

Amendment Application for the Hamlet of Igloolik Water Licence 3AM-IGL----

Nunavut Water Board Technical Meeting
July 7 – 8, 2020

[illegible]

ፌዴራል ሊገረሰፓል፣ ከባለሙያ ጋራ ለጥናትና ምርምር
የሚደረግ ስራ ለጥራት ምርምርና ምርመራ
ኅዳር 7 - 8, 2020



Outline

1. Role and Responsibilities

2. Contributions to the Water Licence Review

3. Technical Review Comments

- I. Hazardous Waste Leachates
- II. Operational Procedures in the Operation and Maintenance Manual Volume I
- III. Upgrades and Updates of Operation and Maintenance Manual Volume I
- IV. Slope Rehabilitation
- V. Health and Safety
- VI. Spill Contingency Plan
- VII. Geothermal Monitoring
- VIII. Water Flow Meters
- IX. Types of Waste Approved in Licence
- X. Information Requests Not Yet Provided

4. Comment Resolution Status

5. Conclusion

$$\triangleleft \triangleright \triangleleft^{\text{fb}} \sqsubset \triangleright \sigma \triangleleft^{\text{fb}} \triangleright^{\text{c}}$$

- [illegible]



[illegible][illegible]

- [illegible]





Contributions to Review

CIRNAC made the following submissions to the Nunavut Water Board regarding application to amend Water Licence 3AM-IGL---- by the Government of Nunavut - Community Government Services (GN-CGS):

- Information Requests: March 23, 2020
- Technical Review Comments: June 12, 2020

ΔCCTΠNϙ ϙPΓPΛDϙdϙJPC

ρϙϙCTΠNΛDσϙPC LϙLJϙbϙdϙdϙ
dϙϙbϙbϙbϙPLϙdϙ JϙϙLϙϙ ϙL
DρDϙbCϙJPC JϙϙLϙσϙ ΛCTNϙϙ
bϙCΓdϙ DdσϙL JσρϙbρDΠPLϙϙ
dϙϙLΓ ΔLCTNσϙJPC bΠLρdϙ
JbρϙDΠϙL CTΔϙJPC ϙϙbρPϙDρLϙJ
CTΔϙ ϙϙDΠCTb 3AM-IGL----
dϙCTσ LϙLbϙdϙσϙJ
ΛρϙΠϙϙbϙdϙ (GN-CGS) :

- JϙLϙDρCΔJLPLϙϙ ϙCT ϙJΔϙdϙDϙPCJϙ:
LϙJ 23, 2020
- ϙJdϙϙJσϙ ϙPΓϙPϙσϙJPC DϙbDρϙΔϙ:
ϙσ 12, 2020



I. $\mathcal{H}^{\mathfrak{a}} \mathcal{Q}^{\mathfrak{b}} \mathcal{C}^{\mathfrak{c}}$ $\mathcal{H} \mathcal{K} \Delta^{\mathfrak{c}}$ $\Delta^{\mathfrak{a}} \mathcal{J}^{\mathfrak{b}} \mathcal{C}^{\mathfrak{c}}$

- $\triangleright d \triangleleft \prec^q \triangleleft \dot{\cap}^c$
 $\triangleleft \triangleright \Delta^a \triangleleft \triangleright \cap \triangleleft \triangleright^q \cap^c \triangleright^c \triangleleft^q \cap^c \sigma^c$
 $\triangleleft \cap^c \cap^c \triangleleft^q \cap^c \sigma^c \triangleright^c \wedge \triangleleft \cap^c \triangleleft^q \triangleright^c,$
 $\sigma \cap^c \triangleright \cap^c \triangleright^c \prec^c \prec^q \triangleleft \triangleright \cap^c \triangleleft^q \prec^c$
 $\triangleleft^q \cap^c \cap^c \triangleleft^q \prec^q \prec^q \prec^q \prec^q:$
 - $\triangleleft \triangleright \triangleleft^c \cap \sigma^c \triangleright^c \wedge \prec^c \dot{\cap}^c \triangleleft^q \triangleleft$
 $\triangleleft^q \cap^c \triangleleft \triangleleft^q \cap^c \sigma^c \triangleright^c \triangleleft \triangleright \triangleright^q \triangleleft$
 $\prec^q \triangleleft \triangleright^c.$
 - $d \triangleleft \prec^q \cap^q \triangleright \triangleleft \sigma \triangleright^b \prec^c \prec^q \sigma^c \triangleright^c$
 $\prec^q \triangleleft \triangleright^c.$
- $\prec^q \triangleleft \triangleright \cap \triangleleft \cap^q \cap^c \cap^c$
 $\triangleleft^q \triangleleft^q \cap^q \triangleright^q \cap^q \cap^c \triangleright \triangleleft \triangleright \triangleleft^c \cap \sigma^c \triangleright^c$
 $\triangleleft \triangleleft \triangleleft \triangleright^c$
 $\triangleleft \triangleright \Delta^a \triangleleft \triangleright \cap^c \cap^c \prec^q \cap^c \triangleleft \triangleleft^b.$



I. $\mathcal{H}^{\mathfrak{g}}_{\mathfrak{u}} \subset \mathcal{H}^{\mathfrak{g}}_{\Delta} \subset \Delta^{\mathfrak{g}, \mathfrak{u}}_{\mathfrak{u}}$

$$\triangleleft \triangleright c^{\epsilon} d \triangleright c \triangleleft^{\epsilon} b.$$

- (R-01) $\supset \sigma \rho \lambda \mu \triangleleft \tau^b$:
 - $\langle \sigma \mu \rangle \cap \tau \triangleleft \rho \lambda \uparrow \Gamma^c \triangleleft \Delta \tau^c \cap \sigma^c \downarrow^c$
 $\Delta^c \mu \cap \sigma^c \cap \tau^c \triangleleft \tau^c \sigma^c \downarrow^c \triangleleft \mu$
 $\triangleleft \rho \mu \downarrow^c \cap \tau^b \triangleleft \rho \mu \sigma \tau^c \text{ ከ } \sigma^c \sigma^c$
 $\Delta \downarrow \sigma^b \cap \tau^c \triangleleft \tau^c \sigma^c \downarrow^c$; $\triangleleft \mu \downarrow$
 - $\triangleleft \Delta \tau^c \cap \sigma^c \downarrow^c \text{ ከ } \lambda \rho \lambda^c \sigma^c \sigma^c \downarrow^c \downarrow$
 $\triangleleft \mu \downarrow \sigma \delta \uparrow \sigma^b \sigma^c \triangleleft \tau^c \rho \sigma^c \Gamma$
 $\langle \sigma \mu \rangle \cap \Gamma^c \text{ ርዕሶ ርዕሱ ወ}^c$
 $\Delta \rho^c \cap \lambda \mu \triangleleft \sigma^b \sigma^c \downarrow^c$, ከ $\mu \lambda \triangleleft \uparrow \sigma^b$
 $\Delta^c \sigma^b \text{ ከ } \mu \Delta^c \sigma^b \triangleleft \rho \lambda \tau^c \sigma^b \triangleleft \tau^c$.



I. $\mathcal{H}^{\infty}_{\mathcal{Q}} \mathcal{H}^{\infty}_{\Delta} \Delta^{\infty}_{\mathcal{J}}$

- ሲባል ሲሆን ለሀገራችን ስሜት ማሳደግና ለሀገራችን ስሜት ማሳደግ ይቻላል፡፡
 - ለሀገራችን ስሜት ማሳደግና ለሀገራችን ስሜት ማሳደግ ይቻላል፡፡
 - ለሀገራችን ስሜት ማሳደግና ለሀገራችን ስሜት ማሳደግ ይቻላል፡፡
 - ለሀገራችን ስሜት ማሳደግና ለሀገራችን ስሜት ማሳደግ ይቻላል፡፡

$$\triangleleft \triangleright c^{\circ} d \triangleright c \triangleleft^{\circ} b :$$

- [illegible]



**III. ԾԱԴԴՆՎՈՐՈՒՄ ԳԼ ՇԿՆՈՐՈՅՈՒՄ
ՎՃՐՈՄՅՈՒՄ ԳԼ ՏՆԵՊԱՆՈՒՄԻՆՅՈՒՄ
ՇՆՈՐՈՒՄ ԳԼ ԳԼՈՒԽ 1**

- [illegible]

- (R-04) Revise the Operation and Maintenance manual to reflect the current state of the Sewage Disposal Facility and its current operations.
- (R-05) Update the Operation and Maintenance manual with current maps and site photos.
- (R-06) Submit Construction Summary Reports for the new infrastructure.

III. ԵՐԵՎԱՆԻ ԳԼԽԱՎՈՐ ԴԱՏԱՎՈՐՈՒԹՅԱՆ
ԿԵՆՏՐԱԼԻԶԱՆԵՐԻ ՎԵՐԱԿՈՆԿՐԱԿՈՒՄԸ
ՎԵՐԱԿՈՆԿՐԱԿՈՒՄԸ ԵՎ ԴԱՏԱՎՈՐՈՒԹՅԱՆ
ԿԵՆՏՐԱԼԻԶԱՆԵՐԻ ԿՈՆԿՐԵՏԱՆԵՐԸ 1

$$\Delta \mathcal{D} \subset \mathcal{D} \subset \mathcal{D}^{\text{b}} \subset \Delta \mathcal{D}^{\text{b}} :$$

- (R-04) ᐊᓴᐅᐱᐊᓪᐱ ᐊᐅᓕᐱᓂᓴᑭᐅ
ᓕᓕᐱᓴᓪᐱ ᐃᓴᐅᐱᐊᓴᐅᓂᓴᑭᐅ ᐊᐱᐊᓴᐅ
ᐱᓴᓴᐱᐱᐊᓂᓴᓪᐱ ᓴᓴᐱᐊᐅᐅᐅ
ᐊᐱᓴᓕᐱᐊᓂᓴᓴ ᐅᐱᓴᐅᓴᐅᐅ
ᐊᐅᓕᓂᓴᓴᓴ.
- (R-05) ᐅᓕᓴᓴᐱᐱᓪᐱ ᐊᐅᓕᐱᓂᓴᑭᐅ
ᐊᐅᓕᐱᐊᓂᓴᓴᓴ ᐱᓴᐅᐅ ᐊᐱᐊᓴᐅ ᓴᓴᓴᓴᐱᐱ
ᐅᐱᓴᐊᐅ ᐊᓴᓴ ᐃᓂᓴᓴᐅᐅᐅ
ᐊᓴᓴᐅᐅᓴᓴᐱᐱᐊᐅᐅ.
- (R-06) ᐱᓴᓴᓴᓴ ᐅᓕᐅ ᓴᐱᐅᐅᓂᓴᓴᓴ ᐱᓴᐅᐅ
ᐱᐱᐱᓴᓴᓴᓴᓴᓴ ᐅᓂᓴᓴᓴᓴᓴᓴᓴᓴ.

IV. ԴՆԵԼՆԸ ՎԳԲՐՎԳԸՍԴՐԸ

- [illegible]

IV. $\rho_{\Delta^0} \rightarrow \pi^0 \rho^0 \rightarrow \pi^0 \pi^0 \pi^0$

$$\langle D \rangle \approx d \sqrt{N} \approx d \sqrt{N_{\text{eff}}} \approx d \sqrt{N_{\text{eff}} \frac{1}{\langle \sigma \rangle}} \approx d \sqrt{N_{\text{eff}} \frac{1}{\langle \sigma \rangle \frac{1}{\langle \sigma \rangle}}}$$

- [illegible]

VI. $d\Delta \prec^c b \supset \Delta \sigma \triangleright^c <^c$
 $\rho \triangleright \sigma \vdash <^c \omega \triangleright^c$

- [illegible]

VI. $d\Delta \leftarrow b \supset \Delta \sigma \triangleright^b \prec^c$ $\nearrow \sigma \nmid \prec^c \Omega \triangleright^c$

$$\langle D \rangle \leq \langle D \rangle_{\text{max}} \leq \langle D \rangle_{\text{min}};$$

- [illegible]

VII. ወደፊት ለሚመጣ የሥራ ስልጣን

$$\Delta \mathcal{D} \subset \mathcal{D} \subset \mathcal{D}^{\text{b}} \subset \mathcal{D}^{\text{b}} \subset \mathcal{D}^{\text{b}}:$$

- [illegible]



VIII. Water Flow Meters

Recommendation:

- (R-12) Flow meters be installed on the water intake at South Lake and the wastewater train.

VIII. ΔΓΔ< Δ&ρ&σ&λσ< &βΔ&λΔ&ρ<

ΔΔ<&δ<Δ<&β:

- (R-12) ΔΓΔ< Δ&ρ&σ&λσ<
&βΔ&λΔ&ρ< Δ&βρ&λ&β<Δ&λσ<&λσ<
σρ&β<ρ&λ<ΔΓ <ρ<Δ<
Δσ<ρΔΔ&λσ<ΔΓ.



IX. $\rho \gamma \Delta^a \omega \Delta^c \gamma \Delta^c$
 $\Delta^a \gamma \Delta^c \gamma \Delta^c \Delta^c \Delta^c \Delta^c$

- [illegible]

IX. $P\uparrow\Delta^a\Delta^c$ $P\Delta^c$
 $\Delta^a P C \triangleright P L \leftarrow^c$ $C \Delta H \Gamma$

$$\langle D^{\epsilon} d^L c^{\epsilon} \rangle:$$

- [illegible]

X. $\mathcal{H} \subset \mathcal{P} \subset \mathcal{J} \subset \mathcal{L} \subset \mathcal{R} \subset \mathcal{S}$

- Information requested by CIRNAC as part of the Information Request stage of the application remains outstanding due to Covid-19 travel restrictions in Nunavut.
- CIRNAC understands this situation and will request that this information be provided prior to the Public Hearing.

X. $\mathcal{H}^{\infty}$ - $\mathcal{H}^2$ ֆունկցիաներ

◁▷c^adLc▷^ab:

- [illegible]

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Qujannamiik

Thank you

Merci

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