Hutchinson
Environmental Sciences Ltd.

ᑕᓯᕐᔪᐊᕐᒥ ᐃᒪᕐᒥᒃ ᐊᑐᕈᓐᓇᐅᑎᑖᕐᓂᕐᒃ

October 14-15, 2015,
Rankin Inlet, NU

Kivalliq Inuit Association

ᑭᓯᓪᓗᕐᒥ ᐃᓄᐃᑦ ᑲᑐᑦᑦᕐᑲᑎᒋᑦ

NUNAVUT TUNNGAVIK

Overview

- This presentation accompanies our submission to the Nunavut Water Board on October 5, 2015
  - *"R151002_J150077_Meliadine WL A Technical Review_FINAL"*
  - That submission documents our concerns and resolutions as of the submission date

- Our review was comprised of 27 separate information requests and technical comments

- We have communicated with AEM over the past month, clarifying issues and resolving some
- 21 of our concerns are resolved at this point
  - AEM has documented their commitments in a spreadsheet they intend to submit to the Nunavut Water Board
    - This spreadsheet has yet to be reviewed by the KIA

ᕿᒥᕐᕈᓂᖅ ᐱᓕᕆᐊᖑᔪᓂᒃ

ᑖᒻᓇ ᐃᓗᓕᖃᖅᑐᖅ ᑐᓂᓚᐅᖅᑕᐸᑎᓐᓂᒃ ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔨᒃᑯᓐᓄᑦ ᐊᒃᑑᐸ 5, 2015ᒥ

- “R151002_J150077_Meliadine WLA Technical Review_Final”
- ᑕᐃᒻᓇ ᑐᓂᓚᐅᖅᑕᕗᑦ ᓇᓗᓇᐃᕆᔪᖅ ᐃᓱᒫᓗᑎᐸᑎᓐᓂᒃ ᐊᒻᒪ ᐋᖅᑭᒋᐊᕈᑕᐅᓚᐅᖅᑐᓂᒃ ᑕᐃᑲᓂ ᐅᐸᓗᕐᒥ.
- ᕿᒥᕐᕈᓂᖅᐳᑦ ᐃᓗᓕᖃᓚᐅᖅᑐᖅ 27ᓂᒃ ᐊᔾᔨᒌᖕᒋᑦᑐᓂᒃ ᑐᓴᒃᑲᓂᕈᒪᔾᔪᑎᓂᒃ ᐊᒻᒪ ᐃᓱᒪᒋᔭᐸᑎᓐᓂᒃ.
- ᐅᖃᖃᑎᒋᓯᒪᔭᕗᑦ AEMᑯᑦ ᑕᖅᑭᐅᓚᐅᖅᑐᒥ ᑐᑭᓯᓐᓇᖅᓯᒋᐊᕈᑎᓂᒃ ᐅᖃᐅᓯᖃᖅᓱᑕ ᐊᒻᒪ ᐋᖅᑭᒃᓯᐸᓗᑕ ᐃᓚᖕᒋᓐᓂᒃ.
- 21ᓂᒃ ᐃᓱᒫᓗᑕᐅᓚᐅᖅᑐᓂᒃ ᐋᖅᑭᒃᓯᓯᒪᓕᖅᑐᒍᑦ ᒫᓐᓇᒧᑦ.
    - AEM ᑯᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐱᒋᐊᕐᓂᓇᓂᐊᖅᑕᒥᓂᒃ ᑕᑯᔭᒃᓴᓄᑦ ᑐᓂᓂᐊᖅᑕᒥᓄᑦ ᐃᒪᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖕᒋᓐᓄᑦ.
    - ᑖᒻᓇ ᑕᑯᔭᒃᓴᖅ ᕿᒥᕐᕈᔭᐅᓯᒪᖕᒋᑦᑐᖅ ᓱᓕ ᑮ ᐊᐃ ᐃ ᑯᓐᓄᑦ.

Guiding Principles

- Our review is guided by
  - Nunavut Water Board's (NWB) water quality framework
    - protect, manage and regulate freshwaters in Nunavut in a manner that will provide the optimum benefits for the residents of the territory in particular and Canadians in general
  - The Nunavut Land Claims Agreement, and
  - The right of Kivalliq Inuit to minimal changes to the environment

- The Kivalliq Inuit Association contracted the services of Hutchinson Environmental Sciences Ltd. and GeoVector Management Inc. to assist with the technical review of the licence.

ᑐᙵᕕᒋᐸᓗᒋᑦ ᒪᓕᓚᐅᖅᑕᕗᑦ ᐅᑯᐊ

- ᖃᒥᕐᕈᓂᕆᔭᕗᑦ ᒪᓕᓚᐅᖅᑐᖅ ᐅᑯᓂᖓ
  - ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔨᒃᑯᑦ ᐃᒪᑦᑎᐊᕙᖃᕐᓂᕐᒧᑦ ᒪᓕᒐᖕᒋᑦ
    - ᒥᐊᓂᕆᓗᒍ, ᐊᐅᓚᑦᑎᐊᕐᓗᒍᖅᑐᖅᑕᐅᓂᖓ ᐃᒪᐃᑦ ᑕᓯᕐᓂ ᓄᓇᕗᒻᒥ ᐱᐅᓂᖅᐹᑎᒍᑦ ᐱᕙᓪᓕᐅᑕᐅᔪᓐᓇᕐᑯᐸᓗᒍ ᐊᖏᓂᖅᐹᒥᒃ ᐃᓄᕐᑯᑎᖏᓐᓄᑦ ᓄᓇᕗᑦ ᐊᒻᒪ ᑲᓇᑕᒥᐅᑦ.
  - ᓄᓇᕗᑦ ᐊᖏᕐᑲᑎᒌᒍᑖ, ᐊᒻᒪ
  - ᑭᕙᓪᓕᕐᒥ ᐃᓄᐃᑦ ᐊᔪᙱᓐᓂᖏᑦ ᒥᑭᓂᖅᐹᒥᒃ ᐊᒃᑐᖅᑕᐅᕐᑯᐸᓗᒍ ᐊᕙᑎᖓᑦ
- ᑭᕙᓪᓕᕐᒥ ᐃᓄᐃᑦ ᑲᑐᔾᔨᕐᑲᑎᒌᑯᖏᑦ ᐱᓕᕆᔨᑖᓚᐅᖅᐳᑦ ᐺᐊᑦᑎᓐᓱᓐ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᐊᒻᒪ ᒋᐅ ᕕᒃᑐ ᐊᐅᓚᑦᑎᔨᑦ ᑯᓐᓂᒃ ᐃᑲᔪᕐᑯᐸᓗᒋᑦ ᖃᒥᕐᕈᓂᕐᒥᒃ ᓚᐃᓴᑖᕋᓱᒍᑎᒥᒃ.

UNRESOLVED ISSUES

ᐃᓱᒫᒐᑏᑦ ᐱᐊᓂᒃᓯᒪᖕᒋᑦᑐᑦ

KIA-WL-05: Saline Groundwater Inflows
KIA-WL-05: ᑕᕆᐅᕐᑲᖅᑐᑦ ᒪᓂᖅᑲᒥ ᐃᒪᐃᑦ ᐃᓗᒻᒧᑦ ᑰᖕᓂᖕᒋᑦ

Issue

- Saline groundwater is projected to flow into the underground works
- The Water Management Plan does not provide full details for long term saline water management and disposal
- Saline discharges may cause negative impacts to the receiving environment

ᐃᓱᒪᔪᑦ

- ᑕᕆᐅᓖᑦ ᐃᒪᐃᑦ ᓄᓇᒥᑦ ᑰᖕᓂᐊᕋᓱᒋᔭᐅᕗᑦ ᓄᓇᐅᑉ ᐃᓗᐊᓄᑦ
- ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᐊᕐᓃᑦ ᐸᕐᓇᒃᓯᒪᔾᔪᑎᖕᒋᑦ ᓇᓗᓇᐃᕆᓱᒫᓂᖕᒋᑐᑦ ᕐᑲᓄᖅ ᐃᒃᐲᒡᓇᕐᓂᕐᑲᕈᒫᕐᒪᖕᒑᑦ ᐅᑭᐅᑦ ᐊᒥᓱᑦ ᓈᒃᐸᑕ ᕐᑲᓄᐃᓐᓂᐊᕐᒪᖕᒑᑦ ᐊᒻᒪ ᕐᑲᓄᖅ ᐊᒃᑐᖅᑕᐅᓂᐊᕐᒪᖕᒐᑦ.
- ᑕᕆᐅᕐᑲᕐᓃᑦ ᐊᓂᐋᕝᕙᓪᓕᐋᔪᑦ ᐊᕙᑎᒧᑦ ᐱᐅᖕᒋᓐᓂᕐᑲᑐᐃᓐᓇᕆᐊᓖᑦ.

KIA-WL-05: Saline Groundwater InflowsI
KIA-WL-05: ᑕᕆᕐᑲᖅᑐᑦ ᒪᓂᖅᑲᒥ ᐃᒪᐃᑦ ᐃᓗᒻᒧᑦ ᑰᖕᓂᖕᒋᑦ

Request

- We recommend that the NWB include a condition in the licence that requires submission of a long-term saline groundwater management plan for approval by the NWB 6 months prior to any planned discharge
- AEM is working with Environment Canada to resolve regulatory challenges posed by saline discharges to the marine environment
- Environment Canada should commit to provide specific guidance to AEM to regulate discharges within the project timeline

ᑐᒃᓯᕋᐅᑦ

- ᑐᒃᓯᕋᖅᐳᒍᑦ NWB (ᐃᒪᓕᕆᔨᕐ) ᐃᓗᓕᕐᑲᕐᑯᐸᓗᒍ ᓚᐃᓴᒋᕈᑎᒥ ᑕᑯᔪᒪᓗᑎᒃ ᐊᑯᓂ ᑕᕆᐅᓖᑦ ᕐᑲᓄᖅ ᐃᒃᐱᖕᓇᕐᓂᕐᑲᕐᓂᐊᕐᒪᖕᒑᑕ ᐊᐅᓚᑦᑎᔾᔪᓂᒥᒃ ᓈᒻᒪᒋᔭᐅᔭᕆᐊᕐᑲᖅᑐᒥᒃ NWB kunnut6 ᑕᖅᑮᑦ ᐱᒋᐊᓚᐅᖅᑎᓐᓇᒋᑦ ᑯᕕᓂᐊᖅᑎᓪᓗᒋᑦ ᑕᕆᐅᓕᖕᓂᒃ ᐃᒪᕐᓂᒃ.
- AEM ᐱᓕᕆᕐᑲᑎᕐᑲᖅᑐᑦ ᑲᓇᑕᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᓐᓂᒃ ᐊᖅᑭᒃᓯᓇᓱᒃᓗᑎᒃ ᒪᓕᒐᕐᓂᒃ ᐃᓗᐊᖕᒋᓕᐅᕈᑕᐅᔪᓂᒃ ᑕᕆᐅᕐᑲᖅᑐᓂᒃ ᑯᕕᓯᓂᐅᑉ ᒥᒃᓵᓄᑦ ᐃᒃᐱᖕᓇᕐᓂᕐᑲᕈᓐᓇᕐᓂᖕᒋᓐᓂᒃ ᐃᒪᕐᒥᐅᑕᓄᑦ.
- ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᒪᓕᒐᒃᓴᓂᒃ ᓴᖅᑭᑦᑎᔭᕆᐊᕐᑲᕋᔭᕐᒪᑕ AEM ᑯᓐᓄᑦ ᐊᐅᓚᑦᑐᓐᓇᕐᓂᐊᕐᓗᒋᑦ ᑯᕕᓯᕐᑲᑦᑕᕐᓂᐅᓂᐊᖅᑐᑦ ᓈᒪᓇᖅᓯᒪᓗᒋᑦ

KIA-WL-06: Site-Specific Water Quality Objective Derivation
KIA-WL-06: ᐱᓕᕆᕝᕕᐅᔪᒧᑦ ᑐᕌᖅᑐᑦ ᐃᒪᖃᑦᑎᐊᕐᓂᐅᑉ ᓴᖅᑭᓐᓂᖏᑦ

Issue

- Site Specific Water Quality Objectives were developed for aluminum, fluoride, and iron for the Meliadine site
  - No methodology was provided in the original submission
- Arsenic concentrations in Collection Pond 4 could slightly exceed the site-specific water quality objective post-closure
- Rainbow trout bioassay was conducted with aged waste rock rather than fresh

ᐃᓱᒫᓗᑦ

- ᐱᓕᕆᕝᕕᖕᓂ ᑐᕌᖅᑐᑦ ᐃᒪᐃᑦ ᖃᓄᐃᑦᑐᓂᐊᕐᓂᖏᑦ ᐋᖅᑭᒃᑕᐅᓚᐅᖅᑐᑦ ᓴᕕᒃᓴᓄᑦ ᐊᕿᑦᑐᓄᑦ, ᑭᓂᖅᑐᓄᑦ, ᐊᒻᒪ ᓴᕕᒃᓴᓐᓄᑦ ᑕᓯᕐᔪᐊᕐᒥ.
  - ᖃᓄᖅ ᐱᓕᕆᐊᖑᓂᐊᕐᒪᖔᑖ ᐱᑕᖃᓚᐅᖏᑦᑐᖅ ᓯᕗᓪᓕᕐᒥ ᓴᖅᑭᑕᐅᔪᒥ
- ᓴᕕᒃᓴᖅᑕᓖᑦ ᐅᓗᕆᐊᓇᖅᑐᓂᒃ ᑲᑎᖅᓱᖅᑕᐅᕕᖕᓂ ᑕᓯᕋᕐᒥ naasautilik4 ᒥᒃ ᖃᖏᐅᑎᓯᒪᕐᔪᒍᓐᓇᖅᑐᑦ ᐃᒪᐅᑉ ᓇᓗᓇᐃᒃᑯᑕᕆᔭᕆᐊᖃᖅᑕᖏᓐᓂᑯᒃᑯ ᐊᓚᐅᖅᑎᓪᓗᒍ.
- ᐃᓗᕋᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓚᐅᖅᑐᑦ ᐅᔭᕋᒃᑕᖅᑕᐅᓯᒪᓂᑯᓂᒃ ᐊᑐᖅᓱᑎᒃ ᓄᑖᓅᖏᑦᑐᖅ

KIA-WL-06: Site-Specific Water Quality Objective Derivation
KIA-WL-06: ᐱᓕᕆᕝᕕᐅᔪᒧᑦ ᑐᕌᖅᑐᑦ ᐃᒪᖃᑦᑎᐊᕐᓂᐅᑉ ᓴᖅᑭᓐᓂᖕᒋᑦ

Request

- AEM has provided the relevant information to satisfy our concerns regarding SSWQO derivation
- We are satisfied with the SSWQOs for construction and operation as all waste streams are collected in CP1 and effluent quality regulated
- NWB include a condition in the licence that current SWQOs not apply for the life of the mine
  - The SSWQOs for closure should be revisited using operational data

ᑐᒃᓯᕋᐅᑦ

- AEM ᑯᑦ ᐅᕙᑉᑎᓐᓄᑦ ᑐᓂᓯᓚᐅᖅᑐᑦ ᓈᒻᒪᒃᑐᓂᒃ ᐃᓱᒫᒧᑦᑕᐅᓚᐅᖅᑑᑉ ᒥᒃᓵᓄᑦ ᐃᒪᐅᑉ ᒥᒃᓵᓄᑦ ᐱᓕᕆᕝᕕᖕᓂ
- ᓈᒻᒪᒋᔭᕗᑦ ᐃᒪᐃᑦ ᒥᒃᓵᓄᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᓇᓕᖅᐸᑕ ᐊᒻᒪ ᐊᐅᓪᓗᖅᑎᑦᑎᓕᖅᐸᑕ. ᑕᒪᕐᒥᒃ ᐃᒪᐃᑦ ᑰᒐᓗᖕᒋᑦ ᑲᑎᑕᐅᓂᐊᕐᒪᑕ CP1 ᒥ ᐊᒻᒪ ᓴᓗᒪᓂᖕᒋᑦ ᖃᐅᔨᓴᖅᑕᐅᖕᒋᓐᓇᕐᓂᐊᖅᓱᑎᒃ
- NWB ᑯᑦ ᐃᓗᓕᖃᖅᑎᑦᑎᓗᑎᒃ ᓚᐃᓴᒥ ᑖᑉᑯᐊ ᒪᓐᓇ ᐃᒪᕐᑐᕐᓂᐅᓂᐊᖅᑐᑦ ᐊᑐᕐᓂᐊᖕᒋᓪᓗᒋᑦ ᐊᐅᓪᓗᕐᓂᓗᒃᑖᖕᒐᓄᑦ ᐅᔭᕋᒃᑕᕆᐊᑉ
  - ᑐᒃᓯᕋᐅᑏᑦ ᐅᒃᑯᐊᖅᑕᐅᓂᕆᔫᒪᖅᑕᖕᒐᓄᑦ ᕿᒥᕐᕈᔭᐅᒃᑲᓐᓂᕋᔭᕐᒪᑕ ᐊᑐᕐᓗᑎᒃ ᐊᐅᓪᓚᕐᓂᖕᒐᑦ ᒥᒃᓵᓄᑦ ᐊᑐᕐᓂᑯᓂᒃ

KIA-WL-07: Mixing Zone Water Quality Monitoring
KIA-WL-07: ᐊᑯᑦᑕᐅᕙᓪᓕᐊᔪᑦ ᐃᒪᐃᑦ ᐱᐅᓂᖓᑕ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦ

Issue

- AEM has proposed 5 sites in the near field exposure area near the diffuser
- One site (MEL_03) is proposed to monitor effluent from the diffuser
- Wind, flow and other mixing zone dynamics limit the capacity of a single monitoring station to appropriately characterize the mixing zone and assimilative capacity of Meliadine Lake
- A minimum of three sites around the discharge point are recommended to assess the capacity of the mixing zone to assimilate the effluent and verify predictions of mixing zone size under all ambient conditions.

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- AEM ᑰᑦ 5ᓂᒃ ᓇᓗᓇᐃᓇᓱᒪᔪᑦ ᓱᓚᒥ ᖃᓂᒋᔭᓂ ᓴᓗᒻᒪᖅᓴᐃᕝᕕᐅᑉ
- ᐊᑕᐅᓯᖅ (MEL_03) ᖃᐅᔨᓴᕐᕕᐅᕐᑯᔭᐅᔪᖅ ᓴᓗᒻᒪᖅᓴᐃᕝᕕᖕᒥ ᐊᓂᐊᕙᓪᓕᐊᔪᓂᒃ
- ᐊᓄᑎ, ᑰᖕᓃᑦ ᐊᒻᒪ ᐊᓯᖕᒋᑦ ᐊᑯᑦᑎᕕᐅᑉ ᒥᒃᓴᓄᑦ ᐊᔪᕐᓇᕈᑕᐅᕙᖕᒪᑕ ᐊᑕᐅᓯᕐᒥᒃ ᖃᐅᔨᓴᕐᕕᖃᕐᓂᕐᒥᒃ ᖃᐅᔨᒪᓇᓱᒃᓗᒍ ᐊᑯᑕᐅᕙᓪᓕᐊᔪᑦ ᒥᒃᓵᓄᑦ ᑕᓯᕐᔪᐊᕐᒥ
- ᒥᑭᓂᖅᐸᒥᒃ ᐱᖕᒐᓱᓂᒃ ᖃᐅᔨᓴᕐᕕᖕᓂᒃ ᐱᑕᖃᕐᑯᔭᐅᕗᖅ ᖃᐅᔨᓴᕐᑎᐊᕈᓐᓇᕐᑯᐸᓗᒍ ᓈᒻᒪᒃᑲᓗᐊᕐᒪᖕᒐᑦ ᐊᑯᑕᐅᕙᓪᓕᐊᔪᖅ ᐊᓂᐊᕙᓪᓕᐊᔪᕐᓗ ᐊᒻᒪ ᖃᐅᔨᒪᓇᓱᒃᓂᐊᕐᓗᓂ ᑕᓯᕐᖅ ᐊᑯᑦᑎᕕᐅᔪᖅ ᓈᒻᒪᒃᑲᓗᐊᕐᒪᖕᒑᑦ ᓱᓇᓗᒃᑕᑦ ᑕᐅᑐᒃᓗᒋᑦ.

KIA-WL-07: Mixing Zone Water Quality Monitoring
KIA-WL-07: ᐊᑯᑦᑕᐅᕙᓪᓕᐊᔪᑦ ᐃᒪᐃᑦ ᐱᐅᓂᖓᑕ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦ

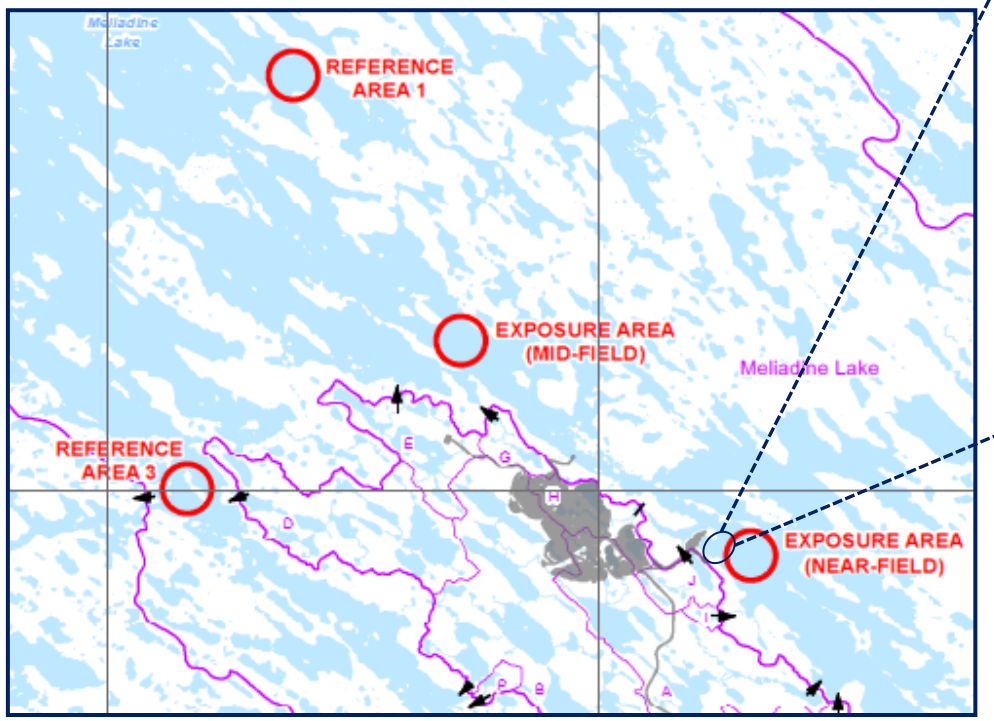
Request

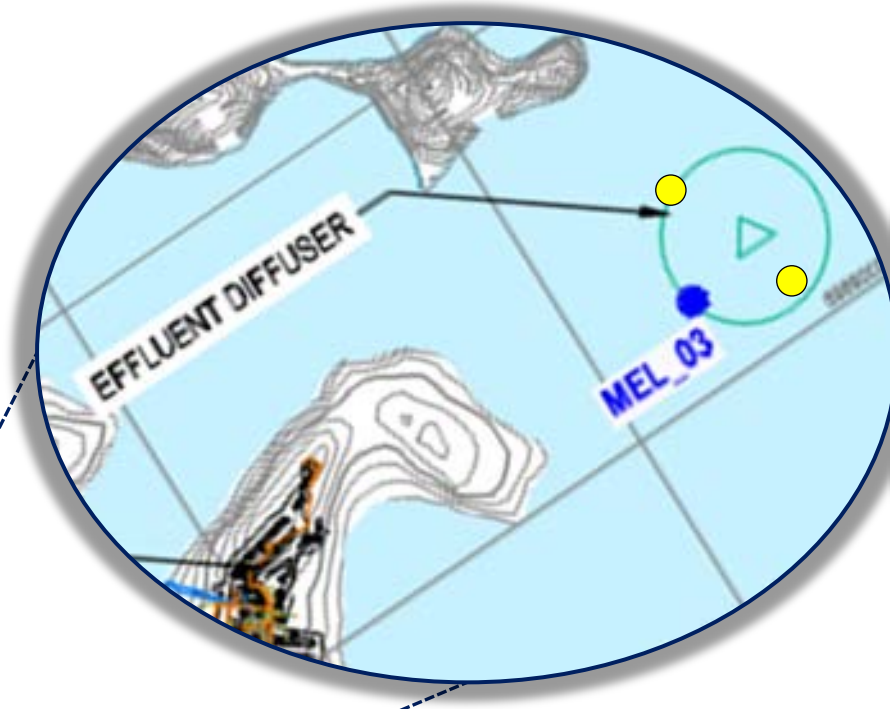
- We request that AEM increase the total number of AEMP sites in the near-field exposure area from 5 as indicated in AEMP to a total of 7 with three around the diffuser
- AEM commit to include 3 sites to triangulate the predicted mixing zone boundary 100m from the diffuser
  - i.e. sites at 120º, 240º and 360º, 100m from the center of the diffuser
  - Samples should be collected from the highest point of conductivity as determined by a water column profile

ᑐᒃᓯᕋᐅᑦ

- ᑐᒃᓯᕋᖅᐳᒍᑦ AEM ᑯᑦ ᐊᒥᓱᖕᒍᕆᐊᖁᐸᓗᒋᑦ AEMP ᖕᒍᔪᑦ 5 ᓂᑦ, 7 ᓄᑦ, ᐱᖓᓱᑦ ᐃᕿᖅᑐᐃᕝᕕᐅᐸ ᖃᓂᒋᔾᔭᓂᖁᐸᓗᑎᒍᑦ.
- AEM ᐱᓂᐊᖁᓂᖃᖁᕙᕗᑦ 3 ᐊᕙᓗᓯᒪᖁᐸᓗᒋᑦ ᐊᑯᑦᑎᕕᐅᓂᐊᖅᑐᒥᒃ 100 ᒦᑕᒥᒃ ᐅᖓᓯᖕᓂᖃᖁᓗᒋᑦ ᐃᕿᖅᑐᐃᕝᕕᖕᒥᒃ.
  - ᓲᖁᓗ ᐊᑕᐅᓯᖅ 120, 240, ᐊᒻᒪ 360, ᒦᓪᓗᑎᒃ 100 ᒦᑕᒥᒃ ᐅᖓᓯᖕᓂᖃᖁᓗᑎᒃ ᑕᓯᕋᐅᐸ ᐃᕿᖅᑐᐃᕝᕕᐅᓂᐊᖅᑑᐸ ᕿᑎᖓᓐᓂᑦ.
  - ᖃᐅᔨᓴᐅᑏᑦ ᑲᑎᑕᐅᖃᑦᑕᖁᓗᑎᒃ ᖁᑦᑎᖕᓂᖅᐹᖓᓂᑦ ᐃᒪᖃᖁᓂᐅᐸ

KIA-WL-07 Continued
Site Locations





MEL_03

MEL_XX

KIA-WL-08: Sample Locations at Rankin Inlet
KIA-WL-08: ᖃᐅᔨᒋᐊᖅᓱᑦ ᑲᖏᖅᓱᓂᕐᒥ

Issue

- Shipping and potential associated accidents may change water quality near the Itivia Harbour
- AEM has not included sample locations at Itivia Harbour in the application

ᐃᓱᒪᔪᑦ

- ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐊᒡᔭᕐᑐᐃᓂᖅ ᐊᒻᒪ ᐱᕐᕈᓗᐊᕐᑭᓂᖅ ᐊᓯᔾᔨᔪᓐᓇᕐᒪᑦ ᐃᒪᖓᓂᒃ ᐃᑎᕝᕙᑉ
- AEM ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᑎᕕᓂᐊᓂᑦ ᐃᓚᐅᑎᑦᑎᓚᐅᖏᓚᑦ ᑐᒃᓯᕋᐅᑎᒥᖕᓂᑦ

KIA-WL-08: Sample Locations at Rankin Inlet
KIA-WL-08: ᖃᐅᔨᒋᐊᖅᓱᑦ ᑲᖏᖅᓱᓂᕐᒥ

Request

- AEM should commit to include sample locations near the Itivia Harbour to track any negative impacts associated with mine related activity- particularly those related to shipping and fuel offloading
  - Program should allow AEM to distinguish their activities from other users of the harbour

ᑐᒃᓯᕋᐅᑎᑦ

- AEM ᑯᑦ ᐃᓚᐅᑎᑦᑎᓂᐊᖅᓂᕋᖅᓗᑎᒃ ᓇᓗᓇᐃᖅᓯᒪᓇᔭᖅᒪᑕ ᐃᑎᕕᐊᒥᑦ ᖃᐅᔨᓴᕈᓐᓇᖅᑯᐸᓗᒋᑦ ᓈᒻᒪᖏᑦᑐᖅᑕᖅᑲᓕᖏᒻᒪᖔᑦ ᐅᔭᖅᑕᖅᓂᖅ ᐱᔾᔪᑎᒋᐸᓗᒍ ᐱᓗᐊᖅᑐᒥᒃ ᐅᒥᐊᖅᔪᐊᖅᓄᑦ ᐊᒻᒪ ᓂᐅᕋᐃᓂᖅ ᐅᖅᓱᐋᓗᖕᓂᒃ

- ᓇᓗᓇᐃᖅᓯᒪᓇᔭᖅᒪᑦ AEM ᐱᓕᕆᐊᖏᑦ ᐊᒻᒪ ᐊᔾᔨᒌᖏᓐᓂᖏᑦ ᐊᓯᖏᓐᓄᑦ ᐊᑐᖅᑕᐅᓂᖅ ᐃᑎᕕᐊᐸ ᑲᖏᖅᓱᐊ

KIA-WL-10: Quality Control Responses
KIA-WL-10: ᓈᒻᒪᒃᑲᓗᐊᕐᒪᖔᒫᑕ ᐱᓕᕆᐊᖑᔪᑦ ᖃᐅᔨᓴᕐᓂᖔᑭᓐᓄᑦ ᑭᐅᔭᐅᔪᑏᑦ

Issue

- AEM has not provided a response framework for duplicate samples with medium and low analytical precision
- We are concerned low quality data will be incorporated into the assessment of mine related impacts
- This may reduce the capacity for the Aquatic Environment Monitoring Program to identify and mitigate impacts to the receiving environment

ᐃᓱᒫᓗᑦ

- AEM ᑯᑦ ᑐᓂᓯᓚᐅᖔᑦᑐᑦ ᖃᓄᐃᓐᓂᐊᕐᒪᖔᕐᒥᒃ ᒪᕐᕈᓕᖔᒐᔪᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ ᐊᑯᑦᓕᖅᐸᖑᔪᓂᒃ ᐊᒻᒪ ᐊᑦᑎᖔᓂᖅᐸᖑᔪᓂᒃ ᓇᓗᓇᐃᒃᑯᑕᓕᖔᓂᒃ.
- ᐃᓱᒫᓗᑎᕐᑲᖅᐳᒍᑦ ᓴᖅᑭᑦᑐᕐᑲᕋᔭᕐᓂᖔᑭᓐᓂᒃ ᒥᑭᓂᖅᐸᒥᒃ ᑐᒃᓯᕋᐅᑎᓂᒃ ᐊᑐᕋᓱᒍᓐᓇᕐᓂᖔᑭᓐᓂᒃ ᕿᒥᕐᕈᓕᕌᖔᒐᑕ ᐅᔭᕋᒃᑕᕆᐊᑉ ᐊᒃᑐᖅᑕᖔᑭᓐᓂᒃ ᐃᓗᐊᖔᑭᓕᐆᕈᑕᐅᔪᓂᒃ
- ᑖᒻᓇ ᒥᒃᕐᓕᑎᑦᑎᔪᓐᓇᕐᒪᑦ ᐱᓕᕆᐊᒍᔪᓐᓇᖅᑐᓂᒃ ᐃᒪᕐᒥᐅᑕᓄᑦ ᐊᕙᑎᖔᑭᓐᓂᒃ ᖃᐅᔨᓴᕈᓐᓇᕐᓂᕐᒥᒃ ᓇᓗᓇᐃᕆᓗᓂ ᐃᒃᐱᖔᓇᕐᓂᕆᔭᖔᑭᓐᓂᒃ ᐊᕙᑎᖔᑭᓐᓄᑦ ᐊᒃᑐᐋᔪᓂᒃ

KIA-WL-10: Quality Control Responses
KIA-WL-10: ᓈᒻᒪᒃᑲᓗᐊᕐᒪᖔᒫᑕ ᐱᓕᕆᐊᖑᔪᑦ ᖃᐅᔨᓴᕐᓂᖕᒋᓐᓄᑦ ᑭᐅᔭᐅᔪᑏᑦ

Request

- Duplicate samples are collected to help detect problems.
- they are *“…used to estimate sampling and laboratory analysis precision.”* (US EPA)
- AEM must provide a response framework for low and medium precision data
  - Validation of sample collection techniques and precision,
  - Validation of analytical precision, and
  - Whether all samples from the suspect field event or those collected from a given field team be excluded from the dataset
- AEM has indicated they have updated their response to be presented during the technical hearings

ᑐᒃᓯᕋᐅᑦ

- ᒪᕐᕉᓕᖓᓗᒋᑦ ᖃᐅᔨᓴᕈᑏᑦ ᑲᑎᑕᐅᕙᒃᑐᑦ ᓴᖅᑭᑦᑎᔪᓐᓇᕐᑯᐸᓗᒋᑦ ᓈᒻᒪᖕᒋᑦᑐᓂᒃ.
- ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ”… ᐊᑐᖅᑐᑦ ᒥᒃᓯᖃᕈᓐᓇᕐᑯᐸᓗᒋᑦ ᖃᐅᔨᓴᕐᓂᕐᓄᑦ ᖃᓂᖅᑯᑦᑎᔪᓐᓇᕐᑯᐸᓗᒋᑦ.”
- AEM ᓴᖅᑭᑦᑎᔭᕆᐊᖃᖅᐳᑦ ᑭᐅᔾᔪᑎᒥᒃ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᓂᒃ ᒥᑭᓂᖅᐹᖓᓄᑦ ᐊᒻᒪ ᐊᑯᓪᓕᖅᐹᖓᓄᑦ ᖃᐅᔨᓴᕐᓂᕐᓂᒃ
  - ᓱᓕᓂᖕᒋᑦ ᖃᐅᔨᓴᕐᓃᑦ ᑲᑎᑕᐅᓂᖕᒋᑦ ᐊᒻᒪ ᖃᓄᖅ ᑲᑎᑦᑎᕙᖕᒪᖔᑕ
  - ᓱᓕᓂᖕᒋᑦ ᖃᐅᔨᓴᕐᓂᖕᒋᑦᑕ ᒥᒃᓵᓄᑦ, ᐊᒻᒪ
  - ᑕᒪᕐᒥᒃ ᑲᑎᑕᐅᔪᑦ ᖃᐅᔨᓴᕐᓃᑦ ᐃᓕᒪᒋᔭᐅᔾᔪᒥᑦ ᐊᓯᖕᒋᓐᓂᓪᓗᓐᓃᑦ ᐃᓚᐅᖕᒋᒃᑲᓗᐊᕐᒪᖔᑕ ᕿᒥᕐᕈᓂᐅᓚᐅᖅᑐᓂᑦ
- AEM ᐅᖃᖅᓯᒪᔪᑦ ᓄᑕᐅᓯᒋᐊᖅᓯᒪᓂᕋᖅᓗᒍ ᑭᐅᔾᔪᑎᑎᒃ ᐊᒻᒪ ᓴᖅᑭᓐᓂᐊᕐᓂᕋᖅᓗᒍ ᑐᓴᕋᓱᖕᓂᐅᓂᐊᖅᑐᒥ

KIA-WL-21: Landfarm Microbial Degradation Rates
KIA-WL-21: ᓄᓇᐊᒥ ᐱᕈᖅᑐᑦ ᖁᐱᕐᕈᐃᑦ ᓱᕈᖅᐸᓪᓕᐊᓂᖕᒋᑦ

Issue

- We are concerned with the biodegradation rates expected at AEM’s proposed landfarm
  - Landfarms will be relied on to treat contaminants such as oils and grease in soil
- AEM provided reference to Meadowbank and results from Resolution Island
  - The area surrounding Resolution Island is dominated by a marine environment and may not be applicable
- Overarching concern is preventing residual effects at the landfarm

ᐃᓱᒫᓗᑦ

- ᐃᓱᒫᓗᑎᖃᕋᑉᑕ ᖁᐱᕐᕈᐃᑦ ᓱᕈᖅᐸᓪᓕᐊᓂᐊᖅᓂᖕᒋᓐᓂᒃ AEMkut ᓄᐊᒧᑦ ᓈᕕᑦᑕᖃᒋᓂᐊᖅᑕᖕᒐᑕ ᒥᒃᓵᓄᑦ.
  - ᓄᓇᐃᑦ ᐊᑐᖅᑕᐅᓂᐊᖕᒪᑕ ᓱᕈᔪᖃᖅᑐᓂᒃ ᐅᖅᓱᐊᓗᖃᖅᑐᓂᒃᓗ ᓴᓗᒻᒪᖃᐅᖃᑦᑕᖅᓂᐊᖅᓗᑎᒃ
- AEMkut ᓴᖅᑭᑦᑎᓚᐅᖅᑐᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥ ᐱᓕᕆᐊᓂᒃ ᐊᒻᒪ ᕋᓴᓗᑎᐊᓐ ᖁᑭᖅᑕᖕᒐᓂᑦ
  - ᖁᑭᖅᑕᒥᑦ ᓴᖅᑭᑕᖅ ᐃᒪᕐᒥᐅᑕᓄᑦ ᐊᕙᓗᔭᐅᓯᒪᖕᒪᑦ ᐊᑑᑎᖃᕋᔭᖅᑰᖕᒋᑦᑐᖅ ᐅᕙᑉᑎᓐᓄᑦ
- ᐃᓱᒫᓗᑎᒻᒪᕆᐅᔪᖅ ᓈᒻᒪᖕᒋᑦᑐᓂᒃ ᐃᒃᐱᖕᓇᕐᓂᖃᕐᑯᔨᖕᒋᓐᓇᖅ ᓄᓇᒥ

KIA-WL-21: Landfarm Microbial Degradation Rates
KIA-WL-21: ᓄᓇᐊᒥ ᐱᕈᖅᑐᑦ ᖁᐱᕐᕈᐃᑦ ᓱᕈᖅᐸᓪᓕᐊᓂᖕᒋᑦ

Request

- AEM intends to provide a discussion during the technical hearings on:
  - Applicability of data from Resolution Island
  - Biodegradation rates experienced at Meadowbank
  - Practices which may improve biodegradation rates at Meliadine

ᑐᒃᓯᕋᐅᑦ

- AEM ᐅᖃᐅᓯᖃᕈᒪᔪᖅ ᑐᓴᕋᓱᓕᖅᐸᑕ ᑕᒪᑐᒪ ᒥᒃᓵᓄᑦ ᐅᑯᐊ ᐱᔾᔪᑎᒋᐸᓗᒋᑦ:
  - ᖃᓄᖅ ᕋᓴᓗᑎᐊ ᕿᑭᖅᑕᖕᒐᓂ ᐃᒃᐱᖕᓇᕐᓂᖃᕐᓂᐊᖅᐸ
  - ᖁᐱᕐᕈᐃᑦ ᓱᕈᖅᐸᓪᓕᐊᓂᖕᒋᑦ ᖃᓄᐃᐸᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥ
  - ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᑕᓯᕐᔪᐊᕐᒥ ᖁᐱᕐᕈᐃᑦ ᐱᕙᓪᓕᕈᓐᓇᕐᑯᐸᓗᒋᑦ

RESOLVED ISSUES

ᐊᖏᕐᑲᑎᒋᒍᑕᐅᓚᐅᖅᑐᑦ ᐃᓱᒪᓗᑎᓇᕝᓃᑦ

KIA-WL-01: Segregation of Overburden
KIA-WL-01: ᓴᓂᕐᐸᖅᑕᐅᓂᖏᑦ ᓄᓇᐃᑦ ᖁᖏᑦ ᐊᑐᖏᑦᑐᑦ

Issue

- AEM intends to store *“about 0.1 Mt”* in the temporary stockpile for use *“as TSF closure cover material”*.
- We are concerned that segregated overburden is only intended for use as part of the TSF closure strategy
  - Overburden is a source of native plant material that can also be used in the closure of roads, pads and other site infrastructure

ᐃᓱᒫᓗᑦ

- AEM ᓴᓂᕐᐸᖅᓯᕐᒪᖕᒪᑕ ᐃᒻᒪᖁ 0.1 Mt ᒥᒃ ᑲᑎᑦᑎᕕᐅᓂᐊᖅᑐᒥ ᐊᑐᕈᒫᕐᓗᒍ ᐅᒃᑯᐊᕆᐊᖅᐸᑦ ᐅᔭᕋᒃᑕᕆᐊᖅ.
- ᐃᓱᒫᓗᑎᕐᑲᖅᐳᒍᑦ ᓴᓂᕐᐸᖅᓯᒪᕐᖅ ᓯᐅᕋᖅᑕᕐᓂᑯ ᐊᑐᖅᑕᐅᑐᐃᓐᓇᕐᓂᐊᕐᓂᖓᓄᑦ ᐃᓚᖓ ᒪᑐᒋᐊᓕᕐᓂᖅᐸᑦ ᑭᓯᐊᓂ ᐅᔭᕋᒃᑕᕆᐊᖅ
  - ᑕᒪᓐᓇ ᐱᕈᖅᑐᕐᑲᖅᑐᕕᓂᖅ ᓯᐅᕋᖅᑕᕐᓂᑯ ᓄᓇᒥᒃ ᐃᓗᓕᕐᑲᕐᒪᑦ ᐊᒻᒪ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᓗᓂ ᐅᒃᑯᐊᖅᓯᓂᕐᒧᑦ ᐊᑉᕐᑯᑎᓂᒃ, ᐱᕐᑯᑎᕐᑲᕐᕕᕕᓂᕐᓂᒃ ᐊᒻᒪ ᐊᓯᖏᓐᓄᑦ

KIA-WL-01: Segregation of Overburden
KIA-WL-01: ᓴᓂᕐᐸᖅᑕᐅᓂᖏᑦ ᓄᓇᐃᑦ ᖃᖏᑦ ᐊᑐᖏᑦᑐᑦ

Resolution

- AEM commits to:
- Minimize the loss of overburden wherever possible to allow for its use as closure material
- Investigate storage options for segregated overburden
- Include a section in the next iteration of the closure and reclamation plan indicating other uses for overburden at closure in addition to capping the TSF
- Investigate:
  - Whether the 0.1 Mt of overburden is sufficient to cap the TSF and support the closure of other site infrastructure

ᐊᖅᑭᒍᑖ

- AEM ᐱᓂᐊᕐᓂᖃᖅᐳᖅ:
- ᒥᑭᓂᖅᐸᒥᒃ ᐊᓯᐅᔨᓂᖃᕐᑯᐸᓗᒍ ᐃᐸᔪᖃᕐᓂᐅᔪᓂᒃ ᐱᕈᖅᑐᖃᕈᓐᓇᕐᓂᕐᓂᒃ ᐊᑐᕈᓐᓇᕈᒫᕐᓗᒋᑦ ᐅᒃᑯᐊᕆᐊᖅᐸᑦ ᐅᔭᕋᒃᑕᕐᕕᒃ
- ᕿᓂᕐᓂᖅ ᖃᓄᖅ ᑐᕐᑰᒪᑎᐊᕋᔭᕐᒪᖔᑦ ᐊᑐᖏᓐᓂᖓᓐᓂ ᓄᓇ
- ᐃᓗᓕᖃᕐᓗᒍ ᑭᖑᓪᓕᕐᒥ ᐅᖃᐅᓯᖃᓕᕈᐸᑕ ᐅᒃᑯᐊᕐᓂᕆᔪᒫᖅᑕᖓᓂᒃ ᐊᒻᒪ ᓄᓇᐅᐸ ᐅᑎᖅᑎᑕᐅᓂᕆᔪᒫᖅᑕᖓᓂᒃ ᖃᓄᐃᓕᐅᕐᓂᕆᔪᒫᖅᑕᖓᓂᒃ ᖃᓄᖅ ᐊᑐᖅᑕᐅᔪᒫᕐᒪᖔᑕ ᖃᓕᖅᑐᖅᑕᐅᓕᖅᐸᑦ ᐅᔾᕋᒃᑕᕐᕕᕕᓂᖅ ᐊᓯᖏᓐᓄᓪᓗ ᐊᑐᑎᒃᓴᐃᑦ
- ᖃᐅᔨᓴᕐᓂᖅ:
  - ᑖᒻᓇ 0.1ᒪᑦ ᖃᕕᓂᖓ ᓄᓇᐅᐸ ᓈᒻᒪᖔᓂᐊᕋᓗᐊᕐᒪᖔᑦ ᐊᑐᖅᑕᐅᓕᖅᐸᑦ ᒪᑐᓕᖅᑎᓪᓗᒍ ᐅᔭᕋᒃᑕᕆᐊᖃᕐᕕᒃ

KIA-WL-02: Additional Cover Material and Re-vegetation

KIA-WL-02: ᓄᓇᒥ ᐱᕈᖅᑐᑦ ᓄᓇᐃᑦ ᐱᕈᖅᑐᓪᓗ ᒥᒃᓵᓄᑦ

Issue

- We expressed concern with the timeline required for revegetation of the site after disturbance
- AEM provided estimates with relevant case studies

ᐃᓱᒪᓗᑦ

- ᐃᓱᒪᓗᑎᖃᓚᐅᕋᑉᑕ ᐊᑯᓂᐅᓂᕆᓂᐊᖅᑕᖓᓂᒃ ᓄᓇᒥ ᐱᕈᖅᑐᑦ ᒥᒃᓵᓄᑦ ᐊᒃᑐᖅᑕᐅᓚᐅᖅᑎᓪᓗᒋᑦ
- AEM ᓴᖅᑭᑦᑎᓚᐅᖅᐳᑦ ᖃᓂᖅᑯᑦᑎᔪᓂᒃ ᐱᕈᒃᑲᓐᓂᕋᔭᖅᓂᖏᑦᑕ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓂᑯᓂᒃ

KIA-WL-02: Additional Cover Material and Re-vegetation

KIA-WL-02: ᓄᓇᒥ ᐱᕈᖅᑐᑦ ᓄᓇᐃᑦ ᐱᕈᖅᑐᓪᓗ ᒥᒃᓵᓄᑦ ᐊᖅᑭᑎᐊᕈᑏᑦ

Resolution

- AEM has committed to generate site specific revegetation information through targeted studies
- AEM is clarifying the feasibility of lichens recolonizing the disturbed areas based on the best available scientific understanding at this time
  - AEM is working with the University of Saskatoon to provide site specific revegetation data

ᐊᖅᑭᑎᐊᕈᑏᑦ

- AEM ᓴᖅᑭᑦᑎᓂᐊᕐᓂᕋᖅᑐᑦ ᐱᕈᖅᑐᕐᑲᕐᓂᐅᑉ ᒥᒃᓵᓄᑦ ᑐᕌᖅᑐᓂᒃ ᐱᓕᕆᔾᕕᖕᒥ ᖃᐅᔨᓴᕐᓂᒃᑯᑦ
- AEM ᓇᓗᓇᐃᕆᔾᔪᓪᓕᐊᔪᑦ ᑎᖓᐅᔭᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᔪᓐᓇᕐᓂᖕᒋᑦᑕ ᒥᒃᓵᓄᑦ ᐊᐅᓚᔾᔭᒃᑕᐅᓯᒪᓂᑯᑦ ᓄᓇᐃᑦ ᒥᒃᓵᓄᑦ ᕿᒥᕐᕈᐸᓗᑎᒃ ᑕᒪᑐᒪ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓂᑯᓂᒃ
- AEM ᐱᓕᕆᖃᑎᖃᖅᑐᖅ ᓴᓴᑲᑑᓐ ᓯᓚᑦᑐᖅᓴᕐᕕᖕᒐᓂᒃ ᓄᓐᒥ ᐱᕈᖅᑐᑦ ᒥᒃᓵᓄᑦ

KIA-WL-03: Water Balance Assumptions
KIA-WL-03: ᐃᒪᐅᑉ ᐊᐅᓚᓂᖅᒐᑕ ᒥᒃᓵᓄᑦ ᐃᓱᒪᓕᐊᑦ

Issue

- AEM had only presented a water balance for a mean precipitation year scenario

ᐃᓱᒫᓗᑦ

- AEM ᓴᖅᑭᑦᑎᑐᐃᓐᓇᓚᐅᕐᒪᑦ ᐃᒪᖅᑐᓂᐅᑉ ᒥᒃᓵᓄᑦ ᐅᑭᐅᓗᒃᑖᒧᑦ ᑕᐅᑐᖅᑰᖅᓱᑎᒃ

KIA-WL-03: Water Balance Assumptions
KIA-WL-03: ᐃᒪᐅᑉ ᐊᐅᓚᓂᖕᒐᑕ ᒥᒃᓵᓄᑦ ᐃᓱᒪᓕᐊ

Resolution

- AEM has provided a memo outlining two additional scenarios on October 1, 2015
  - 1:100 wet precipitation
  - 1:100 dry precipitation
- This has alleviated our concerns

ᐊᖑᒋᑕᐅᓚᐅᖅᑐᖅ

- AEM ᑐᓂᓯᓚᐅᖅᑐᖅ ᑎᑎᖅᑲᒥᒃ ᓇᓗᓇᐃᓇᔪᒥᒃ ᒪᕿᒃᑲᓐᓃᖕᓂᒃ ᑕᐅᑐᖅᑰᒐᒃᓴᓂᒃ ᐊᒃᑐᐸ 1,2015ᒥ
- 1:100 ᖃᐅᓯᕐᓇᖅᑎᓪᓗᒍ ᒥᐊᖅᑐᓂᖅ
- 1:100 ᐸᓂᕐᓇᖅᑎᓪᓗᒍ ᐃᒪᖅᑐᓂᖅ
- ᑖᒻᓇ ᐃᓱᒫᓗᑎᐸᑎᓐᓂᒃ ᐊᖅᑮᓚᐅᖅᑐᖅ

KIA-WL-04: Incorporation of Inuit Qaujimajatuqangit into Monitoring Activities

KIA-WL-04 ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦᑕ ᐊᑐᖅᑕᐅᓂᖏᑦ ᖃᐅᔨᓴᕐᓂᕐᓂ

Issue

- AEM had not included information outlining how Inuit Qaujimajatuqangit has been incorporated into ongoing monitoring activities

ᐃᓱᒫᓗᑦ

- AEM ᐃᓚᐅᑎᑦᑎᓚᐅᖏᒻᒪᑦ ᖃᓄᖅ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ ᐊᑐᖅᑕᐅᖓᖓᑖ ᖃᐅᔨᓴᕐᓂᕐᓂ

KIA-WL-04: Incorporation of Inuit Qaujimajatuqangit into Monitoring Activities

KIA-WL-04 ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦᑕ ᐊᑐᖅᑕᐅᓂᖏᑦ ᖃᐅᔨᓴᕐᓂᕐᓂ

Resolution

- Through the Inuit Impact Benefit Agreement, AEM is committed to work with the KIA to develop techniques that better use Inuit Qaujimajatuqangit to monitor and report to the community
- AEM has committed to:
  - Embed an Inuit Qaujimajatuqangit holder with the aquatic monitoring team
  - Engage with the KIA in Q3 or Q4 of 2016 to further develop Inuit Qaujimajatuqangit aquatic monitoring methods

ᐊᖏᖃᑎᒌᒍᑕᐅᓚᐅᖅ

- ᐃᓄᐃᑦ ᐊᒃᑐᖅᑕᐅᓂᖏᓐᓄᑦ ᐊᖏᕈᓯᐅᖅᓯᒪᔪᑉ ᒥᒃᓵᓄᑦ, AEM ᐱᓂᐊᕐᓂᖃᖅᐳᖅ ᐱᓕᕆᖃᑎᖃᕐᓂᐊᕐᓂᕐᒥᒃ ᑰ ᐊᐃ ᐃ ᑯᓐᓂᒃ ᓴᖅᑭᑦᑎᓂᐊᕐᓂᕐᒥᒃ ᐱᐅᓂᖅᓴᒥᒃ ᐊᑐᕐᓂᕐᒥᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓂᒃ ᖃᐅᔨᓴᓕᕌᖓᑕ ᐊᒻᒪ ᑐᓴᖅᑎᑦᑎᓂᐊᕐᓗᑎᒃ ᓄᓇᓕᖕᒥᒃ
- AEM ᐱᓂᐊᕐᓂᖃᖅᐳᖅ :
  - ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓂᒃ ᐃᓗᑦᓕᖃᕐᑯᐸᓗᒍ ᐃᒪᕐᒥᐅᑕᐃᑦ ᒥᒃᓵᓄᑦ ᖃᐅᔨᒪᔨᓄᑦ
  - ᐱᓕᕆᖃᑎᒋᓗᒋᑦ ᑰ ᐊᐃ ᐃ ᑯᑦ Q3 ᒥ ᐅᕝᕙᓗᓐᓃᑦ Q4 ᒥ 2016 ᒥ ᐱᒋᐊᒃᑲᓐᓂᕐᑯᐸᓗᒋᑦ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ ᐃᒪᕐᒥᐅᑕᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦᑕ ᒥᒃᓵᓄᑦ

KIA-WL-09: Plume Delineation Model Assumptions KIA-WL-09 ᓄᓇᐅᑉ ᑕᐅᑦᑐᕆᔪᒫᖅᑕᖓᑕ ᑎᑎᕋᐅᔭᖅᓯᒪᔪᑦ ᐃᓱᒪᒃᓴᓕᐊᑦ

Issue

- AEM had not provided full rationale for each CORMIX input used to model the effluent plume in Meliadine Lake
- We were also concerned with their input for ambient temperature
  - Discharges will occur in the open water season
  - Inputs of ambient temperature has been calculated using data from June and July resulting in an input of 13.5°C
  - The temperature does not capture the full range of potential temperatures and does not accurately estimate the density of colder, denser water

ᐃᓱᒫᓗᑦ

- AEM ᐃᓗᐃᑦᑐᒥᒃ ᐅᓂᑉᑲᓕᐅᖅᓯᒪᖕᒋᑦᑐᑦ ᖃᓄᖅ ᐊᑯᓯᒪᓂᐊᕐᒪᖓᑕ ᓄᓇᐃᑦ ᐊᑐᖅᑕᐅᔪᒫᖅᑐᑦ ᑕᓯᕐᔪᐊᕐᒥ ᐅᑎᖅᑎᖅᑕᐅᓕᖅᐸᑦ ᓄᓇᕕᓂᖓ
- ᐃᓱᒫᓗᑎᕐᑲᕆᕗᒍᑦ ᓯᓚᐅᑉ ᒥᒃᓵᓄᑦ ᐅᖃᐅᓯᖕᒋᑦᑕ
  - ᐃᒪᕐᓗᖕᓂᒃ ᑯᕕᓯᖃᑦᑕᕐᓂᐊᕐᒪᑕ ᐊᐅᔭᒃᑯᑦ
  - ᓯᓚᐅᑉ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᕐᓂᖕᒋᑦ ᐊᑐᕐᒪᑕ ᔪᓂ ᒥᒃ ᐊᒻᒪ ᔪᓚᐃ ᒥᒃ ᐅᖅᑰᓇᕐᓂᖃᕐᓂᐊᖅᓗᓂ 13.5 ᒥᒃ
  - ᐅᖅᑰᓇᕐᓂᖓ ᑎᒍᓯᓯᒪᖕᒋᒻᒪᑦ ᐊᔾᔨᒌᖕᒋᑦᑐᓂᒃ ᓯᓚᓂᒃ ᐊᒻᒪ ᑐᖓᐅᑦᑎᓯᒪᑉᓗᓂ ᓯᓚᒥᒃ ᐃᒃᑭᕐᓇᕐᓂᖅᓴᐅᑎᑦᓗᒍ, ᐊᒻᒪ ᐃᒪᖅ ᑭᓂᕐᓂᖅᓴᐅᑎᑦᓗᒍ

KIA-WL-09: Plume Delineation Model Assumptions
KIA-WL-09 ᓄᓇᐅᑉ ᑕᐅᑦᑐᓇᔪᒫᖅᑕᖓᑕ ᑎᑎᕋᐅᔭᖅᓯᒪᔪᑦ ᐃᓱᒪᒃᓴᓕᐊᑦ

Resolution

- AEM has:
  - Provided additional model input information
  - Modeled effluent dispersion using colder temperature (4ºC) and found the density change had *“little to no impact on the dilution factors or the conclusions”*

ᐊᖏᕐᑲᑎᒌᖕᓂᖅ

- AEM ᐃᒪᓐᓇᐃᓯᒪᕗᖅ:
  - ᑕᑯᔭᒃᓴᒃᑲᓐᓂᕐᓂᒃ ᓴᖅᑭᑦᑎᓯᒪᕗᑦ
  - ᐃᒪᐃᑦ ᒥᒃᓵᓄᑦ ᓴᖅᑭᑦᑎᓯᒪᒃᑲᓐᓂᖅᐳᑦ ᐊᑐᖅᑐᓂᒃ ᐃᒃᑮᕐᓇᕐᓂᖅᓴᒥᒃ ᓯᓚ 4 ᒥᒃ ᐅᖅᑰᓂᕐᑲᖅᑎᓪᓗᒍ ᐊᒻᒪ ᑐᑭᓯᓚᐅᖅᐳᑦ ᐃᒪᐅᑉ ᑭᓂᕐᓂᐋ ᐃᒃᐱᖕᓇᕐᓂᕐᑲᓚᐅᖏᓚᖅ ᐃᕐᕈᖅᑕᐅᓂᖓᓂᒃ ᐃᒪᕐᔫᑎᐅᑉ

KIA-WL-11: Significance Thresholds for Water Quality, Sediment Quality, and Fish Tissue Chemistry

KIA-WL-11 ᖃᐅᔨᒋᐊᕐᓃᑦ ᑐᙵᕕᒃᓴᖏᑦ ᐃᒪᕐᒧᑦ, ᑕᓯᕋᐅᑉ ᓇᑎᐊᑖᑕ ᒥᒃᓵᓄᑦ ᓈᒻᒪᖕᓂᖏᑦ ᐊᒻᒪ ᐃᒪᕐᒥᐅᑕᐃᑦ ᐊᒥᕋᖏᑦᑕ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᕐᓃᑦ

Issue

- AEM has proposed three significance thresholds which do not directly address changes to water quality, quantity, flow, sediment quality or fish tissue chemistry
- Thresholds do not address the loss of cultural value to Inuit

ᐃᓱᒫᓗᑦ

- AEM ᐱᖕᒐᓱᓂᒃ ᑐᙵᕕᒃᓴᓂᒃ ᖃᐅᔨᒪᓂᕐᒧᑦ ᓴᖅᑭᑦᑎᔪᒪᖕᒪᑕ ᔭᐅᔨᔾᔪᑕᐅᓇᔭᖏᑦᑐᓂᒃ ᐃᒪᐅᑉ ᐊᓯᔾᔨᕋᔭᖅᐸᑦ ᐃᒪᑦᑎᐊᕙᐅᓂᐋ, ᑰᖕᓂᖕᒐ, ᐃᒪᒃᑯᓂᖕᒐ, ᓇᑎᐋ ᐱᐅᔪᓐᓂᕐᐸᓪᓕᐊᓂᖕᒐ, ᐅᕝᕙᓗᓐᓃᑦ ᐊᒥᕋᕐᓗᓕᕋᔭᕐᓂᖏᑦ ᐃᖃᓗᐃᑦ.
- ᖃᐅᔨᒪᓂᖏᑦ ᐅᖃᐅᓯᖃᖏᒻᒪᑕ ᐃᓂᐅᑦ ᐃᓅᓂᖏᓐᓄᑦ ᐊᒃᑐᐋᔪᓂᒃ

KIA-WL-11: Significance Thresholds for Water Quality, Sediment Quality, and Fish Tissue Chemistry KIA-WL-11 ᖃᐅᔨᒋᐊᖅᓱᑦ ᑐᙵᕕᒃᓴᖏᑦ ᐃᒪᖅᒧᑦ, ᑕᓯᕋᐅᑉ ᓇᑎᐊᑕ ᒥᒃᓵᓄᑦ ᓈᒻᒪᖕᓂᖏᑦ ᐊᒻᒪ ᐃᒪᕐᒥᐅᑕᐃᑦ ᐊᒥᕋᖏᑦᑕ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᖅᓱᑦ

Resolution

- The NWB should require AEM to host a working group to
  - Determine significance thresholds to specific aquatic VEC
  - Incorporate cultural value to Inuit in assessing project related changes to the environment
- This request is in line with AEM's commitment to collaborate with the KIA to modify the Aquatic Environment Monitoring Program and incorporate IQ into the monitoring programs
- This can be explored during the discussions committed to in KIA-WL-04

ᐋᖅᑭᒋᐊᕈᑏᑦ

- ᐃᒪᓕᕆᔨᒃᑯᑦ NWB ᑎᓕᓯᓇᔭᖅᒪᑕ AEM ᑯᓐᓂᒃ ᑎᒥᓕᐅᖅᑯᓗᒋᑦ ᐱᓕᕆᓂᐊᖅᑐᓂᒃ ᐅᑯᓂᖓ
  - ᓴᖅᑭᑦᑎᓗᑎᒃ ᐆᒃᑐᕋᐅᑎᒃᓴᓂᒃ ᖃᐅᒪᔾᔪᑕᐅᓂᐊᖅᑐᓂᒃ ᐃᒪᕐᒥᐅᑕᓄᑦ ᐱᕈᖅᑐᖏᓐᓄᑦᓗ
  - ᐃᓚᐅᑎᓪᓗᒋᑦ ᐃᓄᐃᑦ ᐅᐱᒋᔭᖏᑦ ᖃᐅᔨᓴᓕᕐᖓᑕ ᐊᕙᑎᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖏᓐᓂᒃ.
- ᑖᒻᓇ ᑐᒃᓯᕋᐅᑦ ᒪᓕᒃᑐᖅ AEM ᑯᑦ ᐱᓂᐊᕐᓂᕆᔭᖓᓂᒃ ᐱᓕᕆᖃᑎᖃᕐᓂᐊᕐᓂᕐᒥᒃ ᑰ ᐊᐃ ᐃ ᑯᓐᓂᒃ ᐊᖅᑭᒋᐊᖅᓯᓂᕐᒥᒃ ᐃᒪᕐᒥᐅᑕᐃᑦ ᖃᐅᔨᓴᕐᓂᖏᓐᓂᒃ ᐊᒻᒪ ᐃᐊᓗᑎᑦᑎᓂᕐᒥᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓂᒃ ᕿᒥᕐᕈᓂᐅᓂᐊᖅᑐᓄᑦ
- ᑕᒪᓐᓇ ᐅᖃᐅᓯᐅᔪᓐᓇᖅᑐᖅ ᐅᖃᓪᓚᓕᕈᑉᑕ ᐱᓂᐊᕐᓂᕆᔭᑉᑎᓐᓂ ᓇᓗᓇᐃᖅᓯᒪᔪᓂ KIA-WL-04 ᒥ.

KIA-WL-12: Fish Tissue Baseline
KIA-WL-12 ᐃᖃᓗᐃᑦ ᐊᒥᕋᖕᒋᑦᑕ ᒥᒃᓴᓐᓄᑦ ᖃᐅᔨᒪᔭᐅᕙᒌᖅᑐᑦ ᐆᒃᑐᕋᐅᑕᐅᔪᒃᓴᓕᐊᑦ

Issue

- AEM committed to update the fish tissue baseline during the Nunavut Impact Review Board hearings

ᐃᓱᒫᓗᑦ

- AEM ᓄᑕᐅᓯᒋᐊᖅᑎᑦᑎᓂᐊᓚᐅᖅᑐᑦ ᐃᖃᓗᐃᑦ ᐊᒥᕋᖕᒋᑦᑕ ᒥᒃᓵᓄᑦ ᖃᐅᔨᒪᔭᒃᓴᓂᒃ ᓄᓇᕗᑦ ᕿᒥᕐᕈᔨᖕᒋᑦ ᓂᕐᐸ ᑲᑎᒪᑎᑦᑎᑎᓪᓗᒋᑦ

KIA-WL-12: Fish Tissue Baseline
KIA-WL-12 ᐃᖃᓗᐃᑦ ᐊᒥᕋᖕᒋᑦᑕ ᒥᒃᓴᓐᓄᑦ ᖃᐅᔨᒪᔭᐅᕙᒌᖅᑐᑦ ᐆᒃᑐᕋᐅᑕᐅᔪᒃᓴᓕᐊᑦ

Resolution

- AEM collected the fish tissue data in 2015
- AEM has committed to
  - Update the fish tissue baseline report prior to construction
  - Evaluate how the 2015 fish tissue data compares with the historical data and if it changes assumptions presented in the Environmental Impact Statement

ᐋᖅᑭᒋᐊᕈᑦ

- AEM ᐃᖃᓗᐃᑦ ᐊᒥᕋᖕᒋᑦᑕ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᕐᓂᖃᓚᐅᖅᑐᑦ 2015 ᒥ
- AEM ᐱᓇᐃᕐᓂᖃᖅᐳᖅ ᐅᑯᓂᖕᒐ
  - ᓄᑕᐅᓯᒋᐊᖅᑎᑦᑎᓂᐊᖅᑐᑦ ᐊᒥᕋᐃᑦ ᒥᒃᓵᓄᑦ ᖃᐅᔨᓴᕐᓂᕐᒥᒃ ᓴᓇᒋᐊᓚᐅᖕᒋᓐᓂᕐᒥᓂᒃ
  - ᕿᒥᕐᕈᓂᐊᖅᑐᑦ ᖃᓄᖅ 2015ᒥ ᖃᐅᔨᓴᕐᓃᑦ ᐊᔾᔨᒌᖕᒋᓐᓂᕐᑲᕐᒪᖕᒐᑖ ᐊᒻᒪ ᐱᑕᖃᖅᐸᑦ ᖃᓄᐃᑦᑑᖕᒪᖕᒐᑖ ᓴᖅᑭᓪᓗᒋᑦ ᐊᕙᑎᒧᑦ ᐃᒃᐱᖕᓇᕐᓂᐅᓂᐊᖅᑐᑦ ᐅᕐᑲᖅᓯᒪᔪᑦ ᐃᓗᐃᐋᓂ

KIA-WL-13 and KIA-WL-14
KIA-WL-13 ᐊᒻᒪ KIA-WL-14

Issue

- Potential missing information was highlighted in our review of the Concordance Table regarding:
  - Additional Supplemental Information Guidelines
  - Plans for Abandonment and Restoration

ᐃᓱᒫᓗᑦ

- ᐃᓗᑦᓕᖅᑕᐅᖏᑦᑐᕕᓂᐅᑐᐃᓐᓇ ᓇᐊᖃᕐᓂᖓᓂᒃ ᐃᓗᐊᓃᑦᑕᓇᐊᓕᖕᓂᒃ ᓇᓗᓇᐃᖅᓯᒪᔪᖃᓚᐅᕐᒪᑦ ᕿᒥᕐᕈᑎᑦᓗᑕ ᐃᓗᓕᓇᔭᐅᔭᓇᐊᖃᖅᑐᓂᒃ ᐱᔾᔪᑎᒋᐸᓗᒋᑦ ᐅᑯᐊ:
  - ᐃᓚᒋᐊᕈᑏᑦ ᑐᓴᖅᐸᑦᓕᕈᑏᑦ ᒪᓕᒐᒃᓴᐃᑦ
  - ᒪᓕᒐᒃᓴᐃᑦ ᕿᒪᒃᑕᐅᓇᔭᕐᓂᖓᓄᑦ ᐊᒻᒪ ᐋᖅᑭᒋᐊᕐᓂᖓᓄᑦ

KIA-WL-13 and KIA-WL-14
KIA-WL-13 ᐊᒻᒪ KIA-WL-14

Resolution

- AEM has provided the required information

ᐊᖅᑭᒋᐊᕈᑏᑦ

- AEM ᑐᓂᓯᓚᐅᖅᑐᑦ ᐃᓗᓕᕆᔾᐅᔾᕆᐊᖃᖅᑐᓐᓂᒃ

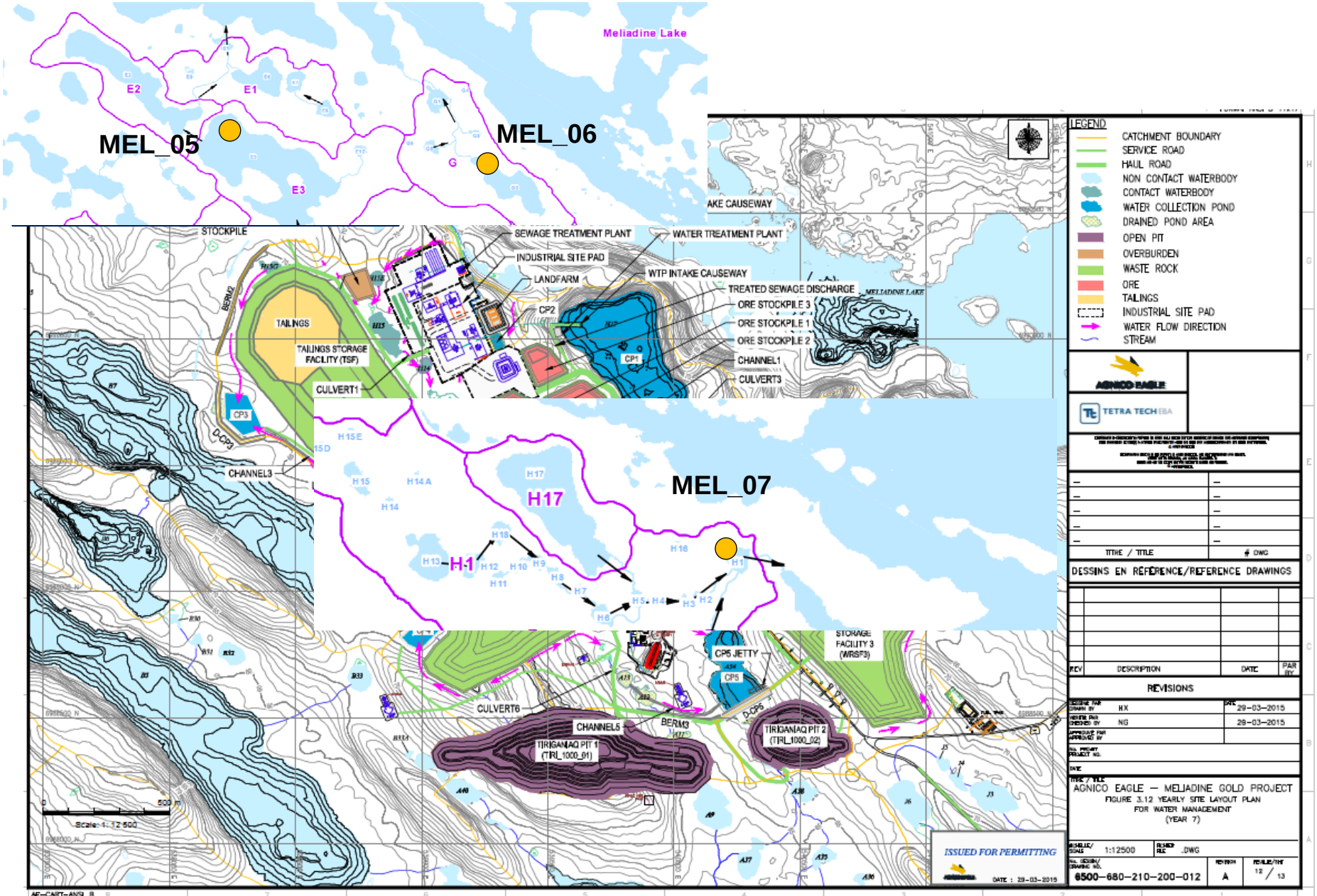
KIA-WL-15: Sample Station Categorization
KIA-WL-15: ᐅᒃᑐᕋᕐᕕᑦ ᐊᔾᔨᒌᖕᒋᓐᓂᖕᒋᑦ

Issue

- AEM categorized MEL-05, MEL-06 and MEL-07 as “verification samples”
- Verification samples are *“for operational and management purposes by Agnico Eagle”*
- General Aquatic samples are *“subject to compliance assessment to confirm sampling was carried out using established protocols, included quality assurance/quality control provisions, and addresses identified issues.”*
- KIA are concerned that these stations drain to Meliadine Lake and any problems detected should trigger management action

ᐃᓱᒫᓗᑦ

- AEM ᑎᑎᖅᓯᓚᐅᕐᒪᑕ MEL-05, MEL-06 ᐊᒻᒪ MEL-07 “ ᑐᑭᓯᒋᐊᕐᕕᒃᓴᐃᑦ ᐅᒃᑐᑏᑦ”
- ᑐᑭᓯᒋᐊᕐᕕᒃᓴᐃᑦ ᐅᒃᑐᑏᑦ ᐊᑐᕆᐊᖃᕐᒪᑕ “ ᐊᐅᓪᓚᕐᓂᖕᒐᓄᑦ ᐊᒻᒪ ᐊᐅᓚᑦᑎᓂᖕᒐᓄᑦ ᐊᒡᓃᑯ ᐃᒍᑯᓐᓄᑦ”
- ᐃᒪᕐᒥᐅᑕᐃᑦ ᐅᒃᑐᑏᑦ ᐃᒪᐃᒻᒪᑕ “ ᐊᒃᑐᐊᖕᒪᑕ ᒪᓕᒃᑲᓗᐊᕐᒪᖕᒐᑕ ᖃᐅᔨᓴᕐᓂᕐᓄᑦ ᓇᓗᓇᐃᕆᓂᐊᕐᓗᑎᒃ ᖃᐅᔨᓴᕐᓂᖅ ᐊᑐᖅᑕᐅᓚᐅᕐᒪᖕᒐᑦ ᑕᐅᖅᓗᑎᒃ ᒪᓕᒃᑕᐅᓲᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ, ᐃᓚᐅᐸᓗᒋᑦ ᐱᓕᕆᑦᑎᐊᕐᓂᖅ, ᐳᐃᔪᓂᖅ ᐊᑐᕐᓂᖅ ᐊᒻᒪ ᑐᕋᖅᑕᕐᓂᒃ ᓇᓗᓇᐃᕆᓇᓱᖕᓂᖅ”
- ᑭ ᐊᐃ ᐃ.ᑯᑦ ᐃᓱᒫᓗᒃᑐᑦ ᑖᑉᑯᐊ ᖃᐅᔨᓴᕐᕕᑦ ᑯᖕᒪᑕ ᑕᓯᕐᔪᐊᕐᒧᑦ ᐊᒻᒪ ᓱᓇᒥᐊᖅ ᐅᓗᕆᐊᓇᖅᑐᖅ ᓴᖅᑭᑉᐸᑦ ᐅᐸᓗᖅᑕᐅᔭᕆᐊᓕᒃ ᐊᐅᓚᑦᑎᔨᓄᑦ


Meliadine Lake
E2
E1
E3
MEL_05
MEL_06
MEL_07
H17
H1
STOCKPILE
SEWAGE TREATMENT PLANT
WATER TREATMENT PLANT
INDUSTRIAL SITE PAD
LANDFARM
WTP INTAKE CAUSEWAY
TREATED SEWAGE DISCHARGE
ORE STOCKPILE 3
ORE STOCKPILE 1
ORE STOCKPILE 2
CHANNEL1
CULVERT3
CP1
CP2
CP3
TAILINGS
TAILINGS STORAGE FACILITY (TSF)
CULVERT1
CHANNEL3
CULVERT6
CHANNEL5
BERM3
TIRIGANIAQ PIT 1 (TRI_1000_01)
TIRIGANIAQ PIT 2 (TRI_1000_02)
CP5 JETTY
CP5
STORAGE FACILITY 3 (WRSF3)
LEGEND
CATCHMENT BOUNDARY
SERVICE ROAD
HAUL ROAD
NON CONTACT WATERBODY
CONTACT WATERBODY
WATER COLLECTION POND
DRAINED POND AREA
OPEN PIT
OVERBURDEN
WASTE ROCK
ORE
TAILINGS
INDUSTRIAL SITE PAD
WATER FLOW DIRECTION
STREAM
AGNICO EAGLE
TETRA TECH EBA
DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS
REVISIONS
AGNICO EAGLE – MELIADINE GOLD PROJECT
FIGURE 3.12 YEARLY SITE LAYOUT PLAN FOR WATER MANAGEMENT (YEAR 7)
ISSUED FOR PERMITTING
6500-680-210-200-012
Scale: 1:12 500

KIA-WL-15: Sample Station Categorization
KIA-WL-15: ᐅᒃᑐᕋᕐᕕᑦ ᐊᔾᔨᒌᖕᒋᓐᓂᖕᒋᑦ

Resolution

- AEM’s low action level response for these three locations will be:
  - To recategorize the specific location of concern as a General Aquatic Monitoring Station,
  - Include the location as an additional station in the Aquatic Environment Monitoring Program,
  - Investigate the source of contamination, and
  - Mitigate the source to prevent further contamination of the water body.

ᑐᑭᓯᕐᑲᑎᒌᒍᑦ

- AEM ᑭᐅᔾᔪᑎᖕᒋᑦ ᐅᐸᓗᐊᖕᒋᓪᓗᒋᑦ ᑖᑉᑯᐊ ᐱᖓᓱᑦ ᐃᓂᖕᒋᑦ ᐅᑯᐋᖑᓂᐊᖅᐳᑦ:
- ᓴᖅᑰᒃᑲᓐᓐᓂᕐᓂᖅ ᐃᓂᒋᔭᐅᓂᐊᖅᑐᖅ ᐃᒪᕐᒥᐅᑕᐃᑦ ᐃᓱᒫᓗᑕᐅᔾᔪᑦ ᐃᓃᑦ ᒥᒃᓵᓄᑦ ᕐᑲᐅᔨᓴᕐᓂᕐᓂᒃ
- ᐃᐊᓗᑎᓪᓗᒍ ᐃᓂ ᕐᑲᐅᔨᓴᕐᕕᐅᕐᑲᑕᐅᓕᕐᓗᓂ ᐃᒪᕐᒥᐅᑕᐃᑦ ᐊᕙᑎᖕᒋᓐᓄᑦ ᕐᑲᐅᔨᓴᕐᕕᖕᓂ
- ᕿᓂᕐᓂᖅ ᓇᑭᑦ ᐱᖓᖕᒑᑦ ᐅᓗᑎᐋᓇᖅᑐᖅ, ᐊᒻᒪ
- ᐋᖅᑭᒋᐊᕐᓗᒍ ᐅᓗᑎᐊᓇᖅᑐᕐᑲᕐᕕᒃ ᐅᓗᑎᐊᓇᖅᑐᕐᑲᒃᑲᓐᓂᕐᑯᓇᒍ ᐃᒪᕐᒧᑦ

KIA-WL-16: Detection Limits
KIA-WL-16:ᖃᐅᔨᓯᑏᑦ ᑭᒡᓕᖕᒋᑦ

Issue

- AEM has indicated no accredited laboratory will be located on site
- Proposed the use of six analytical laboratories
  - Concerned for interlab variability
- AEM did not provide detection limits that will be used at the laboratories

ᐃᓱᒫᒐᑦ

- AEM ᓇᓗᓇᐃᖅᓯᒪᔪᑦ ᖃᐅᔨᓴᕐᕕᑦᓚᑦᑖᒥᒃ ᐱᑕᖃᕐᓂᐊᓂᑦᑐᖅ ᐱᓕᕆᔾᕕᖕᒥ
- ᐊᕐᕕᓂᓕᖕᓂᒃ ᖃᐅᔨᓴᕐᕕᖕᓂᒃ ᐊᑐᕈᒪᓂᖃᖅᑐᑦ
  - ᐃᓱᒫᒐᑎᖕᒐᑦ ᐊᔾᔨᒌᖕᒋᑦᑐᓕᕆᔨᓐᓇᕐᓂᖅ
- AEM ᓇᓗᓇᐃᕆᓚᐅᖕᒋᑦᑐᑦ ᖃᐅᔨᔾᔪᑎᒃᓴᓂᒃ ᑭᒡᓕᖃᕐᓂᐅᓂᐊᖅᑐᓂᒃ ᖃᐅᔨᓴᕐᕕᖕᓂ

KIA-WL-16: Detection Limits
KIA-WL-16:ᖃᐅᔨᔪᑏᑦ ᑭᒡᓕᖕᒋᑦ

Resolution

- AEM has committed to work with the KIA to achieve acceptable detection limits for all laboratories and parameters
  - Limits will be based on those proposed in our submission
  - Agreed upon limits will be included in the Quality Assurance / Quality Control Plan
- Detection limits will apply to all contracted analytical laboratories for water quality samples collected at specific sites indicated in our submission

ᐊᖁᑭᔾᔪᑕᐅᓚᐅᖅᑐᖅ

- AEM ᐱᓂᐊᖁᓂᖃᖅᐳᖅ ᐱᓕᕆᖃᑎᒋᓗᒋᑦ ᑮ ᐊᐃ ᐃ ᑯᑦ ᓈᒻᒪᒃᑐᓂᒃ ᖃᐅᔨᒋᐊᖁᓂᖅᒧᑦ ᑭᒡᓕᓯᓂᐊᕈᑎᖃᕈᓐᓇᖁᑉᓗᒋᑦ ᑕᒪᐃᓐᓄᑦ ᖃᐅᔨᓴᖁᖕᓄᑦ ᐊᒻᒪ ᐊᕙᑎᖕᒋᓐᓄᑦ
  - ᑭᒡᓕᖕᒋᑦ ᑕᐃᑉᑯᐊᖑᓂᐊᖅᐳᑦ ᓴᖅᑭᑕᑉᑎᓐᓂ ᓇᓗᓇᐃᖅᓯᒪᔪᑦ
  - ᐊᖕᒋᕈᑕᐅᔪᑦ ᑭᒡᓕᒃᓴᐃᑦ ᐃᓚᐅᓂᐊᖅᐳᑦ ᐱᐅᔪᓂᒃ ᓈᒻᒪᒃᓴᕈᑎᓂ/ᓈᒪᑏᐊᖅᑐᓂᒃ ᐱᓕᕆᐊᖃᖁᓂᖅᒧᑦ ᐸᖁᒍᑏᑦ ᐃᓪᓗᐋᓂ
- ᖃᐅᔨᔾᔪᑏᑦ ᑭᒡᓕᖕᒋᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᐳᑦ ᑕᒪᐃᓐᓄᑦ ᑲᓐᑐᓛᒃᓯᒪᔪᓄᑦ ᖃᐅᔨᓴᖅᑎᓄᑦ ᐃᒪᐃᑦ ᓈᒻᒪᖕᒪᖕᒑᑖ ᖃᐅᔨᒋᐊᖁᖕᓄᑦ ᓇᓗᓇᐃᖅᓯᒪᔪᓂ ᓴᖅᑭᑕᑉᑎᓐᓂᒃ

KIA-WL-17: Potential Impacts to Lake B7
KIA-WL-17: ᐃᒃᐱᖕᓇᕐᓂᕆᔪᓐᓇᖅᑕᖕᒋᑦ ᑕᓯᖅ B7 ᒧᑦ

Issue

- AEM has moved to dry stack storage of the tailings
  - This reduces impacts to the aquatic environment
  - The main concern of dry stacking is dust generation during operation
- AEM has not provided a map indicating all dust fall monitoring stations in the application
- Lake B7 is now potentially subject to dust deposition originating from the dry stack tailings

ᐃᓱᒫᓗᑦ

- AEM ᓄᑖᓚᐅᕐᒪᑕ ᐸᓂᖅᑐᓂᒃ ᑐᖅᑯᖅᓯᒪᔾᔨᓂᖅ ᐃᕐᕈᖅᑐᐃᔾᔪᑎᕕᓂᕐᓂᒃ ᐅᔭᕋᒃᑕᖅᑕᐅᓂᑯᓄᑦ
  - ᑖᒻᓇ ᒥᒃᓱᕙᓪᓕᖅᑎᑦᑎᖓᒪᑦ ᐅᓗᕆᐊᓇᕐᓂᕐᓄᑦ ᐃᒪᕐᒥᑦᑐᓄᑦ
  - ᐸᓂᖅᑐᓂᒃ ᑲᑎᖅᓱᐃᓂᖅ ᐃᓱᒫᓗᑎᕐᑲᕈᑎᕐᑲᕐᒪᑦ ᐳᔪᕐᑲᑖᒃᑎᑦᑎᕐᑳᑦᑕᕐᓂᖓᓂᒃ ᑲᑎᖅᓱᖅᑕᐅᓕᕐᖓᑦ
  - AEM ᑐᓂᓯᓚᐅᖏᒻᒪᑦ ᓱᓕ ᓄᓇᖑᐊᕐᒥᒃ ᓇᓗᓇᐃᕆᔪᒥᒃ ᓱᑯᑦᑎᐊᓂ ᕐᑲᐅᔾᔭᖅᑕᐅᕙᖕᒪᖕᒐᑦ ᐳᔪᕐᑲᑖᑉ ᐃᖏᕐᕋᓂᖏᑦ
  - ᑕᓯᖅ B7 ᑎᒃᑕᐅᕕᐅᑐᐃᓐᓇᕆᐊᕐᑲᕐᒪᑦ ᐃᕐᕈᖅᑐᑎᕕᓂᕐᓂᒃ ᑲᑎᑕᐅᓯᒪᔪᓂᒃ

KIA-WL-17: Potential Impacts to Lake B7
KIA-WL-17: ᐃᒃᐱᖕᓇᕐᓂᕆᔪᓐᓇᖅᑕᖕᒋᑦ ᑕᓯᖅ B7 ᒧᑦ

Resolution

- AEM has committed to include all dust fall monitoring stations and locations within the Dust Management Plan prior to any material being placed in the Tailings Storage Facility

ᐋᖅᑭᒋᐊᕈᑕᐅᓯᒪᔪᑦ

- AEM ᐅᖃᖅᓯᒪᔪᑦ ᓇᓗᓇᐃᕆᓂᐊᖅᓯᒪᐸᓗᑎᒃ ᑕᒪᐃᓐᓂᒃ ᐳᔪᖃᑖᕐᓂᒃ ᖃᐅᔨᓴᕐᕖᑦ ᐃᓂᖕᒋᓐᓂᒃ ᐳᔪᖃᑖᑦ ᒥᒃᓵᓄᑦ ᐊᐅᐊᑦᑎᓂᐅᓂᐊᖅᑐᑦ ᐸᕐᓇᒃᓯᒪᔾᔪᑎᖕᒋᓐᓂ ᐃᕐᕈᖅᑑᑎᕕᓂᕐᓂᒃ ᐃᓕᓯᔪᖃᒃᑲᓐᓂᓚᐅᖅᑎᓐᓇᒍ ᐃᕐᕈᖅᑑᑎᕕᓂᐅᓯᕝᕕᒃᓴᒧᑦ

KIA-WL-18: Dust Management at Closure
KIA-WL-18: ᐳᔪᕐᑲᑖᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ ᒪᑐᔭᐅᒋᐊᖅᐸᑦ

Issue

- AEM indicated that dust control would be *“evaluated and implemented during closure activities as required”*
- Dust management is an issue of significant concern to the community
- AEM had not provided the thresholds to determine if dust control will be required at closure

ᐃᓱᒫᓗᑦ

- AEM ᓇᓗᓇᐃᓇᓚᐅᕐᒪᑕ ᐳᔪᕐᑲᑖᒃ “ ᕿᒥᕐᕈᔭᐅᔪᒫᕐᒪᑦ ᐊᒻᒪ ᐱᓕᕆᐊᖑᓗᓂ ᒪᑐᕙᓪᓕᐊᓕᖅᐸᑦ ᐊᒻᒪ ᐱᓕᕆᐊᖑᔭᕆᐊᕐᑲᓕᕋᖓᑦ”
- ᐳᔪᕐᑲᑖᒃ ᐃᓱᒫᓗᑕᐅᒻᒪᕆᖕᒪᑦ ᓄᓇᓕᖕᒧᑦ
- AEM ᓴᖅᑭᑦᑎᓚᓗᖕᒋᑦᑐᖅ ᓱᓕ ᐳᔪᕐᑲᑖᑦ ᒥᒃᓵᓄᑦ ᕐᑲᐅᔨᒪᔾᔪᑎᒃᓴᓂᒃ ᐊᒻᒪ ᐳᔪᕐᑲᑖᒃ ᐃᓱᒫᓗᑎᒃᓴᐅᓕᕋᔭᕐᒪᖔᑦ ᒪᑐᓕᖅᐸᑦ

KIA-WL-18: Dust Management at Closure
KIA-WL-18: ᐳᔪᖅᑲᑖᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ ᒪᑐᔭᐅᒋᐊᖅᐸᑦ

Resolution

- AEM has committed to including a discussion of these thresholds in the next iteration of the Closure Plan

ᐋᖅᑭᒋᐊᖅᑕᐅᓯᒪᔪᖅ

- AEM ᑕᒪᑐᒪ ᒥᒃᓵᓄᑦ ᐅᕐᑯᓯᕐᑲᕐᑲᓯᐅᑎᓂᐊᕐᓂᕋᖅᑐᑦ ᑭᒍᓪᓕᕐᒥ ᑲᑎᒍᐸᑕ ᐅᒃᑯᐊᕈᒫᕐᓂᐊᑕ ᒥᒃᓵᓂᒃ ᐅᕐᑲᐅᓯᕐᑲᓕᕈᐸᑕ

KIA-WL-19: Fuel Contact Water Discharge Criteria
KIA-WL-19: ᐅᖅᓱᐊᓗᑉ ᐊᒃᑐᕋᔭᕐᓂᖓᑕ ᐃᒪᕐᒧᑦ ᕿᓄᐃᓕᐅᕈᑎᒃᓴᐃᑦ ᒪᓕᒐᑦ

Issue

- AEM had not provided discharge criteria for melting snow and precipitation within secondary contact berms of the Fuel Tanks at Itivia Harbour
- Concern given Itivia is located away from treatment infrastructure and will contain fuel tanks and potential contact water

ᐃᓱᒫᓗᑦ

- AEM ᐊᑐᐃᓐᓇᕈᐃᓚᐅᖏᑦᑐᑦ ᕿᓄᖅ ᐊᐳᑦ ᐊᐅᒃᐸᑦᓕᐊᔪᖅ ᐊᒻᒪ ᐃᒪᖅ ᐱᓕᕆᐊᖑᓂᐊᕐᒪᖓᑦ ᐅᖅᓱᐋᓗᕐᑲᕐᕕᒃᓴᓂ ᐃᑎᕕᐋᓂ
- ᐃᓱᒫᓗᑦ ᐃᑎᕕᐊ ᐅᖓᓯᖕᓂᖓ ᐃᒪᕐᒧᑦ ᐱᓕᕆᔨᓄᑦ ᐊᒻᒪ ᐃᓗᓕᕐᑲᕐᓂᐊᖅᓗᑎᒃ ᐅᖅᓱᐋᓗᖕᓂᒃ ᐊᒻᒪ ᐃᒪᕐᒧᑦ ᐊᒃᑐᐃᑐᐃᓐᓇᕆᐊᕐᑲᕐᓂᖓ

KIA-WL-19: Fuel Contact Water Discharge Criteria
KIA-WL-19: ᐅᖅᓱᐊᓗᑉ ᐊᒃᑐᕋᔭᕐᓂᖓᑕ ᐃᒪᕐᒧᑦ ᕐᑲᓄᐃᓕᐅᕈᑎᒃᓴᐃᑦ ᒪᓕᒐᑦ

Resolution

- Water meeting discharge criteria will be used as a dust suppressant along the roads
- Water not meeting criteria will be discharged to the tundra
- AEM intends to apply discharge criteria currently used at Meadowbank and will include it in the next iteration of the dust management plan prior to construction

ᐋᖅᑭᑎᐊᖅᑕᐅᓯᒪᔪᖅ

- ᐃᒪᖅ ᐅᓗᑎᐊᓇᖏᑦᑐᖅ ᐊᕙᑎᒧᑦ ᐊᐅᑦᖅᑕᐅᓂᐊᖅᐳᖅ ᐳᔪᕐᑲᑖᑎᒃᑯᑕᐅᓗᓂ ᐊᑉᕐᑯᑎᓄᑦ
- ᐃᒪᖅ ᐊᑐᒐᒃᓴᐅᖏᑦᑐᖅ ᓄᓇᒧᑦ ᑰᒃᑎᑕᐅᓂᐊᖅᐳᖅ
- AEM ᐊᑐᕐᓂᐊᖅᐳᖅ ᒪᓕᒃᓗᑎᒃ ᐊᑐᖅᑕᒥᓂᒃ ᒫᓐᓇ ᐊᐳᖅᑎᓐᓈᖅᑐᒥ ᐊᒻᒪ ᐃᓚᐅᑎᓐᓂᐊᕐᓗᒍ ᐳᔪᕐᑲᑖᑉ ᒥᒃᓵᓄᑦ ᐱᓕᕆᐊᖅᑲᓕᕈᑎᒃ ᓴᓇᒋᐊᓚᐅᖏᓐᓂᕐᒥᖕᓂᒃ ᐅᔭᕐᑲᑕᕆᐊᒥᒃ

KIA-WL-20: Incinerator Dust Fall Monitoring
KIA-WL-20: ᐊᒃᑕᑯᓂᒃ ᐃᑭᑎᑦᑎᑎᓪᓗᒋᑦ ᐃᓯᐊᖑᑭᓂᖕᒋᓐᓂᒃ ᖃᐅᔨᓴᕐᓂᖅ

Issue

- Our concern follows from KIA-WL-17
  - We require more detail regarding AEM’s dust fall monitoring
- The incinerator management plan only included emissions guidelines for mercury, dioxins and furans

ᐃᓱᒪᓗᑦ

- ᐃᓱᒪᓗᑎᕗᑦ ᒪᓕᖕᒪᑦ ᑭᐊ-WL-17 ᒥᒃ
  - ᑐᑭᓯᒃᑲᓐᓂᕆᐊᖃᖅᐳᒍᑦ AEM ᑯᑦ ᖃᐅᔨᓴᕐᓂᕆᓂᐊᖅᑕᖕᒋᓐᓂᒃ ᐳᔪᖃᑖᑦ ᒥᒃᓵᓄᑦ
- ᐊᒃᑕᑯᓄᑦ ᐃᑭᑎᑦᑎᓂᖕᒋᑦᑕ ᐊᐅᓚᑦᑎᓂᖕᒋᑦ ᐅᖃᐅᓯᖃᓚᐅᖃᒪᑕ ᒪᓕᒐᓂᒃ ᐅᓗᕆᐊᓇᖅᑐᓐᒃ ᐃᒃᑎᑦᑎᓂᖅ ᑭᓵᓂ ᓱᖅᓗ ᒧᑯᕆ, ᓇᐃᔭᖅᓗᖕᓇᖅᑐᓂᒡᓗ ᐊᓯᖕᒋᓐᓂᒃ

KIA-WL-20: Incinerator Dust Fall Monitoring
KIA-WL-20: ᐊᒃᑕᑯᓂᒃ ᐃᑭᑎᕐᑎᑎᓪᓗᒋᑦ ᐃᓯᐊᕐᑭᓂᖏᓐᓂᒃ ᖃᐅᔨᓴᕐᓂᖅ

Resolution

- AEM has committed to:
  - Include a summary of all dust monitoring stations
  - Specify which sources they are able to characterize
  - Place high volume air samples downwind of the open pits and the Tailings Storage Facility
  - Specify detection limits and analytical procedures
  - Monitor the snowpack
- This will be included in the Dust Management Plan prior to any material being placed in the Tailings Storage Facility

ᐊᖅᑭᒋᐊᖅᑕᐅᓯᒪᔪᖅ

- AEM ᐱᓂᐊᕐᓂᖃᖅᐳᖅ:
  - ᐃᓚᐅᑎᕐᑎᓂᐊᕐᓗᑎᒃ ᑕᒪᐃᓐᓂᒃ ᐳᔪᖃᑖᓂᒃ ᖃᐅᔨᓴᕐᕕᖕᓂᒃ
  - ᓇᓗᓇᐃᓇᓗᑎᒃ ᓱᓇᓂᒃ ᖃᐅᔨᔪᓐᓇᕐᒪᖔᑖ
  - ᐊᖏᔪᓂᒃ ᓯᓚᒥᒃ ᖃᐅᔨᓴᕐᓂᖃᕈᓐᓇᕐᓗᑎᒃ ᐅᖅᑯᖅᓱᓂᕐᓂ ᐅᔭᕋᒃᑕᕐᕕᑦ ᐊᒻᒪ ᐃᕐᕈᖅᑐᐃᔾᔪᑎᕕᓃᑦ ᐃᓂᖏᓐᓂᒃ
  - ᓇᓗᓇᐃᓇᓗᑎᒃ ᑭᒡᓕᖏᓐᓂᒃ ᖃᐅᔨᓴᕈᑏᑦ ᐊᒻᒪ ᖃᓄᖅ ᐱᓕᕆᕝᕕᖕᓂᖏᓐᓂᒃ
  - ᖃᐅᔨᓴᕐᓗᑎᒃ ᐊᐳᑏᑦ ᒥᒃᓵᓄᑦ
- ᑕᒪᓐᓇ ᐃᐊᓗᓂᐊᖅᑐᖅ ᐳᔪᕐᓂᒃ ᖃᐅᔨᓴᕐᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᓪᓗ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᓂᒃ ᐃᕐᕈᖅᑐᐃᔾᔪᑎᕕᓂᕐᓐᓄᑦ ᑲᑎᖅᓱᐃᕝᕕᒃᓴᖅ ᐊᑐᓕᐊᐅᖅᑎᓐᓇᒍ

KIA-WL-22: STP Discharge Criteria
KIA-WL-22: STP ᑯᕕᔭᐅᓂᖓᓄᑦ ᒪᓕᒐᒃᓴᖅ

Issue

- AEM intends to use *“Biological reactors like Bionest Kodiak units… to treat camp waste water.”*
  - No discharge criterion has been included for oil and grease
  - This request is conservative as discharges go to CP1 prior to the receiving environment

ᐃᓱᒫᓗᑦ

- AEM ᐊᑐᕐᓂᐊᕐᒪᑕ “ᐃᕿᖅᑐᐃᔾᔪᑎᓂᒃ ᒥᐊᕐᔫᑎᒥᒃ ᐱᓕᕆᕝᕕᖕᓂ ᐃᕿᖅᑐᐃᔪᓐᓇᖅᑐᓂᒃ”
  - ᖃᓄᖅ ᑯᕕᓯᓂᐊᕐᒪᖓᕐᒥᒃ ᐅᖅᓯᖅᑎᕿᑎᓂᒃ ᐃᓚᐅᔪᖃᖏᑦᑐᖅ
  - ᑖᒻᓇ ᑐᒃᓯᕋᐅᑦ ᒥᑭᓂᖅᓴᐅᕗᖅ ᑯᕕᖅᑕᖅᑕᐅᔪᑦ ᑐᕌᓱᖑᖓᒪᑕ CP1 ᒧᑦ ᓯᓚᒧᑦ ᐊᕙᑎᒧᑦ ᑎᑭᓚᐅᕐᓇᑎᒃ

KIA-WL-22: STP Discharge Criteria
KIA-WL-22: STP ᑯᕕᔭᐅᓂᖓᓄᑦ ᒪᓕᒐᒃᓴᖅ

Resolution

- AEM will confirm grease traps from the outlet of the kitchens and other possible sources of oil and grease
- AEM has clarified the sewage treatment plant will only ever discharge to CP1 – there will be no discharge to tundra

ᐋᖅᑭᒋᐊᕈᑦ

- AEM ᓇᓗᓇᐃᓇᓂᐊᖅᐳᑦ ᐳᓐᓂᕐᓂᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᒃᓴᓂᒃ ᐃᒐᕝᕕᖕᒥ ᐊᒻᒪ ᐊᓯᖕᒋᓐᓂ ᐅᖅᓱᕐᑲᕐᕕᖕᓂ, ᐳᓐᓂᕐᓂᕐᑲᕐᕕᖕᓂ.
- AEM ᓇᓗᓇᐃᓇᓯᒪᔪᖅ ᕐᑯᕐᕕᖕᒧᑦ ᑯᕕᖅᑕᕐᕕᒃ ᑯᕕᓯᕐᑲᑦᑕᕐᓂᐊᖅᑐᖅ CP-! ᒧᑦ ᑭᓯᒥ – ᓄᓇᐃᓐᓇᕐᒧᑦ ᑯᕕᔪᕐᑲᕐᑲᑦᑕᕐᓂᐊᖕᒋᑦᑐᖅ

KIA-WL-23: Untested Cyanide Detoxification Process
KIA-WL-23: ᐆᒃᑐᖅᑕᐅᓯᒪᖕᒋᑦᑐᑦ ᑐᖁᓐᓇᖅᑐᑦ ᓴᐃᔭᓇᐃᑦ ᐅᓗᑎᐊᓇᕈᓐᓂᖅᑎᑕᐅᓂᖕᒋᓐᓄᑦ ᒪᓕᒋᐊᓖᑦ

Issue

- The cyanide detoxification has yet to be tested at the Meliadine Site
- The total volume of process water to be managed has yet to be confirmed

ᐃᓱᒫᓗᑦ

- ᓴᐃᔭᓇᐃᑦ ᒥᒃ ᐅᓗᑎᐊᓇᕈᓐᓃᖅᑎᑦᑎᓂᖅ ᐆᒃᑐᖅᑕᐅᓯᒪᖕᒋᑦᑐᖅ ᓱᓕ ᑕᓯᕐᔪᐊᕐᒥ ᐱᓕᕆᔾᕕᐊᓂ
- ᐃᒪᕐᒥᒃ ᖃᓄᖅ ᐊᒃᑎᒋᔪᒥᒃ ᐊᑐᕐᓂᐊᕐᒪᖔᕐᒦᒃ ᓱᓕ ᓇᓗᓇᐃᖅᓯᒪᖕᒋᑦᑐᑦ

KIA-WL-23: Untested Cyanide Detoxification Process

KIA-WL-23: ᐆᒃᑐᖅᑕᐅᓯᒪᖕᒋᑦᑐᑦ ᑐᕐᑯᓐᓇᖅᑐᑦ ᓴᐃᔭᓇᐃᑦ ᐅᓗᑎᐊᓇᕈᓐᓂᖅᑎᑕᐅᓂᖕᒋᓐᓄᑦ ᒪᓕᒋᐊᓖᑦ

Resolution

- AEM has confirmed they will use the same technology to detoxify cyanide applied at Meadowbank
- AEM has committed to an “as needed” treatment approach for discharges to Meliadine Lake from CP1
  - AEM will add cyanide detoxification to the treatment plant if they are unable to meet the cyanide discharge criteria
  - AEM will recirculate effluent that does not meet discharge criteria and store it in CP1 until the treatment system has been installed and is operational

ᐊᖅᑭᒋᐊᕈᑦ

- AEM ᓇᓗᐊᐃᖅᓯᒪᔪᑦ ᒪᓕᖕᓂᐊᕐᓂᕐᒥᓂᒃ ᐅᓗᑎᐊᓇᕈᓐᓃᖅᑎᑦᑎᓂᖕᒋᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥ ᐊᑐᖅᑕᐅᔪᑦ ᒪᓕᒃᑕᐅᓂᐊᕐᒪᑕ ᑕᓯᕐᔪᐊᕐᒥ
- AEM ᐱᓕᕆᓂᐊᕐᓂᕋᖅᑐᑦ “ᐊᑐᕆᐊᖃᕐᖓᒥᒃ ᑭᓯᐊᓂ” ᐊᖅᑭᒋᐊᖅᓯᕐᑲᑦᑕᕐᓂᐊᕐᓂᕐᒥᒃ ᑯᕕᑎᑦᑎᔭᕐᖓᒥᒃ ᑕᓯᕐᔪᐊᕐᒧᑦ CP1 ᒥᑦ
  - AEM ᐃᓚᓯᖃᑦᑕᕐᓂᐊᖅᐳᑦ ᓴᐃᔭᓇᐃᑦ ᒧᑦ ᐅᓗᑎᐊᓇᕈᓐᓃᕈᑎᒥᒃ ᐅᖓᐅᖅᑯᑦᑎᓯᒪᔭᕐᖓᒥᒃ ᓴᐃᔭᓇᐃᑦ ᑯᕕᔭᐅᔪᓐᓇᕐᓂᖕᒋᑦᑕ ᒪᓕᒐᖕᒋᓐᓂᒃ
  - AEM ᐊᑐᒃᑲᓐᓂᖃᑦᑕᕐᓂᐊᖅᐳᑦ ᐃᒪᕐᔫᒻᒥᒃ ᓈᒻᒪᖕᒋᒃᑲᖕᒐᑦ ᑯᕕᔭᐅᔪᓐᓇᕐᓂᖕᒐ ᐊᒻᒪ ᑐᖅᑯᖅᑕᐅᖃᑦᑕᕐᓂᐊᖅᓗᓂ CP1 ᒧᑦ ᐊᖅᑭᒋᐊᕈᑖ ᐃᓕᔭᐅᓚᐅᖅᑎᓐᓇᒍ ᐊᒻᒪ ᐊᐅᑦᑖᓕᓚᐅᖅᑎᓐᓇᒍ

KIA-WL-24: Application of Water Quality Criteria to Modelled Results

KIA-WL-24: ᐊᑐᖅᑕᐅᓂᐊ ᐃᒪᑦᑎᐊᕙᖅᑲᖅᓂᐅᑉ ᒪᓕᒋᐊᖅᑲᖅᓂᖕᒋᑦ ᐊᑐᓕᖅᑕᐅᓯᒪᔪᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᑯᓄᑦ

Issue

- Metal Mining Effluent Regulations (MMER) have been compared to modeled dissolved metals concentrations in the collection ponds
  - MMER applies to total metals
- AEM has provided modeled results with the maximum average Total Suspended Solids concentration added to the dissolved fraction

ᐃᓱᒫᓗᑦ

- ᓴᕕᒃᓴᒥᒃ ᐅᔭᕋᖕᓂᐊᕐᓃᑦ ᒪᓕᒐᖕᒋᑦ ᐊᔾᔨᓯᔭᐅᓯᒪᖕᒪᑕ ᓄᖑᓴᖅᓯᒪᔪᓄᑦ ᓴᕕᒃᓴᓄᑦ ᑲᑎᖅᓱᖅᓯᒪᔪᓄᑦ ᑕᓯᕋᓕᐊᕐᓂ
  - MMER ᑐᕌᖅᐳᖅ ᑕᒪᐃᓐᓄᑦ ᓴᕕᖕᓄᑦ
- AEM ᑐᓂᓯᓯᒪᕗᖅ ᖃᐅᔨᓂᕐᓂᒃ ᐊᖕᒋᓂᖅᐹᒥᒃ ᐳᒃᑕᓛᖅᑐᓂᒃ ᓴᕕᒃᓴᓂᒃ ᐃᓚᔭᐅᓯᒪᔪᓂᒃ ᓄᖑᓴᖅᓯᒪᔪᓄᑦ

KIA-WL-24: Application of Water Quality Criteria to Modelled Results

KIA-WL-24: ᐊᑐᖅᑕᐅᓂᐊ ᐃᒪᑦᑎᐊᕙᖅᑲᖅᓂᐅᑉ ᒪᓕᒋᐊᖅᑲᖅᓂᖕᒋᑦ ᐊᑐᓕᖅᑕᐅᓯᒪᔪᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᑯᓄᑦ

Resolution

- We are no longer concerned regarding the comparison of MMER criteria to the dissolved fraction operations
  - Water in all collection ponds will report to CP1
- During post closure, all collection ponds are considered the receiving environment
  - They will be maintained until they are acceptable for discharge to the environment
  - Final discharge criteria will be established in a later version of the Closure Plan

ᐋᖅᑭᒋᐊᕈᑦ

- ᐃᓱᒫᓗᒋᔪᓐᓃᖅᑕᕗᑦ MMER ᒪᓕᒐᖕᒋᑦ ᓄᖑᓴᖅᓯᒪᔪᓄᑦ ᐊᐅᓪᓚᕈᑎᓄᑦ
  - ᑕᒪᕐᒥᒃ ᐃᒪᐃᑦ ᑲᑎᑕᐅᔪᑦ ᑕᓯᕋᕐᓂ ᐃᓕᔭᐅᓂᐊᖅᐳᑦ CP1 ᒧᑦ
- ᐅᒃᑯᐊᓚᐅᖅᑎᓪᓗᒍ ᑕᒪᕐᒥᒃ ᑕᓯᕋᐃᑦ ᐃᓱᒪᒋᔭᐅᓂᐊᖅᐳᑦ ᐊᕙᑎᒧᑦ ᑲᑎᖅᓱᕐᕕᒃᑐᑦ
  - ᒥᐊᓂᕆᔭᐅᓂᐊᖅᐳᑦ ᑯᕕᔭᐅᔪᓐᓇᖅᓯᓚᐅᖅᑎᓐᓇᒋᑦ ᓄᓇᒧᑦ
  - ᑭᖑᓪᓕᖅᐸᖅᓯᐅᑦ ᒪᓕᒐᒃᓴᖅ ᓴᖅᑭᑕᐅᓂᐊᖅᐳᖅ ᖃᑯᒍᒃᑲᓐᓂᖅ ᐸᕐᓇᖕᓂᕐᒧᑦ ᐅᒃᑯᐊᕐᓂᒃᓴᖕᒐᓄᑦ

KIA-WL-25: Dust Suppression Along Roads
KIA-WL-25: ᐊᐸᕐᑯᑏᑦ ᑭᒡᓕᐊᓂ ᐳᔪᕐᑲᑖᕐᑲᓗᐊᖅᑕᐃᓕᓂᖅ

Issue

- AEM intends to use saline groundwater as a dust suppressant
  - Saline water is not approved for use in Nunavut as a dust suppressant
  - Saline brines are also considered a contaminant under the United States Environmental Protection Agency

ᐃᓱᒪᓗᑦ

- AEM ᐊᑐᓕᒫᔪᑦ ᑕᕆᐅᓕᖕᓂᒃ ᐃᒪᕐᒥᒃ ᐳᔪᕐᑲᑖᑏᒃᑯᑎᒋᓗᒍ
  - ᑕᕆᐅᓕᒃ ᐃᒪᖅ ᐊᖏᖅᑕᐅᓯᒪᖏᑦᑐᖅ ᐊᑐᖅᑕᐅᓂᖓ ᓄᓇᕗᑦ ᐃᓗᐋᓂ ᐳᔪᕐᑲᑖᒃᑯᑎᒋᓗᒍ
  - ᑕᕆᐅᓖᑦ ᐊᑯᓯᒪᔪᑦ ᐅᓗᕆᐊᓇᖅᑐᒥᑎᑕᐅᔪᑦᑕᐅᖅ ᐊᒥᐅᕆᑲᓐ ᓄᓇᖓᓐᓂ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᒥᐊᓂᖅᓯᔾᖏᓐᓄᑦ

KIA-WL-25: Dust Suppression Along Roads
KIA-WL-25: ᐊᐸᕐᑯᑏᑦ ᑭᒡᓕᐊᓂ ᐳᔪᕐᑲᑖᕐᑲᓗᐊᖅᑕᐃᓕᓂᖅ

Resolution

- AEM has committed to apply to the Government of Nunavut to approve application of saline groundwater originating from the Meliadine Site as a dust suppressant prior to its use

ᐋᖅᑭᒋᐊᕈᑦ

- AEM ᑐᒃᓯᕋᕐᓂᐊᕐᓂᕋᖅᑐᖅ ᓄᓇᕗᑦ ᒐᕙᒪᒃᑯᖕᒋᓐᓂᑦ ᐊᖕᒋᖅᑕᐅᔾᔪᑎᒥᒃ ᐊᑐᕈᓐᓇᕐᓂᕐᒥᒃ ᑕᕆᐅᓕᖕᒥᒃ ᐃᒪᕐᒥᒃ ᑕᓯᕐᔪᐊᕐᒥᙱᖅᑐᒥᒃ ᐊᑐᕐᓂᐊᕐᓗᒍ ᐳᔪᕐᑲᑖᒌᒃᑯᑎᒧᑦ ᐊᑐᕆᐋᓚᐅᖕᒋᓐᓂᕐᒥᓂᒃ

- AEM has committed to apply to the Government of Nunavut to approve application of saline groundwater originating from the Meliadine Site as a dust suppressant prior to its use

KIA-WL-26: Dust Deposition to Nippisar Lake
KIA-WL-26: ᐳᔪᖅᑲᑖᖅᑲᓕᖅᑎᑦᑎᓂᖅ ᑕᓯᓐᓈᕐᒥᒃ

Issue

- Concern regarding the impact of dust from the bypass road on the Rankin Inlet water supply located in Nippisar Lake

ᐃᓱᒪᓗᑦ

- ᐃᓱᒪᓗᑦ ᐱᑉᓗᒍ ᐳᔪᖅᑲᑖᒃ ᐃᒃᐱᖕᓇᕐᓂᑎᓂᐊᖅᑕᖕᒐ ᑲᖕᒋᖅᓱᓂᐅᑉ ᐃᒥᖅᑕᕐᕕᐊᓄᑦ ᑕᓯᓐᓈᕐᒥ

KIA-WL-26: Dust Deposition to Nippisar Lake
KIA-WL-26: ᐳᔪᖅᑲᑖᖅᑲᓕᖅᑎᑦᑎᓂᖅ ᑕᓯᓐᓈᖅᒥᒃ

Resolution

- Alternative road routes are being discussed with the hamlet council of Rankin Inlet

ᐋᖅᑭᒋᐊᕈᑦ

- ᐊᓯᐊᒍᑦ ᐊᐸᖅᑯᓯᐅᕋᔭᖅᓂᖅ ᒫᓇ ᐅᖃᐅᓯᐅᔪᖅ ᕼᐊᒻᓕᑦᑯᑦ ᑲᑎᒪᔨᖕᒋᓐᓄᑦ ᑲᖕᒋᖅᓱᓂᖅᒥ

KIA-WL-27: Reclamation of Dry Stack Tailings
KIA-WL-27: ᐊᑐᒐᒃᓴᖑᖅᑎᑦᑎᓂᖅ ᐸᓂᖅᑐᓂᒃ ᐅᔭᕋᒃᓴᐃᔭᕐᕕᐅᔪᕕᓂᕐᓂᒃ

Issue

- Concern regarding the time line for progressive reclamation of the dry stack tailings.

ᐃᓱᒪᓗᑦ

- ᐃᓱᒪᓗᑦ ᐊᑯᓂᐅᓂᓇᓂᐊᖅᑕᖓ ᐊᑐᒐᒃᓴᕈᒃᑲᓐᓂᕈᓐᓇᕐᓂᖏᑦ ᐸᓂᖅᑐᑦ ᐅᔭᒐᒃᑕᖅᑕᐅᓂᑯᕕᓃᑦ.
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KIA-WL-27: Reclamation of Dry Stack Tailing
KIA-WL-27: ᐊᑐᒐᒃᓴᖑᖅᑎᑦᑎᓂᖅ ᐸᓂᖅᑐᓂᒃ ᐅᔭᕋᒃᓴᐃᔭᕐᕕᐅᔪᕕᓂᕐᓂᒃ

Resolution

- AEM has indicated progressive reclamation will be started in year 7

ᐋᖅᑭᒋᐊᕈᑦ

- AEM ᓇᓗᓇᐃᖅᓯᒪᔪᑦ ᐱᓕᕆᐊᖃᒻᒪᕆᖕᓂᖅ ᐅᑎᖅᑎᑦᑎᕙᓪᓕᐊᓂᕐᒥᒃ ᓄᓇᒥᒃ ᑕᐅᑦᑐᕆᓚᐅᖅᑕᖕᒐᓄᑦ ᐱᒋᐊᕐᓂᐊᖅ ᐅᑭᐅᖅ 7 ᖕᒐᓂ

QUESTIONS?

ᐊᐱᕐᕐᒃᑯᑏᑦ ?