



Box 1856 Yellowknife, NT X1A 2P4

November 7, 2019

Shannon Allerston
Regulatory Officer
Mackenzie Valley Land & Water Board
sallerston@mvlwb.com

Intervention Submission: Giant Mine Remediation Project

File: MV2007L8-0031

1.0 Introduction

The Yellowknife Historical Society is pleased to provide comments towards the Public Review of the Giant Mine Remediation Project's water license application. We reviewed the proposed 'Closure and Reclamation Plan' and have participated in the Technical Sessions and Workshops held in the summer and fall of 2019. We continue to participate moving forward and acknowledge the cooperation of the Proponent and the Board in helping us through this process.

The Project will have a significant impact on the Society's future land use of the area. Since 2002, our group, in cooperation with the former mineral rights holder Miramar Mining, the City of Yellowknife, and the Giant Mine Remediation Project, has established a heritage destination site at the Giant Mine Townsite Lease. Our main project is a community museum utilizing the Giant Mine recreation hall building but has also invested in displays at the City boat launch parking lot and maintains other buildings in the area. The Society has a long tenure of land use within the project boundaries and is adversely impacted by both the Remediation Project activities and the post-remediated future site design.

The Society has been guaranteed access to our Sublease parcel for the duration of the Remediation Project (see **Attachment 2**). This Sublease contains our recreation hall building which is proposed for the museum facility. However, access to our other areas for which the

Society does not hold legal tenure (City Boat Launch Parking lot area, A-Shaft powerhouse, and the Commissary building) is adversely impacted. The Society uses these areas for its large outdoor display and storage.

The Society understands that public access must be properly managed within the Giant Mine Townsite Lease due to safety concerns. However, the Society promotes a remediation project that takes into account the existing public use of the area, and suggests that remediation activities allow some level of public use to continue, eg: the cruising club and the public boat launch. Considering the limited places in Yellowknife where residents can enjoy access to the waterfront, the Society would also highly recommend that at the conclusion of the Remediation Project the Giant Mine Townsite Lease continue to have recreational/commercial uses.

2.0 Closure and Reclamation Plan comments

In our submission to the Board in May 2019, we provided concerns based on the draft 'Closure and Reclamation Plan'. A summary of these concerns and recommendations is listed below:

2.1 Open Pits (Closure Plan Section 5.3)

The A-1 and A-2 open pits are immediately adjacent to the Society's property at the Giant Mine Townsite. We suggest maintaining an aesthetic standard when planning and implementing closure and reclamation of the pits, as this is a public area with future land use potential. This includes particular concern with closure criteria and objectives (**section 5.3.3**) in which the remnant high walls would be recontoured to an appropriate slope, while also sourcing borrow material for filling in the open pits. This combined activity, we believe, would leave an everlasting scar on the landscape. Furthermore, the blasting of these rocks would create a new open pit high wall and not make the area any safer.

Blasting in the Giant Mine Townsite area would significantly alter a landscape that we, as a Society, would like to preserve not only for our own benefit but as part of a general stewardship of our taiga landscape.

Recommendations: The Giant Mine Townsite Lease and all areas visible from the Lease should be remediated to an aesthetic degree. For example: no blasting of outcrop ridges and hills adjacent to the A-1 or A-2 open pits.

2.2 Borrow Material (Closure Plan Section 5.7)

The Society's philosophy is that the Giant Mine Remediation Project should not be targeting landscape features for borrow-sourcing that have not already been impacted by mine development. The Proponent included a closure objective in the Closure Plan (Appendix 5.0A, Table 8), which states: "New disturbance due to borrow/quarry areas is minimized, to the

extent practicable” and “New borrow and quarry areas are reclaimed at the end of their production.”

Under the Closure Plan, the Proponent chose locations for new borrow and quarry pits that would absolutely create new disturbance, on lands not previously subject to the mine’s footprint, and could only be managed in ways that would be difficult to reclaim. The Society proposes alternate locations where quarries could be built adjacent to existing contamination, away from public use, and possibly be easier to reclaim to the standards desired. These include contaminated areas on the fringes of the main mine site, adjacent to the C-shaft, mill complex, tailings containment ponds, and Tailings Retreatment Plant. These areas are not within view of current and future public use.

Alternative sources might be found southeast and east of the main mine site (C-shaft and mill area) and adjacent to the South and Central Ponds. These areas are already in the middle of the mine’s footprint and leveling off these outcrops to the surrounding grade would not leave a significant mark.

We note that one of the closure objectives for the tailings ponds is “footprint reduction”. We believe that the entire Project should be guided by a footprint reduction. As currently proposed, an incredible amount of the borrow sources (quarry and granular) will be sourced from new areas not currently within the impacted footprint of the existing mine. Many of those new areas are within direct view of the public due to their location adjacent to public roads and highways. A scarred landscape within constant public view does not bode well to the image of the Remediation Project itself, nor does it justify the territory’s slogan “Spectacular NWT”.

Attachment 3 is an edit of the Proponent’s figure 5.7–1 and is the basis of our proposal to find alternate borrow source locations away from public view.

Recommendation: The Giant Mine Remediation Project should not increase the size of the mine’s footprint on the landscape. Any quarry material required for engineering purposes should be sourced from outcrops already surrounded by the mine’s physical footprint. Rock should also NOT be sourced from areas adjacent to the Ingraham Trail or the Vee Lake Road, the Giant Mine Townsite, or any place where the travelling public would see the destruction of the landscape. Alternate borrow sources must be found.

2.3 Remaining Infrastructure (Closure Plan Section 5.9.5.7)

We acknowledge that our buildings (“Commissary” and “Recreation Hall”) are noted in the Closure and Reclamation Plan to remain on site, although we face pressure to relocate the Commissary building in order to accommodate the proposed Baker Creek realignment. Furthermore, our popular “Outdoor Display” area at the Giant Mine Boat Launch Parking Lot

will have to be relocated as part of site-wide remediation. We request that remediation activities in the Boat Launch Parking Lot area be done in phases and only in the identified contaminated areas so that the assets can be preserved in situ and only moved around if required for addressing specific contamination.

We have requested Compensation through the Water Licensing process for the cost of original investment plus future expense of relocating the “Outdoor Display”, and for the cost of relocating the contents of the Commissary building when necessary.

Other assets of interest include the diesel generators in the Powerhouse building which we have recommended be preserved in situ as a lasting monument to the mine. We also recommend the preservation of the historic “Akaitcho” headframe (named for a famous YK Dene chief) as a visible, structurally stable monument to the legacy (whether positive or negative) of mining in the Yellowknife area. These monuments would align with the proposed Toxic Legacy Project, intended to signify to future generations that there was once a mine here.

Recommendations: The “City Boat Launch Parking Lot” outdoor display be maintained in situ and only relocated temporarily in the event of soil remediation below individual Society assets. The “Commissary” building remains the property of the Society until a new location for storage can be arranged; the Proponent should compensate the Society for the loss of the building if necessary. The “A-shaft Powerhouse” diesel engines be preserved in situ as a permanent monument to Giant Mine. The “Akaitcho” headframe be preserved in situ as a permanent monument to Giant Mine. The proponent should be responsible for solving the drainage issue in the Society’s “Museum Parking Lot”. They must remove the former pipebox waste-rock “berm” that runs from the Boilerhouse to the former Curling Rink, and redirect the drainage around our parking area. This berm stops the flow of water off the old highway and has created a large stagnant pond behind our museum building. If any remediation of soils is required at the “Museum Parking Lot”, this shall be conducted at the expense of the Remediation Project. The final product will be a graded lot upon which we may be permitted to use as a landscaped parking lot for museum public access.

2.4 Baker Creek Closure Objectives and Criteria (CRA Section 5.5.3)

Reach 1 to Reach 0 of Baker Creek flows adjacent to the YK Historical Society museum sublease and adjacent to our other assets (Commissary building, Outdoor Display).

Recommendations: The Baker Creek realignment should follow a similar path where it currently enters Yellowknife Bay with the exception of removing the sharp turn where it goes under the highway. The creek should avoid the A-shaft area due to the amount of blasting that may be required in this area. The Proponent should ensure that the final site design for Baker Creek Reach 1 to Reach 0 floodplain does not limit public access to the Giant Mine Townsite

Area in the future. New roads and bridges to provide access to the public boat launch are necessary. If the Commissary building and the Outdoor Display are impacted by the proposed floodway and must be relocated, the Society expects to be compensated. (see **Section 5.0** below)

3.0 Outcome of Workshop Closure Criteria Workshop and Technical Sessions

The Society participated in the Closure Criteria Workshop held on September 10, 2019 and the Technical Session held on September 12, 2019.

We heard that there is more planning to do concerning Open Pit closure objectives and Borrow Pit sourcing. The Society is pleased to be involved in Borrow Pit planning workshops to be held in December 2019. Regarding specific closure objectives as presented at these sessions:

Closure Objective P-2 closure activity “Recontour remnant high walls above A1 and A2 pits.” Based on our Site Tour of October 16, 2019 (see **Section 4.0** below) our understanding is that it is no longer planned to recontour the A-2 pit high wall, therefore this should be changed to reflect the new criteria and any future decisions.

Closure Objective Q-1 “New disturbance due to borrow quarry areas is minimized, to the extent practicable”. We acknowledge that stakeholder engagement on borrow locations will be conducted. We are also pleased that the language has changed from “consider aesthetic impact” to “limit aesthetic impact”. The concerns we addressed in the Closure Plan comments remain, and we expect that borrow pit locations will be chosen based on future public engagement.

4.0 Outcome of Site Tour

The Society participated in a site tour of Giant Mine on October 16, 2019 in the company of Natalie Plato and Geneva Irwin of the Remediation Project and members of the North Slave Metis Alliance. Many of our concerns regarding borrow pit locations were addressed. We learned that plans have changed with the sourcing of borrow material from the A-1 and A-2 open pit escarpments, due to significant public concern. Aside from the steep pit highwall at A-1 pit, the remaining escarpments along these pit walls are natural (particularly at A-2 pit), and thus not considered a hazard that need to be remediated. Our understanding now is that NO blasting will be conducted in this area.

Furthermore, we viewed potential borrow source locations along the Ingraham Trail adjacent to the Northwest Tailings Pond and the Vee Lake Road. We still have concerns that quarrying in this location will be visible to traffic along the public highways. However, we now understand that these areas are already impacted by previous quarrying activity. The proposed quarry at

the southeast end of the Northwest Tailings Pond currently has a large highwall along its south face, a result of tailings berm construction by the mine in the 1980s. The Proponent’s solutions are to either 1) blast this hill down to grade and eliminate the high wall, or (2) blast only rocks to the north of the existing high-wall so that all quarrying activity will not be visible to travelers on the Ingraham Trail, leaving the existing highwall, and the fronting hill as visible from the Ingraham Trail Highway.

The Society looks forward to discussing these options with the Proponent in the upcoming Workshops in December 2019, and offering alternative solutions allowing access to the borrow sources they need for site engineering

5.0 Compensation Notification

On October 18, 2019 the Society submitted to the MVLWB its claim for compensation. Our current renovation plans and future operations could be adversely affected by the remediation work proposed as part of the Giant Mine remediation project water licence application.

Grand total of estimated compensation costs is **\$237,843**. The breakdown is as follow:

Component affected	Nature of Adverse Effects	Cost
Outdoor Display	Compensation to move material plus claim for initial investment	\$123,843
Storage of Museum Collections	Compensation to move material from existing building plus cost of establishing new storage	\$45,000 to \$50,000
Impact on Museum Operations	Estimated loss of revenue associated with decreased visitor traffic due to surrounding remediation	\$64,000
		TOTAL: \$237,843

6.0 Artifacts for preservation

The Society has enjoyed a good relationship with the Giant Mine Remediation Project staff for the past few years. In our quest for artifacts, memorabilia, or machinery for preservation in our proposed museum facility, the Proponent has supported our efforts and donated several

articles. The Society has nearly completed its mission to preserve artifacts and archives from the Giant Mine, and we are working with the Proponent to itemize the last few remaining pieces.

7.0 Conclusions

The Society recognizes that the Giant Mine Remediation Project is in the middle of a planning and consultation phase. Some of our concerns with the Closure and Reclamation Plan have been discussed and addressed through the Closure Criteria Workshops, Technical Sessions, and a recent Site Tour. Further progress will be made in workshops leading up to the Public Hearings in 2020. It is our hope that a mutual understanding can be reached on both the Society's land use in the Giant Mine area, the general public's use of the waterfront at the City Boat Launch, and our philosophy on conducting this remediation in a way that is aesthetic to the natural Yellowknife landscape for the benefit of residents and visitors into the future.

We have an opportunity before us to complete the remediation of Giant Mine in a way that is engineered safely and responsibly, taking into consideration other public interests at the site, and with a vision that looks at how the area will look at the end of the project. Our museum activities are moving forward to completion and we want some guarantee that our investments to date are respected. The Society also wants to ensure that the wider public can utilize the site and continue to appreciate the scenic qualities of the Giant Mine Townsite Lease area. This includes ensuring that remediation of this area is respectful to the landscape and is carried forth without degrading the natural aesthetic of lands that are being used by the public, today and perhaps in 50 years time.

The Yellowknife Historical Society thanks the Mackenzie Valley Land and Water Board, the GNWT, the City of Yellowknife, the Yellowknives Dene, the Project Proponents, and other community interests for the opportunity to comment on this application.

Sincerely,

A handwritten signature in black ink that reads "Helmut Epp". The signature is written in a cursive, flowing style.

Helmut Epp

President, Yellowknife Historical Society
info@yellowknifehistory.com

Attachments:

1) Backgrounder (below)

2) Letter re: access to building

3) Borrow source map

Attachment 1 – Backgrounder

The Yellowknife Historical Society has been advocating for a heritage destination at the Giant Mine site since 2002 when it was first incorporated. Significant monies and volunteer hours have been spent in renovating the recreation hall (the main museum exhibit hall), acquiring and cataloguing artifacts, and fixing up and displaying machinery and buildings. Since 2007, the first year of major renovations, the Society has generated \$1.4 million in fundraising through government grants, memberships, donations, and sales, and has spent \$700,000 on renovations to its buildings at Giant Mine.

The Society holds a license to occupy agreement (hereafter: “Sublease”) with the City of Yellowknife for a portion of the Head Lease 17889T (hereafter: “Giant Mine Townsite Lease”), dated October 14, 2010 and renewed annually. This sublease is for the land the recreation hall building sits upon and the surrounding area, including the “Museum Parking Lot” area which is yet to be landscaped.

The Society occupies under verbal agreement a building known as the “Commissary” for storage purposes. The Society asserts ownership of the building under a prior agreement with Miramar Mining Corporation in 2001, and continues to occupy the lands under verbal agreement with the Government of Canada/ Giant Mine Remediation Project (hereafter: “Remediation Project”). The Society holds no land rights at this parcel.

The Society occupies under Letter of Support from the Mayor of the City of Yellowknife the land around the “City Boat Launch Parking Lot” for the purpose of exhibiting machinery and buildings connected to Yellowknife’s history. This display includes a log cabin, Brock headframe, Cat train caboose and sleigh, trucks, bulldozers, boilers, picnic tables, a rail track with underground machinery, and dozens of other pieces of machinery with interpretive plaques. The Society keeps the grounds clean with a spring cleanup every year. It is a popular destination for tourists and residents.

The Remediation Project will have a significant impact on the Society’s future land use of the area. Contaminated soil remediation is expected to take place at various areas around the

Giant Mine Townsite Lease, including the City Boat Launch Parking Lot. The Society's activities and investments are at risk, as is its ability to secure funding from major sponsors. The uncertainty of ready access for the public, the indefinite timelines of the remediation schedule, the potential destruction of adjacent landforms and loss of aesthetic appeal are all factors that will tend to make funding agencies re-evaluate 'risk' potentially resulting in the Society not garnering the funding support which may have been more certain prior to the proposed Remediation Project.

Attachment 2 – Letter re: access to building

(see separate document)

Attachment 3 – Map of recommended alternate borrow source locations

(see separate document)



PO BOX 2022
YELLOWKNIFE NT X1A 2R3

September 4, 2019

Helmut Epp
President
Yellowknife Historical Society
Box 1856
Yellowknife NT X1A 2P4

Dear Mr. Epp,

The Yellowknife Historical Society has requested the Giant Mine Remediation Project (GMRP) confirm, in writing, that access to the Museum building will not be affected during the remediation project.

As I have confirmed verbally, in both our meeting on April 16, 2019 and during the July 2019 technical sessions, the GMRP will not require access to the area immediately surrounding the Museum building, as indicated as Parcel B in the attached map. The GMRP will, however, require access to areas of Parcel A to remediate soil and Baker Creek. During this time there will be restricted access to Parcel A.

Please let me know if you would like to discuss further or have any questions.

Sincerely,

Natalie Plato
Deputy Director
Giant Mine Remediation Project
CIRNAC
Government of Canada

Attached: Yellowknife Historical Society Lease map



City of Yellowknife
Planning & Lands Division

PROJECT: NWT Mining Heritage Society
 TITLE: Schedule "A" - Sub-lease Agreement
 SCALE: 1:2,000
 DATE: March 2, 2009

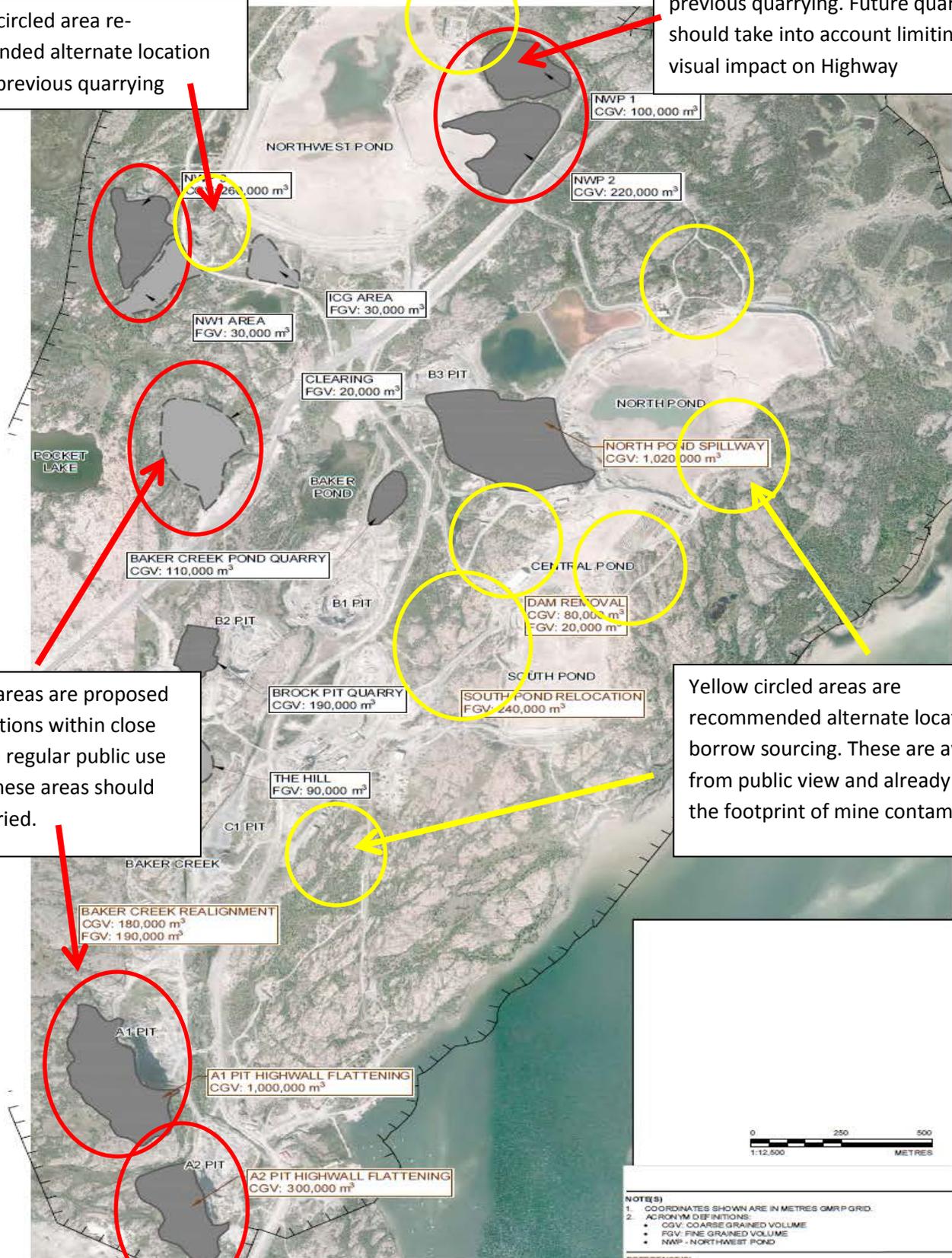


Yellow circled area recommended alternate location due to previous quarrying

These areas are already impacted by previous quarrying. Future quarrying should take into account limiting visual impact on Highway

Red circled areas are proposed borrow locations within close proximity to regular public use and view. These areas should not be quarried.

Yellow circled areas are recommended alternate locations for borrow sourcing. These are away from public view and already within the footprint of mine contamination.



NOTE(S)
 1. COORDINATES SHOWN ARE IN METRES QMRP GRID.
 2. ACRONYM DEFINITIONS:
 • CGV - COARSE GRAINED VOLUME
 • FGV - FINE GRAINED VOLUME
 • NWP - NORTHWEST POND

REFERENCE(S)
 1. PWGSC, AERIAL PHOTOGRAPH, IMAGE FILE: GIANTMINE_GRP.SID, DATED NOVEMBER 24TH 2009.
 2. ASCOM CANADALTD, LEASE BOUNDARY, CAD FILE: GIANT MINE - LEASE B, RECEIVED ON OCT 12 2016.

T BOUNDARY
 AINED BORROW SOURCE SITES
 -GRAINED BORROW SOURCE SITES
 T AREAS
 V AREAS

PROPOSER

 CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA
 RELATIONS COURONNE-AUTOCHTONES ET AFFAIRES DU NORD CANADA

DESIGNED SCOTT McLEAN
PREPARED ALAN FARLOW
REVIEWED HILARY MACHTANS
APPROVED BURN WICKER

YYYY-MM-DD 2019-02-01

GOVERNMENT OF NORTHWEST TERRITORIES
 Gouvernement des Territoires du Nord-Ouest

PROJECT
 Giant Mine Remediation Pro

TITLE
 BORROW SOURCES TO BE DEVELOPED TO SUPPORT CLOSURE AND RECLAMATION ACTIVITIES

REV. 0
 n