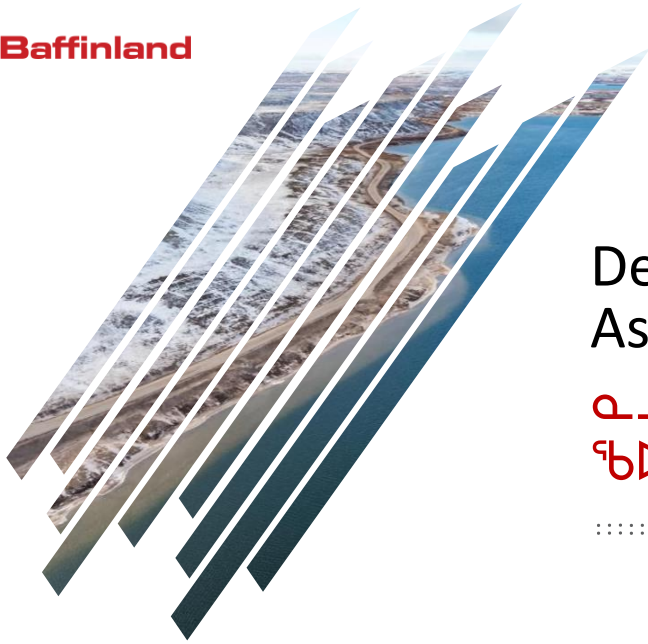


[illegible]

- Description of Assessment
ፍጥነት ለመግለጽ
- Assessment Findings
ፍጥነት ለመግለጽ ፍጥነት ለመግለጽ
- Mitigation and Monitoring
ፍጥነት ለመግለጽ ፍጥነት ለመግለጽ
- Technical Review Summary
ፍጥነት ለመግለጽ ፍጥነት ለመግለጽ
- Project Certificate Conditions
ፍጥነት ለመግለጽ ፍጥነት ለመግለጽ
- Summary
ፍጥነት ለመግለጽ ፍጥነት ለመግለጽ



Description of Assessment

ᓇᓗᓇᐃᑭᑎᓐᑦ
ᖃᐅᓐᓴᐃᓂᐅᓪᓂᑦ

.....

Phase 2 Considerations

ᐊᓐᑎᓪᑦᑎᐊᓐᑦᐅᓐᓴᓐᓴᓐ 2



Mine Site ᐅᓐᓴᓐᓴᓐᓴᓐ

Increased Production
Secondary Crusher Moving to Port

ᐅᓂᓐᓴᓐᓴᓐᓴᓐ ᐅᓐᓴᓐᓴᓐᓴᓐᓴᓐ
ᐱᖃᓪᑎᓐᓴᓐ ᓴᖃᓪᑎᑭᑎ ᓂᓐᓴᓐ ᑭᓐᓴᓐᓴᓐ

Increased Ore Dust, but less compared to previous predictions

ᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ ᑭᓐᓴᓐ
ᐊᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐ ᓂᓐᓴᓐᓴᓐᓴᓐᓴᓐᓴᓐ



Rail/Road Corridor ᐊᓐᓴᓐᓴᓐᓴᓐ/ᐊᓐᓴᓐᓴᓐᓴᓐᓴᓐᓴᓐ

Structure and Modifications
Short-term Increase in Traffic
Long-term Decrease in Traffic

ᐊᓐᓴᓐᓴᓐᓴᓐ ᐊᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ
ᓴᐱᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ ᐅᓂᓐᓴᓐᓴᓐ
ᓴᓐᓴᓐᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ ᐅᓂᓐᓴᓐᓴᓐ

Short-term Increase in Road Dust during construction
Overall Long-term Decrease in Road Dust with switch to rail
ᓇᐃᓐᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐ
ᐊᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ ᓴᓐᓴᓐ
ᓂᓐᓴᓐᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ



Milne Port ᓴᑭᓐᓴᓐᓴᓐ ᓴᓐᓴᓐᓴᓐ

Increased Development Area
Increased Activity

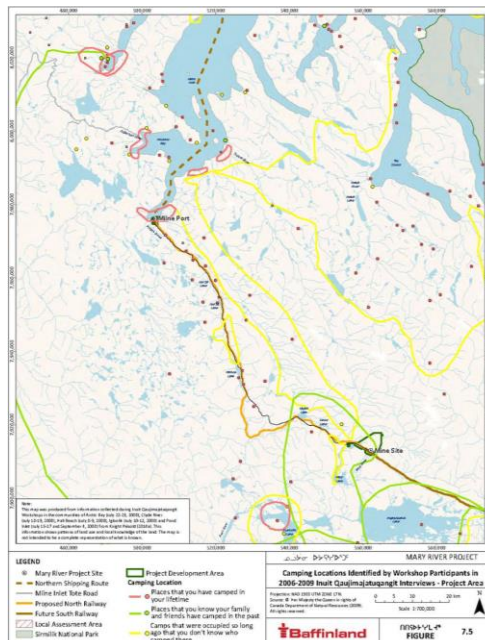
ᐅᓂᓐᓴᓐᓴᓐᓴᓐ ᓴᓂᐱᓐᓴᓐ
ᐅᓂᓐᓴᓐᓴᓐᓴᓐ ᓴᓂᐱᓐᓴᓐᓴᓐ

Increased Ore Dust and Emissions
ᐅᓂᓐᓴᓐ ᓴᓂᓴᓐᓴᓐ ᓴᓐᓴᓐ ᐊᓐᓴᓐᓴᓐᓴᓐ

Key Issues Summary

ለጎረቤታችሁ ጋራ ጋራ ልማት ማድረግ

- Community concerns: / ሙሉ ምክር ቤት ለገቢያት፡
 - metals in dust
ሃይናንቴክኒክ ንጥረ ነገሮች
 - food safety
መጠጥጥ ምግብ ምርት ለማረጋገጥ
 - drinking water safety
ለጥጥ ምግብ ምርት ለማረጋገጥ
 - animal health
እንስሳት ምርት ለማረጋገጥ
 - air quality
የአየር ምርት ለማረጋገጥ



Focus of Assessment

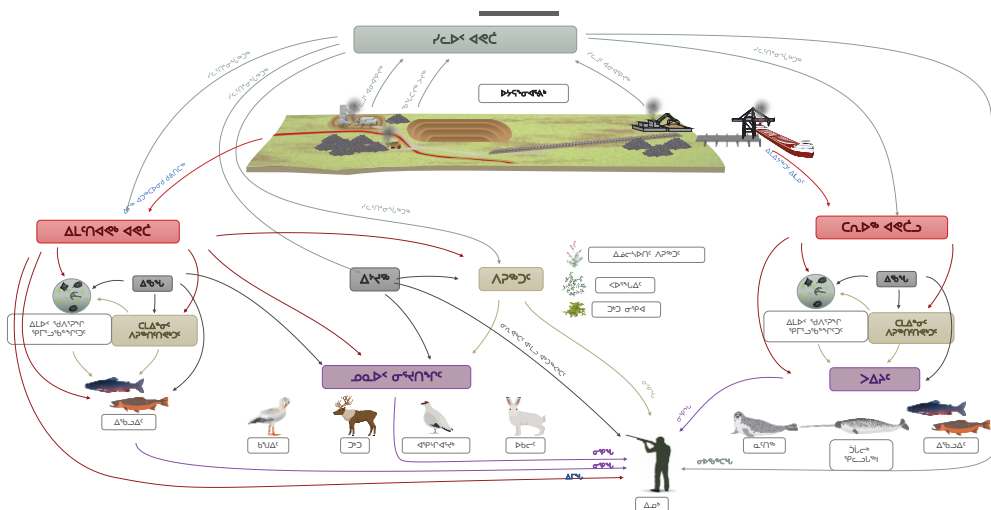
CDJ[®] ማረፊያ ጥንቃቄ

- [illegible]



The diagram illustrates the pathways of contaminants from an industrial project to various environmental compartments and ultimately to humans. The main components and their interactions are as follows:

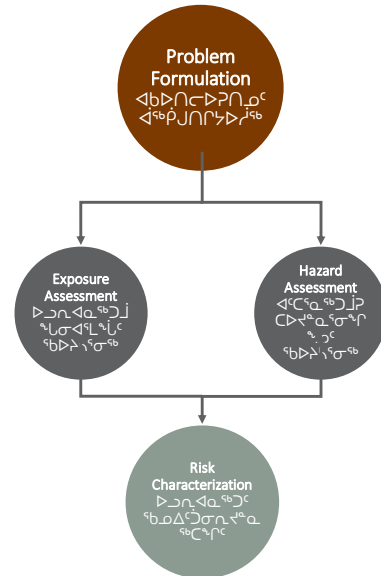
- Atmospheric Environment:**
 - Project:** Source of Air Emissions, Fugitive Dust, and Effluent Discharge.
 - Deposition:** Contaminants move from the atmosphere to the land and water environments.
- Freshwater Environment:**
 - Contaminant Pathways:** Effluent Discharge from the project and Deposition from the atmosphere.
 - Biological Components:** Aquatic Invertebrates, Sediment, Primary Producers, and Arctic Char.
- Marine Environment:**
 - Contaminant Pathways:** Release to Water from the project and Deposition from the atmosphere.
 - Biological Components:** Aquatic Invertebrates, Sediment, Primary Producers, Ringed Seal, Narwhal, and Arctic Char.
- Terrestrial Wildlife:**
 - Contaminant Pathways:** Deposition from the atmosphere.
 - Biological Components:** Medicinal Plants, Berries, Lichen, Snow Goose, Caribou, Ptarmigan, and Arctic Hare.
- Human Exposure:**
 - Contaminant Pathways:** Diet (from Arctic Char, Ringed Seal, Narwhal, Arctic Hare, and Terrestrial Wildlife), Inhalation (from the atmosphere), and Drinking Water (from the freshwater environment).



Assessment Methodology

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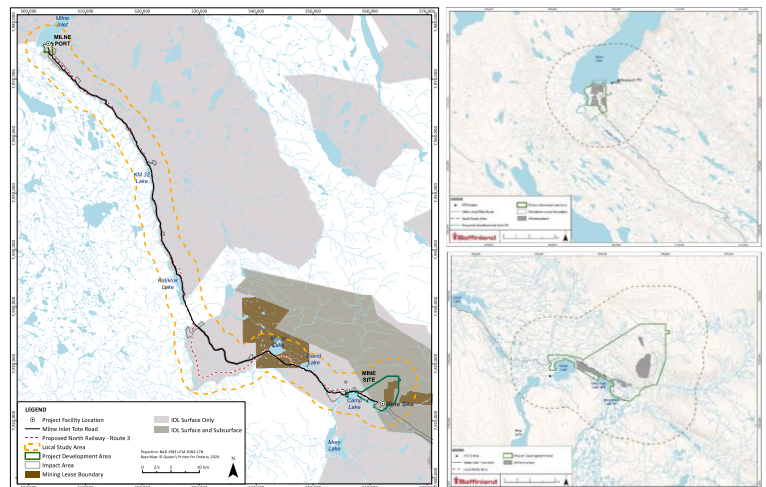
- Followed Health Canada Guidance
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$
- Protective Assumptions
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$
- Upper bound operational conditions
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$
- Families with young children and Elders
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$
- Short and long term exposure potential
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$
- Local hunting and gathering
 $L_{C-CD} / L_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b} \leq C_{C-CD} / C_{C-b}$



Existing Conditions and Study Area – Mine Site

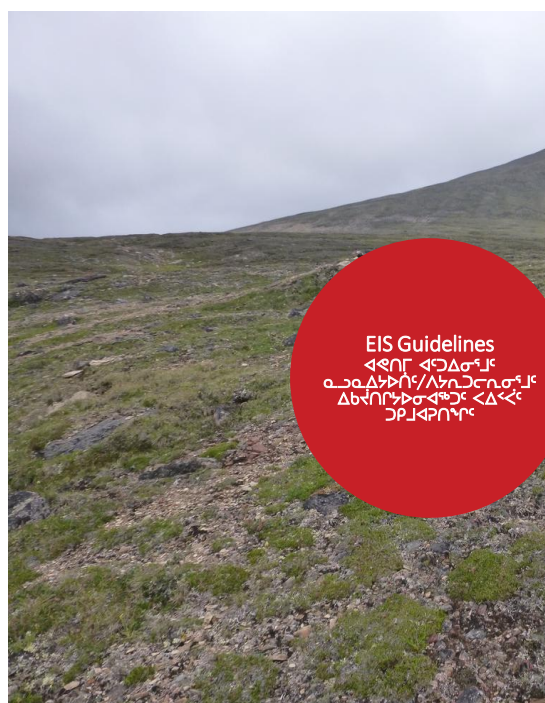
גלעד

ኤፌዴሪ ሲሰር ልኪ
ኤፕላይክሽን ሙሉ -
ኖሎጋስት
ፊኖሎጋስት



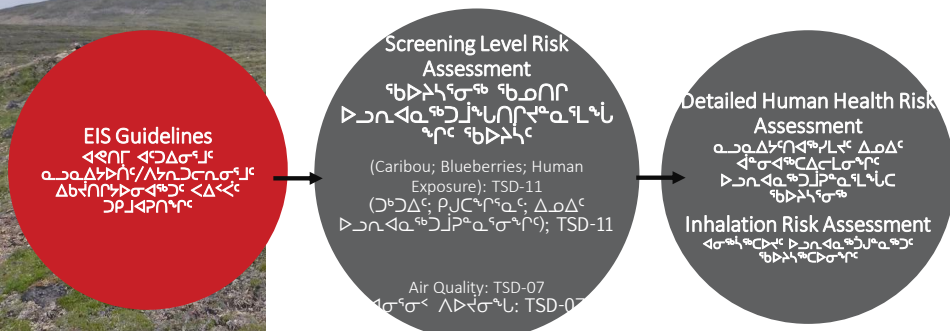
Key Issues / **א' תרל"ד-ב' תרל"ה**

- Human Health Risk Assessment
 Δ ልዩ ክፍል ሲኖር ለሕዝብ ጤና ምክንያት የሚፈጸሙ የአደጋ ምክንያቶችን ማረጋገጥ
- Inhalation Assessment of Combustion Emissions
 ማቆራረጥ የሚችል የአየር ንፍሰት ምክንያቶችን ማረጋገጥ
- Human Health Based Dustfall Thresholds
 ለሕዝብ ጤና ምክንያት የሚፈጸሙ የአደጋ ምክንያቶችን ማረጋገጥ
- Food Security Assessment
 ምርትና የጥቅም ምንጮችን ማረጋገጥ
- Worked Example of Exposure and Risk Estimates
 ለሕዝብ ጤና ምክንያት የሚፈጸሙ የአደጋ ምክንያቶችን ማረጋገጥ



Additional Study

ፍፁም ምርጫ ለሰላምና ለሰጠው



Conclusions

ᐅᓂᕈᑦ

- Mining activities will result in release of dust from the ore in the vicinities of the Mine Site and Milne Port, and from road dust along the Northern Transportation Corridor.

[illegible]

Conclusions

[illegible]

- Once rail is constructed, dust levels from transportation of ore will be greatly reduced

ካዲንድንሲ ሞረጥ፣ ጎረቤቶቻችንን አድርጎ ማጥፋት ምንም ጥረትም አያድርግም።



[illegible]

- Ore dust deposition from the Project is not predicted to result in levels of metals in the Local Study Area that would be harmful to the health of animals considered in the assessment, including caribou, arctic hare, ptarmigan, snow goose, narwhal, ringed seal, and sea run arctic char

[illegible]

- Project related health risks associated with country foods consumption from the local study area are negligible;
ለሮቢፋኒኤን ሕጋዊ ድርጅት የተዘጋጀው የአጠቃላይ የጥሬ አምራችነት ምርመራ በጣም ተስማሚ ነው፡፡
- Project related health risks continue to be negligible when additional exposure pathways are considered (drinking surface water; ingestion of soil and dust; inhalation of air);
ለሮቢፋኒኤን ሕጋዊ ድርጅት የተዘጋጀው የአጠቃላይ የጥሬ አምራችነት ምርመራ በጣም ተስማሚ ነው፡፡



Conclusions

[illegible]

- Some air quality guideline exceedances are predicted at the boundary of the Project Development Area at the Mine and Port sites, however the overall risks to human health remain low;

[illegible]

- Inhalation risks associated with dustfall and air releases for land users outside the Project Development Area are low;

[illegible]

Conclusions

[illegible]

- Nitrogen dioxide concentrations are predicted to meet the Nunavut Air Quality Standard but exceed the Canadian Ambient Air Quality Standard at some locations outside the Project Development Area.

[illegible]

▷ ၁၈၁၁ ခုနှစ် ဇူလိုင်လ ၁ ရက်နေ့

.....

◀▷Δσ⁹ᵇᵇL▷Δ⁹▷ΔΠ⁹Πσ⁹ᵇ

- Switch from ore trucks to rail
 ስታላክ ማሽኖችን ወደ ራይል ማሽኖች ለመቀየር ይቻላል
- Road dust suppression and speed limits
 ማሽኖች ላይ ደረቅ ማቆላለጫ እና ምጣኔ ማጠቃለያ
- Indoor Crushing at Port
 ማሽኖችን በቤት ውስጥ ማቆላለጥ
- Shrouding on crushers, screens and conveyor transfers
 ማሽኖች ላይ ማቆላለጫ ማስተካከል





Project Mitigation

ለርኢጋህበራዊ

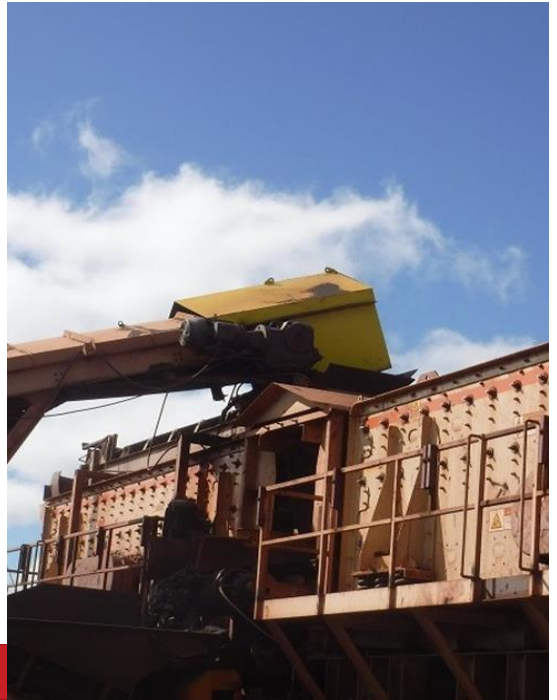
[illegible]

- Low-emission vehicles and idling policy
ᐃᑦᓂᕈᖅᐱᑦᐳᑦᐸᑦᓴᒋᔪᖅ ᓄᓇᕈᐢᕐᓴᓚᖅᐵᑦᐸ ᐱᒻᒫᑦ ᓄᓇᕈᐠᑦ ᓄᖁᖅᓴᒋᔪᕐᐸ ᐸᑲᑦᐸᑲᑲᑯᑦᓴᑲᖅᓴᒋᓂᕐᓴᑦ ᐱᑶᑲᒻᓴᖅ
- Application of Dust Suppressant on Stockpiles at Milne Port
ᑭᑦᐸᑲᑯᑦᐱᑦᐳᑦᐸᑦᓴᒋᔪᖅ ᓴᐱᑦᓴᑲᖅᓴᑲᖅᐸᕈᑦ ᑦᕆᓴᕈᐱᑦᐸ ᑯᑦᑲᑦᐸᑲᑯᑦ

Each of these mitigations have subsequent beneficial effects for minimizing effects on human health and country foods by reducing risk for pathway

[illegible]

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Monitoring and Follow-up Programs

உதாரணமாக, $\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$

[illegible]

Baffinland will continue with monitoring during all phases
(including closure). / <ᑭᓇᐱᒃ ᐅᑦᐳᕋᔪᕆᐁᖅ ᐸᓄᐱᕈᖅ> CLΔ-σϰᓴᖅ
Λᑭ-τᐘσᖅ σᓲᓯᓂ (Λᑭᓶᐤᐵᐢᐣᐮᐬᓴᐤσᓴ).

Comprehensive monitoring programs:

Air Quality / ፖሊጥ ለጋራ ጤናዎቻችን

- Continuous on-site air quality monitoring
ከገንዘብና ሰው ሀይል ጋር ለመቆጣጠር የሚያስፈልግ የሆነው ነው።
- Seasonal off-site air quality monitoring
የአየር ንፍሰት ለመለካተት የሚያስፈልግ የሆነው ነው።
- Monthly dustfall monitoring
የአየር ንፍሰት ለመለካተት የሚያስፈልግ የሆነው ነው።



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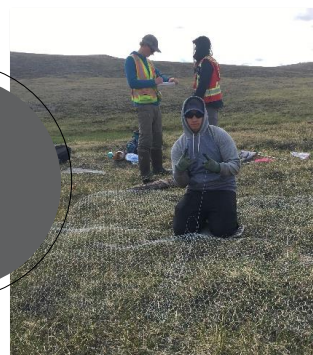
Monitoring and Follow-up Programs

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ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐ

Terrestrial environment / ᓂᓂᓂᓐ ᓂᓂᓂᓐ

- Soil
ᓂᓂᓂᓐ ᓂᓂᓂᓐ
- Lichen and other Biota
ᓂᓂᓂᓐᓂᓐ ᓂᓂᓂᓐ ᓂᓂᓂᓐ
- Caribou Tissue Sampling
ᓂᓂᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ



Monitoring and Follow-up Programs

ᓇᓂᓂᓐᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐ ᓂᓂᓂᓐ

ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐ

Freshwater environment / ᓂᓂᓂᓐ ᓂᓂᓂᓐ

- Sediment, surface water and mine effluent
ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ, ᓂᓂᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐ
- Fish health and benthic invertebrates
ᓂᓂᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ ᓂᓂᓂᓐ ᓂᓂᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ



Risk Communication Strategy

[illegible]

- The strategy will focus on building capacity within community groups to understand the mining process, elements of the mining process and how substances produced from the mining process move in the environment.

[illegible]

- Baffinland will work with communities to develop this program to ensure it is relevant to Inuit.

Adaptive Management

- Multiple Adaptive Management Programs link to human health and environment (air quality, terrestrial, freshwater, marine)

[illegible]

- Qikiqtani Inuit Association and Baffinland will jointly develop and approve the AMP and sub-plans.

- A working group will oversee the development of the AMP
 ለፕላንና ለፖሊሲዎች ለሚሰሩት ሰራተኛ ሰባት ሰራተኛ ሰባት AMP

Adaptive Management

- Thresholds and triggers in the AMP will be based on Inuit, regulatory and Baffinland objectives and requirements
ኢንሱይት ለጥበቃው ድርጅት ለምዕራባዊ ልማትና ማስተካከያ ምክር ቤት የሚመለከቱትን ላይነት አሳይተዎትል
- Inuit will participate in the development and approval of objectives, indicators, thresholds, and response requirements for all environmental sub-plans included
ልማትና ማስተካከያ ምክር ቤት በአካባቢያዊ ምክር ቤት ማህበረሰቡ ላይ ለምዕራባዊ ልማትና ማስተካከያ ምክር ቤት የሚመለከቱትን ላይነት አሳይተዎትል

Key Commitments

- Air Quality monitoring framework
የአየር ዓላማ ማከበርና አዳጅ የአየር ንብረት ትንተና
- Review options to reduce NO^x emissions
የNO^x መነስ አማራጮች ፈልጎች ምርመራ
- New equipment procurement will meet Tier 4 standard or better
አዲስ መሳሪያዎች ሞደል 4 ወይም በሙሉ የሚጓዙ ደረጃዎችን ይሟላሉ
- Monitoring of COPCs reported in the country foods risk assessment
በአገሪቱ የጥሬ እና የተዘጋጀው የእጭር ምጣኔ ምርመራ ውጤት
- Risk communication strategy
የደረሰው ጉዳት ምን ያህል ጊዜ ይደርስ ይለቀቃልል



Summary

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Summary

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- Risk assessment studies were completed
ᐊᑦᑕᑦᓇᑦᓯᓐᓂᑦ ᑲᐅᓯᓚᓂᐅᓯᓚᓂ ᐱᓴᓚᑦᑕᐅᓯᓚᓂᑦ
- Protective assumptions
ᓴᓂᓯᐅᓯᓚᓂᐅᓯᓚᓂᑦ ᐃᓯᓴᓴᓂᐅᓯᓚᓂ
- Included assessment of major exposure pathways
ᐱᑲᓯᐅᓯᓚᓂᐅᓯᓚᓂᑦ ᑲᐅᓯᓚᓂᐅᓯᓚᓂᑦ ᐊᓯᓴᓴᓂᑦ ᐊᓯᓚᓂᑦᓂᑦᑕ ᐊᓯᓴᓴᓂᑦᓂᑦᑕ
- Project-related health risks in the Local Study Area to Inuit Land users are negligible to low
ᐱᓴᓴᓴᓂᑦ ᐊᓯᓚᓂᑦᓂᑦᑕ ᐱᓴᓴᓴᓂᑦ ᐊᓯᓚᓂᑦᓂᑦᑕ ᑲᐅᓯᓚᓂᐅᓯᓚᓂ ᐃᓂᓂᑦᑕ
ᐊᓯᓚᓂᑦᓂᑦᑕ ᓂᓂᓂᑦ ᐊᓯᓴᓴᓂᑦ
- Project is not predicted to result in levels of metals in the Local Study Area that would be harmful to the health of animals considered in the assessment
ᐱᓴᓴᓴᓂᑦ ᐊᓯᓚᓂᑦᓂᑦᑕ ᐊᓯᓚᓂᑦᓂᑦᑕ ᐊᓯᓚᓂᑦᓂᑦᑕ ᐊᓯᓚᓂᑦᓂᑦᑕ ᑲᐅᓯᓚᓂᐅᓯᓚᓂ ᓂᓂᓂᑦ
ᐱᓴᓴᓴᓂᑦ ᓂᓂᓂᑦ

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ልጅ ኢትዮጵያ 622, ልጅ ልጅ ልጅ
 ልጅ ልጅ ኢትዮጵያ 102
 ልጅ ልጅ, ልጅ X0A 0H0