



Crown-Indigenous Relations
and Northern Affairs Canada

Relations Couronne-Autochtones
et Affaires du Nord Canada

NUNAVUT WATER BOARD	
Date:	January 15, 2020
Exhibit No.:	16

Lupin Mine Timiuyuq

**Nutaaguqtiqniqa Ihuqhaqnigalu Tuukhiqtuut
Immaqmiq Aturiagani Laisiuyumik 2AM-LUP1520-**

mik Lupin-mi Uyaraktaqvikmi Havaami

Nunavumi Immaligiyit Katimayit Inuknik Naalaktitiviani

Kugluktuk, Ubluqtuhirvia 15-16, 2020

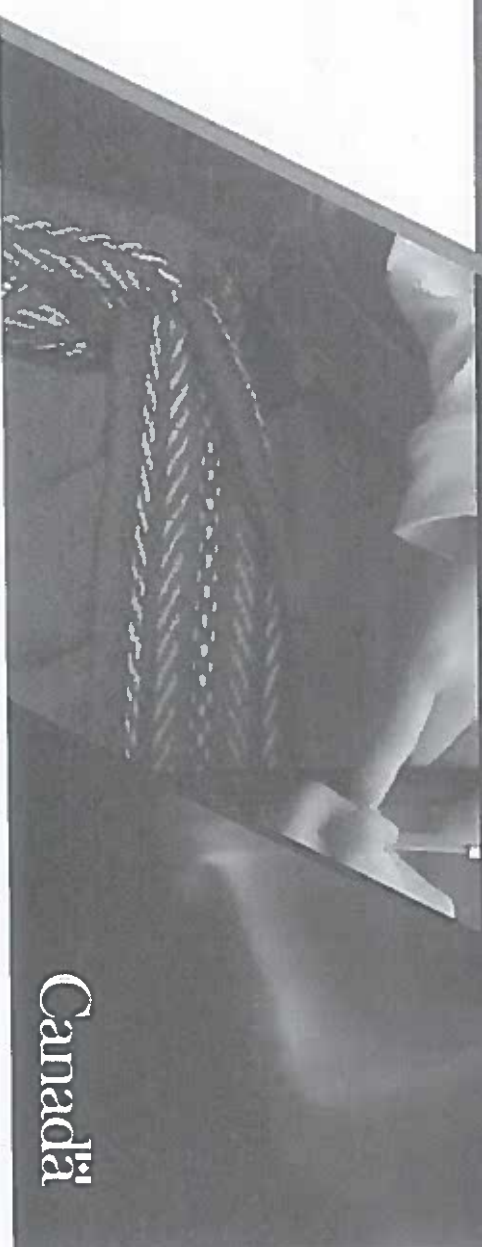
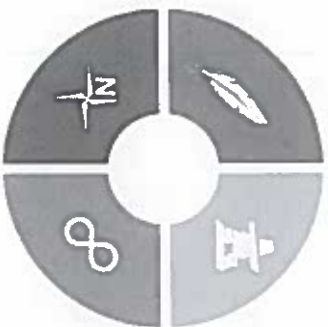
Lupin Mine Inc.

**Renewal/Amendment Application for
Water Licence 2AM-LUP1520 for**

Lupin Mine Project

Nunavut Water Board Public Hearing

Kugluktuk, January 15-16, 2020



Canada



Outline

- Role and responsibilities
- Contributions to review
- Technical review comments
 - Tailings and waste rock
 - Closure and reclamation planning
 - Reclamation security cost estimate
- Conclusion

Qanuriniga

- Havaangit Munariyanginniklu
- Ilagiarutit ihivriiriagani
- Nutauniqhanik ihivriuqnigani uqauhiuyut
 - Ataguut iqaguulu uyaqaat
 - Umikitiqnigagut Nunalu Utiqtiniganik Ilitquhianut parnaiyainiq
 - Nunat utiqtitagaani ilitquhiinut ihumaaluknaitagani akiliriqhimagayup akituniga nalautaqtayup
- Iniqtirutit





Roles and responsibilities

Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) responsibilities, mandate, and obligations are in alignment with the following:

- *Department of Crown-Indigenous Relations and Northern Affairs Act*
- *Nunavut Agreement*
- *Nunavut Land Claims Agreement Act*
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the associated regulations
- *Nunavut Planning and Project Assessment Act*
- *Territorial Lands Act* and the associated regulations
- *Arctic Waters Pollution Prevention Act*

Havaangit Munariyanginniklu

Kuin Nunaqaqaqtut Havaqatiriiknigit Ukiuqtaqtumilu Havauhiyut Kanatami (CIRNAC) havaagit, havaakhitauñigit, aturiaqaqtailu nalaumanignik ukunuga:

- *Havakviyuq Kuin Nunaqaqaqtulu Havaqariiknigit Ukiuqtaqtumilu Malingaqyuaq*
- *Nunavumi Agiqatiriigut*
- *Nunavumi Nunataqnikut Agiqatiriigut Malingaqyuaq*
- *Nunavumi Immaligiyit Nunavumilu Qaaginik Ihumaquutiniik Naalakittiyit Malingaqyuaq* ilagiyailu maliruat
- *Nunavumi Upalugaiaqniqmik Havaaniklu Iliuqtaut Malingaqyuaq*
- *Ukiuqtaqtumi Nunaliqinikut Malingaqyuaq* ilagiyailu maliruat
- *Ukiuqtaqtumi Immavaluit Halumaigitaagani Malingaqyuaq*





Contributions to review Ilagiarutit ihiviriagani

The department made the following submissions to the Nunavut Water Board regarding application to amend and renew water licence 2AM-LUP1520 by Lupin Mines Inc. :

- Information requests: March 4, 2019
- Technical review: April 30, 2019
- Attendance and presentation at the Technical Meeting / Pre-Hearing Conference: June 6-7, 2019
- Review of submissions for commitments: December 6, 2019
- Final submission: December 18, 2019

Havakviuyuq ukuniga tunihihimayuq Nunavumi Immaligiyyit Katimayiinnut pijutauyunik tuukhiqtuut inuqhairagani nutaaguqtiqlugulu immaqmik aturiagani laisiyuq 2AM-LUP1520 Lupin-mi Uyarakhluqtit Timiyyumit :

- Hivuniquhijutit tuukhigauyut: Qiqailruq 4, 2019
- Nutauniquhanik ihivriunig: Qittiqautijut 30, 2019
- Ilauyut katimaqatauyulu Nunauniquhanik Katimanigmi Hivuaniluniit Naalakitiyut Katimaqyuagnigani: Imaruqtiivia 6-7, 2019
- Ihivriunig it tuniayut kiujutit tuhariagani: Ubluqtiivia 6, 2019
- Kiguliq tunihijut: Ubluqtiivia 18, 2019



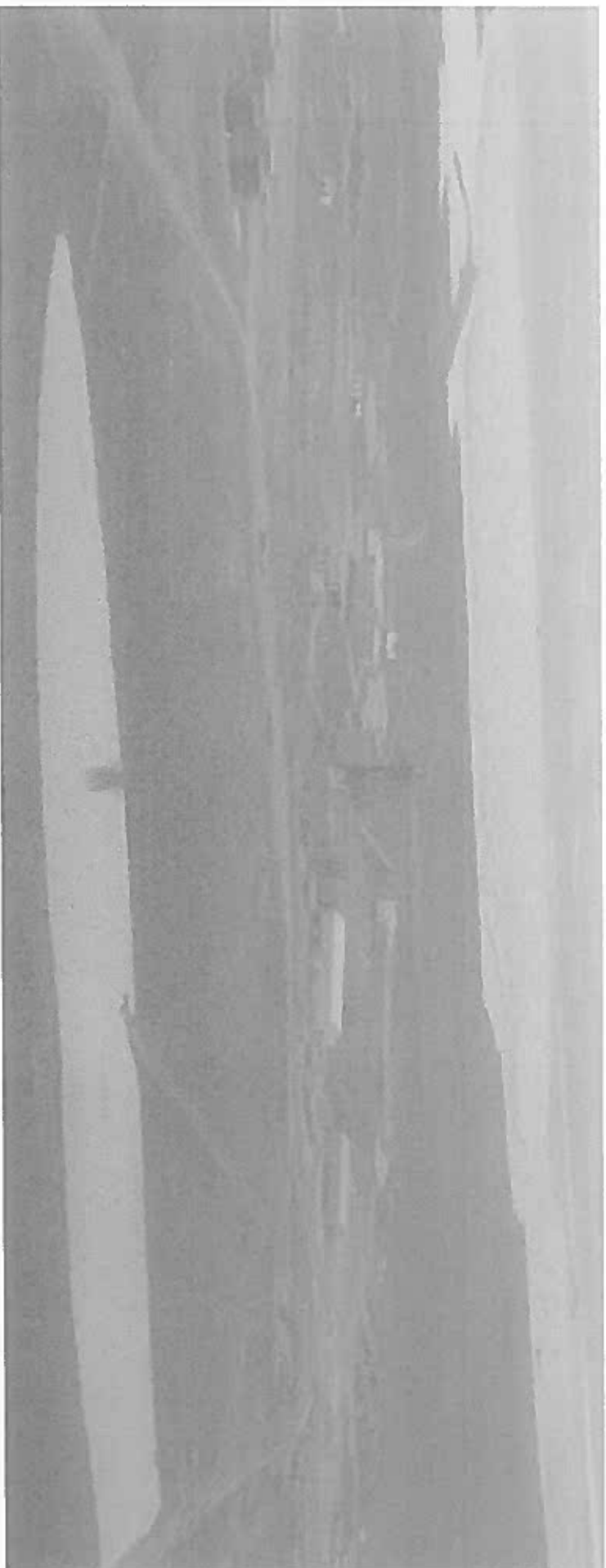


Lupin Mine Site

- Operated as a gold mine beginning in 1982
- Site was in care and maintenance since 2005
- Site currently under closure

Lupin Mine Igluqpaqavik

- Atuqtauyuq kuulmik uyaraktaqviuvluni atuliqhuni 1982-mi
- Igluqpaqavik munariyauyuq ihuaqhaqtauvluinilu 2005-mit
- Igluqpaqavik taja umikhimayuq





Tailings and waste rock Ataiguut iqaguulu uyaqaat

I. Potential contamination from waste rock used across as construction material (Commitments #3 & #4)

- Historical construction data should be reviewed to estimate how much waste rock has been used for infrastructures such as the dams
- Once volume of waste rock is known, we can assess if it is necessary to do geochemical modelling and pathway analysis for potential waste rock acid rock drainage

I. Halumailruqalaqtuq iqagunit uyaqanit atuqtauyut humiliqaa hanavikni ihuaqutavlutik (Uqariyaqhimagayut #3 & #4)

- Taimanit hananiganik naunaipkutit ihivriqtakhaugaluit nalautariagani qanuraaluk iqaguut uyaqat atuqtauniginik hanayaayunik ajikutainik himiktuutit
- Qanuraaluk iqatuut uyaqat naunaikat, iiltuqhalaqtagut aturiaraqmagaa nunami halumailruvaluit qanuriniginiq aulavigiyainiklu iiltuqhautit iqagunit uyaqanit halumailruq uyaqanit kutikniginik





Tailings and waste rock Ataguut iqaguulu uyaqaat

II. Waste rock storage “dome” design & seepage (Commitments #5 & #7)

- Design details needed for newly proposed storage of waste rock
- Satisfied with proposal to collect seepage samples and update model

II. Iqagunik uyaqanik tuutquqtigvik”kigikninua” qanuriniga kuukviunigalu (Uqariiyaqhimayut #5 & #7)

- Qanuriniganik hunaunigit ihariagiyaayut nutaanuami aturumayaayut
tuukquqtirivikhamik iqagunik uyaqanik
- Naamaktut atulirumayaayut katitiriagani kuukniginit
naunaiyagakhat nutaaguqtigluulu atuqtut





Tailings and waste rock

Ataguut iqaguulu uyaqaat

III.Exposed tailings

(Commitment #8)

- Tailings will be exposed when water level is lowered in tailings management area – these need to be moved to contained cells
- Information provided is not a satisfactory decision management matrix

III.Takuukhauyt ataguut

(Uqariyaqhimayut #8)

- Ataguut takuukhauiliniagtut immaiqtiliqat ataguuvik munariyauyuq nuna – ukua nuutariaqaqtut hiamayaktailijutini atuniituni
- Hivunihijutit pipkagauyut naamagituq ihumaliurut munarinigagut uyaraktaqnigmi





Closure and reclamation planning

Umiktiqniqagut Nunalu Utiqtiñiganik Ilitquhianut parnaiyainiq

I. Human health ecological risk assessment

(Commitment #1)

- Human health ecological risk assessment provided does not cover tailings containment area
- Results indicate monitoring plan needs to be updated

I. Inuit Aaniaginigut Nunamiklu Ihumaaluknaqniganik Ilituqhaut

(Uqariyaqhimayut #1)

- Inuit aaniaginigut nunamit ihumaluknaqniganik ilituqhaut pipkagauyuq uqauhiqagimmat ataguunik hiamayaktailivikmik nunamik
- Qanurinigut naunairutiut amirinigagut upalugaiyaut nutaaguqtiqtauyariaqaqtuq





Closure and reclamation planning

Umiktignigagut Nunalu Utiqtiniganik Iltqhianut parnaiyainiq

II. Geotechnical details of engineered structures (Commitment #6)

- Geotechnical design is necessary to evaluate if proposed activities are adequate
- long term erosional stability of dams is biggest concern

II. Nunaliqijutit uqatiaqtauyut hanayakhanik qanuriginik (Uqariyaqhimayut #6)

- Nunaliqijutit qanuriginik aturiaqatqutq naunaiyariagani atulirumayayut huilijuit naamakpata – hivunikhami hituagitaagani himiktuutit aginiqhaq ihumaluut





Reclamation security cost estimate

I. Updated security estimate (Commitment #2)

- Insufficient explanations have been provided for reducing costs
- The department has not been able to create a new reclamation estimate with the limited information provided by LMI

Nunat utiqtitaaqani ilitquhiinut ihumaaluknaitagani akiliriqhimagayup akituniga nalautaqtayuyq

I. Nutaaguqtiglugu ihumaluknaqniga nalautaqaayuyq (Uqariiyaqhimayut #2)

- Naamagitut uqatiarutit pipkagaayut akikhivaaliriagani akitunigit
- Havakviuyuyq ayuqhaqmata hanayaagani nutaamik nunat utiqtitaaqani ilitquhiinut nalautaaruutimik ilakuinaunignik hivuniqhijutit pipkagaayut LMI-kunit



Reclamation security cost estimate

II. Framework for progressive release of security (Commitment #9)

- The department and proponent have been working towards a joint proposal

**Nunat utiqtitaaqani
ilitquhiinut
ihumaaluknaitagani
akiliriqhimayuup akituniga
nalautaaqtauyug**

II. Qanurinihaa hapkugauvalianiginik ihumaluknaipkutit akiligaayut (Uqariiyaqhimayut #9)

- Havakviyuug havaaqarumayuglu havagatiriiktut ikayuqtiriiklutik atulirumayamiknik piyaagani





Outstanding Issues

1. Long term stability of cover and dams
2. Management of tailings exposed when water levels are lowered.
3. Insufficient information for security estimation

Iniqhimagitut Ihumagiyauyut

1. Hivunikhami naamainaqniga hauhijutit himiktuutilu
2. Munarinigit ataguut takuukhauyut immaiqtiliqat iliuraivik.
3. Naamagitut hivuniqhijutit ihumaluknairiagani akiliutit nalautaqtayut



Conclusion

The department will support Lupin Mine Inc.'s renewal/amendment application when the stated outstanding issues are resolved.

Iniqtitrutit

Havakviuyuq ikayuqtuqniakut Lupin Mine Timiuyumit nutaaguqtiniganik ihuahagniganiklu tuukhiutimik ukua uqautauyut iniqhimagitut ihumagiyauyut ihuaqhikpata.



Koana

Young Adults

Thank you

Merci



