪᖅ ᐅᐸᓗᐊᔪᖅ ᖃᐅᔨᑎᑦᑎᑉᓗᓂ ᐃᓱᒪᑕᓇᔭᐅᔪᒥ ᐅᕙᓘᓐᓃᑦ ᖃᓄᐃᓕᐅᖅᑐᖃᖅᐸᑦ ᑲᒪᒥᒃ, ᐱᔭᒃᓴᐅᑎᖃᖅᑐᖅ ᐱᒋᐊᖅᑎᑦᑎᓂᕐᒧᑦ ᑯᕕᔪᖅᑲᖅᐸᑦ ᑐᐊᕕᓇᖅᑐᒃᑯᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ.

ᐊᒡᓃᑯᒃᑯᑦ ᑐᐊᕕᓇᖅᑐᖅᑲᖅᐸᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ ᐱᓕᕆᔩᖅᑲᖅᑐᑦ (ERT) ᐊᔪᕈᓐᓃᖅᓴᖅᑕᐅᒃᑲᖅᑐᑦ ᐊᒻᒪᓗ ᐃᑲᔪᖅᑕᐅᑉᓗᑎᒃ ᐅᐸᓗᐊᓂᕐᒧᑦ ᑯᕕᕐᔪᐊᖅᑐᓄᑦ, ᐱᔭᕆᐊᒃᑲᙵᑕ. ᐃᓚᒋᔭᐅᔪᓗᒃᑖᑦ ᑐᐊᕕᓇᖅᑐᓕᕆᓂᕐᒧᑦ ᐊᔪᕈᓐᓃᖅᓴᖅᑕᐅᒃᑲᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓕᖅᑎᑕᐅᑉᓗᑎᒃ ᑐᐊᕕᓇᖅᑐᓄᑦ ᐊᒻᒪᓗ ᑯᕕᔪᖅᑲᖅᐸᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ ᐱᕙᐅᔪᙳᖅᑐᓂᒃ, ᐸᕐᓇᐅᑎ, ᐊᒻᒪᓗ ᐊᑐᕆᐊᒃᑲᖅᑐᑦ ᑐᐊᕕᓇᖅᑐᒃᑯᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ ᑯᕕᔪᓄᑦ ᐊᑐᖅᑕᐅᒃᑲᖅᑐᓂᒃ. ᑐᐊᕕᓇᖅᑐᓕᕆᔩᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐊᔪᕈᓐᓃᖅᓴᖅᑕᐅᒃᑲᖅᑐᑦ ᐋᓂᕈᑕᐅᔪᙳᖅᑐᓄᑦ ᐊᑐᖅᑕᐅᒃᑲᖅᑐᓂᒃ ᑲᒪᔭᖅᑲᓂᒧᑦ (ᐊᑦᑕᕐᓇᖅᑐᖃᙱᑦᑎᑦᑎᓂᕐᒧᑦ ᓈᓴᐅᑎᓄᑦ/ᑎᑎᖅᑲᓄᑦ ᑎᑎᕋᕝᕕᑦ) ᐊᒻᒪᓗ ᓱᓇᓗᒃᑖᖅᑎᑕᐅᔪᑦ ᐅᐸᓗᐊᓂᐊᕐᓗᑎᒃ ᐅᓗᕆᐊᓇᙱᑦᑐᒃᑯᑦ ᐊᑐᕐᓗᒋᑦ ᐃᓄᖕᒥᒃ ᒥᐊᓂᖅᓯᔪᑦ ᐊᓇᕋᑦ ᐊᑐᖅᑕᐅᒃᑲᖅᑐᑦ (PPE). ᓱᓇᑐᐃᓐᓇᓄᑦ ᐅᔭᕆᒃᑕᕆᐊᕐᒥᑦ ᐊᐅᓚᑦᑎᔾ, ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᐊᖓᔪᖄᖅ, ᐋᓂᐊᖅᑕᐃᓕᒪᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐅᓗᕆᐊᓇᙱᑦᑐᓕᕆᓂᕐᒧᑦ ᐋᓂᐊᖅᑐᓕᕆᓂᕐᒧᑦ ᑲᒪᔩᑦ ᐅᕙᓘᓐᓃᑦ ᑎᓕᔭᐅᓯᒪᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᓗᒃᑖᖅᓯᒪᔪᑦ ᐃᓚᒋᔭᐅᑎᑦᑎᐊᕐᓂᖏᓐᓄᑦ ᑯᕕᔪᖅᑲᖅᐸᑦ ᑐᐊᕕᓇᖅᑐᒃᑯᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ.

ᑯᕕᔪᖃᖅᐸᑦ ᐊᑐᖅᑕᐅᔭᕆᐊᖃᖅᑐᑦ ᐃᓂᒦᑎᑕᐅᔪᑦ ᐃᓂᒋᔭᕆᐊᖃᖅᑕᖏᓐᓂᑦ ᐅᔭᕋᒃᑕᕆᐊᕐᒥᑦ. ᐃᖏᕐᕋᔪᓗᒃᑖᑦ ᐅᔭᕋᒃᑕᕆᐊᕐᒥᑦ (ᓄᓇᐅᑉ ᖄᖓᓂᑦ ᓄᓇᒃᑰᕈᑎᕐᔪᐊᑦ) ᐱᑕᖃᕐᒥᔪᑦ ᑯᕕᔪᖃᖅᐸᑦ ᑐᐊᕕᓇᖅᑐᒃᑯᑦ ᐅᐸᓗᐊᔾᔪᑎᓂᒃ. ᐃᖏᕐᕋᔭᖃᑦᑕᖅᑐᖅ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑐᐊᕕᓇᖅᑐᓕᕆᕝᕕᒃ ᐅᔭᕋᒃᑕᕆᐊᕐᒦᒻᒥᔪᖅ. ᓰᑳᓐ ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐅᓯᔭᐅᖃᑦᑕᖅᑐᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕚᑦ ᑯᕕᔪᖃᖅᐸᑦ ᐅᐸᓗᐊᓂᕐᒧᑦ ᐱᕐᑯᑎᖃᖅᑐᑦ ᐊᑐᖅᑕᐅᔭᕆᐊᖃᖅᑐᓂᒡᓗ ᖃᓂᑕᖓᓂᑦ ᐃᖃᓗᒑᕐᔫᑉ ᑰᖓᓂᑦ ᑭᓵᒥᑕ 18-ᒥᑦ ᐊᒻᒪᓗ ᐃᑎᕕᐊᓂᑦ (ᓯᑲᐅᑦ ᑎᑭᖃᑦᑕᖅᑎᓪᓗᒋᑦ).

ᖃᓄᐃᓕᐅᕆᐊᖃᕐᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᓂᑦ ᐃᓚᐅᔪᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᓈᒻᒪᒃᑐᑦ ᑯᕕᔪᒥᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓄᖅᑲᖓᑎᑦᑎᓂᕐᒧᑦ ᐋᖅᑭᐅᒪᔪᓂᒃ (ᓲᕐᓗ, ᐊᕙᓗᐃᑦ ᐊᒻᒪᓗ ᐃᓗᑦᑐᖅᓯᒪᔪᑦ, ᐳᒃᑕᓵᓲᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ, ᑕᒪᒃᑯᐊᕋᓗᐃᑦ). ᑯᕕᔪᖃᖅᐸᑦ, ᖃᓄᐃᖏᑦᑐᑦ ᐱᔭᐅᔪᓐᓇᖅᑐᓕᒫᑦ ᐅᑎᖅᑎᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᑐᖅᓱᑎᒃ ᒥᓗᑲᐅᑎᓂᒃ, ᑯᕕᖅᑕᐃᔾᔪᑎᓂᒃ, ᑕᒪᒃᑯᓂᖖᒐᕋᓗᒃ ᐃᓕᔭᐅᑉᓗᑎᒡᓗ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᖕᓄᑦ. ᖃᐅᓯᖅᑐᓂᒃ ᒥᓗᑲᐃᔪᖕᓇᖅᑐᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ ᒥᓗᒃᑕᐅᓂᐊᕐᓗᑎᒃ ᖁᒪᒃᑎᑦᑐᑦ. ᐱᐅᖏᑦᑐᖅᑕᓵᑦ ᐱᔭᐅᑉᓗᑎᒃ, ᐃᓕᔭᐅᑉᓗᑎᒃ ᑐᖅᑯᖅᓯᒪᕝᕕᖕᓄᑦ ᐊᒻᒪᓗ ᐊᑎᓕᖅᑕᐅᑉᓗᑎᒃ ᑐᖅᑯᕐᕕᐅᓯᒪᓚᐅᐱᓪᓚᖕᓂᐊᕐᓗᑎᒃ. ᒪᓕᒃᓱᒍ ᖃᓄᐃᖓᓂᖓ ᐱᐅᖏᑦᑐᖅ, ᓯᑎᔪᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐱᓕᕆᐊᖑᖃᑦᑕᖅᑐᑦ ᐅᔭᕋᒃᑕᕆᐊᕐᒥᑦ (ᐊᒃᑕᑯᐃᑦ), ᐅᕝᕙᓘᓐᓃᑦ ᐊᐅᓪᓚᖅᑎᑕᐅᑉᓗᑎᒃ ᐅᔭᕋᒃᑕᕆᐊᑉ ᓯᓚᑖᓄᑦ ᓈᒻᒪᒋᔭᐅᔪᒧᑦ ᐱᓕᕆᐊᖃᕝᕕᖕᒧᑦ ᐊᒻᒪᓗ ᐊᒃᑕᑰᕈᕝᕕᖕᒧᑦ.

EXECUTIVE SUMMARY

The Spill Contingency Plan (Plan) for the Agnico Eagle Mines Limited (Agnico Eagle) Meliadine Gold Mine (Mine) covers: the Meliadine site, Rankin Inlet Itivia land-based facilities, conveyance of treated saline water via waterlines for ocean discharge, the All-weather Access Road (AWAR) and associated roads on and off site, including the Rankin Inlet bypass road.

This Plan ensures that Agnico Eagle respects all applicable federal and territorial laws, regulations, and guidelines for spills to land, air, water and/or ice. Spills that are deemed "reportable spills" pursuant to applicable laws and regulations will be reported by Agnico Eagle to the NT-NU 24-Hour Spill Report Line, Crown-Indigenous Relations and Northern Affair, Environment and Climate Change Canada, Department of Fisheries and Oceans, Kivalliq Inuit Association, and Nunavut Water Board.

The goal of the Plan is to minimize the impacts of spills by the establishment of predetermined response procedures and to protect the safety of workers, contractors and the public in the event of a spill. This goal will be achieved by applying best management practices, promoting environmental awareness and safety, encouraging prevention and maintenance, and facilitating efficient cleanup of spills, releases, or discharges to land, water, ice, and snow.

Substances covered by the Plan include effluent as defined by the MDMER, hydrocarbon products, liquid and solid hazardous substances, saline water and compressed gas. Other types of spills such as seepage from water containment structures or waste sources that could affect off site receptors are also considered.

For all spill emergencies, priority actions are: (1) ensure safety, (2) respond quickly, and (3) report the spill. The Plan outlines response organization and communication lines and lists emergency response contacts. The person who is the primary person involved in a spill, or the first to observe a spill, is the first responder. The first responder contacts a Supervisor or the Incident Coordinator, who is responsible for initiating appropriate spill emergency response.

Agnico Eagle has an Emergency Response Team (ERT) that are trained to provide support in the response of major spills, as needed. All members of the ERT are trained and familiar with emergency and spill response resources, the Plan, and appropriate emergency spill response methodologies. The ERT members receive basic training on hazardous materials handling (Safety Data Sheets) and are equipped to respond safely while wearing Personal Protective Equipment (PPE). The General Mine Manager, Environment Superintendent, Health and Safety Superintendent and Health care personnel or designates are all identified as key elements to spill emergency response.

Spill response kits are strategically located where required on-site. All mobile equipment on-site (surface heavy equipment) are also equipped with an emergency spill kit. A mobile environmental emergency trailer is located on-site. Sea cans with spill response equipment and supplies are located near the Meliadine River at Km 18 and at Itivia (during barge season). Agnico Eagle is consistently

evaluating effective deployment of emergency seacans at strategic locations alongside the AWAR to support spills from the AWAR and potential leaks from the waterline, and remains committed to maximizing response coverage when required.

Action plans involve standard and appropriate spill control and containment techniques (e.g., dikes and trenches, floating booms, etc.). In the event of a spill, free-product is recovered as much as possible using vacuums, pumps, etc. and placed in appropriate containers. Absorbent materials are used to soak up residual products. Contaminated materials are salvaged, put into appropriate containers and labelled for temporary storage. Depending on the nature of the contamination, solid materials are either treated on-site (landfarm), or shipped off-site to an approved treatment and disposal facility.

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DOCUMENT CONTROL

Version	Date	Section	Page	Revision	Author
1	October 2012			First draft of the Spill Contingency Plan	John Witteman, Env. Consultant, Agnico Eagle
2	March 2013			DEIS re-submission	Rebranding
3	April 2014	7	23-24	Included Tables 7-2 and 7-3 as per Information Request answer (TC_149)	John Witteman, Env. Consultant, Agnico Eagle
		6.5	21	Included commitment from technical review wrt TDGR.	
		App. H	A-32 A-36	Completed regulations table (ref. information requests)	Josée Noël, Env. Coord., Agnico Eagle
4	April 2015			Update for Type A Water License Application	John Witteman, Env. Consultant, Agnico Eagle
5	December 2015			Comprehensive revision and updates. Adapted to licenses B (MEL1424, 2BW-MEL1525 and 8BC-MEL1516) and future Type A Water License	Environment dept., Agnico Eagle
6	March 2017			Spill kit list and spill kit location updated	Alexandre Gauthier, Environment Dept., Agnico Eagle
7	March 2018			Annual review	Jessica Huza Alexandre Gauthier, Environment dept., Agnico Eagle

Version	Date	Section	Page	Revision	Author
8	February 2019	All	All	Change of Plan to reflect production, change of MSDS to SDS, change of MMER to MDMER. Inclusion of the MDMER Emergency Plan	Bethany Hodgins, Terry Ternes, Agnico Eagle Environment Department
		Executive Summary		Substance covered including MDMER	
		3	6	Update table 3-1 to include AN	
		5	15-18	Update table 5-1, 5-2, 5-3 contact list	
		6.4 6.5	22-23	Update document for spills on ice and saline spills	
		10	32-33	Update section on MDMER to reflect changes from MMER	
		App H	All	Create Response for Spilled Saline Water	
		App J	All	Latest Spill Response Test Record	
		App H	All	Procedure for saline water spill added	
		App K	All	MDMER Cross Reference table updated	
9	July 2019	10	32-33	Update section on MDMER to include MEL-26 and addition of the FDP pictures for MEL-14 and MEL-26. Addition of other water source for the MEL-14 discharge	Agnico Eagle Environment Department
10	December 2019	1 and 6	1, 23	Added a reference to sewage spills	Bethany Hodgins
11	January 2021			Revised to address Technical Comments related to spills associated with the waterline and issued as draft to the NIRB for the Waterline Project assessment process (Commitment 19)	Agnico Eagle Environment Department

Version	Date	Section	Page	Revision	Author
12	February 2022	1.1 4 App H		Updated to address the revised Term and Condition 124, per Project Certificate Amendment 002	Agnico Eagle Permitting Department
		App H, 7c		Updated to address the revised Term and Condition 119 and 124, per Project Certificate Amendment 002	
11B	April 2022 (submitted with 2021 Annual Report)	All	All	General Revision Contacts Updated in tables 5-1, 5-2, 5-3	Agnico Eagle Environment Department
13	March 2023	All	All	General Revision Updated to address Emergency Substance (E2) Regulations Section 6.5, 6.6 and 6.7 updates to spill type, response and disposal methods Section 8 updates to training and simulation exercises Section 10 updates to MDMER information Section F.1 updated to comply with ICMC requirements	Agnico Eagle Environment Department
14	January 2024	A yellow arrow in the right-hand margin indicates where updates have been made		Submitted to Nunavut Water Board as part of the Modification to the Water Licence for Additional Fuel Tanks at the Rankin Inlet Fuel Farm and the Water Licence Amendment Application The Modification for the additional Fuel Tanks at the Rankin Inlet Fuel Farm was approved by the NWB on February 16, 2024. As of March 2024, the Water Licence Amendment was undergoing the application review.	Agnico Eagle Permitting Department
15	March 2024	Section 3 Section 5		Updated Table 3-1 Updated Tables 5-2 and 5-3	Agnico eagle Environment Department

DISTRIBUTION LIST

Agnico Eagle – General Manager
Agnico Eagle – Environment Superintendent
Agnico Eagle – Engineering Superintendent
Agnico Eagle – Health and Safety Superintendent
Agnico Eagle – Geology Superintendent
Agnico Eagle – Process Plant Superintendent
Agnico Eagle – Maintenance Superintendent
Agnico Eagle – Mine Superintendent
Agnico Eagle – Energy & Infrastructure Superintendent

IMPLEMENTATION SCHEDULE

The implementation schedule for this Plan is effective immediately subject to any modification proposed by the NIRB and/or NWB as a result of the review and approval process.

ACRONYMS

Agnico Eagle	Agnico Eagle Mines Limited
ANFO	Ammonium Nitrate – Fuel Oil, a type of explosive
AWAR	All-Weather Access Road
CEPA	Canadian Environmental Protection Act
CIRNAC	Crown-Indigenous Relation and Northern Affairs Canada
ECCC	Environment and Climate Change Canada
EM	Event Monitoring
E2	Environmental Emergency Regulations
DFO	Department of Fisheries and Oceans Canada
ERT	Emergency Response Team
FDP	Final Discharge Point
IQ	Inuit Qaujimajatuqangit
JHA	Job Hazard Analysis
KivIA	Kivalliq Inuit Association
MDMER	Metal and Diamond Mining Effluent Regulation
Mine	Meliadine Gold Mine
NIRB	Nunavut Impact Review Board
NT	Northwest Territories
NU	Nunavut
NWB	Nunavut Water Board
Plan	Spill Contingency Plan
PPE	Personal Protective Equipment
RMMS	Risk Management and Monitoring System
RP	Responsible Person
SDS	Safety Data Sheet
TSF	Tailing Storage Facility
WHMIS	Workplace Hazardous Materials Information Sheet
Water Licence	Type A Water Licence No. 2AM-MEL1631
WRSF	Waste Rock Storage Facility

SECTION 1 • OVERVIEW

1.1 Purpose and Scope

The purpose of the Spill Contingency Plan (Plan) is to minimize the impacts of spills by the establishment of predetermined lines of response, plans of action, and to protect the safety of workers and contractors in the event of a spill.

This goal is achieved by applying best management practices, promoting environmental awareness and safety, encouraging prevention and maintenance, and facilitating efficient remediation of spills, releases, or discharges to land, air, water, ice, and snow related to Agnico Eagle Mines Limited Meliadine Mine (Mine).

This plan has been developed to meet the requirements of section 30 of the Metal and Diamond Mining Effluent Regulation (MDMER) Emergency Response Plan pursuant to the *Fisheries Act* and the Environmental Emergency (E2) Regulations enacted under the Canadian Environmental Protection Act (CEPA).

This Plan is designed to facilitate effective communication and efficient cleanup of spills of potentially hazardous materials. Hazardous materials include and are not limited to:

- Hydrocarbon products such as diesel fuel, gasoline, petroleum oils;
- Soluble solids, such as ammonium nitrate prill;
- Liquids, such as glycols and paints;
- Corrosive liquids/solids, such as sulphuric acid and sodium cyanide;
- Effluent as defined by the MDMER;
- Treated groundwater effluent;
- Untreated sewage;
- Compressed (inert and flammable) gas; and
- Seepage from waste related structures that could affect off site receptors.

The Plan includes spill response that would apply in the case of a saline water spill originating from the waterline during the construction and operation phases.

Furthermore, the objectives of this 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 at the Mine;
- 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, ice and snow.

This Plan applies to all Agnico Eagle employees and contractors associated with:

- The Mine site including the Itivia fuel storage facility; and
- The All-weather Access Road (AWAR) and associated roads on and off site, including the Rankin Inlet bypass road.

1.2 Related Documents

Documents containing information related to this Plan include the following management plans:

- Environmental Management and Protection Plan;
- Risk Management and Emergency Response Plan;
- Explosives Management Plan;
- Borrow Pits and Quarries Management Plan;
- Roads Management Plan;
- Landfill and Waste Management Plan;
- Hazardous Materials Management Plan;
- Water Management Plan; and
- Oil Pollution Emergency Plan (OPEP) and Oil Pollution Prevention Plan (OPPP).

1.3 Use of Inuit Qaujimajatuqangit in Spill Management

Inuit Qaujimajatuqangit (IQ) is the most successful and oldest monitoring practice in Nunavut, where the resource users do the observing or monitoring. Information collected through IQ can contribute to mine design and planning, as well as monitoring activities. Agnico Eagle is committed to including IQ and public concerns stemming from IQ, where practical, in the design of management and monitoring plans for the Mine.

This Plan considers IQ, including traditional ecological knowledge, traditional land use, and concerns regarding Mine effects on traditional resources and traditional land use sites. IQ indicates that the Mine area is important for the traditional harvesting of caribou, other land mammals, waterfowl, geese, fish and vegetation, and maintaining the health of these resources so that traditional land use activities can continue. This Plan is designed to minimize the potential impacts of spills to land, water, ice and snow, and focuses on promoting environmental awareness, encouraging prevention and maintenance, and facilitating efficient cleanup of spills, releases, or discharges to land, water, ice, and snow as follows:

- Predetermined lines of response and plans of action are established;
- Spill prevention occurs though regular inspections of storage areas and ocean discharge waterlines for leaks and hazardous materials, and the training of workers in the use of safe work and spill clean-up procedures;
- Spill response kits are strategically located where required on-site and on all mobile equipment on-site (surface heavy equipment). A mobile environmental emergency trailer and a trained emergency response team (ERT) are located on-site. Sea cans with spill

response equipment and supplies are located at km 7 and 18 along the AWAR, and at the Itivia site;

- Spill and emergency response equipment is installed at hazardous material storage areas; and
- To minimize potential impacts to waterbodies and the tundra from possible vehicle accidents, a maximum speed of 50 km/hr on the AWAR is applied to all vehicles (empty and transporting hazardous materials). All employees and contractors using the roads will carry spill response equipment.

SECTION 2 • DEFINITIONS

2.1 Classification of Spills

A Spill is defined as an accidental release of a large or small quantity of material into the environment that has the potential for adverse impact. At Agnico Eagle all spills must be reported internally into the internal Agnico Eagle database (Intelex). Some spills are externally reportable to regulators via the NU/NT Spill Report Line email (spills@gov.nt.ca) , dedicated phone line (867 920-8130) or fax (867 873- 6924). Externally reportable spills (also called reportable spills) are defined in Section 2.2 below.

For the purposes of this Plan, a major spill is defined as an accidental release of a large or small quantity of material into the environment that has the potential for adverse impact and **cannot be handled safely without the assistance of the Emergency Response Team (ERT)**, including all events where a person is injured or material is contaminated. In the event of a major spill, the ERT is notified immediately and responds accordingly. As an example, for the purpose of this Plan, a tanker truck overturned on the AWAR or a cyanide release are considered major spills.

A minor spill is defined as any spill of material that does not involve toxic, reactive, or explosive chemicals, in a situation that is not life threatening to humans, fish or wildlife. Furthermore, this type of spill presents a manageable physical or health hazard to personnel who, when wearing proper PPE, are not exposed to any chemical at a level that exceeds any recognized action levels or permissible exposure limits. Minor spills are reported and are not expected to involve emergency responders. Minor spills may be externally reportable if they meet the criteria described in section 2.2 below.

2.2 Reportable Spills on-Site

In the event that a particular spill meets or exceeds the amount specified or conditions outlined in Table 2-1, the spill will be reported to regulators via the NT-NU 24-Hour Spill Report Line[1]

Further, to ensure compliance with Section 38 (5) of the *Fisheries Act* and Section 5 (1) of the *Government of Nunavut's, Environmental Protection Act*, all spills and unauthorized releases of effluent, fuel or hazardous materials, regardless of quantity, into a waterbody or onto ice are reported immediately to the NT-NU 24-Hour Spill Report Line[1]. As a precaution, if there is any doubt as to whether the quantity spilled meets the minimum reportable thresholds listed in Table 2-1 (AANDC 2010), the spill incident will be reported to the Spill Report Line.

Furthermore and as mentioned above, Agnico Eagle maintains a detailed log of all spills, including spills that are not externally reportable (also called non-reportable spills). As part of Agnico Eagle's Risk Management and Monitoring System (RMMS), and for continuous improvement of environmental performance, procedures are implemented to ensure that employees communicate all spill incidents and clean them up as required.

[1] Nunavut Environmental Protection Act. *Consolidation of Spill Contingency Planning and Reporting Regulations* R-068-93.

Table 2-1 Spill Quantities to be Reported to the Spill Report Line[(a)]

Transportation Class	Type of Substance	Compulsory Reporting Amount
1	Explosives	Any amount
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity exceeding 100 L
2.2	Compressed gas (non-corrosive, non-flammable)	Any amount from containers with a capacity exceeding 100 L
2.3	Compressed gas	Any amount
2.4	Compressed gas (corrosive)	Any amount
3.1, 3.2, 3.3	Flammable liquid	100 L
4.1	Flammable solid	25 kg
4.2	Spontaneously combustible solid	25 kg
4.3	Water reactant solids	25 kg
5.1	Oxidizing substances	50 L or 50 kg
5.2	Organic peroxides	1 L or 1 kg
6.1	Poisonous substances	5 L or 5 kg
6.2	Infectious substances	Any amount
(including sewage and wastewater unless otherwise authorized)		
7	Radioactive substances	Any amount
8	Corrosive substances	5 L or 5 kg
9.1 (in part)	Miscellaneous substances	50 L or 50 kg
9.2	Environmentally hazardous	1 L or 1 kg
9.3	Dangerous wastes	5 L or 5 kg
9.1 (in part)	PCB mixtures of 5 ppm or more	0.5 L or 0.5 kg
None	Other contaminants	100 L or 100 kg
(including, but not limited to crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids)		

[(a)] Nunavut Environmental Protection Act. Consolidation of Spill Contingency Planning and Reporting Regulations R-068-93. Note: PCB = polychlorinated biphenyls; ppm = parts per million.

SECTION 3 • HAZARDOUS MATERIALS ON-SITE

A variety of petroleum products and other hazardous materials are used as part of mining operations. Explosives are stored on-site; details are available in the Explosives Management Plan. Other hazardous materials are used in smaller quantities (Table 3-1), all these products are considered as potential environmental and safety hazards.

Safety Data Sheets (SDS) of all materials transported, stored and used on-site are available at strategic locations, near where hazardous materials or toxic substances are stored or utilized. As a reference; the up-to-date SDS's can be found on the Agnico Eagle SDS portal. Appendices B to G also provide general response procedures for specific spilled chemical substances.

Table 3-1 Hazardous Materials Stored and Used On-Site

Products	Use/Location	Maximum Amount Anticipated On-Site (units)	Maximum Amount by Unit
Process Plant Reagents			
Anionic Flocculants 920	Mill/Grinding	200	750 kg/bag
Copper Sulphate	Mill/Cyanide Destruction	460	1,000 kg/ bag
Caustic Soda Anhydre	Mill/Stripping	400	1,000 kg/bag
Anhydre Borax 12 Mesh Dehybor	Mill/Refinery	350	25 kg/bag
Sodium Nitrate 98% Industrial grade	Mill/Refinery	100	22.7/bag kg
Quick Lime 0-2,5 MM 1152	Mill/Grinding/CIL/Cyanide Destruction	3200	1,700 kg
Activated Carbon PICA 210 AS	Mill/CIL/Stripping	250	500 kg/bag
Metabisulfite	Mill/Cyanide Destruction	2800	1,000 kg/bag
Hydrochloric Acid 20 BE	Mill/Stripping	450	193 Liters or 240 kg
Hydrochloric Acid 20 BE	Mill/Stripping	220	Tote of 1,150 kg
Caustic Soda Micropearl	Mill/Stripping	8250	Bag/22.67 kg/bag
Lead Nitrate	Mill/CIL	1700	25 kg/bag
Lead Nitrate	Mill/CIL	400	1,000 kg/bag
Refractory Backup	Mill/Refinery	48	25 kg/bag
Cap Material	Mill/Refinery	48	25 kg/bag
ILR Acacia LeachAid	Mill/Grinding	760	15 kg /Bucket
Silica Sand	Mill/Refinery	200	22.68 kg/bag
Sodium Cyanide must be Cyplus	Mill/CIL	2500	1,000 kg/bag
Scale Control CC7430 Controlchem	Mill/Grinding/Stripping	20	20 kg/box
Cyanide Red Dye	Mill	5	20 kg /box
Water Treatment Reagents			
Ferric Sulfate	WTP	260 t	1 t/bag
Lime	WTP	320 t	1,743 kg/bag
Flocculant	WTP	5 bags	750 kg/bag (15 t/sea can)
Cationic Polymer Hydrex 3613	EWTP-WTC	66	25 kg/bag
Coagulant Dry Poly Aluminium Chloride	EWTP-WTC	66	900 kg/bag Hydrex 3267

Products	Use/Location	Maximum Amount Anticipated On-Site (units)	Maximum Amount by Unit
Actisand	EWTP-WTC	1000	22.68 kg/bag
Anionic Polymer Hydrex 6105	EWTP-WTC	600	25 kg/bag
Cationic Polymer Hydrex 3613	EWTP-WTC	66	25 kg/bag
Coagulant Dry Poly Aluminium Chloride	EWTP-WTC	66	900 kg/bag Hydrex 3267
Actisand	EWTP-WTC	1000	22.68 kg/bag
Anionic Polymer Hydrex 6105	EWTP-WTC	600	25 kg/bag
Sulfuric Acid	SETP-WTC	221	1000L Totes
Powder Activated Carbon, dry (Hydrex 3966)	SETP-WTC	88	454 kg bags
Sodium thiosulfate, dry (Hydrex 3966)	SETP-WTC	20	1200 kg bags
Poly Aluminum Chloride (Hydrex 6240)	SETP-WTC	22	1000L Totes
Sulfamic Acid – 100%	SWTP	3620	25 kg/bag
Calcium Hypochlorite – 100%	SWTP	6300	25 kg/bag 45kg drums
Biocide 1 (Kathon CF150 or Microcide WT461)	SWTP	15	200 L (Drum)
Caustic Soda Anhydre	SWTP	500	1,000 kg/bag
Caustic Soda Micropeal	SWTP	10000	22.67 kg/bag
Antifoam (AF-64)	SWTP	10	(Tote/1000 L)
RO CIP Agent (ROClean)	SWTP	10	(Drum)
RO CIP Agent (ROClean P403)	SWTP	3	(Drum)
Sodium Metabisulfite (SMBS – 100%)	SWTP	20	25 kg/bag
Corrosion Inhibitor (Bar Cor CWS-55) 100%	SWTP	3	(Bottle 20L)
Sodium Hypochlorite	RO	50	5-gal pails
Vitec 7000 (Antiscalant)	RO	6	50-gal barrels
RO Clean L211	RO	143	5-gal totes
RO Clean L403	RO	12	50-gal barrels
Citric Acid	RO	133	25 kg bags
Sodium Hydroxide	RO	10000	Bags of 22.45 kg
Hydrochloric Acid	RO	19	5-gal pails
Sodium bisulfite	RO	182	25-kg bags
Caustic Soda	STP	10000	22.5 kg/pail
Soda Ash	STP	133	25 kg/bag
Chlorine (NaOCl)	STP	500 L	20 L/bucket
Maintenance & Welding Products			
Acetylene	Welding	830	11 m3/bottle
Paints	Maintenance	180	1 gallon/pail
Solvents	Maintenance	56	1 gallon/pail
Lead Acid Batteries (12V)	Maintenance	386	units
Fuel Products			
Diesel	**Itivia**		
	1- Itivia Oil Handling Facility	20 ML	
	2- Itivia Oil Handling Facility	13.5 ML	

Products	Use/Location	Maximum Amount Anticipated On-Site (units)	Maximum Amount by Unit
	3- Itivia Oil Handling Facility	9 ML (proposed for construction in 2024)	
	4- Itivia Oil Handing Facility	4.5 ML (proposed for construction in 2024)	
	Industrial Site Tank Farm		
	4- Site Main Fuel Tank	6 ML	
	5- Site Fuel Tank summer	250,000 L	
	6- Powerhouse	50,000 L	
	7- Process Plant	10,000 L	
	8- Mechanical Shop (Oil)	10,000 L	
	Portal #1 Mine Site Tank Farm		
	9- Site Main Fuel Tank	3 ML	
	10- Site Fuel Tank summer	250,000 L	
	11- Site Fuel Tank Measure for UG	2,000 L	
	12- Site Fuel Tank UG Heating Intake West	50,000 L	
	13- Site Fuel Tank UG Heating Intake East	50,000 L	
	Underground		
	14- UG Fuel Tank UG Level 325	2,359 L	
Moto Oil	Mechanical Shop	800,000 L	20,800 L/sea can
	Powerhouse		
Hydraulic Fluid	Mechanical Shop		Cubes or Barrels
	Powerhouse		Cubes or Barrels
	Process Plant		Cubes or Barrels
Ethylene glycol	Mechanical Shop	60,000 L	10,000 L/sea can
Fuel Products			
Ammonium Nitrate	Emulsion/ Dyno Nobel	4,200,000 Kg	1000 Kg/ Tote
Sodium Nitrate	Emulsion/ Dyno Nobel	360,000 Kg	1000 Kg/ Tote
Titan Fuel Phase Oil 68	Emulsion/ Dyno Nobel	181,400 Kg	960 Kg/ Cube

SECTION 4 • PREVENTION AND INSPECTIONS

Spill response is reactive while spill prevention is proactive. Spill prevention, response, and reporting is part of the induction training, which is mandatory for anyone coming to work at the Meliadine site. Also, all personnel are trained to call the Environment Department in the event of an externally reportable spill and to notify their supervisor in the event of any spill. Spill kits are available to assist with containing the spill and starting cleanup, if safe to do so. Upon arriving and inspection of the spill site, if potential hazards are present, staff are instructed to call ERT or initiate a Code 1.

Regular worksite inspections are conducted to identify measures to minimize or prevent the risk of spills. Completion of the induction training ensures all staff know the procedure to follow in the event of a spill. The procedure includes reporting, containing and cleaning up all spills. Following the clean-up of a spill, the Environment Department inspects the spill site and, if necessary, collects samples to verify clean-up is complete.

All personnel are trained to be aware of the potential hazards associated with the fuel/chemicals they are assigned to work. In addition to work site inspections conducted by area specific employees, the Environment Department conducts weekly inspections to audit facilities where hazardous materials are handled and stored and the waterline. Inspection frequencies may change depending on if a facility has no non-conformities over a few weekly inspections.

Agnico Eagle is implementing the following general principles for spill prevention:

- Provide up-to-date and accessible SDS for all hazardous materials to designated emergency response personnel, mine health staff, and Rankin Inlet health center staff;
- Regular inspection of fuel/chemical storage areas for leaks (including flex connectors and plumbing) and platform shifting;
- Regular inspection of hazardous materials storage areas;
- Regular visual inspection of the waterline and logging of inspections;
- Train workers in the use of safe work procedures for hazardous materials, and procedures to clean up spills;
- Encourage workers to take reasonable measures to prevent spills;
- Keep drums/containers sealed or closed;
- Place drums/containers within a suitable form of secondary or spill containment;
- Segregate incompatible materials;
- A leak detection system will be installed for the waterline;
- An emergency spill line number will be made available to the public to report any spills from the waterline;
- Ensure chemical storage areas are adequately protected from weather and physical damage; and
- Provide adequate spill response materials at storage areas (details of spill prevention and response equipment are outlined in Section 7 • Response Equipment).

Agnico Eagle is implementing the following general principles for spill prevention specific to the waterlines:

During Design

- Covering 80-90% of the waterline
- Design for corrosion protection and freeze/thaw consistent with northern environments

During Construction

- Installation of the waterlines directly under and secured to the existing and approved bridges
- Construction inspection, visual examination of pipes after installation, initial pressure testing
- Apply best management practices, such as spill kits in mobile equipment vehicles

During Operations:

- Use of a leak detection system
    - The leak detection system is very sensitive and will respond to the slightest changes in pressure within the waterline. Agnico Eagle will have the ability to turn off the waterline when the leak detection system is triggered allowing for timely reaction. The leak detection system is the primary mitigation to address links and spills. The leak detection system will be calibrated when it is first implemented so that a leak or spill can be distinguished from an ATV or vehicle or caribou crossing the waterlines.
- Initial inspection/pressure testing, on-going visual examination of the surface condition of the pipes
- Waterline testing at the beginning of each discharge season and prior to commissioning
- Calibration of the leak detection system during commissioning and during operations
- A reporting line for the road user from the community to call in spills/leak
- Winterize the waterline to remove any accumulated sediment
- Regular maintenance, internal inspections, and visual inspection

Refer to Appendix H for additional details on spill prevention principles related to the waterlines and the protection of caribou.

SECTION 5 • RESPONSE ORGANIZATION

During site orientation, induction training ensures all employees understand the steps to be undertaken in the event of a spill. All employees and contractors are shown where spill kits are stored, made aware of their contents, and are familiar with using spill equipment and responding to spills.

Figure 5-1 illustrates Agnico Eagle's spill/incident reporting procedure and the following sub-sections list the major responsibilities of site staff that will be participating in the emergency response.

5.1 First Responder

The person who is the primary person involved in a spill, or the first to observe a spill, is the first responder. The responsibilities of the First Responder are as follows:

- If considered safe to do so after initial assessment, STOP the spill using equipment contained in spill response kits, if required;
- In the case of a major spill (e.g., if a tanker truck is overturned, and a spill threatens human life or the spill is uncontrollable), initiate Code 1. Remain on radio to provide guidance to the ERT;
- Contact the Supervisor and the Environment Department to report the incident;
- Identify spilled product and contain the spill, IF SAFE TO DO SO; and
- Participate in spill response as a member of the cleanup crew.

5.2 Supervisor

The responsibilities of the Supervisor are as follows:

- Initially assess the severity of the incident;
- Contact the ERT Incident Coordinator and/or the Environment Department;
- Gather facts about the spill; and
- Participate in spill response as a member of the cleanup crew.

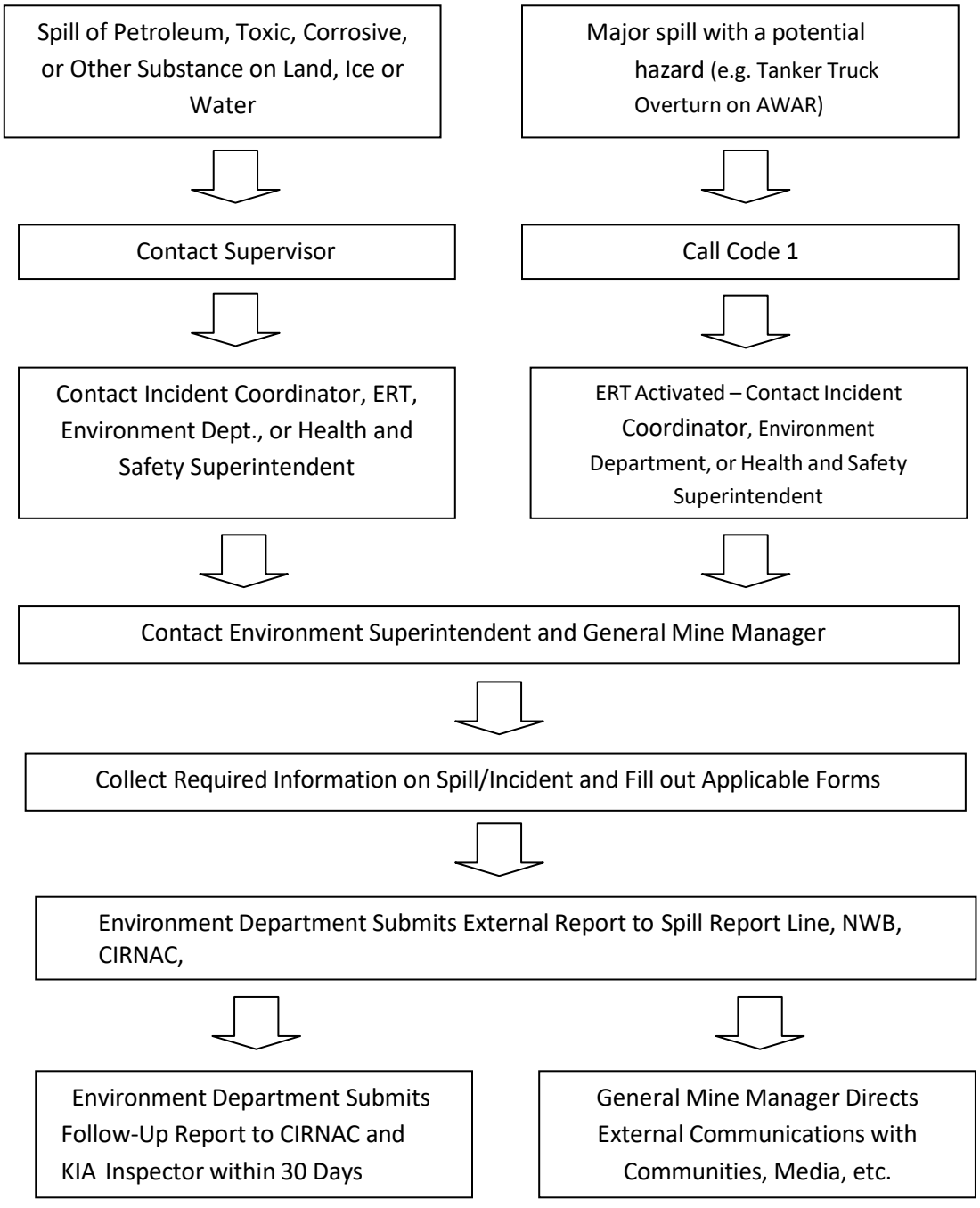

Figure 5-1 Spill/ Incident Reporting Procedure

5.3 Environment Incident Coordinator

Responsibilities of the Environment Incident Coordinator are as follows:

- Assume complete authority over cleanup personnel and the spill scene;
- Assume responsibility for all mitigation efforts;
- Evaluate the initial situation and assess the magnitude of the problem;
- Activate the initial response plan;
- Alert and assemble key personnel in the ERT, as deemed appropriate, to handle the situation;
- In consultation with the Environment Superintendent or designate, develop the plan of action for containment and cleanup, and direct and implement the plan;
- Ensure assigned responsibilities are carried out and the activities of team members are coordinated;
- Assess the requirements for people, equipment, materials, and tools to contain the spill considering what resources are immediately available - urgency will depend on the nature of the spill; and
- In consultation with the Environment Superintendent or designate, mobilize any additional resources that may be required and arrange for the transportation of necessary personnel and/or materials to the spill site.

5.4 Emergency Response Team

Since the commencement of construction, Agnico Eagle has an ERT team that is trained to assist in controlling major spills. For example, they could be called upon to respond in the event a tanker truck rolled over on the AWAR. These team members attend training sessions in spill response.

5.5 Emergency Response Team Incident Coordinator

The responsibilities of the ERT Incident Coordinator are as follows:

- Assume complete authority over securing the scene prior to cleanup;
- Mobilize all ERT personnel, equipment, PPE, and supplies as required to the site of the spill;
- Assist the Environment Incident Coordinator in obtaining any additional resources not available on-site;
- Ensure that appropriate PPE is worn and used properly;
- Assist in developing and implementing emergency response training programs and exercises; and
- Ensure that all spill response personnel receive adequate training to fulfil their responsibilities as part of the ERT.

5.6 Environment Superintendent or Designate

The Environment Superintendent or designate is responsible for implementing and maintaining the Plan. In addition, the responsibilities of the Environment Superintendent or designate are as

follows:

- Liaise with the Environment Incident Coordinator;
- Provide technical advice on the anticipated environmental impacts of the spill;
- Advise on the effectiveness of various containment, recoveries and disposal options;
- Prepare and submit any formal report (see Appendix A for the Spill Report Form) to regulators and Agnico Eagle management detailing the occurrence of a spill;
- Contact the Senior Vice President - Environment and Sustainable Development immediately in case of a major spill;
- Contact the Corporate Director of Communication & Public Affairs immediately in case of a major spill;
- Act as the spokesperson with regulatory and government agencies;
- If authorized by the General Mine Manager or delegate, act as a spokesperson with the public and media, as required;
- Implement a sampling protocol for the collection and analysis of samples to identify and monitor possible contaminant levels resulting from the spill;
- Ensure on-site resources for spill response and cleanup are available;
- Monitor the effectiveness of the cleanup operation and recommend further work, if necessary;
- Review incident occurrences and recommend preventative measures; and
- Assist in implementing training and simulation requirements for spill response personnel.

5.7 General Mine Manager or Designate

The General Mine Manager or designate is required to inform ERT members of the detailed nature of the operations to be performed in the event of a facility malfunction causing a spill during the operations phase. The responsibilities of the General Mine Manager or designate are as follows:

- Liaise with appropriate Agnico Eagle personnel and keep them informed of cleanup activities; and
- Assist the Incident Coordinator and ERT as needed, particularly in obtaining any additional personnel and resources not available on-site for spill response and cleanup.

5.8 Health and Safety Superintendent or Designate

The following is the responsibilities of the Health and Safety Superintendent or designate in conjunction with the Training Department:

- Maintain emergency and health and safety records;
- Assist in conducting emergency spill response exercises;
- Track all emergency and health and safety training that on-site staff, including contractors, have received, and when retraining is required;
- Notify the Incident Coordinator (related to ERT) when retraining is required;
- Ensure that employees are retrained in appropriate emergency response skills prior to expiry

of existing training certification (e.g., Workplace Hazardous Materials Information System (WHMIS), Hazard Communication, Occupational Health and Safety Administration, first aid, respirator fit-testing); and
- Consult with appropriate organizations regarding retraining requirements and schedule.

5.9 On-Site Health Care Providers

On-site nurses are responsible to:

- Provide on-site first aid and other medical support; and
- Provide additional training for ERT members.

In addition to the health care providers on-site, the Rankin Inlet health professionals can be called for assistance, if required. For example, they may be the first to respond to incidences that could occur at Itivia.

5.10 Emergency Contact Information

Table 5-1 provides contact information for select Agnico Eagle contractors present at the Mine. Internal contact information is presented in Table 5-2 for all Agnico Eagle personnel involved in spill recovery and subsequent reporting. Important external contacts relating to spill response, such as regulatory agencies and health organizations, are listed in Table 5-3. Table 5-4 provides contact information for external spill response contractors, should incident warrant assistance from outside sources. These tables are updated on an annual basis at minimum or as required.

5.11 Communication with the Public

Communication with public bodies during a state of emergency is the responsibility of the General Mine Manager or the Communications & Public Affairs Corporate Director.

In the case that the community of Rankin Inlet should need to be evacuated on short notice, the ERT will immediately assist in the evacuation of the community. The General Mine Manager will immediately contact the Mayor of the Hamlet to provide information regarding the situation. If safe to do so, a radio notification is immediately broadcasted on the Rankin Inlet Radio station.

Table 5-1 Contractor Contacts

Contractor	Telephone No.	Contact in Emergency for:
Nolinor Aviation Services	Protocol Agent 819-759-3555 ext. 4608008 Emergency (450) 476.0018 (888) 505.7025	Flight services for additional crew, or additional supplies
Calm Air	Baker Lake (867) 793-2873 Rankin Inlet (867) 645-2746	Flight services for additional crew, or additional supplies
Dyno Nobel Explosives Ltd.	(819) 759-3555 ext. 4603926	Heavy Equipment, Man power, Emergency Blasting
Transport Desgagnés Inc. (Shipping)	(418) 692-1000	Dry Cargo
Woodwards Group	Dennis White (VP Operations) Cell: (709) 896-2421 Craig Farrell (Marine Superintendent/DPA) Cell: (709) 541-0789	Fuel Hauler
M&T Entreprises, Rankin Inlet	867 645-2778	Transportation to and from Meliadine
Sarliaq Holdings Ltd.	Richard- Office 867.645.2653 Cell 867.645.1281 Silu - Office 867.645.2651 Cell 867.645.7645 James - Office 867.645.2759 Cell 867.645.6718 Kilabak - Office 867.645.2759 Cell 867.645.7851 Marvin - Cell 867.645.6799	Equipment, man power, Ground transportation services
Inuksuk Construction	John Winter – 902.483.0398 Tony King – 902.478.4700 Inukshuk Construction – 867.645.4032	Man power, equipment, trades personnel i.e., pipefitter, plumber, electrical

Table 5-2 Internal Contacts

Title	Name	Telephone No.
EVP, Operational Excellence, Environment, & Sustainable Development	Carol Plummer	416.644.2056 ext. 4012056 Cell: 819.354.9877
Vice President of Environment and Critical Infrastructures	Michel Julien	416-947-1212 ext. 4013738 Cell: 514.244.5876
Vice President Health, Safety, Social Affairs & People	Jason Allaire	819.759.3555 ext. 4608004 Cell: 819.355.2608
Corporate Director, Environment and Operational Risks	Jessica Huza	819.759.3555 Cell: 438.830.6797
Meliadine General Mine Manager	Jean-Claude Blais	819-759-3555 ext 4603170 Cell: 819.651.2970
H&S Superintendent	Eric Marcotte	819.759.3555 ext.4603073
H&S General Supervisor	Geoff Neville Jamie Vinnicombe	819.759.3555 Ext 4603906 Cell: 709.682.6447
Emergency Measures Counselor	David Loder Darren Wilcox	819.759.3555 ext.4603113
Environment Superintendent	Sara Savoie	819.759.3555 ext. 4603175 Cell:819.856.9349
Environment General Supervisor	Kyle Conway John Baechler	819.759.3555 ext. 4603212 Cell: 819.860.1033
Environment Coordinator	Randy Schwandt/Alexandre Langlais-Bourassa	819.759.3555 ext.4603996
Environment Department	Environment Technicians	819.759.3555 ext.4603903, 4603202 & 4603925
On-site Nurses		819.759.3555 ext.4603011

Table 5-3 External Contacts

Organization/Authority	Telephone Number	Fax Number
NT-NU 24-Hour Spill spills@gov.nt.ca	(867) 920-8130	(867) 873-6924
Workers' Safety & Compensation Commission	(867) 979-8500	(867) 979-8501
Kivalliq Inuit Association (KIA)	(867) 645-5725	(867) 645-2348
Nunavut Water Board (NWB)	(867) 360-6338	(867) 360-6369
CIRNACInspector (Kyle Amsel) Nunavut Regional Office (NRO) – Indigenous and Northern Affairs Canada (INAC) – Iqaluit	(867)645-2089 (867) 975-4500	(867) 975-4560
Department of Fisheries and Ocean (DFO) – Nunavut Regional Office - Iqaluit	(867) 979-8000	(867) 979-8039
Department of Environment, Government of Nunavut	(867) 975-7700 Rankin Office 867.645.8083	(867) 975-7742
Kivalliq Health Centre – Rankin Inlet	(867) 645-8300	(867) 645-8304
Emergency on call Nurse	(867) 645-6700	
Rankin Hamlet Office	(867) 645-2895	(867) 645-2146
Rankin Ambulance or Fire Emergency	(867) 645-2525	
RCMP 24 Hour Emergency Number	(867) 645-0123	
Canadian Coast Guard (in the event of a spill to the marine environment 24 hours) Coast guard e-mail for notification iqanordreg@innav.gc.ca	867)-979-5269 (867)-979-5269	
Transport Canada – Marine Safety Jaideep Johar	(204)-984-8618 or (204) 880-0754	(204) 984-2254

SECTION 6 • ACTION PLAN

Preventative measures are the primary form of ensuring safety. All personnel who must deal with chemicals are trained in first aid and safe materials handling, including WHMIS. Regular training updates and site-specific exercises/drills are integral to preventing incidents.

Procedures vary depending on the season, hazardous materials spilled and location of the spill (land, air, water, ice or snow). The SDS are consulted to ensure safety procedures are followed. Response procedures specific to spills on land, air, water, snow and ice are presented in the following sub-sections as general guidelines.

6.1 Initial Action

For all spill emergencies, it is required that the following priority actions be undertaken:

- Ensure personal safety;
- Respond quickly; and
- Report the spill.

For the waterlines, initial actions also include responding to the leak detection system, such that if the leak detection system in place detects a leak, the waterline will be inspected to confirm if there is a leak. The waterline will cease to operate until the leak can be controlled and/or fixed.

6.1.1 Respond Safely

Responding safely involves the following:

- Consult the SDS and Product Guides for further information on the substance;
- Control the spill area to prevent unauthorized access by other workers;
- Ensure adequate ventilation;
- Assess whether the spill, leak or system failure can be readily stopped or brought under control;
- Stop product flow or leak if possible and IF SAFE TO DO SO, in the case of the waterline leaks, the waterline with a leak will cease to operate;
- Approach spill from upwind IF SAFE TO DO SO;
- Do not contain compounds (e.g., gasoline, aviation fuel) if vapours might ignite – allow them to evaporate;
- Depending on the type of compound spilled and IF SAFE TO DO SO, contain product using booms, berms, absorbent pads, earthen dike, trenches or improvise with materials at hand and
- Wear appropriate PPE, such as impervious clothing, goggles and gloves when containing the spill.

6.1.2 Respond Quickly

Responding quickly involves the following:

- Identify the spilled material;
- Stop the spill, if safe to do so;
- Be alert – ensure safety of yourself and others by notifying them of the incident;
- Contact the Incident Coordinator if it is a major spill (Code 1), identify the location and request assistance as required. The Incident Coordinator will mobilize the ERT if necessary;
- Shut off ignition sources such as vehicles and unplug electrical equipment – NO SMOKING nearby;
- Attend to the injured if applicable; and
- Assess the severity of the spill.

6.1.3 Report Spill

Reporting the spill includes the following:

- Obtain all necessary information to complete the external spill report and provide it to the Environment Department (see Appendix A). External reportable spills must be reported by Agnico Eagle Environment Staff to the NT-NU 24-Hour Spill Report Line, Crown-Indigenous Relation and Northern Affairs Canada (CIRNAC), Kivalliq Inuit Association (KivIA), Environment and Climate Change Canada (ECCC), Nunavut Water Board (NWB) and the Nunavut Impact Review Board (NIRB); and
- Submit a detailed spill follow up report to the same external stakeholders no later than 30 days after the spill. The report contains the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain, cleanup, and restore the spill site.

6.2 Spills on Land

In the event of a spill on land, it is important to prevent the spilled material from migrating to a waterbody. Response to spills on land includes the general procedures detailed in the following section. The main spill control techniques involve the use of two types of barriers: dikes and trenches. Barriers are placed down-gradient (down-slope) from the source of the spill, and as close as possible to the source of the spill. Barriers slow the progression of the spilled material and serve as containment to allow recovery of the spilled material.

Depending on the spill volume, the site of the spill and available material, a dike may be constructed with soil, booms, lumber, snow, etc. A plastic liner is placed at the foot of and over the dikes to protect the underlying soil or other material and to facilitate recovery of the spill material.

Dikes are constructed to accumulate a thick layer of free product in a single area (V- shaped or U-shaped).

Trenches are useful in the presence of permeable soil and when the spilled material is migrating

below the ground surface. If deemed necessary, a material specific liner is placed on the down-gradient edge of the trench to protect the underlying soil. Liners should not be placed on the bottom of the trench to allow water to continue flowing underneath the layer of floating material (such as fuel).

The use of large quantities of absorbent materials to recover significant volumes of spilled material should be avoided. Large volumes of free-product should be recovered, as much as possible, by using vacuums and pumps, and containerized. Mixtures of water and fuel may be processed through an oil-water separator. Absorbent sheets should be used to soak up residual fuel on water, on the ground (soil and rock), and on vegetation. Peat moss may also be sprinkled on vegetation to absorb films of petroleum products. Excavations will be planned for contaminated areas using heavy equipment and contaminated soil will be disposed of at the Landfarm or shipped south during the summer barge season.

6.3 Spills on Water

In the event of a spill on water, it is important to limit the migration of the spilled material. Response to spills on water includes the general procedures provided in the following section. The following elements are taken into consideration when conducting response operations:

- Type of waterbody or watercourse (lake, stream, river);
- Type of spilled material;
- Water depth and surface area;
- Wind speed and direction;
- Water flow and direction;
- Type of shoreline;
- Seasonal considerations (open-water, freeze-up, break-up, frozen); and
- Equipment and personnel available for first response.

Containment of an oil slick in water requires the deployment of mobile floating booms, maritime barriers to intercept, control, contain and concentrate (i.e., increase thickness) the floating oil. Saline effluent removal could include vacuum recovery, depending on the volume and location.

Measures are taken to protect sensitive and accessible shoreline. The spill is monitored to determine the direction of migration. In the absence of strong winds, the material will likely follow water flow direction. Measures are taken to block and concentrate the spilled material at the discharge of a waterbody using booms where it will subsequently be recovered.

In the case of spills in larger rivers, with fast moving currents, diversion booms are used to direct the spilled material ashore for recovery. Single or multiple booms (i.e., cascading) may be used for diversion. Typically, the booms are anchored across the river at an angle. The angle depends on the current velocity. Choosing a section of a river that is both wider (i.e., less current) and shallower makes boom deployment easier. Diversion booming may also be used to direct the spilled material away from a sensitive area to be protected.

6.4 Spills on Snow and Ice

In general, snow and ice will slow the movement of hydrocarbons, saline effluent, or other spilled material. Snow is a good natural sorbent. Hydrocarbons tend to be soaked up by snow through capillary action. However, the use of snow as a sorbent material is limited as much as possible. Snow and frozen ground also prevent spilled material from migrating down into soil or at least slow the migration process. Ice prevents seepage of spilled material into the water. On the other hand, the presence of snow may hide the spilled material (especially oil slicks) and make it more difficult to follow its progression.

Most response procedures for spills on land can be used for spills on snow and ice. The use of dikes (i.e., compacted snow berms lined with plastic sheeting) or trenches (dug in ice) slow the progression of the spilled material and serve as containment, to allow recovery of the material. Free-product is recovered using a vacuum, pump, or sorbent materials. Contaminated snow and ice are scraped up manually or with heavy equipment, depending on volumes. The contaminated snow and ice are stored at the Snow Cell or disposed of at the Landfarm and treated in spring with the oil and water separator as per the Water Management Plan.

In the event a hydrocarbon spill occurs on a frozen river and the hydrocarbon has migrated under the ice a V trench can be installed downstream of the spill. This would involve a chainsaw cutting through the ice, if the ice is not too thick, and a V structure constructed such that the point of the V is the furthermost point of the structure downstream of the spill. This structure may allow hydrocarbons to accumulate along the sides of the V forcing the hydrocarbons to the point of the V where absorbents can be used to collect the product. This work should only be completed if it is safe to work on the ice and the ice is not too thick that a chainsaw can cut through the ice. This procedure may also be used for saline effluent spills over frozen rivers (if the waterline is operating during these conditions), and may support vacuum removal activities.

6.5 Spills of Compressed Gas

If an accidental release of compressed gas occurs the release should be stopped at the source if safe to do so. The area should be vented to dilute the gas and the area should be isolated to prevent accidental ignition, explosions, or inhalation by personnel. Only employees with the appropriate PPE and training should attempt to mitigate the release.

6.6 Burning of Spills

If safe to do so, smaller spills of hydrocarbons (< 100L) may be removed from unlined pads by using a propane torch. This response method can often reduce the amount of contaminated material generated by a spill as well as the handling and storage of such material.

Burning of larger spills may be considered on a case-by-case basis and only once Agnico Eagle has consulted and received approval from CIRNAC, KivIA and ECCC. This response method is most effective shortly after the spills event, prior to natural spill dispersal and the loss of the more ignitable hydrocarbon fraction.

Additional safety precautions shall be employed prior to the use of this method. A Job Hazard Analysis (JHA) should be completed prior to the undertaking of mitigation method.

6.7 Disposal of Spilled Impacted Materials

Contaminated materials are salvaged, put into appropriate containers (e.g., Quatrex bags/drums), and labelled for temporary storage. Depending on the nature of the contamination, solid materials are treated on-site (landfarm), disposed of within the Underground or Waste Rock Storage Facility (WRSF) upon approval of the Responsible Person (RP), or shipped off-site to a licensed disposal facility. Water contaminated with hydrocarbons is processed with the oil-water separator. Water contaminated with other products is placed in drums for offsite disposal.

Soils contaminated with light hydrocarbons (such as gasoline or aviation fuel) are treated on-site in the Landfarm. Details on the design and operation of the Landfarm are provided in the Landfarm Management Plan. Larger materials such as oversized mine rock that cannot be treated in the landfarm are disposed of within the WRSF upon approval of the RP or backfilled in underground stopes (co-disposal with paste backfill or cemented rockfill).

In the event of a saline spill on land the necessity of cleanup will be determined for each incident. For instance, if a spill occurred on the AWAR, the saline in the water will act as a natural dust suppressant, binding to the road base material. In this situation digging up the saline water may be more detrimental than leaving the saline bound to the road. For a saline leak from the waterlines, a vacuum truck or similar type of equipment should be used to pick up the residual saline water. If an area impacted with saline water needs to be cleaned up the leftover material is to be deposited with the WRSF upon approval of the RP or Overburden Material.

Soil, snow or ice contaminated with sewage will be collected and placed in the Landfarm. Untreated sewage contains microorganisms that will aid in the breakdown of hydrocarbons in the Landfarm. For sewage spills where larger volumes of material cannot be accommodated within the Landfarm, this material may be disposed of within an active WRSF or Tiriganiaq Pit 2, with the required approval from the RP or from the Environment Superintendent, respectively.

Soils contaminated with other spilled products are segregated, packaged and shipped to an external licensed disposal facility. In this, Agnico Eagle will adhere to the requirements under the *Transportation of Dangerous Goods Regulations*, particularly Part 5. All contaminated materials (dangerous goods) will be shipped in a means of containment required or permitted by Part 5 of the Regulations.

6.8 Event Monitoring and Remediation

The Event Monitoring (EM) program addresses the site-specific monitoring that is required following any accidental release. A “release” may be caused by a spill or an emergency. The EM program is designed to verify whether contamination of the surface soil, nearby receiving environment and active zone has occurred as a result of an accidental release of a hazardous material or contaminated water, through monitoring of surface runoff and nearby receiving environment following remediation of any release. It is anticipated that owing to the presence of permafrost beneath most of the mine footprint, there will be minimum impact to groundwater.

The EM plan is developed on a site-specific basis subsequent to a spill or accidental release, and considers the location, extent of the spill, type of product spilled, potential receptors and the potential for any remaining contamination after clean up. The plan is done in coordination with the Environment Superintendent or designate. In the event of an accidental release, the water quality of the downstream receptor and possibly upstream of the receiving point is to be sampled (during the ice-free season) and analyzed. Should the spill have happened over snow cover, water and possibly soil sampling should take place at the earliest feasible time after thaw to determine if there is any impact to the receiving water or soil quality. The specific parameters monitored as part of the EM program depend on the nature of the spill and is determined for the specific hazardous material released.

The final remediation and monitoring will be conducted as per the EM, and where appropriate in consultation with CIRNAC, the KivIA and ECCC.

SECTION 7 • RESPONSE EQUIPMENT

This section addresses the emergency response machinery, equipment, tools and other resources that are made available on-site for spill recovery measures (see Tables 7-1, 7-2, and 7-3).

Table 7-1 Equipment for Spill Emergency Response

Mobile Equipment	
Excavators	Pickup trucks
Snowmobiles	Generator
ATV	Fire truck
Vacuum truck	Boats
Loaders	Fuel trucks
Backhoe	Haul truck
Bulldozer	Spill response trailer
Zoomboom	Bobcat
Water trucks	
Temporary Containment Systems	
Booms	Spill absorbent material
Drums Tanks	Packages/pads
Flexible bladder	Silt fencing
Temporary secondary Containment	Maritime barrier
Emergency Transportation	
Helicopter if available	Snow mobile
ATV	Boats
Snow Cat	
Communication Equipment	
Radio	Email
Phone	Wireless communication system

If required, additional on-site equipment is made available to assist with spill recovery. Temporary containment systems are also available on-site and at Itivia. If required, external resources are available in Rankin Inlet, they are listed in Table 5-2 and Table 5-4.

Communication equipment on-site includes radios, telephones and other wireless communication systems that are available in the event of an emergency.

Spill response kits are strategically located where required on-site. Each department is responsible for providing sufficient spill response kits in their respective work areas. The kits are kept in marked and accessible locations. The locations include all fuel storage areas and chemical storage areas.

All mobile equipment on-site (surface heavy equipment) are equipped with an emergency spill kit and a quarterly audit is performed by the Environment Department.

A mobile environmental emergency trailer, which is easily accessible and transportable, is located on-site and contains the items listed in Table 7-2.

Table 7-2 Contents of Mobile Environmental Emergency Trailer

Emergency Response Equipment	
Pump centrifugal (summer only)	White oil spill pads and roll
Pump accessories, Vacuum	Universal booms
Tubing or pipes for vacuum or pumping	Quatrex bags
Tyvek suit and glove	Wedge wood, Plug pattie
Diesel fuel jerry can (placed on a miniberm)	Hand shovel
Leak control Kit	Sledge hammer, Re- bars
Drum opener	Pipe patch kit
Wescott (to open empty drum screw)	Absorbent pellet bag
Drums	Crowbar
Absorbent booms	Secondary containment
Tarps	
Ropes	
Evac treatment system	
Yellow liner roll (Bags)	

Environmental emergency sea cans are located near the Meliadine River at km 7 and 18 along the AWAR as well as at Itivia. Each environmental emergency sea can contains material listed in Table 7-3.

Table 7-3 Environmental emergency sea can content

Quantity	Equipment/tool name
3	Empty drum (sealed)
2	Mini berm 36”x 36”
2	4 drums berm 4’x 8’
4	Tarp 20’x 30’
4	Tarp 30’x 50’
10	Oil spill absorbent pad
5	Universal absorbent boom 5”x 10’ (for hydro-soluble chemical)
5	Universal absorbent boom 8”x 10’ (for hydro-soluble chemical)
5	Petroleum base absorbent boom 5”x 10’ (for petroleum product)
3	Maritime barrier (baffle)
2	Cell-U-Sorb (absorbent)
2	Amerisorb peat moss (absorbent)
2	Oil gator absorbent
1	Plug pattie
4	Quatrex bag and liners
2	Fork lift wood pallet
4	Hand shovel
1	Crowbar chisel
1	Ice breaker chisel
1	Sledgehammer
15	Re- bar 4’
1	½ drum containment
1	Yellow liner roll
1	Toolbox
2	Silt fence
2	Silt bag
2	EVAC System
1	45-gallon Spill Kit
1	Yellow Nylon rope roll

TABLE 7-4 Spill kit Location

Spill Kit Number	Area	Location	
		Easting	Northing
1	Dyno Plant	537617	6990766
2	Dyno Plant	537628.26	6990782.78
3	Dyno Plant	537646.13	6990772.74
4	Diesel Tank Main Camp	538978.57	6990222.61
5	Warehouse	539130.45	6990095.51
6	Geo Main Camp Core Shack - Fuel Tank	539046.53	6990061.19
7	STP	539152.43	6990257.57
8	Power Plant Fuel tanks - North Yard	539190.73	6990098.13
9	Power Plant Facility	539218.95	6990062.64
10	Power Plant Facility	539228.42	6990045.75
11	Assay Lab	539083.63	6990060.99
12	Assay Lab	539075.78	6990057.13
13	Assay Lab	539077.1	6990053.99
14	6M tankfarm-Gas Boy	539312.36	6989929.12
15	6M tankfarm-Gas Boy	539322.95	6989886.12
16	Water Management Garage	539661.57	6989849.34
17	WTC	539651.48	6989809.89
18	3M tankfarm - Gas Boy	540134.46	6989080.49
19	3M tankfarm - Gas Boy	540134.64	6989094.09
20	Moreau Dome - Fab Shop	539356.69	6990154.29
21	Itivia - Tankfarm	546049.06	6963693.71
22	Itivia - Gasboy	546098.57	6963698.08
23	KCG Yard	540028.18	6989039.74
24	KCG Yard	540005.75	6989053.06
25	KCG Yard	539991.54	6989010.43
26	KCG Yard	539800.2	6989013.98
27	KCG Yard	539784.42	6989025.94
28	KCG Yard	539760.55	6989095.17
29	Explo - Jet Fuel Tanks	541944.65	6988945.66
30	Explo - Enviro Dome	541843.67	6988935.23
31	SETP	539958.98	6988662.04
32	Vent Raise - Air Intake UG	540025.6	6988640.68
No number	Orbit Dome	539882.96	6988781.56
No number	Orbit Dome	539881.47	6988804.27
35	Portal 1 Dome Yard	539879.69	6988866.87
36	Portal 1 Dome Gen Sets	539830.25	6988866.27
37	Fournier Plant	539574.31	6989058.36
38	Fournier Plant	539606.72	6989085.84
22	Portal 2 Dome Yard	539338.52	6989531.86
40	Portal 2 Dome Yard	539355.15	6989537.74
41	Portal 2 Dome Yard	539340.71	6989555.4
42	Portal 2 Dome Yard	539343.03	6989565.12
No number	Warehouse - East Door		

SECTION 8 • TRAINING AND EMERGENCY SPILL EXERCISE

8.1 Training

Every employee and contractor at the Meliadine site receives basic spill and waste management training during their induction, enabling them to respond to small spills and raise the alarm if a larger response is required.

The Environment Department regularly attends tool-box sessions to provide information on spill response and reporting procedures to other departments. The Health and Safety Department, including the on-site Clinic personnel, are familiar with and have up-to-date SDS available.

Training related to spill management at Meliadine will include lessons learned from past incident root cause analyses.

8.1.1 Emergency Response Team

A designated ERT consisting of on-site personnel is established. Agnico Eagle ensures that the ERT is adequately trained and available at all times. All members of the team are trained and familiar with emergency and spill response resources, including their location and access, the Spill Contingency Plan, and appropriate emergency spill response methodologies. The ERT receive 4 hours of training per quarter.

The training includes the following:

- A review of the spill response plan and responsibilities of the ERT members;
- The nature, status and location of fuel and chemical storage facilities and waterlines;
- The on-site and off-site spill response equipment and how to use it;
- Operation of the leak detection system for the waterlines;
- Distribution of SDS sheets;
- Emergency contact lists;
- Worker health and safety during emergency interventions;
- Communication methods and signals;
- Desktop exercises of “worst case” scenarios;
- Emergency evacuation;
- Fires or explosions;
- Emergency equipment and use;
- Personal protective equipment and clothing;
- Marine shoreline recovery operations; and,
- Likely causes and effects of spills.

The ERT members receive in-depth spill response training and learn how to respond while wearing PPE.

8.2 Spill Response Simulation Exercises

Spill Response Simulation Exercises will be used for training purposes and to test the adequacy of the actions outlined in the Crisis Management Plan, the Emergency Response Plan and those outlined in this Plan.

Details of the spill response simulation exercise will be documented, and the results and associated modifications will be incorporated into updates to all applicable management plans. A record of these exercises will be kept by Agnico Eagle.

Prior to the spill response simulation exercises related to fuel transfers at the Itivia Oil Handling Facility, a notice will be provided to the Transport Canada Regional Environment Preparedness and Response Officer.

Simulation exercises as per E2 Regulations requirements are detailed below. Information related cyanide-related simulations exercises for the International Cyanide Management Code requirements is presented in the Cyanide Management Plan.

8.2.1 Annual Simulation Exercise

A spill response simulation exercise will be conducted annually for an E2 Schedule 1 substance stored on site, to test the preparedness of Agnico Eagle personnel and the Emergency Response Team. The exercise will simulate the release of an E2 substance to the environment and will test the response actions outlined in the Crisis Management Plan, the Emergency Response Plan and those outlined in this Plan.

8.1.2 Full-Scale Simulation Exercise

Every 5 years, a full-scale simulation exercise will be conducted to test the preparedness of Agnico Eagle Personnel and the Emergency Response Team, and will include the deployment of personnel, response resources and equipment during the simulation.

Once completed, a notice regarding the simulation exercise will be submitted to the Minister as per Schedule 5 of the E2 Regulations.

SECTION 9 • POTENTIAL SPILL ANALYSIS – AWAR

To prepare for emergency spill response, potential spill analysis is conducted for a variety of potential worst-case scenarios. The exercise serves to: identify potential risk areas, determines the fate of spilled products and predict environmental effects. The following example, of a tanker truck spill on the AWAR, is used to demonstrate the application of the spill response as part of the spill analysis.

Description of Incident: Rollover of fuel tanker due to poor road conditions. The rollover has resulted in approximately 1,000 L of fuel to the ground along the roadside.

Potential Causes: Vehicle accident, human error.

Hazardous Product(s) Spilled: Diesel fuel.

Maximum Potential Volume Spilled: 45,000 litres.

Immediate Receiving Medium: Land.

Distance and Direction to Nearest Receiving Body of Water: 500 metres.

Resources to Protect: Land and any nearby stream, river or waterbody.

Estimated Emergency Response Time: Maximum time is 90 minutes depending on location of spill (assuming truck driver is injured and cannot commence spill response). Minimum time to respond to a spill on the AWAR is 15 minutes, depending on the distance from the proposed Meliadine site.

Spill Response Procedures: Under this scenario, the truck driver was not injured, and therefore he acted as the first responder and immediately activated the Plan as defined in Section 6. The driver attempted to seal the leak. He tried to use the spill kit carried in the fuel truck and made all attempts to contain and recover the fuel on the ground using dikes, sumps or trenches as described in Section 6.2. A sorbent boom was used to block the flow of the fuel towards the Lake. The first responder notified the Incident Coordinator, ERT and Environment Department by calling a Code 1 on radio. The mobile emergency response trailer was brought to the spill site by the ERT, who assisted in digging trenches to contain and collect free-product for temporary storage. Spilled material was recovered using pumps. The Environment Superintendent, or designate, immediately transmitted the information to the General Mine Manager or designate. The fuel remaining in the tanker was pumped into a temporary storage tank using appropriate equipment. The leak stopped as the tank volume was reduced below the leaking safety valve. Pumping continued until all of the fuel was removed. The empty tanker was righted up and brought back to the site. All soil was cleaned up thereafter and disposed of in the landfarm. The spill was reported to the NT/NU spill report line, KIA, and INAC. After the cleanup had been completed, the Environment Department collected soil samples to verify that no residual fuel remained at the spill site. A follow-up of the spill causes results in the development of mitigation measures including:

- Fuel deliveries from Itivia to the mine site are suspended during poor weather or poor road conditions;
- Agnico Eagle sands the roads when road ice poses a safety risk to travel; and
- All Agnico Eagle vehicles carry basic spill response equipment and the drivers are trained in its use. This allows the truck driver to act as the first responder and attempt to contain the spill and recover any spilled product, if safe to do so.

These mitigation measures, combined with the procedures outlined in this Plan above, provide protection to Nipissar Lake.

SECTION • 10 • MDMER INFORMATION

The Fisheries Act prohibits the deposit of deleterious substances into fish frequented waters unless authorized by regulation. The Metal and Diamond Mining Effluent Regulations (MDMER) were promulgated under the Fisheries Act and exempts metal and diamond mining industry from subsection 36(3) general prohibition of the Act. The MDMER includes effluent limits on releases of nine parameters: six metals (arsenic, copper, cyanide, lead, nickel and zinc), radium-226, un-ionized ammonia and total suspended solids (TSS). The MDMER also imposes limits on the pH of effluent and prohibits the discharge of effluent that is acutely lethal to fish, even if it is determined that the nine MDMER parameters and pH effluent comply. TSS is the parameter in the effluent discharge that is the most likely to give concern for the discharge in freshwater. To prevent this the Effluent Treatment Plant was put in place to treat the TSS.

Before an effluent discharge occurs, required samples from the Final Discharge Point (FDP) are taken and analyzed to ensure they are compliant with the MDMER and the Water License. As per Water Licence Agnico Eagle must provide notification of discharge to CIRNAC 10 days in advance of discharge. If analysis indicates a limit is exceeded or a field measurement indicates a trend towards non-compliance, discharge does not proceed or is suspended if a discharge is underway. Evaluation is done and if necessary, treatment occurs while re-circulating the water within CP1.

Trigger limits for stopping discharge are in place at the Effluent Water Treatment Plant (EWTP) as a component of TSS and TDS exceedance mitigation during periods of discharge. When a trigger limit is reached, the EWTP stops discharge immediately and begins recirculating treated water to CP1.

For the discharge to Meliadine Lake, the Final Discharge Point (FDP) is located downstream of the EWTP; beyond that point Agnico Eagle cannot exercise control over the quality of the effluent. FDP water quality is assessed with grab samples; the sampling point is located at a valve along the discharge pipe in the EWTP. For the discharge to Melvin Bay, the FDP is located at a valve installed downstream of the storage tank near the Itivia Fuel Storage Facility at Rankin Inlet.

On June 20th, 2017, Agnico Eagle Meliadine commissioned a FDP in Meliadine Lake at 63°01’45.97’’ N 92°09’18.12, 100 m from shore. Water is pumped from CP1 to the EWTP. The final control sampling point is located in the EWTP at ‘MEL-14’ (63°02’15.46’’ N 92°13’06.24). The FDP consists of a diffuser to control erosion and disturbance to bottom sediments.

On April 29th 2019, Agnico Eagle provided notification to ECCC for a new final discharge point at the Meliadine Mine. Agnico Eagle commenced discharging water to sea in 2019. Groundwater is in surface ponds at the Mine site, separate from other water. The groundwater is treated at the Mine site so that it is safe to discharge into the ocean. The MDMER final discharge point in Melvin Bay (MEL-26) is located at 62°48'01,99"N 92°06'00,05" W. The effluent is then be released in Melvin Bay via a submerged diffuser. The location of the diffuser is 62°47’48.43” N 92°05’53.10” W

SECTION • 11 • REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2014. Oil Pollution Emergency Plan (OPEP), Final Environmental Impact Statement, Meliadine Gold Project, Nunavut, Volume 8, Support Document 8-2.

INAC (Aboriginal Affairs and Northern Development Canada). 2010. Guidelines for Spill Contingency Planning. Last modified- 2010/09/15 http://www.aadnc-INAC.gc.ca/eng/1100100024236/1100100024253#sub1A_6

NWB (Nunavut Water Board). 2010. 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).

APPENDIX A • NT/NU SPILL REPORT FORM

Northwest Territories Nunavut Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR	REPORT NUMBER
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME	☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	
C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION		
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION		
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES	
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ NAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

PAGE 1 OF _____

APPENDIX B • GENERAL RESPONSE PROCEDURES FOR SPILLED EXPLOSIVES

B.1 Ammonium Nitrate

Ammonium Nitrate is a substance listed on Schedule 1 of the E2 Regulations, with a threshold of 20 tonnes. This product is used in the manufacturing of an emulsion explosive at the Mine.

The first step to prevent potential spills and associated hazards is the application of proper storage procedures for bulk ammonium nitrate, including the following:

- Ensure good housekeeping of the storage facility to prevent spilling and/ cross-contamination of materials;
- Store ammonium nitrate away from combustible materials, fuels, and other blasting accessories (i.e., boosters, delays, detonating cords, and detonators);
- Post proper signage restricting the use/exposure of ammonium nitrate to ignition sources (e.g., no hot work, smoking or vehicle maintenance);
- Ensure the storage facility is well ventilated; and
- Ensure the storage facility is always locked with only authorized personnel allowed access.

The following is a general spill response procedure for ammonium nitrate. Consult the SDS to determine whether deviations from the general guidance are required.

For an **ammonium nitrate spill** (solid):

1) Isolate and evacuate the spill area.

2) Contact your Supervisor, who will contact the Incident Coordinator and coordinate appropriate spill response (assemble ERT members and the appropriate spill response materials). **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

3) Put on appropriate personal protective equipment. For an ammonium nitrate spill, this includes:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Protective eyeglasses or chemical safety goggles or face shield as recommended by the SDS;

    c. Lab coat, coveralls or Tyvek™ coveralls as recommended by the SDS; and

    d. Half mask air-purifying respirator with cartridges and/filters as recommended by the SDS or respirator manufacturer.

4) Ventilate (open windows/doors to outdoor) closed spaces before entering.

5) Remove all sources of heat and ignition (no smoking, flares, sparks, or flames in immediate area)

and remove uncontaminated combustible materials and organic compounds (wood, paper, oil, etc.) from spill area.

6) For spills on land, protect the spill area from water runoff by constructing a ditch or dike using suitable absorbent materials, soil or other appropriate barrier.
7) AN dissolves quickly in water or snow so it is critical to minimize its interaction with water or snow. If the material is spilled on snow the area should be cleaned up as soon as possible to minimize the amount of AN that gets dissolved. If the spill occurs when it is raining, it may be advantageous to cover the material with an impermeable tarp to minimize the interaction with the rain until the spill is cleaned up.
8) Vacuum or sweep the spill residue using non-metal, non-sparking tools and place the residue in a labelled plastic container (plastic pail with lid or double heavy-duty plastic bags) for re-use or off-site disposal at a licensed disposal facility.

    Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid and clearly label the container per WHMIS Guidelines.

    Note: Minimize dust generation during the operation.

9) Remove and bag PPE for cleaning or disposal at a licensed facility. Thoroughly wash potential skin contact locations after handling.

B.2 Ammonium Nitrate Fuel Oil

Proper storage, handling and disposal of ammonium nitrate fuel oil (ANFO) are an important first step in preventing spills and associated hazards.

The proper storage procedures are as follows:

- Use ANFO under the supervision of authorized trained personnel;
- Keep ANFO away from heat, sparks, and flames, as well as initiating explosives, oxidizing agents, combustibles, and other sources of heat; and
- Protect containers from physical damage and store them in dry, well ventilated conditions.

Explosives that have been identified as deteriorated or damaged need to be disposed of or destroyed. The appropriate method of disposal or destruction and subsequent course of action is determined by authorized personnel or the explosive supplier.

Transportation of explosives-related compounds and materials is in accordance with Section 14 of the *Mine Health and Safety Act* and associated regulations, and the *Transportation of Dangerous Goods Act*. Transport vehicles will be in sound mechanical condition and equipped with proper safety equipment. Loaded vehicles will not be left unattended, and only authorized personnel are responsible for the security of the explosives under their control.

The following is a general spill response procedure for ANFO. The following procedure does not apply to emulsions or other explosives. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For an **ANFO spill** (solid):

1) Isolate and evacuate the spill area.

2) **IF SAFE TO DO SO,** immediately extinguish any open flames and remove ignition sources (no smoking, flares, sparks in immediate area). **Fires involving large quantities of ANFO should not be fought.**

3) Contact the Incident Coordinator who will assemble ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

4) Put on appropriate personal protective equipment. For an ANFO spill this includes:

    a. Gloves as recommended by the SDS or glove manufacturer;

b. Protective eyeglasses or chemical safety goggles or face shield as recommended by the SDS;

c. Lab coat, coveralls or Tyvek™ coveralls as recommended by the SDS;

d. Shoe covers or rubber boots; and

e. Half mask air-purifying respirator with cartridges and/filters as recommended by the SDS or respirator manufacturer.

5) If the spill occurred outdoors, stay upwind and avoid low lying areas. Ventilate (open windows/doors to outdoors) closed spaces before entering. Ensure adequate explosion proof ventilation for cleanup.

6) Remove all sources of heat and ignition (no smoking, flares, sparks or flames in immediate area) and remove uncontaminated combustible materials and organic compounds (wood, paper, oil, etc.) from spill area.

7) Do not operate radio transmitters within 100 m of electric detonators.

8) For a spill on land, protect the spill area from water runoff by constructing a ditch or dike using suitable absorbent materials, soil or other appropriate barrier. For a spill to water, utilize damming, and/or water diversion to minimize the spread of contamination. ANFO dissolves quickly in water so the material should be covered up with a tarp if it is raining out and if cleanup is delayed. If an ANFO spill occurs on snow this area should be cleaned up as quick as possible as the ANFO will dissolve in the snow.

9) Collect, sweep or shovel spilled material and the other contaminated material/soil using non-metallic, spark-proof tools and place residue into a labelled plastic waste container (plastic pail with lid or double heavy duty plastic bags) for off-site disposal at a licensed disposal facility.

Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid, and clearly label the container per WHMIS Guidelines.

Note: The drums/containers/residues are to be stored in ventilated areas away from incompatible materials for eventual off-site disposal at a licensed disposal facility.

10) Remove and bag PPE for cleaning or disposal at a licensed disposal facility. After handling thoroughly wash potential skin contact locations with soap. Properly dispose of contaminated leather articles including shoes that cannot be decontaminated.

APPENDIX C • GENERAL RESPONSE PROCEDURES FOR COMPRESSED GAS LEAK

The following is a general spill response procedure for compressed gases. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **compressed (inert and flammable) gas** leak:

1) **IF SAFE TO DO SO** and if it will stop the gas leak, turn off cylinder valve.

2) If the leak cannot be stopped by closing the cylinder valve and it is **an inert atmospheric gas** (e.g., nitrogen, carbon dioxide, etc.), isolate and evacuate the affected area. If the leak is a **flammable gas** and the leak is outside of a ventilated building enclosure that will contain the gas, immediately activate the fire alarm system and evacuate the area/building.

3) Contact the Incident Coordinator who will assemble ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

4) If possible and if safety permits, adjust leaking cylinder so that gas escapes rather than liquid.

5) If possible and if safety permits, eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area) and turn off electrical equipment.

6) If a spill has occurred outdoors, stay upwind and avoid low lying areas. If the spill has occurred inside a building, prevent spread of vapour throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, it may also be necessary to have it shut-down. Allow vapours to ventilate outdoors by opening windows and doors to the exterior.

7) Isolate area until gas has dispersed. Incident Coordinator to verify safe conditions.

APPENDIX D • GENERAL RESPONSE PROCEDURES FOR SPILLED FLAMMABLE OR COMBUSTABLE LIQUIDS

Diesel Fuel is a substance listed in Schedule 1 of the E2 regulations, with a threshold of 2,500 tonnes. Diesel fuel is used on site to for power and to fuel various pieces of light/heavy equipment.

The following is a general spill response procedure for flammable or combustible liquids, particularly petroleum hydrocarbon products. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a spill of flammable or combustible petroleum hydrocarbon product (liquid):

1) Isolate and evacuate the spill area.

2) **IF SAFE TO DO SO**, immediately extinguishes any open flames and remove ignition sources (no smoking, flares, sparks in immediate area).

3) **IF SAFE TO DO SO**, stop leak and contain spill (**see Step 9**).

4) Contact the Incident Coordinator who will assemble ERT members if required and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

5) Put on appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Splash goggles or face shield;

    c. Shoe covers or rubber boots;

    d. Lab coat or Tyvek™ coveralls; and

    e. Half mask air-purifying respirator with **organic vapour or combination cartridges**, or as otherwise recommended by the SDS or respirator manufacturer.

6) If the spill has occurred outdoors, stay upwind and avoid low lying areas. If the spill has occurred inside a building, prevent spread of vapour throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, it may also be necessary to have it shut-down.

7) Ventilate (open windows/doors to outdoors) closed spaces before entering. Ensure adequate explosion-proof ventilation for cleanup. A vapour suppressing foam or water spray may be used to reduce vapours.

8) Remove all sources of ignition (no smoking, flares, sparks or flames in immediate area) and combustible materials (wood, paper, oil, etc.) from within the spill area.

9) Contain spill by using spill absorbent, spill pads or pillows, soil or snow by constructing a dike that will limit flow and prevent entry to sewer, waterways or onto ice. For spills to land, excavation of trenches/pits to capture spill flow may also be appropriate. If possible, compact soil or snow dikes, and place plastic tarps over the dike and at its foot to allow the product to pool on the plastic for easy recovery.

   Note: Do not use paper towels to absorb spill as this increases the rate of evaporation and vapour concentration in the air.

   Note: Do not flush with water into drainage areas or ditches as this will spread spill.

   Note: Snow works well as a natural absorbent to collect and contain spilled petroleum hydrocarbons. However, its use in containing a spill will result in a water-contaminant mixture that may be more difficult to manage. It is important to scrape up the contaminated snow and ice as soon as possible.

10) Carefully cover the spill area with spill absorbent, spill pads, soil or snow, starting at the outside and working inward. Do not touch or walk through spilled material.

11) Sweep up or shovel the residue using non-metallic, spark-proof tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy duty plastic bags). For larger spills to land, excavate impacted absorbent material and soil, place in lined and bermed temporary storage area or directly into sealed drums/containers.

   Note: The drums/containers/residues are to be stored in ventilated areas away from incompatible materials for eventual treatment at the on-site landfarm facility or off-site disposal at a licensed disposal facility. Electrically ground all containers and transporting equipment.

   Note: Larger pools of product may be pumped into empty storage tanks or drums.

12) If a spill is indoors, mop the affected area using detergent and water. Dispose of this water to drums for eventual off-site disposal at a licensed disposal facility. Spills to land may require further excavation or remediation of contaminated soil until acceptable soil quality is achieved. The Incident Coordinator and/or Environment Superintendent or designate will assess this requirement.

13) For spills to water, immediately limit the area of the spill on water using absorbent pads and booms and similar materials to capture small spills on water. Deploy and slowly draw in absorbent booms to encircle and absorb the spilled product. Recover larger spills on water with floating skimmers and pumps, as required, and discharge recovered product to drums or tanks.

   Note: Petroleum hydrocarbons are generally hydrophobic, and as such, do not readily dissolves in water. They typically tend to float on the water's surface. Absorbent booms are often relied on to recover hydrocarbons that escape land containment and enter water.

   Note: Antifreeze sinks and mixes with water. If released to water, attempt to isolate/confine the spill by damming or diverting the spill. Pump contaminated water to tanks or drums.

14) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated leather articles (including boots and shoes) that cannot be decontaminated.

APPENDIX E • GENERAL RESPONSE PROCEDURES FOR SPILLED OXIDIZING SUBSTANCES

E.1 Liquids

The following is a general spill response procedure for liquid oxidizer compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **liquid oxidizer** spill:

1) Isolate and evacuate the spill area.

2) **IF SAFE TO DO SO**, stop leak and contain spill (**see Step 8**).

3) Contact the Incident Coordinator who will assemble, if required, ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

4) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Splash goggles or face shield;

    c. Shoe covers or rubber boots;

    d. Lab coat, coveralls or Tyvek™ coveralls as recommended by the SDS; and

    e. Half mask air-purifying respirator with cartridges and/or filters as recommended by the SDS or respirator manufacturer.

5) Ventilate closed spaces before entering. Ensure adequate explosion-proof ventilation for cleanup.

6) Remove and/or moisten with water any combustible material (wood, paper, oil, etc.) affected by the spill.

7) Use water spray to reduce vapours or divert vapour cloud drift, if required.

8) Contain spill by using non-combustible spill absorbent, soil or snow to construct a dike that limits flow and prevents entry to sewer, waterways or onto ice. For spills to land, excavation of trenches/pits to capture spill flow may also be appropriate.

    Note: Flushing area with flooding quantities of water may also be appropriate assuming this does not make cleanup and waste management more difficult – refer to the SDS.

9) Carefully cover the spill area with chemical spill absorbent, soil or snow, starting at the outside and working inward. Use non-combustible absorbent. Do not touch or walk through spilled material.

10) Sweep up or shovel the spill residue using non-metal, non-sparking tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags) for off-site disposal at a licensed disposal facility.

11) For indoor spills, mop the affected area using detergent and water. Flushing area with flooding quantities of water may also be appropriate – refer to the SDS. Dispose of this water to the sanitary sewer, process stream or waste drums as appropriate. Spills to land may require further excavation or remediation of contaminated soil until acceptable soil quality is achieved. The Incident Coordinator and/or Environment Superintendent or designate will assess this requirement.

12) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

E.2 Solids

The following is a general spill response procedure for solid oxidizer compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **solid oxidizer** spill:

1) Isolate and evacuate the spill area.

2) Contact the Incident Coordinator who will assemble, if required, ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

3) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Safety glasses or goggles;

    c. Lab coat; and

    d. Half mask air-purifying respirator with **N95 or greater protection** particulate filter or as recommended by the SDS or respirator manufacturer.

4) Remove all sources of heat and ignition (no smoking, flares, sparks or flames in immediate area) and remove uncontaminated combustible materials and organic compounds (wood, paper, oil, etc.) from spill area.

5) For spills to land, protect the spill area from water runoff by constructing a ditch or dike using suitable non-combustible absorbent materials, soil or other appropriate barrier. For spills to water, utilize damming and/or water diversion to minimize the spread of contamination.

6) Vacuum, sweep, or shovel the spill residue using non-metal, non-sparking tools, and place the residue into a labelled plastic container (plastic pail with lid or double heavy-duty plastic bags) for re-use or off-site disposal at a licensed disposal facility.

    Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid, and clearly label the container per WHMIS Guidelines.

    Note: Minimize dust generation.

7) If there is still oxidizer residue left in the spill area, neutralize with appropriate agent as recommended by the SDS, or for spills to land, continue to excavate until no visible spilled solid remains. Use non-combustible chemical spill absorbent or soil to absorb the neutralized residue. Place in suitable drums/containers for disposal at a licensed facility.

8) For indoor spills, mop the affected area using detergent and water. Dispose of this water to the sanitary sewer (if the quantity is not too large), process stream or waste drums as appropriate.

9) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

APPENDIX F • GENERAL RESPONSE PROCEDURES FOR SPILLED POISONOUS AND TOXIC SUBSTANCES

F.1 Sodium Cyanide

The following is a general spill response procedure for solid Sodium Cyanide. Agnico Eagle commits to review and test, and if necessary, modify and update this spill response procedure on a periodic basis.

Any significant cyanide incident must be initially reported to the ICMI within 24 hours of an occurrence, stating the date of the incident, nature of the incident, and contact information of the AEM representative. Further information, such as root cause, health, safety and environmental impacts, and any mitigation or remediation is requested to be provided within 7 days of the incident.

A significant occurrence as described in the ICMI glossary would include; human exposure that requires an action by the emergency response team, unpermitted release on or off site that enters natural waters, unpermitted release that occurs off-site or migrates off-site, a release or transport incident requiring an intervention by emergency response teams, wildlife fatalities, or theft of cyanide. Notifications or report may be submitted by e-mail to ICMI at info@cyanidecode.org.

For a **Sodium Cyanide (solid)** spill:

1) Isolate and evacuate the spill area.

2) Contact the Incident Coordinator who will assemble ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

3) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Safety glasses or goggles;

    c. Class B Ty-Chem suit;

    d. SCBA – Self-Contained Breathing Apparatus; and

    e. Rubber boots

    Note: For worker safety, maintain readily accessible supply of cyanide antidote kits (Cyanokit™) on site.

4) Ventilate area of spill or leak.

5) Avoid exposure to acids, water or weak alkalis, which can react to form toxic Hydrogen Cyanide gas.

6) Contain spill to prevent release to sewer, waterway or onto ice. For spills to land, protect the

spill area from water runoff by constructing a ditch or dike using absorbent materials, soil or other appropriate barrier. If raining, cover spill area with tarp or plastic to minimize contact with water and prevent subsequent runoff. For spill to water, utilize damming, and/or water diversion to minimize the spread of contamination.

7) Shovel the spilled material into labelled drums, containers or plastic bags for re-use or off-site disposal at a licensed disposal facility.

   Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid and clearly label the container per WHMIS Guidelines.

   Note: Minimize dust generation.

8) If there is residue from the Sodium Cyanide spill remaining in the spill area, neutralize with appropriate agent **as recommended by the MSDS** (Sodium or Calcium Hypochlorite solution), or for spills to land, continue to excavate until no visible spilled solid remains. Use suitable spill absorbent or soil to absorb the neutralized residue. Place in suitable drums/containers for disposal to a licensed facility. Collect material and place in a closed container for recovery or disposal.

IMPORTANT: It is strictly prohibited to add any chemicals or neutralizing solutions to a Sodium Cyanide spill near a drainage system, or near or into a water body, or in any situation where there is a potential for impacting surface water.

9) For indoor spills, mop the affected area using detergent and water. Dispose of this water to waste drums/containers for disposal to a licensed facility.

10) Remove and bag PPE for disposal at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

APPENDIX G • GENERAL RESPONSE PROCEDURES FOR SPILLED CORROSIVE SUBSTANCES

G.1 Acids, Liquids

The following is a general spill response procedure for liquid acid compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **liquid acid** spill:

1) Isolate and evacuate the spill area.

2) **IF SAFE TO DO SO**, stop leak and contain spill (**see Step 8**).

3) Contact the Incident Coordinator who will assemble, if required, ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

4) Put on appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Splash goggles or face shield;

    c. Shoe covers or rubber boots;

    d. Lab coat or Tyvek™ coveralls; and

    e. Half mask air-purifying respirator with **acid gas or combination** cartridges, or as otherwise recommended by the SDS or respirator manufacturer.

5) If the spill has occurred outdoors, stay upwind and stay out of low areas. If the spill has occurred inside a building, prevent spread of vapour throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, it may also be necessary to have it shut-down.

6) Ventilate (open windows/doors to outdoors) closed spaces before entering.

7) Remove all sources of ignition (no smoking, flares, sparks or flames in immediate area).

8) Contain spill by using chemical spill absorbent, spill pads or pillows, or dry soil to construct a dike that limits flow and prevents entry to sewer, waterways or onto ice. For spills to land, excavation of trenches/pits to capture spill flow may also be appropriate. Ideally, use spill absorbent that contains a mild neutralizing agent as recommended by the SDS.

Note: Many acids, particularly concentrated acids, react violently in the presence of water. Do not flush spill area with water unless the SDS indicates acceptable.

Note: Nitric Acid reacts violently and explosively with organic chemicals and organic material such as wood, cotton and paper; therefore, do not use organic absorbent material on Nitric Acid.

Note: Hydrofluoric Acid will fume during neutralization. Provide adequate ventilation and approach from upwind. Neutralize carefully with Sodium Bicarbonate, soda ash or lime. Use water spray to disperse the gas/vapour if required. Remove all sources of ignition.

9) Carefully cover the spill area with chemical spill absorbent, spill pads or dry soil, starting at the outside and working inward. If practical, neutralize spill using SDS-recommended or commercially available neutralizers. Use pH indicator paper to determine if spill is neutralized (pH 7).

Note: Use caution as neutralization reactions generate heat.

10) Sweep or shovel the neutralized spill residue using non-metal, non-sparking tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags) for off-site disposal at a licensed disposal facility.

11) Check the pH of the spill area. If it is less than pH 6, then further neutralize with a dilute solution of a suitable reagent as identified on the SDS, or for spills to land, continue to excavate contaminated soil.

12) For indoor spills, mop the affected area using detergent and water. Dispose of this water to the sanitary sewer (if the quantity is not too large, process stream or waste drums as appropriate.

13) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

14) After the spill has been cleaned up, the area should be free of vapours. However, if personnel note odours or irritation, isolate the spill area, re-clean the area as per Steps 11 and 12 or wait at least 1 hour before re-entering or until considered safe by the Incident Coordinator or Environment Superintendent or designate.

G.2 Acids, Solids

The following is a general spill response procedure for solid acid compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **solid acid** spill:

1) Isolate and evacuate the spill area.

2) Contact the Incident Coordinator who will assemble, if required, ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

3) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Safety glasses or goggles;

    c. Lab coat; and

    d. Half mask air-purifying respirator with **N95 or greater protection** particulate filter, or as otherwise recommended by the SDS or respirator manufacturer.

4) Contain spill to prevent release to sewer, waterway or onto ice. For spills to land, protect the spill area from water runoff by constructing a ditch or dike using absorbent materials, dry soil or other appropriate barrier. If raining, cover spill area with tarp or plastic to minimize contact with water and prevent reaction and/or subsequent runoff. For spills to water, utilize damming, and/or water diversion to minimize the spread of contamination.

5) If necessary to minimize dust production, slightly moisten the solid. Use water, or if the material is water reactive, another inert liquid as recommended by the SDS.

6) Sweep up or shovel the residue using non-metallic, spark-proof tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags) for reuse or off-site disposal at a licensed disposal facility.

    Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid and clearly label the container per WHMIS Guidelines.

7) Remaining solid acid residue may be neutralized using a dilute solution of appropriate agent as recommended by the SDS (e.g., Sodium Bicarbonate - baking soda) or, for spills to land

continue to excavate until no visible spilled solid remains. Check the pH of the spill area; the final pH should be between pH 6 and 10. Use spill absorbent, spill pads or dry soil to absorb the neutralized residue.

Note: Use caution as neutralization reactions generate heat.

8) For indoor spills, mop the affected area using detergent and water. Dispose of this water to the sanitary sewer (if the quantity is not too large, process stream or waste drums as appropriate.

9) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

G. 3 Bases/Alkali,Liquids

The following is a general spill response procedure for liquid alkali or base compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **liquid alkali or base** spill:

1) Isolate and evacuate the spill area.

2) **IF SAFE TO DO SO**, stop leak and contain spill (**see Step 8**).

3) Contact the Incident Coordinator who will assemble ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

4) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Splash goggles or face shield;

    c. Shoe covers or rubber boots;

    d. Lab coat or Tyvek™ coveralls; and

    e. Half mask air-purifying respirator with cartridges/filters as recommended by the SDS or respirator manufacturer.

5) If the spill has occurred outdoors, stay upwind and stay out of low areas. If the spill has occurred inside a building, prevent spread of vapour throughout the building by closing doors to other rooms and hallways. If the room's air exchange system distributes air throughout the building, it may also be necessary to have it shutdown.

6) Ventilate (open doors/windows to outdoors) closed spaces before entering.

7) Remove all sources of ignition (no smoking, flares, sparks or flames in immediate area) and combustible materials (wood, paper, oil, etc.).

8) Contain spill by using spill absorbent, spill pads or pillows, or dry soil to construct a dike that limits flow and prevents entry to sewer, waterways or onto ice. For spills to land, excavation of trenches/pits to capture spill flow may also be appropriate. Ideally, use chemical spill absorbent that contains a mild neutralizing agent as recommended by SDS.

Note: Use caution as neutralization reactions generate heat.

9) Carefully cover the spill area with chemical spill absorbent, spill pads or dry soil, starting at the outside and working inward. If practical, neutralize spill using SDS-recommended or commercially available neutralizers. Use pH indicator paper to determine if spill is neutralized (pH 7).

   Note: Use caution as neutralization reactions generate heat.

10) Sweep or shovel the neutralized spill residue using non-metal, non-sparking tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags) for off-site disposal at a licensed disposal facility.

11) Check the pH of the spill area. If it is greater than pH 10, then further neutralize with a dilute solution of a suitable reagent as identified on the SDS, or for spills to land, continue to excavate contaminated soil.

12) For indoor spills, mop the affected area using detergent and water. Dispose of this water to the sanitary sewer (if the quantity is not too large, process stream or waste drums as appropriate.

13) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

14) After the spill is cleaned up, the area should be free of vapours. However, if personnel note odours or irritation, isolate the spill area, re-clean as per Steps 11 and 12 or wait at least 1 hour before re-entering or until it is considered to be safe by the Incident Coordinator or Environment Superintendent or designate.

G.4 Bases/Alkali,Solids

The following is a general spill response procedure for solid alkali or base compounds. Consult the SDS for the specific spilled compound to determine whether deviations from the general guidance are required.

For a **solid alkali or base** spill:

1) Isolate and evacuate the spill area.

2) Contact the Incident Coordinator who will assemble, if required, ERT members and the appropriate spill response materials outside the spill area. **Obtain and read the SDS** for the substance to determine the chemical-specific hazards and to identify any special precautions that must be taken.

3) Put on the appropriate PPE. Depending on the scale of the spill and properties of the spilled substance, this can include:

    a. Gloves as recommended by the SDS or glove manufacturer;

    b. Safety glasses or goggles;

    c. Lab coat; and

    d. Half mask air-purifying respirator with **N95 or greater protection** particulate filter or as recommended by the SDS or respirator manufacturer.

4) Contain spill to prevent release to sewer, waterway or onto ice. For spills to land, protect the spill area from water runoff by constructing a ditch or dike using absorbent materials, dry soil or other appropriate barrier. If raining, cover spill area with tarp or plastic to minimize contact with water and prevent reaction and/or subsequent runoff. For spills to water, utilize damming, and/or water diversion to minimize the spread of contamination.

5) If necessary to minimize dust production, slightly moisten the solid. Use water or, if the material is water reactive, another inert liquid as recommended by the SDS.

    Note: Do not use water to flush bases in powdered form, such as Calcium Oxide (lime), as this material is not very soluble.

6) Sweep or shovel the residue using non-metallic, spark-proof tools and place the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags) for off-site disposal at a licensed disposal facility.

    Note: Recovered solid, if generally free from impurities, may be suitable for its intended use. In this case, place solid in suitable container with lid and clearly label the container per WHMIS Guidelines.

7) Remaining solid alkali or base residue may be neutralized using a dilute solution of appropriate acid. Check the pH of the spill area; the final pH should be between pH 6 and 10. Use chemical spill absorbent, spill pads or dry soil to absorb the neutralized residue.

8) For indoor spills, mop the affected area using detergent and water. Dispose of this water to the sanitary sewer (if the quantity is not too large, process stream or waste drums as appropriate.

9) Remove and bag PPE for cleaning, inform laundry personnel of contaminant hazards, or dispose at a licensed disposal facility. Thoroughly wash with soap potential skin contact locations after handling. Properly dispose of contaminated clothing that cannot be decontaminated.

APPENDIX H • GENERAL RESPONSE PROCEDURES FOR SPILLED SALINE WATER

The following is a general spill response procedure for saline water. It must be noted that the location and volume of the spill will dictate the types of mitigation practices that will occur.

For a spill of saline water:

1) When the leak detection system is triggered, confirm the location of the leak and shut down the waterline
2) Suspend discharge from a waterline if a leak has been identified until the leak is resolved
3) Isolate the spill area.
4) **IF SAFE TO DO SO**, stop leak and contain spill **(see step 7)**.
5) Contact the Incident Coordinator who will assemble ERT members if required and the appropriate spill response materials outside the spill area.
6) Put on standard PPE;
    a. Nitrile gloves
    b. Protective eyeglasses
    c. Safety boots
    d. Hard hat
    e. High Visibility Clothing
7) For saline spills to land, the mitigation techniques will depend on the location and quantity of the spilled material. These will be divided into 3 general locations with each location having specific requirements:
    a. Spills at the Meladine Mine Site
        - Saline spills on the Meladine Mine Site will be cleaned up or mitigated depending on the quantity and the location that a spill occurs. If a saline spill occurrs in an area that could potentially impact the water quality of a water body such as CP1 or Meladine Lake then the spill will be mitigated such that no saline water enters these water bodies. If there is concern that leaching from the spill may cause an impact to the water then the contaminated soil may be removed and placed into the Waste Rock/Overburden Facilities where the potential leachate is collected at CP4. The effluent from CP4 can then be treated at one of the existing treatment facilities.
        - Saline spills on the Meladine Mine site which occur at a location which does not have a negative impact may not be cleaned up. For instance a spill which occurs upstream of the P area will not cause an impact to the site as any leachate generated will flow towards the P area and this effluent can then be treated by one of the existing

treatment facilities.

- Since Calcium Chloride ($CaCl_2$) is one of the accepted dust suppressants that is used on site, a small amount of Saline Water that is spilled on the ground should not cause an impact to the site provided that the water does not leave the site or enter a water body which could be impacted. Saline water will have a lower Total Dissolved Solids (TDS) and $CaCl_2$ composition than the dust suppresant which is presently used.

b. Spills on the AWAR and/or Bypass Road

- Calcium Chloride and water is approved to be used on the AWAR as a dust suppressant during the summer months. If there is a spill of saline water that is being trucked to Itivia on the AWAR, the location and magnitude of the spill will determine the mitigation techniques deployed. For instance, if the spilled saline water stayed on the road or if there was no chance of impacting surface water the cleanup process may be more detrimental to the environment than leaving it as is. If a spill occurred close to Nipissar Lake, including during construction of the waterline, then every effort should be made to contain the spill and minimize impact to the lake. This is reviewed on a case-by-case basis and decided by the Environmental Superintendent or designate.

c. Spills on the AWAR and/or Bypass Road due to Waterline Leak

- In the case of accidental spills or leaks from the waterlines appropriate procedures for collecting spilled product (e.g., vacuum recovery, or removal of any affected standing water combined with flushing in the summer with freshwater) will be employed to avoid any detectable environmental change.
- During construction, all equipment will be equipped with an emergency spill kit and spill response kits are strategically located along the AWAR should spill events related to hydrocarbons or releases from the waterlines occurring on the bypass road and within proximity to (and including potential spills into) Nipissar Lake.
- During operations regular internal visual inspections of the above ground waterline with a special attention to water crossings.
- Response measures for a spill to prevent caribou from accessing or be exposed to water spilled, or released from the waterline include containment, removal/recovery, containment berms, and long-term soil treatment.
- To be protective to caribou, any notification from the leak detection system would result in an immediate shutdown of that waterline, when caribou are in the vicinity of the AWAR, until it can be confirmed whether a leak has occurred.
- Additional measures to prevent caribou from accessing the area would depend on the time of year and extent of spill but regardless of the degree, the area would be isolated until it is safe for caribou to return.

d. Spills at Itivia during saline effluent release into Melvin Bay

- If there is a spill of saline effluent during the release to Melvin Bay the location and

magnitude of the spill will determine mitigation techniques deployed. If the spilled saline water is flowing to Melvin Bay, then mitigation techniques should be applied to stop the discharge of the water. In addition, techniques should be applied to slow the flow of the water and to try to contain the water from entering the Bay. It is not believed that the saline effluent will cause an impact to the water in the Bay rather it is the sediment which may be picked up as the water flows into the Bay. It is imperative that the velocity of the flow be mitigated such that minimal erosion occurs from the spill. To cleanup, saline effluent which has not been released into Melvin Bay is reviewed on a case-by-case basis and decided by the Environmental Superintendent or designate

8) If a saline spill occurs on land which may have a detrimental impact to the land or any nearby water bodies then the spill should be contained using; spill absorbents, spill pads or pillows, dike construction (made of soil or snow), or excavation of trenches/pits to capture spill. If possible, compact soil or snow dikes, and place plastic tarps over the dike and at its foot to allow the product to pool on the plastic for easy recovery. The first priority is to limit saline water entry into ditches, freshwater systems or onto ice (if saline water enters a freshwater system see step 12). After all pathways from the spill to surrounding freshwater systems, ditches and ice are controlled, contain the other areas of the spill.

   Note: Do not flush with water into drainage areas or ditches, as this will spread spill.

   Note: It is important to scrape up the contaminated snow and ice as soon as possible.

9) If there is a large quantity of saline water and it has been captured in dykes, trenches etc. then it may be possible to collect the water with the vacuum truck. This water will then be discharged to one of the ponds such as SP1, SP2, or P3. If the volume of saline water is not substantial then the spilled area may be cleaned up using spill absorbents, spill pads, soil or snow, starting at the outside and working inward. Do not touch or walk through spilled material.

10) Sweep up or shovel the residue into a labelled plastic waste container (plastic pail with lid or double heavy-duty plastic bags). For larger spills to land, excavate impacted absorbent material and soil, place in lined and bermed temporary storage area or directly into sealed drums/containers. This solid material may also be placed into the Waste Rock/Overburden Facility such that any leachate that is generated will be captured in CP4 and may be treated in one of the Treatment Facilities.

    Note: Larger pools of product may be pumped into empty storage tanks or drums and taken to SP1, SP2 or P3 if appropriate.

11) Spills to land may require further excavation or remediation of contaminated soil until acceptable soil quality is achieved. The Incident Coordinator and/or Environment Superintendent or designate will assess this requirement.

12) For spills to water, a follow up study will be performed if deemed necessary by the Environmental Superintendent or designate. Post spill monitoring will be dependent upon volume of substance spilled, size of freshwater system affected and presence/ absence of fish. If the spill is believed to have caused an impact then water samples will be taken upstream and downstream of the incident to confirm any potential impact.

APPENDIX I • FEDERAL AND TERRITORIAL LAWS, REGULATIONS AND GUIDELINES

Act	Regulation	Guideline
Federal		
Canadian Environmental Protection Act (1999 c.33)	*Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* (SOR/2008-197) *Environmental Emergency Regulations* (SOR/2003-307) *Interprovincial Movement of Hazardous Waste and Hazardous Recyclable Material Regulations* (SOR/2002-301)	CCME - Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products Notice with respect to substances in the National Pollutant Release Inventory Canada-Wide Standards for Particulate Matter (PM) and Ozone Canada-wide Standards for Petroleum Hydrocarbons (PHC) in Soil
Canada Wildlife Act (1985 w9)		
Species at Risk Act (2002 c.29)		
Migratory Birds Convention Act (1994 c.22)	*Migratory Birds Regulations* (C.R.C., c. 1035)	
Canada Water Act (1985 c.11)		
Arctic Waters Pollution Prevention Act (R.S.C., 1985, c. A-12)		
Canada Shipping Act, 2001 (S.C. 2001, c. 26)	*Response Organizations and Oil Handling Facilities Regulations* (SOR/95-405)	
Navigable Waters Protection Act (R.S. 1985 c. N-22)	*Navigable Waters Works Regulations* (C.R.C., c. 1232) *Navigable Waters Bridges Regulations* (C.R.C., c. 1231)	
Marine Liability Act (A.C. 2001, c.6)	*Marine Liability Regulations* (SOR/2002-307)	
Fisheries Act (1985, c. F-14)	*Metal Mining Effluent Regulations* SOR/2002-2222)	The Policy for the Management of Fish Habitat Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters Freshwater Intake End-of-Pipe Fish Screen Guideline Standard Operating Procedure – Clear Span Bridges
Transport of Dangerous Goods Act (1992, c. 34)	*Transportation of Dangerous Goods Regulations* (SOR/2001-286)	

Act	Regulation	Guideline
Explosives Act (1985 c.E-17)	*Ammonium Nitrate and Fuel Oil Order* (C.R.C., c. 598)	
	Explosives Regulations (C.R.C., c. 599)	
National Fire Code of Canada (2010)		
Nuclear Safety and Control Act (s.c. 1997, c.9)	*General Nuclear Safety and Control Regulations* (SOR/2000-202)	
Canadian Human Rights Act (R.S.C., 1985, c. H-6)		
Canada Labour Code (R.S.C., 1985, c. L-2)	*Canada Labour Standards Regulations* (C.R.C., c. 986) *Canada Occupational Health and Safety Regulations* (SOR/86 304)	
Territorial Lands Act (R.S. 1985, c. T-7)	*Northwest Territories and Nunavut Mining Regulations* (C.R.C., c. 1516) *Territorial Land Use Regulations* (C.R.C., c. 1524) *Territorial Quarrying Regulations* (C.R.C. c. 1527)	
Nunavut Waters and Nunavut Surface Rights Tribunal Act (2002, c. 10)	*Northwest Territories Waters Regulations* (SOR/93/303)	
Nunavut Act (1993 c.28)	*Nunavut Archaeological and Paleontological Sites Regulations* (SOR/2001-220)	
Nu*navut Land Claims Agreement Act* (1993, c. 29)		
Territorial		
Environmental Protection Act (RSNWT (Nu) 1988, c E-7)	*Spill Contingency Planning and Reporting Regulations (NWT Reg (Nu) 068-93)* *Used Oil and Waste Fuel Management Regulations (NWT Reg 064-2003)* [The removal of hazardous materials will require the registration with the Government of Nunavut, Department of Environment as a waste generator as well as carrier (if applicable) prior to transport.]	Guideline on Dust Suppression Guideline for the General Management of Hazardous Waste in Nunavut Guideline for Industrial Waste Discharges in Nunavut Guideline for Air Quality – Sulphur Dioxide and Suspended Particulates Guideline for the Management of Waste Antifreeze Guideline for the Management of Waste Batteries Guideline for the Management of Waste

Act	Regulation	Guideline
		Paint Guideline for the Management of Waste Solvents Guideline for Industrial Projects on Commissioner's Land
Scientists Act (RSNWT (Nu) 1988, c S-4)	*Scientists Act Administration Regulations* (NWT Reg (Nu) 174-96)	
Historical Resources Act (RSNWT (Nu) 1988, c H-3)		
Territorial Parks Act (RSNTW (Nu) 1988, c T-4)	*Territorial Parks Regulations* (RRNWT (Nu) 1990 c T-13)	
Wildlife Act (RSNWT (Nu) 1988, c W-4)	*Wildlife General Regulations* (NWT Reg (Nu) 026-92) *Wildlife Licences and Permits Regulations* (NWT Reg (Nu) 027-92) *Wildlife Management Barren-Ground Caribou Areas Regulations* (NWT Reg (Nu) 099-98) *Wildlife Management Grizzly Bear Areas Regulations* (NWT Reg (Nu) 155-96) *Wildlife Management Zones Regulations* (RRNWT (Nu) 1990 c W-17) *Wildlife Regions Regulations* (NWT Reg (Nu) 108-98)	
Commissioner's Land Act (RSNWT 1988, c C-11)	*Commissioner's Airport Lands Regulations* (NWT Reg (Nu) 067-97) *Commissioner's Land Regulations* (RRNWT 1990, c C-13)	
Safety Act (RSNWT 1988, c.S-1)	*General Safety Regulations* (RRNWT (Nu) 1990 c S-1) *Work Site Hazardous Materials Information System Regulations* (RSNWT 1988, C 81 (Supp))	
Mine Health And Safety Act (SNWT (Nu) 1994, c 25)	*Mine Health And Safety Regulations* (NWT Reg (Nu) 125-95)	
Workers' Compensation Act (RSNWT, 1988, c. W-6)	*Workers' Compensation General Regulations* (Nu Reg 017-2010)	

Act	Regulation	Guideline
Apprenticeship, Trade and Occupations Certification Act (RSNWT (Nu) 1988, c A-4)	*Apprenticeship, Trade and Occupations Certification Regulations* (RRNWT (Nu) 1990 c A-8)	
Labour Standards Act (RSNWT (Nu) 1988, c L-1)	*Annual Vacations Regulations* (RRNWT 1990, c.L-1) *Educational Work Experience Regulations* (RRNWT 1990, c.L-2) *Employment of Young Persons Regulations* (RRNWT 1990, c.L-3) *Labour Standards Meal Regulations* (RRNWT 1990, c.L-4) *Notice of Termination Exemption Regulations* (RRNWT 1990 c.L-5) *Pregnancy and Parental Leave Regulations* (RRNWT 1990, c.8(Supp.)) *Reciprocating Jurisdiction Order* (RRNWT 1990, c.L-6) *Wages Regulations* (RRNWT 1990, c.L-7)	
Electrical Protection Act (RSNWT (Nu) 1988, c E-3)	*Electrical Protection Regulations* (RRNWT 1990 c. E-21)	
Explosives Use Act (RSNWT (Nu) 1988, c E-10)	*Explosives Regulations* (RRNWT (Nu) 1990 c E-27)	
Petroleum Products Tax Act (RSNWT (Nu) 1988, c P-5)	*Petroleum Products Tax Regulations* (RRNWT (Nu) 1990 c P-3)	
Fire Prevention Act (RSNWT (Nu) 1988, c F-6)	*Fire Prevention Regulations* (RRNWT (Nu) 1990 c F-12)	
Hospital Insurance and Health and Social Services Administration Act (RSNWT 1988, c T-3)	*Territorial Hospital Insurance Services Regulations* (RRNWT (Nu) 1990 c T-12)	
Public Health Act (RSNWT (Nu) 1988, c P-12)	*Camp Sanitation Regulations* (RRNWT (Nu) 1990 c P-12) *General Sanitation Regulations* (RRNWT (Nu) 1990 c P-16)	
All-terrain Vehicles Act (RSNWT (Nu) 1988, c A-3)	*All-terrain Vehicles Regulations* (RRNWT (Nu) 1990 c A-1)	
Motor Vehicles Act (RSNWT (Nu) 1988 c M-16)	*Large Vehicle Control Regulations* (RRNWT (Nu) 1990 c M-30)	

Act	Regulation	Guideline
Public Highways Act (RSNWT (Nu) 1988, c P-13)	*Highway Designation and Classification Regulations* (NWT Reg (Nu) 047-92)	
Transportation Of Dangerous Goods Act (1990, RSNWT (Nu) 1988, c 81 (Supp))	*Transportation Of Dangerous Goods Regulations* (1991, NWT Reg (Nu) 095-91)	

APPENDIX J • MDMER CROSS REFERENCE TABLE