Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

GIANT MINE REMEDIATION PROJECT

Engagement Plan

Version 2.1

March 2021

LAND ACKNOWLEDGEMENT

The GMRP acknowledges the Indigenous Peoples and the importance of the land in and around the Giant Mine site, which is located in Chief Drygeese Territory. From time immemorial, it has been and is the traditional land of the Yellowknives Dene First Nation. We acknowledge that the Giant Mine site is also within the homeland of the North Slave Metis Alliance and the Tłı̨chǫ Mǫwhì Gogha Dè Nı̨ı̨tłèè boundary. The GMRP respects the histories, languages, and cultures of First Nations, Metis, Inuit, and all First Peoples of Canada, whose presence continues to enrich our vibrant community.

PLAIN LANGUAGE SUMMARY

This, Giant Mine Remediation Project (GMRP) Engagement Plan breaks down the members of the Project Team, who the project team engages with, and how, when and why they plan to do so.

The Project Team is made up of representatives from Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the Government of the Northwest Territories (GNWT). There are numerous groups, committees, and Indigenous rights holders who provide knowledge and input into the remediation of the Giant Mine site. In this plan, the Project provides clear avenues and frequencies of communication with each group and the way in which their input and concerns are gathered and logged.

This plan was required as part of the Water Licence (MV2007L8-0031). The Water Licence Conditions related to engagement are referred to throughout the document and included in Appendix A. The Project used the Water Board's definition of Engagement as stated in the Mackenzie Valley Land and Water Board (MVLWB) *Engagement Guidelines for Applicants and Holder of Water Licences and Land Use Permits* (MVLWB 2013b) to guide the development of this document.

In addition to the Conditions set out in the Water Licence, there are also Measures and Suggestions from the Report of Environmental Assessment (MVEIRB 2013) as well as any amended Measures from the Final Decision Letter (AANDC 2014) that pertain directly to engagement. Engagement work has taken place to address many of the Measures and Suggestions as laid out in Appendix B, Table B-1. Additional work is planned to continue engagement activities related to the Measures and Suggestions as laid out in this plan. Additional engagement also takes place as the Project Team recognizes the benefit of outreach and education related to the GMRP.

The Project Team recognizes the potential impact of the GMRP on the Northern economy. As such, prioritizes working with partners, stake holders and Indigenous rights holders to develop and implement socio economic benefits that allow for a collaborative approach to maximizing benefits to Northern and Indigenous people and businesses. This plan includes details on the engagement approach undertaken by the GMRP on socio economics.

VERSION HISTORY

Version	Date Issued / Effective Date	Description of Version
1.0	April 1, 2019	Submitted with Water Licence Application to Mackenzie Valley Land and Water Board
1.2	November 5, 2020	Circulated to Working Group for review prior to Submission to Mackenzie Valley Land and Water Board
2.0	December 16, 2020	Submitted to the Mackenzie Valley Land and Water Board as per Water Licence MV2007L8-0031, Part B, Condition 2. Changes to this Plan include an update to address the Board Directives included in the Water Licence, commitments made during the water licencing process, inclusion of an Appendix on Traditional and Local Knowledge considerations, and for consistency in format with other site wide plans.
2.1	March 30, 2021	Submitted to the Mackenzie Valley Land and Water Board as per Water Licence MV2007L8-0031, Part B, Condition 2. Changes to this Plan include updates to address the Board's conformity check on Version 2.0

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List of Acronyms, Abbreviations, Units and Symbols

Acronym/Abbreviation	Definition
AAC	Aquatics Advisory Committee
AEMP	Aquatics Effects Monitoring Program
AIA	Archaeological Impact Assessment
AQMP	Air Quality Monitoring Program
CBM	Community-Based Monitoring
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CRP	Closure and Reclamation Plan
DAR	Developer's Assessment Report
DFO	Department of Fisheries and Oceans
ECCC	Environment and Climate Change Canada
EHSC	Environment, Health and Safety, and Community
EQC	Effluent Quality Criteria
ETP	Effluent Treatment Plant
FOS	Freeze Optimization Study
GMAC	Giant Mine Advisory Committee
GMOB	Giant Mine Oversight Board
GMRP	Giant Mine Remediation Project
Golder	Golder Associates Ltd.
GNWT-ENR	Government of the Northwest Territories – Environment and Natural Resources
GNWT	Government of the Northwest Territories
HC	Health Canada
HOA	Heritage Overview Assessment
IOC	Indigenous Opportunities Consideration
KPI	Key Performance Indicators
MCM	Main Construction Manager
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
NSMA	North Slave Métis Alliance
PCP	Perpetual Care Plan
PPE	personal protective equipment
PSAB	Procurement Strategy for Aboriginal Businesses
PSPC	Public Services and Procurement Canada

Acronym/Abbreviation	Definition
PWNHC	Prince of Wales Northern Heritage Centre
QRA	Quantitative Risk Assessment
SSP	Site Stabilization Plan
SEWG	Socio-economic Working Group
SDE	Surface Design Engagement
TCAs	Tailings Containment Areas
Wood	Wood PLC
WSCC	Workers' Safety and Compensation Commission
YKDFN	Yellowknives Dene First Nation

Unit/Symbol	Definition
%	percent
km	kilometre

1 INTRODUCTION

The Giant Mine (Site) is located within the City of Yellowknife boundary, approximately 1.5 kilometres (km) from the community of Ndilǫ and 9 km from the community of Dettah. The Site is situated on Commissioner's Land administered by the Government of the Northwest Territories (GNWT); Reserves (R622T and 85J/8-257-2) have been established to allow for the implementation of the remediation of the Site. Ongoing care, maintenance and remediation of the Site is known as the Giant Mine Remediation Project (GMRP or the Project). Subsurface mineral rights are under federal jurisdiction and were withdrawn by Order in Council SI/2005-55 on 15 June 2005. For a history of the Giant Mine and planned remediation activities, please refer to the Closure and Reclamation Plan (CRP).

The Site consists of eight abandoned open pits; an underground mine with arsenic trioxide storage areas; Tailings Containment Areas (TCAs) with associated rock fill dams; mine waste rock that buttresses Dams 11, 21B and 21D; a tailings re-treatment plant (out of service since 1990); an Effluent Treatment Plant (ETP); a Mill Complex; several warehouses; and a townsite. Baker Creek flows through the Site seasonally with one ponded area. The Site features are outlined in Figure 1-1.

1.1 Plan Objectives

Plan Objective

This Engagement Plan focuses on the engagement activities anticipated during the implementation of the GMRP. It summarizes the engagement activities the GMRP will undertake and desired outcomes. It is anticipated that this plan will be updated and revised as necessary to focus on providing summaries of engagement that have taken place in the previous calendar year and engagement planned for the upcoming year.

The Engagement Plan has been developed to satisfy the applicable conditions set forth in the Water Licence MV2007L8-0031. Engagement, as defined by the *MVLWB Engagement and Consultation Policy* (MVLWB 2013a) is "the communication and outreach activities a proponent undertakes with affected parties prior to and during the operation of a project". The GMRP believes communications and engagement are critical to the overall success of the Giant Mine Remediation Project. The GMRP strives to ensure that Project engagement is rooted in mutual respect with rights and stakeholders. The Project is committed to conducting Project engagement in a timely manner that is open and transparent to ensure rights and stakeholders understand where their input has been incorporated into the Project.

The GMRP has adopted the Board's definition for the purpose of engagement, as stated in the MVLWB *Engagement Guidelines for Applicants and Holder of Water Licences and Land Use Permits* (MVLWB 2013b), through engagement, *"affected parties, including Indigenous organizations/governments, are able to:*

- *Develop an understanding of the proposed project or component of a project.*
- *Provide feedback during the engagement process on issues of concern with regards to a project.*
- *Work towards building relationships with proponents that are operating in an area.*

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Trapper Lake
Shot Lake
DAM 22B
NORTHWEST POND NON-HAZARDOUS WASTE DISPOSAL SITE
DAM 22A
Yellowknife River
Gar Lake
NORTHWEST POND HAZARDOUS WASTE AREA
NORTHWEST POND
DAM 21D
Trapper Creek
SOLIDS RETENTION DYKE (SPLITTER DYKE)
CONTAINMENT BERM
DAM 21A
EFFLUENT TREATMENT PLANT (ETP)
DAM 21C
DAM 21B
DAM 3C
B4 PIT
DAM 3
SETTLING POND
Baker Creek
DAM 1
POLISHING POND
DAM 2
DAM 3D
B3 PIT
NORTH POND
M&M DAM
TAILING REPROCESSING PLANT
Pocket Lake
Baker Pond
DAM 6
4
DAM 10 (REMOVED)
DAM 4
CENTRAL POND
DAM 9
STORAGE DOME
CALCINE POND
B1 PIT
MATERIAL STORAGE AREA
B2 DAM
DAM 8
B2 PIT (UBC)
DAM 5
DAM 12
BROCK PIT
FORMER ROASTER AND STACK
SOUTH POND
MILL POND
MILL
DAM 11
C SHAFT
C1 CLAY BORROW DAM
DAM 7
Baker Creek
C1 PIT
FORESHORE TAILINGS AREA
A SHAFT
Yellowknife Bay
Handle Lake
A1 PIT
TOWNSITE
MARINA
DWC DAM
A2 PIT

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LEGEND

- BUILDING
- GIANT MINE PROJECT BOUNDARY
- HIGHWAY
- INDUSTRIAL WATERCOURSE
- INFRASTRUCTURE
- ROAD
- SPLITTER DYKE
- SURFACE WATER MANAGEMENT DAM/DYKE
- TAILINGS OR SLUDGE RETENTION DAM
- WATERCOURSE
- INDUSTRIAL WATERBODY
- PIT BOUNDARY
- WATERBODY

0 500 1,000
1:20,000 METRES

REFERENCE(S)

HYDROLOGY AND TRANSPORTATION DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. 2018 ORTHOPHOTO PROVIDED BY AECOM.
DATUM: NAD 83 PROJECTION: UTM ZONE 11

PROPONENT

Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

Government of Northwest Territories / Gouvernement des Territoires du Nord-Ouest

YYYY-MM-DD	2021-03-18
DESIGNED	J. LACRAMPE
PREPARED	A. AUCOIN
REVIEWED	T. HALL
APPROVED	T. HALL

PROJECT

Giant Mine Remediation Project

TITLE

GIANT MINE SITE LAYOUT

PROJECT NO.	CONTROL	REV.	FIGURE
20137939	02-74-0599	0	1.1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

25mm

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Through engagement, the GMRP also wishes to provide opportunities for rights and stakeholders to have input into and support the proposed methods for communication and exchange of information.

In accordance with the Boards' Engagement Guidelines, this Engagement Plan has been designed to:

- Describe the goals and the methods of engagement.
- Outline a frequency of engagement that allows for relevant and timely information sharing.
- Establish a process that allows the rights and stakeholders party to raise concerns or issues.
- Allow opportunities for, when appropriate, community meetings to take place to be inclusive of perspectives from all sectors of the community, including women, youth, and Elders.
- Ensure the proponent has procedures in place to understand and respond to issues as they arise.
- Build relationships with rights and stakeholders, proactively, including identification of avenues of engagement for knowledge sharing and exchange of information.

1.2 Giant Mine Remediation Project Team Overview

The GMRP is jointly managed through a Cooperation Agreement, with the Government of Canada and the GNWT. The GMRP Team consists of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the Government of the Northwest Territories – Environment and Natural Resources (GNWT-ENR) acting as co-proponents with respect to the Environmental Assessment and other regulatory considerations. Public Services and Procurement Canada (PSPC) provides contracting services, contract management, and technical support services to CIRNAC. PSPC has awarded the Main Construction Manager (MCM) contract to Parsons Incorporated. This contract will be used to complete implementation activities for the GMRP. The MCM is responsible for overall Site management including emerging risks on Site and supporting planning efforts for closure and reclamation during the GMRP.

The Engagement Team is made up of representatives from both CIRNAC and GNWT and is responsible for ensuring the goals and objectives of the Engagement Plan are met. CIRNAC provides support for engagement through various positions, including engagement manager, community consultation officer, socio-economic advisor, as well as through administrative support for engagement log management and tracking concerns from rights and stakeholders. The GNWT's senior advisor and technical specialist are dedicated to engagement, as well as other aspects of the GMRP. Senior-level support and direction are provided to the Engagement Team from CIRNAC's deputy director and GNWT's Director of Environment Protection and Waste Management.

The MCM will be responsible for Site care and maintenance and emerging risks on Site, as well as supporting planning efforts for closure and reclamation during the GMRP. The MCM will be responsible for letting various sub-contracts, with the goal of providing employment and maximizing training opportunities for rights holders and Northerners. Once remediation begins, the MCM will oversee the implementation of the overall remediation plan and associated activities. The MCM will oversee the implementation of the CRP and associated activities. Refer to Table 1-1 for staff responsible for engagement for the GMRP.

Table 1-1: Giant Mine Remediation Project Engagement Contacts

Company	Contact	Role	Information
CIRNAC	Natalie Plato	Deputy Director	Phone: 867-669-2823 Email: natalie.plato@canada.ca
	Jessica Mace	Engagement Manager	Phone: 867-446-6658 Email: jessica.mace@canada.ca
	Geneva Irwin	Community Consultation Officer	Phone: 867-444-9427 Email: geneva.irwin@canada.ca
GNWT	Alex Lynch	Senior Advisor	Phone: 867-587-6651 Email:alex_lynch@gov.nt.ca
	TBD	Technical Specialist	
Parsons	Louie Azzolini	Economic Development Manager	Phone: 867-688-0655 Email: Louie.Azzolini@parsons.com

CIRNAC = Crown-Indigenous Relations and Northern Affairs Canada; GNWT = Government of the Northwest Territories; TBD = to be determined.

The MCM will also play an important role in contributing to socio-economic benefits by maximizing local workforce in its core staff, as well as through the sub-contracts it will award for remediation project work. The MCM will be responsible for site care and maintenance and emerging risks on site as the Mine Manager, as well as supporting planning efforts for the full remediation. Once remediation begins, Parsons will oversee the implementation of the overall remediation plan and associated activities. Under the MCM Contract, Parsons employs a full-time dedicated Community Economic Development Officer and Community Liaison. These positions are responsible for:

- Assisting with developing a Socio-Economic Strategy.
- Facilitating, promoting and ensuring community and economic development.
- Developing and overseeing implementation of an Indigenous Benefits Plan.
- Managing and coordinating implementation of Parsons Labour Capacity Study.
- Developing economic profiles of regions and Communities via Capacity Assessment.
- Collaborating with the GMRP Team to determine work packages and adjusting Indigenous Opportunities Consideration (IOC) criteria to best align with labour capacity.
- Collaborating with respective organizations to provide outreach to Indigenous, and Northern residents to discuss work and training opportunities.

1.3 Environment, Health and Safety, and Community Policy

Within the GMRP, the health and safety of employees and protection of the environment are an over-riding priority. Management is committed to doing everything possible to prevent injuries and to maintain a healthy environment.

The overall goals of the GMRP are:

- minimize public and worker health and safety risks
- minimize the release of contaminants from the Site into the environment
- remediate the Site in a way that inspires public trust
- implement an approach that is cost-effective and robust over the long term

In keeping with these overall goals for the Project, the specific objectives of this policy are:

- protecting the environment and the health and safety of its employees, contractors, and the general public
- engaging meaningfully with stakeholders and rights holders
- recognizing the important contributions of Elders and community members, and incorporating Traditional Knowledge and community knowledge across the Project
- delivering local social and economic benefits
- recognizing the Project is an opportunity to advance reconciliation
- continuing to look for opportunities to further reduce greenhouse gas emissions and ensure climate change adaptation is incorporated into the Project
- being a recognized leader in EHSC management among public environmental remediation projects

The full GMRP EHSC Policy is available upon request.

1.4 Regulatory Framework

This plan was developed in consideration of regulatory requirements including legislation, guidance documents, Water Licence requirements, and GMRP commitments and conditions. Relevant federal and territorial legislation, guidelines and permits/licences that apply to the Site include:

- *Mackenzie Valley Resource Management Act* (Government of Canada 1998)
- Type A Water Licence (MV2007L8-0031) (Water Licence Schedule 1, condition 2: Board Directives for the Engagement Plan)
- Land Use Permit (MV2019X0007)
- MVLWB Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits (2018)

There are several conditions, Environmental Assessment Measures, and information requirements that apply to the GMRP. The following presents conditions, measures and commitments and where concordance with those conditions, measures and commitments can be located in the Project's documentation:

1. Measures and Suggestions from the Report of EA (MVEIRB 2013) as well as any amended Measures from the Final Decision Letter (AANDC 2014) that pertain directly to engagement are summarized in the Updated Project Description (CIRNAC and GNWT 2019b), and below in Section 1.4.1.
2. Water Licence Conditions and commitments made during the water licencing process are summarized in Appendix A.

1.4.1 Environmental Assessment Measures

The following is a summary of the Environmental Assessment Measures that are related to engagement (referenced throughout the document). The summary of the engagement work completed, underway and/or still required is included below each Measure and included in Table B-1 in Appendix B. Additional details are provided in the text in Appendix B and C on the engagement processes summarized in this section.

Environmental Assessment Measure #5 – In order to mitigate significant adverse impacts that are otherwise likely, the Developer will commission an independent QRA to be completed before the Project receives regulatory approvals.

- To complete the QRA outlined in Measure #5, four engagement phases were designed including the following:
  - Phase 1 – introduce the QRA and validate the engagement process (April 2018 meetings with GMWG)
  - Phase 2 – identify and discuss risk scenarios and consequence categories (May/June 2018 two- day workshop). A second phase 2 workshop, with the YKDFN was held August 30 and 31, 2018
  - Phase 3a and 3b – meetings to discuss consequences of risk scenarios, what level of consequences are unacceptable (thresholds), and to agree on which scenarios will be analyzed in more detail in the QRA (December 2018 meeting with GMWG plus additional members from YKDFN, NSMA and Alternatives North)
  - Phase 4 – meetings held with GMWG, YKDFN and NSMA to review and discuss the results of the QRA (2020)

Environmental Assessment Measure #9 - The Developer will work with other federal and territorial departments as necessary to design and implement a broad health effects monitoring program in Ndilǫ, Dettah and Yellowknife focusing on arsenic and any other contaminants in people which might result from this Project. This will include studies of baseline health effects of these contaminants and ongoing periodic monitoring. The organization conducting the monitoring will provide regular plain language explanations of the monitoring results in terms that are understandable to lay people, and communicate this to potentially affected communities in a culturally appropriate manner. The organization conducting the monitoring will provide regular plain language explanations of the monitoring results in terms that are understandable to lay people, and communicate this to potentially affected communities in a culturally appropriate manner.

- The GMRP contracted the University of Ottawa as an independent researcher to conduct this work. The University of Ottawa has conducted their own engagement on study design and continues to engage on results (including the development and distribution of plain language summaries). GMRP will provide updates on this work in the annual report as indicated in Section 8.1 of this plan.

Environmental Assessment Measure #10 - The Developer will commission a comprehensive quantitative human health risk assessment by an independent, qualified human health risk assessor selected in collaboration with Health Canada, the Yellowknives Dene, the City of Yellowknife, and the Developer. This human health risk assessment will be completed before the Project receives regulatory approvals.

- Over ten sessions, including scope development informed the implementation and delivery of the HHERA. The HHERA was carried out with significant stakeholder and Indigenous rights holder input, to better assess risks considering differences in traditional land use, food consumption, and lifestyles. Extensive community participation was part of comprehensive country food sampling program.
- Measure 10 also outlines that “indirect effects of potential exposures to arsenic on wellness, including stress effects” and “identify, design and implement appropriate design improvements and identify appropriate management responses to avoid or reduce the severity of any predicted unacceptable health risks.”
  - A number of engagement sessions have occurred with the working group, newly established Hoèła Weteèts’eèdeè Advisory Body, and Technical Committee to provide input into all aspects of design of the Study. This study will assess the health and wellness of the local population in Yellowknife, Ndilo and Dettah. The study is currently under development and will be implemented once COVID-19 restrictions move into Phase 3 of the “Emerging Wisely Plan” in the Northwest Territories. This work is being led by the University of Laurier as an independent researcher and will be reported on by the GMRP in the annual report.

Environmental Assessment Measure #11 – The Developer, with meaningful participation from the Oversight Body and other parties, will thoroughly assess options for, and the environmental impacts of, diversion of Baker Creek to a north diversion route previously considered by the Developer or another route that avoids the mine site and is determined appropriate by the Developer. Within one year of the project receiving its water license, a report outlining a comparison of options including the current on-site realignment will be provided to the appropriate regulatory authorities, the Oversight Body and the public.

- Measure 11 was addressed during the Surface Design Engagement process. This included eleven focused sessions over two years (2015 to 2017) to provide input into plans for remediation of the surface of the mine (Baker Creek, Pits, Tailings, Contaminated Soils and Land Use). Detailed review of closure options and risks resulted in formative input on design decisions with respect to the diversion of the Baker Creek channel so that underground flooding is avoided in the future and so that fish are protected from arsenic exposure.

Environmental Assessment Measure #12 – To prevent significant adverse impacts on Great Slave Lake from contaminated surface waters in the existing or former channel of Baker Creek, should it be re-routed to avoid the mine site, the Developer will ensure that water quality at the outlet of Baker Creek channel will meet SSWQO based on the CCME Guidance on the Site-Specific Application of Water Quality Guidelines in Canada.

- Measure 12 was addressed during the Surface Design Engagement process. This included eleven focused sessions over two years (2015 to 2017) to provide input into plans for remediation of the surface of the mine (Baker Creek, Pits, Tailings, Contaminated Soils and Land Use). Detailed review of closure options and risks resulted in formative input on design decisions with respect to the rerouting of the Baker Creek channel.

Environmental Assessment Measure #14 – The Developer will add an ion exchange process to its proposed water treatment process to produce WTP effluent that at least meets Health Canada drinking water standards (containing no more than 10µg/L of arsenic), to be released using a near shore outfall immediately offshore of the Giant mine site instead of through the proposed diffuser. The Developer will achieve this concentration without adding lake water to dilute effluent in the treatment plant.

- Assessment of outfall locations for discharge from water treatment plant, with 4 separate engagement sessions (larger YKDFN community, working group and GMAC). Four potential discharge locations and three discharge cooling options were considered and evaluated. As a result of engagement and factors associated with land use outfall location was identified near the outlet/vicinity of Baker Creek.

Environmental Assessment Measure # 18 - Prior to preparing chambers and stopes for freezing, the Developer will conduct a comprehensive QRA evaluating both wet and dry methods for the initial freezing design, with respect to current risks and implications for future removal. This will include an evaluation of potential effects of the proposed freezing and wetting method on the thawing or frozen excavations, and potential impacts of ongoing design changes prior to implementing the Project. The Developer will release a plain language report to the public describing its considerations and the resulting design.

- The freeze study was engaged on through the Giant Mine Working Group and Giant Mine Advisory Committee. A plain language summary was developed that outlines the comprehensive methods to both wet and dry freeze methods and is used often as a valuable tool for engagement and communication.

Environmental Assessment Measure #22 – The Developer will conduct a study to determine appropriate depth of the tailings cap and B1 pit cover, in consultation with Environment Canada and responsible regulators, to verify that the depth proposed will ensure the tailings cap and B1 pit cover are not compromised by vegetation growth. The Developer will provide a report of this study to the MVLWB before it issues a water license for the Project.

- Measure 22 was addressed during the Surface Design Engagement process. This included eleven focused sessions over two years (2015 to 2017) to provide input into plans for remediation of the surface of the mine (Baker Creek, Pits, Tailings, Contaminated Soils and Land Use). The GMRP conducted a study as required in Measure 22 and the detailed review of closure options and risks resulted in formative input on design decisions with respect to the tailings cap and B1 Pit cover.

Environmental Assessment Measure #25 - The Developer will work cooperatively with responsible regulatory authorities and interested Parties in the development and submission of an Air Quality Management Plan which incorporates an ongoing air quality monitoring program. This ongoing monitoring program will include all previously identified on-site air quality monitoring stations and one off-site air quality monitoring station near Niven Lake. At a minimum, ambient concentrations of NO_2 and $PM_{2.5}$ will be monitored at the Niven lake site. Total suspended particulate and metal concentrations will be monitoring at the on-site locations. This AQMP will identify action levels and trigger additional management and mitigation activities, if required.

- To address Measure 25, an Air Quality Monitoring Program (AQMP) was developed. This included the installation of a series of air monitoring stations on the perimeter (fence line) of the Giant Mine Site, implementation of site-specific activity driven monitoring stations, and three community stations located in Ndilǫ, the Yellowknife marina, and Moyle Park (Niven). The site selection for three community stations located in Ndilǫ was done in consultation with YKDFN staff and the Giant Mine Advisory Committee (GMAC)

Environmental Assessment Measure #26 – In conjunction with Measure 10 above, the Developer will consider the results of the comprehensive human health risk assessment, and consult with the YKDFN and City of Yellowknife when determining suitable end uses of the site, to ensure that those proposed uses do not pose a health risk to people, including toddlers.

- The GMRP will support the City of Yellowknife in land use planning by providing information on final site conditions and residual risks at the site. The GMRP will work with the GMWG in 2021 to further clarify the constraints to potential future land uses presented in the Closure and Reclamation Plan.

1.5 Project Activities Relevant to the Plan

Project activities related to engagement are wide reaching and therefore engagement will take place throughout the entirety of the remediation period. Remediation will take over ten years to complete. After that time, ‘adaptive management’ will commence to determine if the completed activities are performing as designed. Once closure activities are complete, the GMRP will enter the post-closure phase; it is understood that post-closure activities are not in scope in this water licence.

This version of the Engagement Plan focusses on the remediation phase of the project.

2 VISIONS, PRINCIPLES, GOALS AND ENGAGEMENT OBJECTIVES

2.1 Vision

The GMRP vision for engagement is that, as a result of the GMRP communications and engagement program, rights and stakeholders, residents of Yellowknife, Ndilǫ and Dettah, and community and interest groups feel well-informed about the Project and that their input, including Traditional Knowledge, has been effectively integrated into the GMRP.

The overall Project goals for the GMRP are to:

- minimize public and worker health and safety risks
- minimize the release of contaminants from the site to the surrounding environment
- remediate the site in a manner that instills public confidence
- implement an approach that is cost-effective and robust over the long term

The GMRP recognizes that the Project can contribute to reconciliation through the overall GMRP by healing of the land through remediation activities, providing socio-economic opportunities through employment, and by building relationships through engagement and communication activities.

2.2 Guiding Principles

The GMRP adopts the four guiding principles presented in the Board's Engagement Policy as well as includes two of its own principles (5 and 6) to guide engagement for this remediation project:

1. Shared Responsibility – it is essential that engagement is a coordinated process within the co-management system of the region, which reflects the responsibility of the GMRP, Indigenous governments/organizations, and the Boards to enable meaningful involvement of rights and stakeholders.
2. Appropriate Disclosure – all information relevant to the application is made available in a timely and understandable manner and considers the culture(s), language(s), and traditional practices of rights holders.
3. Inclusiveness – Those potentially affected, including youth, Elders, women, and men should be given the opportunity to be heard and involved.
4. Reasonableness – the GMRP, rights and stakeholders, the Boards and the Crown must be reasonable when setting expectations for engagement and consultation processes and be willing to enter these processes in the spirit of cooperation. This includes the provision of reasonable resources, where appropriate, for carrying out and participating in consultation and engagement processes.
5. Acknowledgement and Respect – All experiences with respect to the history and legacy of the Giant Mine, its impacts to traditional use, and the current remediation project are real and deserve to be heard.
6. Openness – All questions and concerns are welcomed as an opportunity to build clarity, understanding, and trust.

As well as having principles for engagement, there are principles for closure of the site. While many are more technical in nature (e.g., physical stability, chemical stability and minimizing long-term active care requirements), the need and importance for engagement as part of the closure process, is reflected in these two key closure principles.

1. Incorporation of input from rights and stakeholders—The CRP reflects the input from engagement initiatives and reflects the values and direction provided by the local communities.
2. Effective risk communications for future generations— The CRP recognizes the need for ongoing effective risk communication to future generations, considering the need for long-term management of the arsenic trioxide underground via the freeze, and other longer-term activities such as water treatment.

2.3 Goals for Engagement

The overall GMRP engagement goals are:

1. Rights and stakeholders have increased trust in the project plan, the project team, the overall project management, and are confident in the direction the project is taking moving forward.
2. The GMRP is operating in an open, inclusive and transparent manner.
3. Rights and stakeholders feel increased ownership and optimism with respect to the future remediation of the Site, as a result of collaborative decision making with rights and stakeholders and the GMRP Team.

2.4 Objectives for Engagement

The GMRP also has several objectives for engagement:

1. The GMRP contributes to reconciliation by facilitating engagement activities that lead to long-term socio-economic benefits for Indigenous communities relating to the remediation of Giant Mine.
2. Rights and stakeholders feel well-informed about the GMRP, are aware they have opportunities to participate in the Project, and feel they have the tools necessary to capture these opportunities (e.g., Socio Economic Industry Day, capacity building, IOC, etc.).
3. Internal parties (including the GMRP Team) are well-informed about the Project and are confident with respect to the role they play in communications and engagement.
4. There is an increased alignment between the expectations of rights and stakeholders and the GMRP Team.
5. Communications and engagement help rights and stakeholders and community members to understand the risks associated with the GMRP.
6. Increase and maintain rights holders' participation in community-based monitoring processes.
7. Facilitate the exchange of and understanding of Traditional Knowledge and the link to technical information regarding the GMRP and Site.

3 RIGHTS HOLDERS AND STAKEHOLDERS, OVERSIGHT AND REGULATORY BODIES

The following sections outline the rights and stakeholders and groups the GMRP provides information to and requests input from.

3.1 Rights Holders and Stakeholders

3.1.1 Rights Holders

- Yellowknives Dene First Nation (YKDFN)
- Giant Mine Advisory Committee (GMAC)
- North Slave Métis Alliance (NSMA)
- Tłı̨chǫ Government

3.1.2 Communities

- Residents of Yellowknife
- Residents of Ndilǫ
- Residents of Dettah
- Residents of Tłı̨chǫ communities

3.1.3 Community Interest Groups

- Alternatives North
- Ecology North
- Back Bay Community Association
- The Great Slave Sailing Club
- Fly Kids Foundation
- Yellowknife Historical Society

3.2 Oversight/Regulatory Bodies

- Giant Mine Oversight Board (GMOB)
- Mackenzie Valley Land and Water Board (MVLWB)
- City of Yellowknife – Administration & City Council
- Government of the Northwest Territories (GNWT)
    - Department of Lands
    - Department of Environment and Natural Resources, Environmental Protection
- Crown-Indigenous Relations Northern Affairs Canada (CIRNAC)
- Department of Fisheries and Oceans (DFO)
- Environment and Climate Change Canada (ECCC)
- Health Canada
- Workers Safety and Compensation Commission (WSCC)

4 ENGAGEMENT AND COMMUNICATION

4.1 Communication

Table 4-1 outlines the communication methods that the Project currently implements and will be maintained throughout the Project. The specific expectations and timing for these communications activities are dependent on Project activities. The GMRP will update the Engagement Timeline monthly and provide it to the Working Group prior to meetings. Specific details for engagement (e.g. who will be engaged and when) are included in this timeline.

A key part of the GMRP communication are emergency communications. Please refer to Appendix D for the full Emergency Communications Plan.

Table 4-1: Communication Methods

Types of Communications	Activity	Timing	Comments
Written Notification or Radio/Video Broadcast	Key messaging and Q&A development	As needed	For use with media, public and rights and stakeholders
	Reporting on air quality monitoring results	Weekly As needed	Distributed to the GMRP email distribution list, submitted to the MVLWB, and air quality results uploaded to the GNWT website[1]
	E-newsletter	8-10 per year	Distributed to email list, posted to website[2]
	Social Media	As and when needed	Giant Mine twitter accounts @GiantMine and @MineGiant to communicate project information on an as and when needed basis. Giant Mine Remediation Project content shared on the @GovCanNorth Facebook and Twitter channels
	Media relations (pro-active)	As required or as per annual work plan	Includes: media tours, media technical briefings, planned interviews, media training for media spokesperson(s)
	Media relations (responsive)	As required	Project spokespersons are designated, trained and supported with approved messaging
	Site related Public Service Announcements	As required	Includes print and radio
	Response to unforeseen events	Target: develop and deliver media messages within 24 hours in cases of emergency and 2-3 days for other issues	Based on the Emergency Communications Plan. Vehicles include: media interviews; web postings; Twitter feed; direct communication with key partners; e-newsletter distribution list

[1] GNWT Air Quality Monitoring Network Website (http://aqm.enr.gov.nt.ca/)

[2] GMRP Monthly Newsletters (https://www.aadnc-aandc.gc.ca/eng/1589922281977/1589922330698)

Table 4-1: Communication Methods

Types of Communications	Activity	Timing	Comments
Written Notification or Radio/Video Broadcast (Continued)	Videos	As and when determined	Has been previously carried out for technical components of the project (e.g., Freeze Optimization Study, Roaster Complex deconstruction, Closure Plan overview [drone footage])
	Website	On-going, updated as and when needed by significant project initiatives or engagement sessions (e.g., public forum event)	• Provides project specific information on the remediation plan, contact information, provides links to other relevant organizations • CIRNAC – Giant Mine Website https://www.aadnc-aandc.gc.ca/eng/1100100027364/1100100027365 • GNWT – Giant Mine Website https://www.enr.gov.nt.ca/en/services/giant-mine-remediation-project • Parsons (MCM) https://giantminerp.ca/
	GMRP “info line”	Phone number advertised in most communications	For more information, please contact the Project team (867) 669-2426.
Face-to-Face and/or Virtual Meetings	Giant Mine Virtual Reality	As needed	Provides residents an opportunity to see the underground, as well as what the future or the site could look like through virtual reality
	In-person meetings or telephone calls (if appropriate) with representatives of rights and stakeholders, communities, interest groups, or other rights and stakeholders.	Regularly/as needed.	Dependent upon the party in question and the issues being discussed
Community Public Meetings	Community forums; informal public meeting where everyone in the community is invited to attend and discuss the project; broad community input required.	• 1 per year for YKDFN • 1 per year for NSMA • 1-per year for Yellowknife residents • GMOB Annual Public Meeting • Tłı̨chǫ Government (as requested)	• Are often accompanied by print materials (e.g., factsheets) • GMOB is mandated to hold semi-annual meetings and annual public meetings which GMRP participates in as a “party”. • GMRP also attends other community meetings as and when requested by the hosting organization.
Workshops	Focus Workshops; discuss technical issues, or when information needs to be shared and feedback solicited with large groups of people.	As required	The format of workshops will vary based on the focus and interests of participants; the Surface Design Engagement (SDE) process is an example of a large-scale workshop effort. The selection of the location of the landfill and outfall are examples of more focused workshops.

The GMRP Team is actively exploring new methods for continual improvement in Project communications and engagement techniques and approaches (e.g., translated video and models).

General public inquiries and/or questions can be directed to the general GMRP information line at 1-867-669-2426, or provided via email to giantmine@aandc-aadnc.gc.ca.

There are also formal notifications to regulators, inspectors, and the public that are captured in the management plans. These are not included here since they are already shown in each management plan.

4.2 Engagement

Engagement is a major initiative that has been undertaken by the GMRP. This section includes details on the engagement committees that exist, their purpose and meeting frequency. Educational activities and community outreach initiatives are also included along with additional detail on socio economic engagement. Some historical information is provided in this section to provide background but a detailed description of historical engagement is included in Appendix B.

4.2.1 Engagement Committees

Established engagement channels are a key method through which the GMRP Team engages with rights and stakeholders in a meaningful way, both to provide information and to solicit input. Over time, a range of rights and stakeholder engagement groups have been established or considered to address the needs and interests of rights and stakeholders and the GMRP Team, and to satisfy the regulatory process.

Table 4-2 provides an overview of the nature and status of these groups as it relates to engagement. The specific membership and timing of these groups has changed, and may continue to change over time, to reflect the interests and desires of the participants. Additionally, although many meetings are scheduled monthly, meetings are occasionally cancelled if both parties are in agreement. Any changes to these committees will be updated in subsequent versions of this Plan.

Engagement methods (last column in Table 4-2) have been adapted due to COVID-19 restrictions over the past year. When COVID-19 restrictions were first enacted in the NWT, many meetings were cancelled because they had traditionally been held face-to-face. The GRMP Team along with the stakeholders and rights holders have adapted to having meetings virtually where possible as indicated in the Primary Methods column.

Table 4-2: Engagement Committees and Purpose

Engagement Committee	Primary Purpose	Primary Participants	Primary Methods
Giant Mine Working Group (GMWG)	An opportunity to provide a forum for interested parties to discuss and make recommendations on technical, operational and project activities regarding the remediation of Giant Mine. The GMRP also engages this forum on updates to environmental management plans and programs.	City of Yellowknife, North Slave Métis Alliance (NSMA), Alternatives North (AN), Yellowknife Dene First Nation (YKDFN), Environment and Climate Change Canada (ECCC), Department of Fisheries and Oceans (DFO), Health Canada (HC), Giant Mine Advisory Board (GMOB), Public Services and Procurement Canada (PSPC)	Scheduled Monthly meetings (face-to-face or virtual)

Table 4-2: Engagement Committees and Purpose

Engagement Committee	Primary Purpose	Primary Participants	Primary Methods
Giant Mine Advisory Committee YKDFN (GMAC)	An opportunity to express concerns about the project and to receive updates from the Giant Mine Remediation Team. GMAC also provides an opportunity to receive input on specific topics.	Members of the YKDFN	Scheduled Monthly meetings (face-to-face)
North Slave Métis Alliance (NSMA)	An opportunity to discuss key initiatives and provide annual updates	NSMA members	Meetings upon request or as identified by the GMRP (face-to-face or virtual)
YKDFN Chiefs and Council	An opportunity to provide an annual update to YKDFN Chief and Council	YKDFN Chief and Council	Annual meetings (face-to-face)
City of Yellowknife Staff	Working level meetings with senior City staff to create an open dialogue and address questions on topics such as permitting and future land use.	City of Yellowknife Senior Staff	Scheduled monthly staff meetings with Directors (face-to-face or virtual)
City of Yellowknife Mayor and Council	An opportunity for the project team to attend regular City Council meetings and the Municipal Services Committee, to give updates on the project and answer questions. Media and the public are often present	GNWT, CIRNAC, City of Yellowknife Mayor and Council	GMRP Team one to two times/year (face-to-face or virtual)
YKDFN Elders Senate	An existing YKDFN body that gives advice to the chiefs and councils and provides Traditional Knowledge to the project as and when needed	Made up of YKDFN elders	GMRP Team meetings upon request (face-to-face); on hold until COVID-19 controlled
Health Effects Monitoring Program Advisory Committee (HEMPAC)	An opportunity for member groups to contribute to the development and implementation of the monitoring program by utilizing their health expertise and knowledge of regional and community level issues	GNWT, GNWT-HSS, CIRNAC, Health Canada, YKDFN, NSMA, GMOB, City of Yellowknife, University of Ottawa	Scheduled Monthly Meetings (virtual)
Great Slave Sailing Club	An opportunity to inform the Sailing Club of activities at Giant Mine and exchange information as the club holds a lease with the GNWT within the Project Boundary	Board of Directors and members of the Sailing Club	Annual meetings (face-to-face or virtual)
Yellowknife Historical Society	A venue to discuss issues and exchange information and/or ideas relating to preserve the heritage of the Giant Mine.	Board of Directors of the Mining Heritage Society	Annual meetings (face-to-face meetings

Table 4-2: Engagement Committees and Purpose

Engagement Committee	Primary Purpose	Primary Participants	Primary Methods
Socio-Economic Advisory Body	The SE Advisory Body's mandate is to provide direction and guidance to the Socio-Economic (SE) Working Group to act as senior government champions for the implementation of the SE Working Group's approach To ensure that members of the group will be able to address organizational barriers to implementing the Socio-Economic Strategy and provide strategic advice to the working group	City of Yellowknife, Citizen Services Yukon and Northwest Territories, YKDFN, PSPC, GNWT, Canadian Northern Economic Development Agency, CIRNAC, NSMA, and AN	Quarterly meetings (face-to-face or virtual)
Socio-Economic Working Group	The SE Working Group's mandate is to coordinate and conduct activities related to the implementation of the GMRP Socio-Economic Strategy. More specifically, the SE Working Group's objectives are to: (1) Coordinate activities related to the implementation of the GMRP Socio-Economic Strategy through sharing information and seeking opportunities to improve collaboration; and, (2) Report and seek advice from the Project Management Team (PMT) and Socio-Economic Advisory Body on the implementation approach.	City of Yellowknife, YKDFN, PSPC, NSMA, Tłı̨chǫ Government, GNWT-ENR, Canadian Northern Economic Development Agency, CIRNAC, MCM, GMOB (observer status)	Scheduled Bi-Monthly meetings (face-to-face or virtual)
Perpetual Care Plan Advisory Task Force	To provide support and recommendations to the GMWG about the development of a comprehensive PCP, so that members of the GMWG can provide effective input to the GMRP about the PCP and those members who are signatories to the Environmental Agreement can make informed decisions about the endorsement of the PCP.	City of Yellowknife, CIRNAC, GNWT- ENR, AN, YKDFN, NSMA	Bi-Monthly meetings (face-to-face or virtual)

Table 4-2: Engagement Committees and Purpose

Engagement Committee	Primary Purpose	Primary Participants	Primary Methods
Hoèla Weteèst'eèdeè Advisory Committee	The objectives and purpose of the Hoèla Weteèst'eèdeè Advisory Committee are to: • provide advice and make recommendations by utilizing health expertise and knowledge of regional and community level issues • provide technical expertise and advice in the development and implementation of the Study • provide community perspective, expertise, advice, and traditional knowledge in the development and implementation of the Study • monitor the implementation of the Study and provide input into refinement opportunities • provide advice on proposed communications and contribute to the development of communication materials • exchange up-to-date information among members to maintain stakeholder involvement in the Study	GNWT, GNWT-HSS, CIRNAC, Health Canada, YKDFN, NSMA, GMOB, City of Yellowknife, Wilfred Laurier University	Scheduled monthly meetings (face-to-face or virtual)
Aquatics Advisory Committee (AAC)	The primary purpose of the AAC is to: • bring together a small group of rights and stakeholders who have an interest in the Project and the aquatic environment • share project design details (many of which informed by knowledge and recommendations made during the Surface Design Engagement process) • gather Traditional and Community Knowledge to inform project decisions (e.g., type of fish and vegetation desired in Baker Creek and Yellowknife Bay) • gather stakeholder and rights holder concerns and recommendations to be submitted as part of the DFO Fisheries Authorization applications The participants participate in aquatic-related engagement activities as representatives and informal community liaison	CIRNAC, GNWT, YKDFN, NSMA, DFO, ECCC, GMOB, HC, AN, City of Yellowknife, Other interested parties	Monthly Meetings until Aquatic Engagement is complete. Regular meetings expected to be complete in spring of 2021. Meetings will then be held on an as needed basis (face-to-face or virtual)

4.2.2 Educational Initiatives

The GMRP has been proactively looking for opportunities to communicate publicly and engage with rights and stakeholders in an effort to communicate Project details with larger audiences, beyond those noted in Sections 4.1 and 4.2. The following educational initiatives will continue to be undertaken.

4.2.2.1 YKDFN Job Fair

The GMRP Team attends the YKDFN's youth job fair annually, aside from 2020 due to COVID-19, encouraging youth to become more informed about future employment opportunities on the Giant Mine site. The GMRP Team explains what types of employment are available and how to prepare for them, as well as possible scholarship opportunities provided through Parsons, and the training opportunities available through the Mine Training Society and Dechįta Nàowo.

4.2.2.2 High School Education Unit (EA Suggestion 3)

The GMRP is actively working with rights and stakeholders and the GNWT Department of Education, Culture and Employment to develop a grade 10 curriculum resource to encourage widespread learning from and remembering of the experiences of the Giant Mine. The GMRP Team has also provided a number of workshops with the assistance of consultants to grade 11 biology students at École St. Patrick High School. These students are given an opportunity to participate in hands-on water sampling and fish monitoring activities as part of their Ecology unit. This program helps to broaden Yellowknife youths' understanding of the future of the site, gives technical monitoring experience and promotes active, continuing research on Giant Mine. This work engagement work will resume once COVID-19 restrictions are lifted.

4.2.2.3 In-classroom Education

When requested (and when COVID-19 requirements can be met), members of the GMRP Team will visit classrooms of various ages to discuss aspects of the GMRP. Topics often include: history of Giant Mine, environmental monitoring, information on arsenic (arsenic trioxide), continued research and the Closure and Reclamation Plan. These initiatives allow the GMRP to continue to engage with youth while providing knowledge about the site, expelling myths, and promoting future research and community involvement.

4.2.3 Community Events

4.2.3.1 Spring Trade Show

For the past several years, the GMRP team has held a booth at the Yellowknife Spring Trade Show in May. The booth offers the community an opportunity to ask questions about the Project, meet the project team, and take home valuable information about the remediation and its process. With an attendance of over 6000 community members each year, it is a great venue for the team to hear concerns from the public and to offer ongoing communication with a large audience.

4.2.3.2 Community Forums

Since 2010/2011, the GMRP Team has been holding annual public forums. The forums started as part of the Site Stabilization Program to provide updates on the progress of site stabilization, and has since become an avenue for the GMRP to provide a general overview of the Project. The public forums will continue to act as one of the avenues that the Project uses to engage with the general public.

4.2.3.3 Industry Day

In 2018, the GMRP Team hosted a 1-day conference to help prepare local and Indigenous businesses to participate in upcoming procurement opportunities on the Site. The GMRP Team and Parsons Inc. provided information on the anticipated project schedule, types of work packages and procurement approaches, with opportunities for questions, discussions, and networking.

In 2020, Parsons held a 3-day Industry Day virtual event (three hours per day) to help prepare local and Indigenous businesses to bid on the site work (Early Works Implementation) that is scheduled to occur in 2021 and 2022. Similar details were included in the virtual event as was provided in 2018. Unfortunately due to the even being held virtually because of COVID-19 restrictions, the face-to-face aspect was lost. Questions could be submitted via e-mail to Parsons. Additional procurement workshops are being considered for business that are registered under PSAB.

Parsons will continue to hold Industry Day events currently scheduled to occur annually.

4.2.4 Socio-Economics

The GMRP spans a wide variety of topics and has a wide range of responsibilities including social, economic, human health, and environmental considerations. The Water Licence process is focused on the environmental considerations of the project, specifically related to the use of water and deposit of waste on land and in water. The MVLWB, and therefore the Water Licence requirements, is focused on GMRP uses of water and land.

However, GMRP engagement is broader than only the requirements of the MVLWB. And the Project recognizes the potential impact of the GMRP on the Northern economy. As such, the GMRP is working with organizations and programs to promote capacity-building to ensure a collaborative approach to maximize the benefits to Northern and Indigenous groups and businesses.

In 2019, the GMRP completed a major update to the Socio-economic Strategy and made it available to the public. In collaboration with rights- and stakeholders, the Project has developed a Socio-economic Implementation Plan to guide the Project's and its partners' actions in delivering tools to ensure socio-economic benefits from the Project. The goal of this Implementation Plan is to maximize economic opportunities for Northerners and local Indigenous peoples through employment and procurement, address socio-economic impacts, and mitigate potential barriers. The objectives of this Implementation Plan are as follows:

1. Clarify communicate socio-economic barriers, opportunities and benefits.
2. Coordinate with rights and stakeholders to minimize negative impacts, build capacity and deliver benefits.
3. Improve socio-economic planning and performance, leading to a strengthened social licence.

The GMRP Team will be communicating progress on the Socio-economic Implementation Plan as the Project moves into remediation. A list of Key Performance Indicators (KPI) and Targets, for a subset of KPIs, will be used to demonstrate the Project's socio-economic performance. The Targets are a benchmark to measure the Project against, focusing on those that encourage and drive performance and are more directly under the control or influence of the Project. Reporting on KPIs and Targets will be done annually in the GMOB Annual Report and summarized via a Snapshot document for public engagement events.

The GMRP Team has also committed to continuing to engage with several socio-economic committees to ensure that proper direction and guidance is provided to the Project Team and the MCM as it relates to the socio-economic activities on the GMRP (Table 4-2). Additional details regarding the status of socio-economic activities on the GMRP can be found on the Project's website.

The MCM is responsible for the following socio-economic commitments:

1. Develop an Indigenous Benefits Plan during the implementation of the remediation project.
2. Complete, at minimum, two Labour Capacity Study updates.
3. Structure work packages and sub-contracts to maximize opportunities for Indigenous and northern businesses.
4. Use IOCs in subcontractor tenders.
5. Use the Procurement Strategy for Aboriginal Businesses (PSAB), where competition is achievable in the market place.

5 TRADITIONAL KNOWLEDGE AND WAY OF LIFE

The consideration and incorporation of Traditional Knowledge has been integrated into project planning and activities through the consultation and engagement processes we undertake with rights holders on various project works, as well as the overall Closure and Reclamation Plan.

5.1 Past Work

5.1.1 YKDFN

The GMRP supported Trailmark Systems Incorporated in 2018 to carry out a Traditional Knowledge study with the YKDFN at the Giant Mine site. The goal of this work is to ensure that YKDFN knowledge, values, risk perceptions, and understanding of damage and impacts to past and current land use is incorporated into the Project, that upcoming or future reclamation plans are aligned with YKDFN values and will support future land use aspirations. Furthermore, this work will help support the ongoing, proactive inclusion of Traditional Knowledge elements into mine management and risk assessment throughout the remediation of Giant Mine site.

5.1.2 NSMA

Through a contribution agreement, the project also supported the completion of a 2020 preliminary study on the traditional land use of the NSMA in the Great Slave area, Yellowknife Bay and the Giant Mine Site area. The project noted the importance of creating a clearer picture of Métis history and Traditional Knowledge in order to effectively engage with the community.

5.2 On-going Work

Understanding and incorporating Traditional and local Indigenous Knowledge, along with perceptions and values is an important component of the GMRP to benefit all people affected and to have the broadest possible knowledge base to achieve the best possible results. The GMRP Team will continue to include Indigenous Knowledge into various facets of the project. The Engagement Team will track and will report on this item as per the Water Licence requirement (Appendix C). The design plans and monitoring plans will include a section on where Traditional Knowledge and/or Community Knowledge was included in the plan. If there was no Traditional Knowledge and/or Community Knowledge included it will be indicated in this section.

Not only has Traditional Knowledge been gathered through the direct studies but has been shared throughout the engagement sessions that have taken place throughout the project. Many project decisions have been influenced by the valuable Traditional Knowledge that community members have shared. Recommendations from community members have been incorporated into various aspects of the project. Refer to Appendix B, for a detailed overview of the GMRP's history of engagement and Appendix C for the incorporation of Traditional Knowledge.

6 ENGAGEMENT ACTIVITIES DURING THE LIFE OF THE PROJECT

Moving forward through site remediation the GMRP Team will continue engaging on multiple facets of the Project. This includes providing annual reporting updates on monitoring and closure plan advancements, updates on work completed on EA measures, continued community monitoring and other outreach initiatives within the community including fish monitoring, education for high school students, updates on ongoing operations, and contributions to cumulative effects monitoring within Great Slave Lake. Additionally, continued work on hearing and incorporating Traditional Knowledge into the GMRP, and providing and communicating socio-economic opportunities, are also part of the GMRP engagement plan.

As laid out in Section 4 of this document, engagement channels have been developed and will continue to exist during the life of the Project. These channels will remain as the key method through which the GMRP team engages with rights and stakeholders. Please refer to Table 4-2 for the committees (e.g., Giant Mine Working Group, Giant Mine Advisory Committee), topics of engagement covered and timing (e.g., monthly). Over time, there may be changes to the scope of each engagement committee as the GMRP progresses into the various phases of the Project. These changes will be captured and reflected in subsequent versions of this Plan.

The sections below will provide information on engagement related to the regulatory requirements. Table 6-1 provides a list of engagement triggers to summarize the information included in Sections 7. Section 8 includes a summary of how the Engagement Plan will be reviewed and updated over the life of the Project.

6.1 Regulatory-related Engagement

6.1.1 Submissions to the MVLWB

The MVLWB has an established review process for all documents that are required by the Water Licence and Land Use Permit held by the GMRP. This includes design and construction plans, management and monitoring plans, and corresponding reporting, and other annual reporting requirements. Most of these documents are for Board approval.

Documents submitted to the MVLWB for Board approval undergo the Board's formalized public review process. These documents are posted on the MVLWB Online Public Review System, and all rights and stakeholders are notified that the documents are available for review. All rights and stakeholders are then able to provide comments for the Board's consideration, prior to the reviewer deadline. The GMRP Team will then have the opportunity to respond to all comments received, prior to the Board making a final decision. In addition to this formalized review process, the GMRP will also present the results of many of its programs in annual meetings and/or to established committees, as is applicable (refer to Section 4.2 above for a list of establish committees). For example, plan progress will be presented at the GMRP public forum and any other planned annual community meetings.

Technical updates to planned closure activities may also require additional engagement beyond the formalized process by the Board. The GMRP has established engagement committees with representatives from rights and stakeholders and regulatory bodies that allow the GMRP to notify rights and stakeholders representatives and gain input into proposed changes, prior to submission to the Board if deemed necessary (Table 6-1 for a summary of engagement triggers). The Water Licence conditions require the GMRP to review its management plans annually, and update them as needed. These updates will be submitted to the Board for review. See Section 8 below for details specific to review of the Engagement Plan.

Table 6-1: Summary of Engagement Triggers and Methods

	Engagement Trigger	Anticipated Timelines (Short, Medium, or Long-Term)	Primary Purpose	Primary Methods of Pre- Submission Engagement	Pre- Submission Engagement Participants	Regulatory Authority Engagement
1	Application for Renewal or Amendment of Water Licence and Land Use Permit (as required)	• Long-term	• Pre-application engagement to record and respond to initial questions and to gather community input • Gather community input into Plans and Programs to accompany the Water Licence application • To discuss updates to the plans and updates to design	Pre-application engagement may include: • Meetings with Community Leadership • Community Meetings • Workshops • Technical Sessions • Written Comments/Responses	• GMWG • GMAC	Mackenzie Valley Land and Water Board review process, including: • Technical meetings • Written Comments/Reponses • Public Hearings This information will be sent to the MVLWB Distribution list
2	Management and Monitoring Plans (Version 2.0 for Phase 2 Active Remediation and Adaptive Management)	• Long-term	• To gain input into proposed changes to established Plans and Programs • Ensure parties are aware of proposed changes or updates to Environment Plans and Programs • Board approval required prior to implementation	Pre-submission engagement may include: • Technical Sessions • Written comments/responses to be included with submission to the Mackenzie Valley Land and Water Board	• GMWG	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
3	Annual updates to Management and Monitoring Plans (Annual submissions to align with WL conditions)	• Long-term	• Ensure parties are aware of proposed changes or updates to the Management and Monitoring Plans • To gain input into proposed updates • Board approval required prior to implementation	• No regular pre-submission engagement anticipated on annual updates to MMPs • Pre-submission Engagement required for the Dust Management and Monitoring Plan prior to reducing monitoring requirements for post-remediation conditions including: • Technical Sessions; or • Written comments/responses to be included with submissions to the Mackenzie Valley Land and Water Board	• No pre-engagement anticipated on annual updates to MMPs • Change to Dust Monitoring Post-Remediation: GMWG	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
4	Reclamation progress updates, submitted through the Water Licence Annual Report	• Long-term	• To provide a summary of the reclamation progress made from the previous year • To provide an overview of the upcoming closure activities planned for the upcoming calendar year	• No pre-submission engagement anticipated on Water Licence Annual Report	• No pre-engagement anticipated on Water Licence Annual Report	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
6	Closure Criteria in development to be included in subsequent Design Plans and revised CRP Closure Table	• Short-term to Medium-term	• To gain input into proposed closure criteria in development • To gain input into closure criteria in development should a new component or new design be incorporated as a result of RRPs.	Pre-submission engagement may include: • Technical meetings • Written and/or verbal comments to inform revisions to closure criteria in development	• GMWG	Mackenzie Valley Land and Water Board review process (via Design Plans): • Written comments/Response This information will be sent to the MVLWB Distribution list
7	Design Plans and, where applicable Construction Plans submitted to the Board prior to commencement of construction/remediation of components in the Closure and Reclamation Plan.	• Short-term	• To provide final design details and monitoring requirements for Project Components identified in the Closure and Reclamation Plan	Pre-submission briefing (via request) to include: • Technical briefing meetings	Pre-submission briefing on priority Design Plans at request via: • GMWG • GMAC	Mackenzie Valley Land and Water Board review process (via Design Plans): • Construction Plans - for information only • Design Plans -undergo the formal review process (written comments/response) This information will be sent to the MVLWB Distribution list

Table 6-1: Summary of Engagement Triggers and Methods

	Engagement Trigger	Anticipated Timelines (Short, Medium, or Long-Term)	Primary Purpose	Primary Methods of Pre- Submission Engagement	Pre- Submission Engagement Participants	Regulatory Authority Engagement
8	Action Levels in Site-Wide Management and Monitoring Plans	Long-term	• To report when an action level has been exceeded	• Low action levels will be reported in the Annual Water Licence Report unless otherwise indicated in the applicable Site Wide Management and Monitoring Plan. • Moderate and high action levels will be reported to the MVWLB and an Inspector within 24 hours of an occurrence.	• No pre-engagement anticipated	This information will be sent to the MVLWB Distribution list
9	Aquatics engagement required for work in fish-bearing streams	• Medium-term	• To outline remediation activities in Baker Creek and Yellowknife Bay including nearshore and foreshore sediments design (60% designs) • To outline design constraints and assumptions • To gather stakeholder and rights holder concerns and recommendations to be submitted as part of the DFO Fisheries Authorization	Pre-submission engagement to include: • Technical briefing meetings	• GMRP Aquatics Advisory Committee • GMAC	DFO is required to engage with communities and rights holders; they will reach out through their channels to solicit feedback.
10	Closure and Reclamation Completion Report submitted to the Board	• Long-term	• To provide as-built designs.	• No pre-engagement anticipated on Closure and Reclamation Completion Report	• No pre-engagement anticipated on Closure and Reclamation Completion Report	Mackenzie Valley Land and Water Board review process (via Design Plans): • Written comments/Response This information will be sent to the MVLWB Distribution list
11	Final Closure and Reclamation Report	• Long-term	• To provide a compilation of all Closure and Reclamation Completion Reports	• No pre-engagement anticipated on Closure and Reclamation Completion Report	• No pre-engagement anticipated on Closure and Reclamation Completion Report	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
12	Post-Closure Monitoring and Maintenance Plan Table of Contents submitted to the Board	• Long-term	• To share monitoring and maintenance details for the post closure phase of the GMRP • To receive input on the Table of Contents	Pre-submission engagement may include: • Technical meetings • Written and/or verbal comments to inform TOC	• PCP Advisory Task Force • GMWG • GMAC	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
13	Performance Assessment Reports submitted to the Board	• Long-term	• To provide information regarding how each closure activity has met the respective closure criteria.	Pre-submission engagement may include: • Technical meetings • Written and/or verbal comments	• GMWG	Mackenzie Valley Land and Water Board review process: • Written comments/Response This information will be sent to the MVLWB Distribution list
14	Update to advances in the Project schedule	• Long-term	• To provide updates to the Project schedule and potential implications.	Pre- engagement may include: • Face-to-face or virtual meetings	• GMWG • GMAC	• N/A
15	Traffic and access plans	• Short-term	• To review and update traffic and access plans • To understand potential Project implications to highways • To gain input into the contents of the plans	Pre- engagement may include: • Face-to-face or virtual meetings	• City of Yellowknife • GNWT	• N/A

Table 6-1: Summary of Engagement Triggers and Methods

	Engagement Trigger	Anticipated Timelines (Short, Medium, or Long-Term)	Primary Purpose	Primary Methods of Pre- Submission Engagement	Pre- Submission Engagement Participants	Regulatory Authority Engagement
16	Public Access Plan	• Short-term	• To identify how the Project will maintain access to a public boat launch at the Giant Mine Town Site at all times during the open water season	Pre- engagement may include: • Face-to-face or virtual meetings • Written Communication • Press Release • Updates to GMRP website	• City of Yellowknife • Yellowknife Historical Society • Mine Heritage Society • Great Slave Sailing Club	• N/A
17	Annual Report (Section 5.1 Environmental Agreement) Annual update to GMOB on the Project's key activities (no later than October 1st in each year)	• Long-term	• To present key project information to GMOB as outlined in Section 5.2 of the Environmental Agreement	No engagement by GMRP anticipated on GMOB report Engagement with GMOB may include: • Face-to-face or virtual meetings • Written Communication Engagement with the public may include: • Provide a link to the Annual Report on the GMRP website. • Plain language summary is included in the annual report as an Annex	n/a	Giant Mine Oversight Board review process: • Written comments/Response
18	Status of the Environment Report (Section 6.1 Status of the Environment Report). Share with the Oversight Body and make available to the public, a comprehensive report on the Project (seven years after the Effective Date, and subsequently every three years for a period of 15 years. After the 15-year period, Co-Proponents shall prepare the report required by section 6.1 every five years)	• Long-term	• Opportunity to share and discuss key project activities that occurred in the reporting period with GMOB and rights and stakeholders, as outlined in section 6.1 of the Environmental Agreement	No pre-submission engagement anticipated on Status of the Environment Report. Engagement may include: • Face-to-face or virtual meetings • Written Communication • Provide a link to the Status of the Environment Report on the GMRP website. • Plain language summary of the Report	• Community Members • (Public meeting attendees)	Giant Mine Oversight Board review process: • Written comments/Response
19	Perpetual Care Plan (Section 4.2 Environmental Agreement) Presentation of draft Perpetual Care Plan and subsequent versions to the Giant Mine Oversight Board	• Long-term	• Opportunity to get input and feedback on how the GMRP are addressing Perpetual Care requirements	Pre-submission engagement may include: • Technical meetings • Written and/or verbal comments to inform PCP	• PCP Advisory Task Force • GMWG	Giant Mine Oversight Board review process: • Written comments/Response
20	Completion of the Hoèła Weteèts'eèdee` Understanding Community Well-being Around Giant Mine (Measure #10) *	• Long-term	• To disseminate results of the study • To determine if and how the project can use the results to inform remediation	Pre Submission may include: • Face-to-face or virtual meetings • Written Communication • Plain language summary of the study	• GMWG • YKDFN • NSMA • Community Members (YK population)	• N/A

Table 6-1: Summary of Engagement Triggers and Methods

	Engagement Trigger	Anticipated Timelines (Short, Medium, or Long-Term)	Primary Purpose	Primary Methods of Pre- Submission Engagement	Pre- Submission Engagement Participants	Regulatory Authority Engagement
21	Socio-Economic Implementation Plan and the Socio-Economic Strategy	• Long-term	• To share project information, discuss socio-economic issues and recommendations collectively • To gather input from the committee and advisory body members • The Socio-Economic Implementation Plan is an evergreen document that is updated regularly during and/or after the socio economic working group meetings • Focus group meetings have begun to take place with stakeholder and rights holder groups and will continue to ensure that multiple voices are heard and ideas are considered and added to the Implementation Plan where possible	No pre-submission engagement anticipated on the Socio-Economic Implementation Plan and the Socio Economic Strategy. Engagement will include: • Face-to-face or virtual meetings • Written Communication	• SEWG • SEAB	• N/A

6.1.2 Pre-engagement Process for Management and Monitoring Plans

The GMRP Team developed a process in conjunctions with rights and stakeholders for pre-engaging on revised versions of the various GMRP management and monitoring plans for Phase 2: Active Remediation and Adaptive Management including:

- Arsenic Trioxide Frozen Shell Management and Monitoring Plan
- Water Management and Monitoring Plan
- Waste Management and Monitoring Plan
- Dust Management and Monitoring Plan
- Borrow and Explosives Management and Monitoring Plan
- Erosion and Sediment Management and Monitoring Plan

This process involved a staggered approach for sharing revised plans and updated responses to reviewer comments received during the Water Licence proceeding with the GMWG. It also included a 2-week review period, a 2-hour dedicated meeting to discuss each plan followed by a 2-week comment period. Reviewers were provided with a template to submit their comments, which will be provided with the GMRP's submission to the MVLWB.

The GMRP will carry out annual reviews of the management and monitoring plans and will notify the MVLWB no later than March 31 of each year or a minimum of 90 days prior to the implementation date of the proposed changes as per Water Licence, Part B, Conditions 9 and 10.

Moving forward, the GMRP will use the MVLWB review process for sharing annual revisions of the MMPs with rights and stakeholders (as per WL conditions); however, as the GMRP gets closer to post-closure, and some monitoring will be scaled down (e.g., dust), the GMRP will bring changes in the frequency of monitoring forward to rights and stakeholders through existing engagement channels through a similar pre-engagement process (e.g., GMWG, GMAC, NSMA, etc.).

6.2 Environmental Agreement

GMOB was established as a condition of the GMRP Environmental Agreement. The GMRP Environmental Agreement is a multi-party agreement signed on June 9, 2015 by the Government of Canada (CIRNAC), GNWT (ENR), YKDFN, NSMA, Alternatives North and the City of Yellowknife. Both GMOB and Co-Proponents (CIRNAC and GNWT) have specific roles and responsibilities under the Environmental Agreement that require varying levels of engagement. The specific engagement roles and responsibilities of the GMRP are further outlined in Table 6.1-1. GMOB also has a specific set of roles responsibilities under the Environmental Agreement. The engagement responsibilities of GMOB are not included in the GMRP engagement plan but can be referenced in the Environmental Agreement.

6.2.1 Long-term Risk Communication and Perpetual Care

The GMRP recognizes the responsibility of the Project to ensure risks are communicated effectively with current and future generations. The GMRP Team actively engages on the long-term risks of the Project through our various engagement channels to gather input into ways in which the Project can minimize Perpetual Care requirements at the Giant Mine site. The feedback that has been received through these channels has informed the Closure and Reclamation Plan to ensure there are both long-term approaches for communicating risk to future generations through physical means (e.g., landscape and Project design components that portray risks such as rock cover, boulders, monument, over 600 thermosyphons, etc.), and also through on-going engagement activities (e.g., GMWG and GMAC).

The GMRP is also required through the Giant Mine Remediation Project Environmental Agreement, to develop a comprehensive PCP that addresses improvements in records management, communications with future generations, long-term access to funds for the Project, and an analysis of different possible future scenarios that might affect the Perpetual Care of Giant Mine. The GMRP established a Perpetual Care Plan Advisory Task Force in October 2019 to provide support and recommendations to the GMWG about the development of a comprehensive PCP. The GMRP will engage with the Giant Mine Working Group and the public prior to the submission (both draft and subsequent versions of the PCP) to the Giant Mine Oversight Board, to gather input and feedback into the Plan (Table 6-1). As per Schedule 1, Condition 2 iii), the GMRP will also document engagement taken related to the Perpetual Care Plan in the Annual Water Licence Report.

The remediation decisions made by the GMRP inherently result in land-use constraints being established for the Site. Rights and stakeholders have expressed concerns during the 2019/2020 Water Licence process regarding the end land use objectives for the Project; however, the land-use planning process for identifying future land use of the Site is outside of the authority of the GMRP Team.

The GMRP Team will work with parties responsible for land-use planning and rights and stakeholders to understand the constraints that will exist post-closure. Furthermore, the GMRP Team has developed a land-use constraint map that will be updated and included as a component of the Perpetual Care Plan to help inform discussions on long-term risk communications.

The GMRP Team also understands the need for rights and stakeholders to understand post-closure site appearance. The Project works to communicate post-closure site appearance through site renders that are used as engagement tools through various engagement initiatives such as borrow and aquatics engagement. Furthermore, the Project has developed a virtual reality tool that has been shared with rights and stakeholders through the Project's annual public forum.

6.3 Ongoing Engagement Related to Environmental Assessment Measures

6.3.1 Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine

Measure 10 of the Report of EA (MVEIRB 2013) requires the GMRP to commission a human health risk assessment, which would include "indirect effects of potential exposures to arsenic on wellness, including stress effects" and "identify, design and implement appropriate design improvements and identify appropriate management responses to avoid or reduce the severity of any predicted unacceptable health risks."

Since 2017, the University of Laurier has been leading the development of the Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine Study with various rights and stakeholders. The University of Laurier's research team will lead the 2021 implementation of this study and will also independently lead the engagement related to the dissemination of the results of the study with the support of the GMRP.

The GMRP will report on the progress and results of the Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine Study in the Water Licence Annual Report (Section 8.0). This will include how the GMRP will use the results of the study (e.g., implementing appropriate design improvements and identifying appropriate management and communication responses or other mitigation measures as identified).

6.3.2 Land Use Planning (Measure 26)

Measure 26 of the Report of EA (MVEIRB 2013) requires the GMRP in conjunction with Measure 10 above, to "consider the results of the comprehensive human health risk assessment, and consult with the YKDFN and City of Yellowknife when determining suitable end uses of the site, to ensure that those proposed uses do not pose a health risk to people, including toddlers." The GMRP will support the City of Yellowknife in land use planning by providing information on final site conditions and residual risks at the site. The GMRP will work with the GMWG in 2021 to further clarify the constraints to potential future land uses presented in the Closure and Reclamation Plan.

6.4 Borrow Engagement

Borrow engagement workshops were held over three days that included a full-day workshop with the Yellowknives Dene First Nations, a full-day workshop with the Giant Mine Working Group and general public and an evening session with the North Slave Métis Alliance.

The purposes of the workshops were to:

- share information about the current state of borrow design and the process that will be used to finalize borrow course decisions
- increase the overall understanding of the range of considerations and constraints that will come into play when making decisions related to on site borrow sources
- allow the project team to fully understand which borrow sources are most contentious, for whom, and for what reasons
- explore options for incorporating stakeholder and Indigenous rights holders concerns and preferences

Results of the borrow engagement sessions helped to inform the GMRP Borrow and Explosives Management Plan and helped to drive the borrow design/selection of borrow areas. The Project Team will communicate with rights and stakeholders on the final borrow locations once the material balance and volumes are finalized by the Project Team (anticipated in 2020/2021 fiscal year).

6.5 Aquatics Engagement

Over the next number of years, the GMRP will be engaging with rights and stakeholders on a series of aquatic related aspects of the remediation project. The engagement is designed to ensure that GMRP in-water components are designed in a way that considers the needs and expectations of the GMRP, rights and stakeholders and regulators. Furthermore, the engagement is intended in increase trust and understanding from rights and stakeholders in the way in which the GMRP monitors and manages Project-related impacts to the aquatic environment. The following aspects of the GMRP will be engaged on during the Project's aquatic engagement work:

1. Baker Creek design
2. DFO offsetting requirements for in-water work in Baker Creek
3. Aquatics Effects Monitoring Program (AEMP; Yellowknife Bay) Design and Baseline Special Study
4. DFO offsetting requirement for in-water work in Yellowknife Bay monitoring and Yellowknife Bay future conditions

As part of this work, the GMRP has formed an Aquatics Advisory Committee (AAC) (Table 4-2) made up of a small group of rights holders and stakeholders who would participate in some or all of the aquatics engagement activities. The Committee will allow for participants with a keen interest in the GMRP aquatics environment to actively participate in meaningful conversations and exploration of concepts. The objective of the Committee is for participants to develop a deeper knowledge of the Project, the regulatory framework, the aquatic environment and environmental monitoring concepts. Furthermore, the AAC and associated engagement will also be designed to meet the engagement requirements of DFO Fisheries Authorization for the GMRP.

The GMRP Team is developing a series of post-remediation renders and artist illustrations to communicate the final design for Baker Creek and remediation activities taking place in Yellowknife Bay (nearshore sediments and foreshore tailings design).

The Working Group has also begun to be engaged on for the Baker Creek in development criteria. This will continue into early 2021.

6.5.1 Community Based Monitoring Program

As a result of engagement, the GMRP has documented concerns from YKDFN and NSMA which has highlighted that concerns with respect to re-contamination of sediment in Baker Creek and aquatic environments continue to be the highest priority. The concerns are rooted in fish having continued access to Baker Creek and being exposed to high levels of contaminants. Therefore, the project is exploring ways to address these concerns via a community-based monitoring program. In addition, the Project has heard the desire from YKDFN to participate in on-going, long-term monitoring on Site, in all areas, to ensure risks are communicated, and monitoring results are disseminated to their communities. The Project is committed to working with rights holders to address these concerns and is evaluating various methodologies and tools (e.g., Healthy Country Planning) for developing stewardship plans that reflect community values and perspectives. This work is currently under development, and more information will be made public and incorporated into this Plan when it becomes available. Preliminary meetings with both the NSMA and the YKDFN took place in 2019/2020.

7 PROCESSES FOR RAISING CONCERNS AND EXPRESSING INPUT

7.1 Avenues to Raise Concerns

The GMRP has several different avenues for rights and stakeholders and public to raise concerns relating to the Project. These avenues are specifically identified in Table 4-2.

7.2 Dispute Resolution Process

In the event of a dispute between GMRP and an affected party, the GMRP is committed to meet with the affected party to discuss the matter in an effort to resolve the dispute, and will exercise all reasonable efforts to resolve it amicably. These discussions may progress from operational and project staff to senior-level management to resolve the outstanding issue.

The GMRP has adopted a Dispute Resolution Process to manage disputes or grievances that may arise during engagement related to the Project. The Dispute Resolution Process consists of the following steps:

(a) Dispute Prevention – the Project works to prevent disputes relating to the GMRP through ongoing and regularly scheduled project meetings (Table 4-2), site tours, community public meetings, workshops, and official project correspondence (Table 4-1).

(b) Dispute Identification – through regular engagement with rights and stakeholders and ongoing communication from the GMRP Engagement Team.

(c) Dispute Response – initially through correspondence to confirm issues and responsible parties; once confirmed, through meetings and development of an Action Plan.

(d) Dispute Resolution –through execution of an Action Plan and follow-up with all rights and stakeholders.

(e) Dispute Escalation – if the issue cannot be resolved at a project level, issues will be elevated to the senior-level management. If appropriate, the Dispute Resolution process outlined in the Environmental Agreement will be used to address escalated issues (Government of Canada et. al, 2015).

8 UPDATES TO ENGAGEMENT AND PLAN REVIEW

8.1 Reporting

In accordance with the Annual Water Licence reporting requirements, the GMRP will submit a summary of engagement activities conducted in accordance with the approved Engagement Plan, (Schedule 1, Part B, Condition 3. e) of the Water Licence MV2007L8-0031). The Annual Water Licence Report provides a holistic summary of all on-site activities throughout the entire year. It will provide engagement activities undertaken during the previous calendar year, a brief description of activities planned for the forthcoming year, and provide reference to activities specific to closure and remediation, the Health Effects Monitoring Program (University of Ottawa as the primary researchers), the Socio-Economic Strategy, the Perpetual Care Pan, the Quantitative Risk Assessment, and the Hoèła Weteèts'eèdee` Understanding Community Well-being Around Giant Mine (Laurier University as the primary researcher).

8.2 Required Review and Updates

Engagement is an ongoing activity and the Engagement Plan is a living document. Over time it is anticipated that the proposed engagement methods and frequencies will be updated to reflect the needs and desires of rights and stakeholders, and the status of the Project.

The plan will be reviewed annually as per Part B, Condition 9 of Water Licence MV2007L8-0031 and updated as necessary by the GMRP. Annual review of the Engagement Plan will involve rights and stakeholders. As part of its annual meetings and within its engagement committees, the GMRP will provide opportunities each year for rights and stakeholders to reflect on the engagement conducted and provide input for updates and improvements to the Engagement Plan and the engagement processes being implemented.

All updates will be submitted to the MVLWB for review and approval. During the MVLWB review process, rights and stakeholders will have the opportunity to review and comment on the updates included in the Engagement Plan. Once approved, the updated plan will be implemented by the GMRP.

During development of the Engagement Plan we sought input from the GMWG and GMAC and subsequently the 2020 version of this plan was updated with additional feedback from the GMWG.

In Spring 2021, the GMRP will propose a feedback mechanism to the GMWG for review and input. It is anticipated that the finalized feedback mechanism will be incorporated into the Engagement Plan in March 2022 as part of the annual review and update (Part B, Condition 9 of Water Licence MV2007L8-0031).

8.3 Engagement Plan Status

Version 1.0 of this Engagement Plan was provided to the Mackenzie Valley Land and Water Board (MVLWB) for review and feedback in 2019 and was given interim approval by the MVLWB on September 18, 2020.

This Engagement Plan has been updated to include additional engagement activities that have occurred since that submission (refer to Appendix B).

9 REFERENCES

AANDC (Aboriginal Affairs and Northern Development Canada). 2014. Letter regarding the Report of Environmental Assessment and Reasons for Decision, Modifications to Measures. Letter from Bernard Valcourt, Minister of AANDC to JoAnne Deneron, Chairperson of MVEIRB. 11 August 2014.

CIRNAC and GNWT (Crown-Indigenous Relations and Northern Affairs Canada and Government of the Northwest Territories). 2019a. Giant Mine Remediation Project Closure and Reclamation Plan. Submitted to the Mackenzie Valley Land and Water Board, Yellowknife, NT, Canada.

CIRNAC and GNWT. 2019b. Updated Project Description. Prepared for the Mackenzie Valley Land and Water Board, Yellowknife, NT, Canada. 2019.

CIRNAC and GNWT 2020a. Engagement Log. Submitted to the Mackenzie Valley Land and Water Board, Yellowknife NT, Canada.

CIRNAC and GNWT 2020b. Engagement Summaries. Submitted to the Mackenzie Valley Land and Water Board, Yellowknife NT, Canada.

CanNorth (Canada North Environmental Services). 2018. Giant Mine Human Health and Ecological Risk Assessment, Prepared for Public Services and Procurement Canada – Western Region, Environmental Services and Contaminated Sites Management. Edmonton, AB, Canada.

Government of Canada. 1998. *Mackenzie Valley Resource Management Act*. S.C. 1998, c.25. Current to 30 January 2018. http://laws-lois.justice.gc.ca/eng/acts/M-0.2/FullText.html.

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MVEIRB (Mackenzie Valley Environmental Impact Review Board). 2013. Report of Environmental Assessment and Reasons for Decision, Giant Mine Remediation Project, EA0809-001. June 20th, 2013.

MVLWB. 2013a. Engagement and Consultation Policy. Available at: https://mvlwb.com/sites/default/files/documents/wg/MVLWB%20Engagement%20and%20Consultation%20Policy%20-%20May%2015.pdf.

MVLWB. 2013b. Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences. Available at: https://mvlwb.com/sites/default/files/documents/wg/MVLWB%20Engagement%20Guidelines%20for%20Holders%20of%20LUPs%20and%20WLs%20-%20Oct%202014.pdf.

APPENDIX A Conformity Table

Type A Water Licence

Conditions of the Type A Water Licence (MV2007L8-0031) are summarized in Table A-1 along with sections of the Engagement Plan where each condition is addressed.

Table A-1 Water Licence Conditions

Water Licence Section Reference	Water Licence Condition	Engagement Plan Reference
Part B, General Conditions Traditional Knowledge	3. In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee. 4. In each submission required by this Licence or any Directive from the Board, the Licensee is to identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission, and provide justification for any recommendation not adopted.	Section 5.2 Traditional Knowledge and Way of Life, On-going Work, and Appendix C, GMRP Traditional and Local Knowledge Engagement Past Considerations
Part B, Item 22, ENGAGEMENT PLAN - REVISED	Within 90 days following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised **Engagement Plan.** The updated version shall be developed in accordance with the MVLWB *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permit*s and Schedule 1, condition 2: Board Directives for the Engagement Plan.	Section 8.2 Required Review and Updates
Schedule 1, Condition 1 (e)	A summary of engagement activities conducted in accordance with the approved **Engagement Plan**, undertaken during the previous calendar year and a brief description of activities planned for the forthcoming year, including engagement associated with the following external initiatives: i. Health Effects Monitoring Program; ii. Stress Study; iii. Socio-Economic Strategy; iv. Perpetual Care Plan; and v. Quantitative Risk Assessment.	Section 8.1 Reporting Section 6.3 Appendices B and C
Schedule 1, Condition 2 (a)	Update to include commitment to meet with the City of Yellowknife and the Government of the Northwest Territories to review and update the traffic and access plans.	Table 6-1 Summary of Engagement Triggers and Methods
Schedule 1, Condition 2 (b)	Update the trigger table to reflect the commitments made through the licensing process and to reflect changes in the proposed submission process.	Table 6-1 Summary of Engagement Triggers and Methods
Schedule 1, Condition 2 (c)	Outline pre-engagement for the Site-Wide Management and Monitoring Plans;	Section 6.1.2 Pre-engagement Process for Management and Monitoring Plans
Schedule 1, Condition 2 (d)	Update to include a description of how engagement with rights and stakeholders will occur for scaling back the dust management and monitoring post-remediation.	Table 6-1 Summary of Engagement Triggers and Methods

Table A-1 Water Licence Conditions

Water Licence Section Reference	Water Licence Condition	Engagement Plan Reference
Schedule 1, Condition 2 (e)	Update to include plans to communicate advances in the Project implementation schedule ahead of time.	Table 6-1 Summary of Engagement Triggers and Methods
Schedule 1, Condition 2 (f)	Outline the plan for engaging on the following specific topics: i. Final volumes and location of borrow sources; ii. Post-closure site appearance; iii. Baker Creek final design and Closure Criteria; iv. Remediation activities in Yellowknife Bay including nearshore sediments and Foreshore Tailings design; v. Criteria under development; and vi. Timing and access to the Townsite and marina area.	(i) Section 6.4 Borrow Engagement (ii) Section 6.2.1 Long-term Risk Communications and Perpetual Care (iii) Section 6.5 Aquatics Engagement (iv) Section 6.5 Aquatics Engagement (v) Section 4.2.1 Engagement Committees, Working Group meetings specific to Criteria in development (vi) Section 6.5 Aquatics Engagement, Section 4.1 Communications, and Section 4.2.1 Engagement Committees
Schedule 1, Condition 2 (g)	Update to clarify engagement process with respect to all Fisheries Authorizations.	Table 6-1 Summary of Engagement Triggers and Methods Section 6.5 Aquatics Engagement
Schedule 1, Condition 2 (h)	Update on the development of the Community-Based Monitoring Program and how it will be engaged upon.	Section 6.5.1 Community Based Monitoring Program
Schedule 1, Condition 2 (i)	Update to include the commitment to document engagement related to: i. Health Effects Monitoring Program; ii. Socio-Economic Strategy; iii. Perpetual Care Plan; and iv. Quantitative Risk Assessment.	Table 6-1 Summary of Engagement Triggers and Methods
Schedule 1, Condition 2 (j)	Outline how the results of the Stress Study will inform further engagement and communication.	Section 6.3.1 Hoèłą Weteèts'eèdee` Understanding Community Well-being around Giant Mine
Schedule 1, Condition 2 (k)	Outline the plan for the development of any socio-economic strategy.	Section 4.2.4 Socio-Economics Table 6-1 Summary of Engagement Triggers and Methods
Schedule 1, Condition 2 (l)	A description of the public communications plan in the event that Action Levels are realized.	Table 6-1, and see Site-Wide Management and Monitoring Plans Section on Action Levels
Schedule 1, Condition 2 (m)	Append Emergency Communication Plan.	Appendix D Emergency Communications Plan

Commitments on Engagement Plan

The GMRP committed to administrative and content updates to the Engagement Plan in the Water Licence application proceedings, these are summarized in Table A-2 along with sections of the Engagement Plan where each condition is addressed.

Table A-2 Commitments on Engagement Plan

Comment #	Commenter	Topic	Comment/Recommendation	Commitment	Engagement Plan Section
ORS 3 comment #4	Slater Environmental Consulting: Bill Slater	4. Engagement Plan	The activities carried out in accordance with the Engagement Plan need to set the foundation for establishing the communities' long-term understandings of the risks at the site. One of the goals of the Engagement Plan should be that future generations understand the risks at the site.	The GMRP notes that Section 2.4 of the Engagement Plan notes that "Communications and engagement help rights and stakeholders to understand the risks associated with the GMRP". In future revisions to the Engagement Plan the wording will be revised to include "in the short term and long term" or similar. As the Perpetual Care Plan is developed linkages will be made to ensure the engagement plan captures any long-term management requirements from an engagement standpoint.	Section 2.2 Guiding Principles
Engagement Plan: Section 6.2.2 Community Based Monitoring Program	YKDFN	4. Engagement Plan	Section 7.4.1 (Community Based Monitoring Program) of the Engagement Plan has documented concerns from YKDFN and NSMA with respect to re-contamination of sediment in Baker Creek and that the Project has heard the desire from YKDFN to participate in on-going, long-term monitoring on Site, in all areas, to ensure risks are communicated, and monitoring results are disseminated to their communities. A community-based monitoring program is said to be under development collaboratively with rights and stakeholders and that more information will be made public on CBMP, when it becomes available. The Board require that the co-proponents provide updates and clarify commitments.	The GMRP will provide updates through regular communication and engagement avenues, as presented in the Engagement Plan and documented in our engagement log. The GMRP has committed to co-developing a Community Based Monitoring Program with stakeholders. Given engagement demands on stakeholders in 2018 and anticipated in 2019, the Project has not advanced the CBM planning to-date. The GMRP has provided funding to YKDFN, to engage their consultant Trailmark , to provide initial guidance and direction on developing considerations in the design of a Community Based Monitoring Program. Preliminary meetings have occurred with YKDFN and their consultant Trailmark, with future meetings intended.	Section 6.5.1 Community Based Monitoring Program

Table A-2 Commitments on Engagement Plan

Comment #	Commenter	Topic	Comment/Recommendation	Commitment	Engagement Plan Section
ORS 3 comment #10	MVLWB: Shannon Allerston	Engagement Log	The engagement log table (1997-2015) does not line up throughout most of the table (columns shifted) Please provide an updated engagement log with errors amended	The GMRP recognizes that the table has errors. The table has now been updated and resubmitted with the ORS 3 reviewer comment responses. Please refer to ORS 3 – Attachment 2 – Revised Engagement Log 1997-2015.	See MVLWB Public Registry
ORS 1 comment #2	City of Yellowknife: Kerry Penney	Traffic & Access	This project is occurring within the boundaries of the City of Yellowknife. It has the potential to have unintended consequences affecting the everyday well-being of the citizens of Yellowknife. Working with the proposed timeline as a basis, the project will prepare a traffic and access plan to ensure that impacts to the movements of Yellowknife citizens are minimized. This should be updated every April, with a working meeting between Canada, GNWT and the City held to review the updates and make appropriate adjustments to plans.	During the active remediation phase the GMRP agrees to meet with the City and GNWT to review and update the traffic and access plans. This will be included in the next version of the engagement plan.	Table 6-1 Summary of Engagement Triggers and Methods

Table A-2 Commitments on Engagement Plan

Comment #	Commenter	Topic	Comment/Recommendation	Commitment	Engagement Plan Section
ORS 5 - Borrow - Comment 2	General Public: Yellowknife Historical Society	Section 5.7 Borrow Material, Figure 5.7-1	The proponent proposes creating new quarry pits at A1 and A2 Open Pits in order to create fill necessary to fill in the existing open pits, and other engineering designs of the remediation project. The A1 and A2 open pit areas are in direct view of our activities at the Giant Mine Townsite Lease, quite literally across the road from our museum building. Reducing these hills to rubble and the resultant open scar that would be produced, significantly alters the aesthetic of our museum site. But our concerns are not just rooted in a self-preservational opinion of 'property value'. Blasting away these ridges and hills 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. Quarry Pits should be managed in a way that is aesthetic to the surrounding landscape, especially if within areas that maintain a high degree of public use and visibility at the Giant Mine Townsite Area. The proponent should be required to source quarry material from another location within the minesite itself (refer to appended map). 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. Lands that are not already physically disturbed must not be impacted. The remediation of Giant mine should not increase the size of the mine's footprint, especially into areas that have high public visibility.	A key objective of the GMRP is to reduce risks to the public associated with historically mined pit wall benches and the current plan is for these to be reduced by re-contouring steep benches. This process would involve a combination of blasting and filling. The GMRP has a stated objective that new disturbance due to borrow/quarry areas is minimized, to the extent practicable (please refer to CRP Table 5.7-4: Borrow Pits and Quarries Closure Objectives and Criteria, Closure Objective Q1). Design efforts are ongoing for the selection and landscape design of borrow extraction areas, and for defining the amount of fill needed for pits. GMRP recognizes the importance of this aspect of the project to all stakeholders, and there will be engagement specifically on the topic of borrow material at the end of 2019. Selection of borrow locations and their design will consider a number of factors, including aesthetics, public feedback, geochemical characteristics of the rock in the potential borrow locations, haul distance, the location of required remediation infrastructure, traditional land use/archeological considerations, and the extent of soil contamination.	Table B-1 Key GMRP Engagement Activities in Closure Planning

Table A-2 Commitments on Engagement Plan

Comment #	Commenter	Topic	Comment/Recommendation	Commitment	Engagement Plan Section
ORS 2 - comment #71	City of Yellowknife: Kerry Penney	Response to pre-engagement comments, AN# 5	Section 1.5 of the CRP does not provide additional clarity on land management or creation of a research reclamation plan (as suggested) linked to the criteria. The creation of a perpetual care plan, along with the aspects associated with communication with future generations is not part of the draft permit or license	The GMRP confirms that the Perpetual Care Plan (PCP) is not proposed to be part of the Water Licence; rather, this is a requirement of the Giant Mine Environmental Agreement. It is worth noting that a closure principle is minimizing long-term active care requirements, which have guided the development of the CRP, in addition to Site Wide Closure Objective SW4. The development of the PCP will take place with rights and stakeholders beginning in June of 2019.	Table 4-2 Engagement Committees

APPENDIX B GMRP History of Engagement

B1.0 History of Engagement

CIRNAC has led engagement and consultation with rights- and stakeholders and the public over the last 19 years since mine management became the responsibility of CIRNAC. A comprehensive engagement log is provided together with this plan (Engagement Log; CIRNAC and GNWT 2020c).

Since the completion of the Environmental Agreement in August 2014, the GMRP has undertaken several engagement activities to support the development and implementation of the EA measures, along with the Water Licence process. These engagement activities and regular communication tools provide direct opportunities for rights and stakeholders to voice concerns, identify their priorities, and provide overall input to the planning of the GMRP.

A short summary of the major engagement activities undertaken to date are provided in Table B-1 below. These activities were in addition to the regular meetings outlined in Section 4.2. A detailed history of engagement is provided below Table B-1. Activities have also been captured in the Engagement Log (CIRNAC and GNWT 2020a) and Engagement Summaries (CIRNAC and GNWT 2020b).

Table B-1: Key GMRP Engagement Activities

History of Engagement Activities				
Activity	**Date Range**	**Comments**	**Purpose**	**Outcome**
Arsenic Trioxide Dust Remedial Option Selection	2001-2003	Over 40 public consultations with 3 major workshops to select the preferred option for long-term arsenic trioxide dust management.	To develop a remedial action plan to be submitted with the 2005 Water Licence package	Input resulted in the selection of the in-situ frozen block method (due to concerns raised in the EA, method has since been adjusted to the frozen shell method)
Site Stabilization Program (Decontamination and Deconstruction of the Roaster Complex and underground stabilization)	2013-2016	Input from rights and stakeholders (separate from the GMRP working group) was received throughout the process prior to submittal of materials to the MVLWB. The GMRP Team additionally led separate annual meetings with the YKDFN and NSMA and their membership since 2014.	To ensure that every reasonable measure will be taken to address on-site dangers and risks in order to protect human health and safety as well as the environment. The separate YKDFN and NSMA meetings were to provide rights and stakeholders with an update of the SSP activities that year.	Input from engagement informed the air quality monitoring program, medical monitoring program for site workers, and emergency response plans.

Table B-1: Key GMRP Engagement Activities

History of Engagement Activities				
Activity	**Date Range**	**Comments**	**Purpose**	**Outcome**
Surface Design Engagement (SDE)	2015 to 2017	Eleven focused sessions over two years to provide input into plans for remediation of the surface of the mine (Baker Creek, Pits, Tailings, Contaminated Soils and Land Use). Detailed review of closure options and risks resulted in formative input on design decisions with respect to the remediation.	Suggestion #1 (Environmental Assessment) – to ensure surrounding communities are consulted prior to finalizing its Project design and design improvements may be incorporated. Suggestion #13 (Environmental Assessment) – to ensure the feasibility of filling pits is explored. Measure #22 (Environmental Assessment) – to determine the appropriate depth of tailings cap and B1 pit cover to ensure they are not compromised by vegetation growth. Measure #11 (Environmental Assessment) – to help meet the requirement to select options which minimize flood impacts from Baker Creek (supported by outcome to fill pits and decisions made regarding routing Baker Creek). Measure #11 (Environmental Assessment) - to minimize fish exposure to arsenic in contaminated sediments (removal of sediments). Measure #12 (Environmental Assessment) – to support the achievement of water quality objectives at the outlet of Baker Creek (removal of sediments).	Key decisions based on SDE input included: -fill the open pits with waste rock and new quarried rock; -remove contaminated sediments from Baker Creek and keep it in an on-site alignment; -relocate the South Pond and consolidate North and Central Ponds; -cover all tailings ponds with a rock cover; -excavate contaminated material from a historical spill from the North Pond area; and, -remediate the Townsite and Shoreline Area to residential criteria.
Human Health and Ecological Risk Assessment (CanNorth 2018)	2015 to 2018	Over ten sessions, including scope development informed the implementation and delivery of the HHERA. The HHERA was carried out with significant stakeholder and Indigenous rights holder input, to better assess risks considering differences in traditional land use, food consumption, and lifestyles. Extensive community participation was part of comprehensive country food sampling program.	Measure #10 (Environmental Assessment) – to commission a comprehensive quantitative human health risk assessment.	The final report released in January 2018 found that there is low risk to very low risk from past activities at the Giant Mine and that the clean-up will further reduce these risks.

Table B-1: Key GMRP Engagement Activities

History of Engagement Activities				
Activity	**Date Range**	**Comments**	**Purpose**	**Outcome**
Outfall	2016 to 2017	Assessment of outfall locations for discharge from water treatment plant, with 4 separate engagement sessions (larger YKDFN community, working group and GMAC). Four potential discharge locations and three discharge cooling options were considered and evaluated.	Measure #14 (Environmental Assessment) –to ensure the diffuser option is replaced with a near shore outfall, with discharge criteria requiring the Health Canada drinking water standard for Arsenic be met.	As a result of engagement and factors associated with land use outfall location was identified near the outlet/vicinity of Baker Creek.
Baker Creek Alignment	2017	Detailed evaluation of diversion alternatives separate from SDE process with Giant Mine Working Group, GMOB and GMAC, confirming selection of alignment.	Measure #11 (Environmental Assessment) – to thoroughly assess options for, and the environmental impact of, diversion of Baker Creek to a north diversion route previously considered by the Developer or another route that avoids the mine site and is determined appropriate by the Developer.	Confirmed selection of on-site alignment.
Non-Hazardous Landfill Siting	2017	Two engagement sessions for the selection of the preferred landfill site from six potentially viable options.	Suggestion #15 (Environmental Assessment) – to consult with the City of Yellowknife in the design of any landfill on the Giant Mine site.	Engagement resulted in unanimous identification of preferred site.
Health Effects Monitoring Program	2017	Community consultation took place to inform about the program, discuss proposed study protocols, and provide the opportunity for people to provide feedback, and bring up any issues of concern.	Measure #9 (Environmental Assessment) - to design and implement a Health Effects Monitoring Program in Ndilǫ, Dettah and Yellowknife to ensure remediation activities that will take place at Giant Mine will not have a negative impact on people's health.	The GMRP will ensure that exposure measured in 2017-2018 is not increasing because of remediation work.
Archaeology	2018	An Archaeological Impact Assessment (AIA) was conducted in July 2018 with field assistance by members/representatives of the Yellowknives Dene First Nation, with a focus on areas of high archaeological potential that overlapped with areas of planned or potential remediation activities. Areas of high archaeological potential were identified through desktop studies as well as based on input from Traditional Knowledge holders and interested parties. North Slave Métis Alliance members/representatives also took part in the AIA process in July 2018.	To revisit (through pedestrian reconnaissance, visual ground inspection, and shovel testing) known traditional use areas and previously recorded archaeological sites, as well as mitigate areas of high potential ahead of planned remediation activities in existing disturbed areas and undisturbed areas, including those of potential borrow sources. A final report was produced for submission to the Prince of Wales Northern Heritage Centre summarizing findings and recommendations.	A total of 21 proposed borrow sites, 8 previously recorded traditional use areas, and 4 previously recorded archaeological sites were investigated, along with other areas identified for field investigation. Input identified seven traditional use areas. Three new archaeological sites and one new traditional use area were identified in the field. Additional feature mapping was recommended for one of the new archaeological sites. The boundary of a potential borrow area has been altered to avoid disturbance to a traditional use area.

Table B-1: Key GMRP Engagement Activities

History of Engagement Activities				
Activity	**Date Range**	**Comments**	**Purpose**	**Outcome**
Quantitative Risk Assessment (QRA)	2018-2020	Phase 1 – introduce the QRA and validate the engagement process (April 2018 meetings with GMWG) Phase 2 – identify and discuss risk scenarios and consequence categories (May/June 2018 two-day workshop). A second phase 2 workshop, with the YKDFN was held August 30 and 31, 2018 Phase 3a and 3b – meetings to discuss consequences of risk scenarios, what level of consequences are unacceptable (thresholds), and to agree on which scenarios will be analyzed in more detail in the QRA (December 2018 meeting with GMWG plus additional members from YKDFN, NSMA and Alternatives North) Phase 4 – meetings held with GMWG, YKDFN and NSMA to review and discuss the results of the QRA (2020)	Measure #5 (Environmental Assessment – to commission an independent quantitative risk assessment before the project receives regulatory approvals	The QRA results will be used to improve the design including design changes and changes to monitoring and management plans.
Draft Water Licence Package Technical Sessions	2018	Three days of technical workshops with rights and stakeholders.	These workshops focused on the technical aspects of the water licence submission, including the Closure and Reclamation Plan, and were planned and developed based on feedback from stakeholders.	Input from these sessions helped the team made adjustment to the water licence package before submitting it to the Mackenzie Valley Land and Water Board in April 2019.
Draft Water Licence Community Meeting	2018	Four stations were set up around the room, allowing participants to ask more detailed questions on four key topic areas related to the Water Licence package.	To outline the contents of the Water Licence application and the big-picture aspects of the closure plan	The draft version of the Closure and Reclamation Plan was made available for review and input by all parties on the same day. Rights and stakeholders were given two months to review the closure plan and other documents provided during pre-engagement including the Effluent Quality Criteria (EQC) Report and Aquatic Effects Monitoring Program, to identify any concerns or areas of interest they wished to receive more information on before formal licence submission. Comments on the closure plan were also accepted during this period.

Table B-1: Key GMRP Engagement Activities

History of Engagement Activities				
Activity	**Date Range**	**Comments**	**Purpose**	**Outcome**
Closure and Reclamation Plan Site Tour	2018	Conducted two site tours with rights and stakeholders YKDFN (20 members participated) and NSMA (approximately 10 people participated).	To allow an opportunity for rights and stakeholders to see the care and maintenance work that is ongoing at the site, as well as learn how the Project Team planned to address different aspects of the site in the Closure and Reclamation Plan.	Input from these sessions helped the team make adjustment to the water licence package before submitting it to the Mackenzie Valley Land and Water Board in April 2019.
Perpetual Care Plan Workshop	2019	The PCP Workshop took place over two days and presented the PCP Draft Framework that was developed through collaboration with the Giant Mine Working Group, Giant Mine Advisory Committee and previous members of the Communicating with Future Generations Working Group.	The purpose of the workshop was to review and discuss the preliminary draft PCP framework. The workshop discussions provide direction on amendments to the preliminary draft framework. The workshop also helped set out a scope of work, process, roles and responsibilities and schedule for the procurement process to secure a consultant and the subsequent development of the first comprehensive draft of the Perpetual Care Plan.	The workshop allowed for an opportunity for the GMRP to provide a status update on the PCP, provide a perspective on the emerging PCP purpose and alignment with various GMRP management and monitoring plans, review and amend the preliminary draft framework and outline of the PCP, and develop a process for the development of the first formal draft of the PCP framework and outline.
Borrow Engagement *(more details included below)*	2019	The workshops were held over three days and included a full-day workshop with the Yellowknives Dene First Nations, a full-day workshop with the Giant Mine Working Group and general public and an evening session with the North Slave Métis Alliance.	The purposes of the workshops were to share information about the current state of borrow design and the process that will be used to finalize borrow course decisions; to increase the overall understanding of the range of considerations and constraints that will come into play when making decisions related to on site borrow sources; to allow the project team to fully understand which borrow sources are most contentious, for whom, and for what reasons; and, to explore options for incorporating stakeholder and Indigenous rights holders concerns and preferences.	Results of the borrow engagement sessions helped to inform the GMRP Borrow and Explosives Management Plan and helped to drive the borrow design/selection of borrow areas. The Project Team will communicate with rights and stakeholders on the final borrow locations once the material balance and volumes are finalized by the Project Team (anticipated in 2020/2021 fiscal year)

The GMRP is committed to incorporating input and feedback from rights and stakeholders on how to continually improve engagement channels to appropriately reflect the changing needs of rights and stakeholders and the GMRP. The GMRP has done this with previous engagement channels and will continue to do this throughout the life of the Project. Additional examples of how the GMRP has been actively working to take feedback throughout the life of the Project and adjust engagement channels appropriately are included here:

1. Giant Mine Working Group – Environmental Management System and Remediation Plan: the parties to the Environmental Assessment (EA 0809-001) recommended that the GMRP Team develop a working group to help facilitate the gathering of outstanding information to develop the Environmental Management System and Remediation Plan. The initial mandate of the GMWG provided a forum for interested parties to be informed of current design details and provide meaningful input. However, as the Project progressed further into detailed design, implementation of required environmental assessment measures, and developing the CRP, it was determined that the original scope of the GMWG required adapting. Based on feedback from members it was determined that the scope should be broader and therefore it resulted in Parties being more informed and having more opportunities to provide input on general site activities, current design details and broader project activities.
2. YKDFN Giant Mine Advisory Committee (GMAC): In 2011/2012, the GMRP Team worked with the YKDFN to establish a Community Liaison and Technical Advisor responsible for effective YKDFN participation by ensuring all necessary arrangements are completed for consultations. This responsibility includes public community hearings, mine site tours, evaluation meetings with Elders, YKDFN executive briefings, etc. Following the creation of these positions and the workload and community communication requirements, it was realized that there would be benefit of having a committee of members representing various facets of the YKDFN community, including Elders, youth, business, and Traditional Knowledge holders in a committee of nine representatives. In 2011/2012 the GMRP supported the establishment of the Giant Mine Advisory Committee to meet monthly with the GMRP Team on various aspects of the Project to allow the GMRP Team to seek input and guidance from the committee on broader community engagement initiatives. GMAC was also established to be an in and output for community concerns to the Project and communications back out to community members via the GMAC members.

B1.1 Arsenic Trioxide Dust Remedial Option Selection

In determining the best option for long-term storage of the arsenic trioxide dust, an alternatives assessment of 56 long-term storage methods was completed. The assessment involved three years of studies from 2001 to 2003 and over 40 public consultation meetings, including the following three major workshops:

1. Giant Mine Underground Arsenic Trioxide Management Alternatives Workshop June 11-12, 2001, Yellowknife.
2. Giant Mine Underground Arsenic Trioxide Management Alternatives Workshop January 2003, Yellowknife.
3. Giant Mine Underground Arsenic Trioxide Management Alternatives- Moving Forward: Selecting a Management Alternative Workshop July 2003, Yellowknife.

Representatives from the communities of Yellowknife, Ndilǫ, Dettah, Indigenous government, federal and municipal government, representatives for members of parliament (MP) and MLAs, Health authorities, industry, labour organizations and environmental non-government organizations attended these three workshops.

Analysis carried out by the Technical Advisor (SRK Consulting) on the 56 possible arsenic dust management options, identified at the 1999, workshop resulted in the selection of 12 alternatives for further detailed study. The two best options were presented at the second public workshop. At that second workshop in January 2003 the public informed DIAND (CIRNAC's previous name at the time) that they required more information and more time in order to provide valuable input on a preferred choice. Consequently, DIAND extended its communication activities by four months and provided an additional 20 public information sessions and events from March through May 2003. At the subsequent 'final' workshop, attendees were generally in a better position to understand the presented material and were able to express a preference for one of the two long-term management alternatives brought forward.

Concerns and questions raised during the sessions were on the technical aspects of the options, the risk assessments carried out, the need for refined public communications. The sessions also allowed for community members to describe their perspectives on legacy issues associated with respect to both social and environmental impacts.

After considering the feedback received from the public and other rights and stakeholders, in addition to the recommendations from the Technical Advisor and the Independent Peer Review Panel (consisting of nine recognized experts in: geotechnology, mining, mineral processing and environmental engineering, toxicology, hydrogeology, risk assessment, and public health), DIAND announced in February 2004, its decision to proceed with the in-situ Frozen Block Method (the frozen block) as the preferred management alternatives. That choice was one that is an environmentally effective option with the least health and safety risks for the workers. It was not, however, the least costly option.

As per the scoping phase of the Environmental Assessment in December 2008, the Mackenzie Valley Environmental Impact Review Board (MVEIRB) noted that there still remained public concern surrounding the frozen block but that it did not require reinvestigation. The MVEIRB agreed that significant efforts to engage and receive public input into the selection of the final option was sufficient. In addition, to a subsequent level of design review by the Independent Peer Review Panel. Therefore, the frozen block method was not considered in scope of the Environmental Assessment; however, the GMRP still intended to provide further refined details of the frozen method through the process and afterwards in preparation for water licence submission.

B1.2 Submission of Original Remediation Plan to the Mackenzie Valley Land and Water Board (MVLWB) and subsequent Environmental Assessment

On October 19, 2007, INAC (CIRNAC's previous name at the time) applied for a water license to the Mackenzie Valley Land and Water Board. The application was to complete the reclamation of Giant Mine over a period of ten years. On March 31, 2008, the City of Yellowknife referred the Giant Mine Remediation Plan to an Environmental Assessment due to public concern. The MVEIRB began its environmental assessment of the remediation project on April 7, 2008.

B1.3 Environmental Assessment Process

The EA process was carried out from 2007 to 2014 through the following phases:

1) *Reasons for Decision on Scope* (December 2008) included, but not limited to:
    - Freeze excluded (decided that this was the accepted management option and excluded from the EA)
    - Spatial scope remained within INAC's reserve of notation boundaries
2) *Terms of Reference* (May 2009)
3) *DAR* submitted (October 2010)
4) *Information Request* Phase (November 2010-March 2013) Included the following items relevant to closure activities, included, but not limited to the following themes:
    - Freeze (e.g., alternatives, frozen block, groundwater, risk assessment, thaw, climate change)
    - Water (e.g., baker creek, effluent, groundwater, mine flooding, treatment)
    - Surface (e.g., air quality, land use, security, tailings, vegetation, decommissioning)
    - Failure Modes (e.g., alternatives, climate, risk assessment)
    - Monitoring (e.g., minewater, tailings, water quality, independent body)
    - "Other" (e.g., oversight, regulatory, Indigenous claims, economic development)
5) *Technical Workshop (June 2012) agenda focused on:*
    - Water Quality Criteria
    - Environmental Management System
    - Water Treatment-diffuser
    - Air Quality Modeling and impact considerations
    - Freeze Optimization Study update
    - Baker Creek design and alignment considerations
6) *Technical Reports (July 2012) From all parties registered in the EA*
7) *Public Hearings (September 10-14, 2012)*
8) *Report of Environmental Assessment (June 2013). Minister response triggered a request to modify*
9) *Minister's decision and final measures (August 11, 2014)*

In the period between 2007 and 2010, the GMRP Team engaged with Indigenous organizations and other rights and stakeholders to share the detailed design and the overall direction that the Project was taking towards a final remediation plan for the site. In September 2009, the GMRP Team hosted public tours of the Giant Mine as part of this engagement. The input received from this engagement resulted in the Project carrying out a focused engagement session in 2010, co-hosted with the Giant Mine Community Alliance, on the frozen block method, remediation and environmental site quality.

Common issues noted by participants included:

a) Indigenous community engagement approaches and inclusion of Traditional/local Knowledge and involvement in monitoring.

b) Legacy issues: impacts to land use, impacts to wildlife/environment, apology and compensation.

c) Arsenic toxicity and mobility.

d) Earthquake and climate change considerations.

e) Off-site arsenic impacts.

GMRP commitments, relevant to the Closure and Reclamation Plan directly, included:

a) Active freeze equipment remains on site as a contingency.

b) Identification of YKDFN archaeological and burial sites.

c) Work cooperatively with the YKDFN on the development of the remediation plan and its implementation.

d) Incorporation of Traditional Knowledge into remediation activities.

B1.4 Environmental Assessment Measures

The Mackenzie Valley Impact Review Board considered the following issues and provided a series of measures and suggestions that will mitigate the significant adverse environmental impacts and resulting public concern, and improve the monitoring and management of potential impacts surrounding

- Perpetual Care
- Funding
- Oversight
- Human health effects
- Baker Creek
- Treated water quality and the diffuser
- Management of underground arsenic trioxide
- Traditional use
- Engagement

The GMRP was approved on August 14, 2014, by the Responsible Ministers, subject to 26 measures necessary to mitigate adverse impacts on the environment and to address public concern, and 16 suggestions.

A significant GMRP commitment was made within the EA process, with respect to water treatment. This included the decision to replace the diffuser option with an outfall to address public concerns identified (e.g., remobilization of sediment, and ice thickness). In addition, GMRP committed to treating water to drinking water standards for arsenic at end of pipe.

Many of the measures indicated that they were to be completed prior to GMRP receiving regulatory approvals. A number of these measures directed specific engagement requirements. The GMRP has carried out extensive engagement since the decision were issued in 2014, leading to decisions being made with significant consideration to stakeholder input. This input has contributed to further design details, or in some cases, resulted in significant changes to the selection of a closure option versus the 2007 Remediation Plan and 2010 Developer's Assessment Report (DAR) (e.g., filling of open pits).

B1.5 Site Stabilization Program

The Site Stabilization Plan (SSP), which included the decontamination and deconstruction of the roaster complex and underground stabilization, was developed with extensive engagement and input from rights and stakeholders. Key concerns heard from rights and stakeholders about the SSP included potential impacts to air quality in the community, potential health impacts to workers, and emergency response procedures for the high-risk work. In response to these concerns, the GMRP incorporated this input in the following ways:

- An Air Quality Monitoring Program (AQMP) was developed. This included the installation of a series of air monitoring stations on the perimeter (fence line) of the Giant Mine site, implementation of site specific activity driven monitoring stations, and three community stations located in Ndilǫ, the Yellowknife marina and Moyle Park (Niven). Weekly air quality monitoring reports are prepared and provided to rights and stakeholders by email and posted to the GNWT website. GNWT website also hosts real-time data from the program.
- In addition to air quality monitoring and the use of personal protective equipment (PPE), a medical monitoring program was implemented on site for workers. As part of this program, workers on site engaging in high risk work have the arsenic levels in their urine tested. This program was developed in consultation with the Workers' Safety and Compensation Commission (WSCC) and will continue throughout the implementation of remedial activities on site.
- Emergency Response Plans were updated for specific activities on site, including the roaster deconstruction. The Project worked closely with the City of Yellowknife and first responders including the Fire Department to ensure they were adequately prepared and briefed on the risks. The GMRP also worked with the City to ensure that procedures were in place for communicating with the public in the unlikely event of an emergency.

The SSP work was completed under Water Licence MV2012L8-0010 and Land Use Permit MV2016S0016. Work followed a staged approach through the existing Water Licence process administered by the MVLWB. This process included notification of upcoming work through a pre-engagement period, as well as a formal comment period through the MVLWB, which allowed rights and stakeholders to provide input and voice concerns on proposed work. The GMRP followed this process for the deconstruction of the Roaster Complex, the underground stabilization program, including most recently the C-509 Stope complex.

B1.6 Surface Design Engagement (SDE)

Following completion of the EA, which raised many concerns about the 2007 Remediation Plan, particularly with respect to surface components, the GMRP recognized the need for broader engagement.

Suggestion 1 from the EA stated:

> *The Developer should further consult with surrounding communities including Dettah, Ndilǫ and the City of Yellowknife, prior to finalizing its Project design, so that design improvements may be incorporated to address any remaining concerns.*

To address this suggestion, and to develop the CRP, and implement addressing several other measures from the EA, in 2015 the GMRP initiated an engagement process called *Surface Design Engagement.* The objectives of the process were to provide opportunity for stakeholder input to the surface remediation plan, and to ensure that the Project Team understood the perspectives and preferences of all interested parties.

Over 100 people from Yellowknife, Ndilǫ, and Dettah participated in the SDE process. Representatives from North Slave Métis Alliance (NSMA), Yellowknives Dene First Nation (YKDFN), Toxic Legacies Project, GNWT (Departments: Lands, Industry Tourism and Investment, Health and Social Services), Fly Kids, Mining Heritage Society, Environment and Climate Change Canada (ECCC), Department of Fisheries and Oceans (DFO), Giant Mine Oversight Board (GMOB), and the City of Yellowknife attended the meetings.

1. Info Session, YKDFN Community (May 2015)
2. Determining Remediation Objectives YKDFN Community (May 2015 and February 2015)
3. Determining Remediation Objectives- All other parties (May-June 2015)
4. Options “Brainstorming” all participants (June 17-18, 2015)
5. Follow-up/Detail Input YKDFN (Sept 29-30, 2016)
6. Risk Review (December 8-10, 2015)
7. Prep for Evaluation Meeting YKDFN Elders (February 4, 2016)
8. Options Evaluation All Participants (February 16-19, 2016)
9. Present Draft SDE Report GMAC (April 14, 2016)
10. Present Draft SDE Report YKDFN Community (June 16-17, 2016)
11. Present Current Thinking and Project Decisions based on SDE- All Participants (February 15, 2017)

The SDE process included the following steps:

1. **Preparation, information sharing, and identifying objectives with rights and stakeholders and participants**—The GMRP Team first met with groups of people to share information about the Giant Mine site. There were separate meetings with an independent consultant to identify each group's objectives for the site after the remediation is complete.
2. **Identification and review of closure options for the mine components**—An Options Definition Workshop was held in Dettah in June 2015. Approximately 90 people worked together for two days to identify ideas for remediating Baker Creek, tailings ponds, open pits, and contaminated soils.
3. **Development of engineering and risk aspects of closure options**—The GMRP Team worked with its engineers to turn the June 2015 ideas into six complete remediation plans.
4. **Evaluation and presentation of closure options in the context of risk**—In December 2015, a smaller group of local rights and stakeholders worked with the GMRP Team to identify risks and concerns with each plan, and what improvements could be made.
5. **Evaluation of closure options**—The final step was the Options Evaluation Workshop, which was held in Dettah in February 2016. More than 75 people participated. Members of each group sat together at tables of about six to ten people. Over a period of four days, each table evaluated the remediation plans against the objectives that were identified in May 2015 by rights and stakeholders.

Key input received during SDE included the following:

Baker Creek

Rights and stakeholders agreed that Baker Creek should have a wider channel that can handle floods safely, and that contaminated sediments in the creek should be removed. There was disagreement whether fish should be allowed to live in the creek after it was remediated, as there was concerns regarding risk for people who might eat the fish, while others thought Baker Creek was good fish habitat and the risk to human health would be very low.

Pits

Stakeholder groups agreed that the pits should be filled. There were different opinions on what materials should be used (e.g., tailings, vs. clean rock).

Tailings

There was agreement that the footprint of the tailings should be minimized as much as possible. It was suggested that tailings should be placed in the underground mine as much as possible, and that some of the tailings should be moved into the pits or combined into a smaller tailings area. Everyone agreed that any tailings remaining on surface need to be covered. Some groups wanted soil covers with vegetation. Other groups wanted rock covers to prevent vegetation so that animals would not use the area, and so that future generations would always know there were contaminated tailings materials below the surface.

Contaminated Soils

Stakeholder groups agreed that contaminated soils should be cleaned up from areas of the site that had already been disturbed by mining activities, and most groups wanted to clean up soils across the southern part of the site and along the shoreline. For parts of the site where the soil is contaminated by dust, people recommended sampling and testing with remediation or restricted access to areas that could present a potential risk to people.

Land Use

There were different perspectives from rights and stakeholders on how much the rest of the site should be used after it is remediated. Some groups thought that parts of the site should be accessible for other uses, while others particularly the YKDFN, wanted the site to remain off limits to people, so that future generations would never be exposed to any of the buried tailings, arsenic dust, soils and residual risk.

Outcomes

Key project decisions that were based on SDE input include the decision to fill the open pits, to remove contaminated sediments from Baker Creek and keep it in an on-site alignment, to relocate the South Tailings Pond and cover all tailings ponds with a rock cover, to excavate contaminated material from a historical spill from the North Tailings Pond area, and to remediate the Townsite and shoreline area to residential criteria.

Input received from SDE was critical for the GMRP in developing and updating the CRP and preparing the Water Licence application. One favorable outcome of SDE is that while the final plan may not reflect every stakeholder group's first choice for closure, there is at least more of an understanding of the many other perspectives that must be considered by the GMRP Team in selecting closure options.

B1.7 Baker Creek Alignment

September 21, 2017- WG, including GMOB and October 19, 2017- GMAC

The requirement of a final closure diversion alternative was formalized under the Report of Environmental Assessment, Measure 11. During the SDE sessions, all parties supported Baker Creek to remain on Site due to considerations for impacting other water bodies, and undisturbed lands, and the recognized issue of future arsenic loadings from upstream/off-site impacted areas. However, the measure was clear that the final Baker Creek alignment, whether on-site or off-site, must be determined based on a detailed evaluation of diversion alternatives informed by regulatory authorities, the Giant Mine Oversight Board (GMOB) and the public, in consideration of potential risks of flooding to the arsenic chambers, stopes and underground workings, and potential risks of exposure of fish to arsenic.

Therefore, a complete comprehensive evaluation of diversion alternatives was undertaken, separate from the details presented within the SDE process. The draft report was presented to Giant Mine Working Group, which included GMOB and GMAC for input. All rights and stakeholders support the recommended outcome, and recommended alignment route presented in the Report.

A letter confirming GMOB review received October 10, 2017 stated:

> *"In our opinion, the Report effectively demonstrates that an off-site diversion of Baker Creek is undesirable from a number of perspectives. The outcomes of the Surface Design Engagement (SDE) process were particularly germane to the alternatives assessment, especially stakeholder's stated preference for not contaminating additional waterbodies and the Project Team's commitment to fill and cap the open pits. Overall, GMOB is comfortable with the results of the evaluation and the conclusion that an on-site alignment of Baker Creek is preferable."*

GMAC input and Traditional/local Knowledge concerns were with respect to ice buildup within the channel and the need to address seasonal fluctuations, in addition to maintaining a route through Site within an area already disturbed. Stakeholder concerns remain on fish exposure to arsenic and whether fish are safe to eat.

Further details regarding the specific on-site alignment will be part of conversations intended with the FSCAP Federal Departments of DFO and ECCC, in addition to their regulatory mandates.

B1.8 Effluent Treatment Plant Outfall

Engagement history on the selection of an outfall location for the proposed effluent treatment plant:

September 13, 2016 – GMWG, GMAC
November 10, 2016 - YKDFN Community Meeting
December 8, 2016 - GMWG
March 1, 2017 - Public Forum

The GMRP's original intention with water treatment was to discharge treated water directly into Back Bay via a diffuser and treatment year-round. As a result of the Environmental Assessment process, and concerns raised regarding diffuser impacts to ice, and the remobilization of contaminated sediments, the diffuser option was removed and replaced with an outfall meeting Health Canada drinking water standard for arsenic. Additional details regarding can be found in the Water Management and Monitoring Plan.

The objectives of the engagement sessions during September and November 2016, with the YKDFN, GMAC, and GMWG, were to clarify the changes, and to receive input on three preferred locations of the outfall along the shoreline of Back Bay. As a result of engagement, and factors associated with land use and land disturbance identified a fourth, near the outlet/vicinity of Baker Creek. Concerns identified included remaining questions on the impacts to fish and ecosystem habitat, water quality at the outlet of Baker Creek, and the influence the outfall may have on the receiving environment.

B1.9 Non-Hazardous Landfill Siting

Engagement history on the site selection for the non-hazardous landfill siting:

- June 14, 2017- GMWG
- October 19, 2017 GMAC

A non-hazardous waste landfill is required for demolition materials on-site. The GMRP carried out a site reconnaissance survey to identify areas that could potentially meet the number of requirements. Six areas were identified. An internal GMRP evaluation exercise was carried out with a recommended area preferred. Evaluations were based on set-back distances and siting criteria based on various NWT regulations/guidelines, environmental and safety considerations. These six locations and the evaluation criteria and subsequent process were presented to the GMWG and GMAC for feedback. As a result of these discussions, all parties supported the recommended location of Area 3 - within the core industrial area, with the caveat that further heritage and archeological work be undertaken to ensure siting will not have any impacts on areas of cultural significance.

B1.10 Quantitative Risk Assessment

Measure 5 of the Report of Environmental Assessment and Reasons for Decision mandated the GMRP to undertake the Quantitative Risk Assessment (QRA). Measure 5 specifically required that the QRA include "explicit acceptability thresholds, determined in consultation with potentially affected communities". The GMRP Team hired Wood PLC (Wood) to conduct the QRA and hired Stratos Inc. to plan and implement the engagement process for the QRA.

The QRA was initiated in 2018. The QRA engagement process aimed to meet the requirements of Measure 5 as well as the GMRP's engagement goals of rights and stakeholders being well-informed about the Project and having the opportunity to be involved in the exchange of information regarding the project.

As mentioned in Section 7.3.2 of the Engagement Plan, the QRA engagement took place in a series of phases from 2018 – 2020 outlined below:

- Phase 1 was completed in late April 2018 and involved meeting with the Giant Mine Working Group (April 26) and with a representative of the North Slave Métis Alliance (NSMA) (April 25) to introduce the QRA and validate the engagement approach.
- Phase 2 was initiated by holding an initial two-day workshop (May 31 and June 1) in Yellowknife involving a range of community members and other groups to identify and discuss risk scenarios and consequence categories. A second Phase 2 workshop, with the Yellowknives Dene First Nation (YKDFN), was held on August 30 and 31, 2018 in Dettah.
- Phase 3a and 3b included meetings to discuss consequences of risk scenarios, what level of consequences are unacceptable (thresholds), and to agree on which scenarios will be analyzed in more detail in the QRA (December 2018 meeting with GMWG plus additional members from YKDFN, NSMA and Alternatives North).

Phase 4 occurred in 2020 and involved a series of meetings with YKDFN, NSMA and GMWG to communicate the results of the QRA and the next steps for the GMRP to incorporate the results into the GMRP. Phase 4 engagement with rights and stakeholders took place from July – September 2020 to review the results of the QRA. The QRA Team met to review the results and revisit various components of the QRA through a series of virtual meetings as a result of the COVID-19 pandemic. There is no forthcoming engagement initiatives planned for 2021.

B1.11 Water Licence Engagement

Pre-submission Engagement

While all the engagement which has led to the development of the Closure and Reclamation Plan (as identified in Section 6.0 above) is considered pre-submission engagement by the GMRP, on December 8, 2017, the GMRP sent its official notification to the distribution list and the MVLWB of its intention to submit its Type A Water Licence application for remediation of the Giant Mine Site in 2019, officially commencing the pre-engagement process for the Water Licence application. The following sections outline formal pre-engagement activities that have taken place following the official notification to the MVLWB.

Community Meeting

In June 2018, the GMRP Team held a community session outlining the contents of its Water Licence application and the big-picture aspects of the closure plan.

Four stations were set up around the room, allowing participants to ask more detailed questions on four key topic areas related to the Water Licence package:

1. The Underground, including the freeze system; this included a virtual reality component allowing participants to explore the extent of the drifts in the underground workings and visualize in three dimension how the frozen shell completed as part of the Freeze Optimization Study (FOS) looks.
2. Surface Design, including visuals of the final landscape once the closure plan is implemented.
3. Engagement, including how engagement will proceed during the water licence process and beyond.
4. The components of the Long-Term Monitoring Program and Regulatory processes, including the steps in the upcoming water licence process.

The draft version of the Closure and Reclamation Plan (CIRNAC and GNWT 2019a) was made available for review and input by all parties on the same day; other draft documentation was provided in the coming weeks. Rights and stakeholders were given two months to review the closure plan and other documents provided during pre-engagement including the Effluent Quality Criteria (EQC) Report and Aquatic Effects Monitoring Program, to identify any concerns or areas of interest they wished to receive more information on before formal licence submission. Comments on the closure plan were also accepted during this period.

Technical Community Workshops

In September 2018, the GMRP Team held technical workshops to further discuss key topics of interest identified by rights and stakeholders in review of the key documents provided over the summer of 2018. These workshops included:

1. Project Overview.
2. Detailed sessions: technical overview on tailings, pits, borrow, contaminated soils, underground, non-hazardous waste landfill/waste, freeze, water treatment and outfall, Baker Creek, and a water focused monitoring overview.
3. Additional overview of the sessions will be updated in final version submitted to the Board in January 2019.

B1.12 Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine

Measure 10 of the Report of EA (MVEIRB 2013) requires the GMRP to commission a human health risk assessment, which would include "indirect effects of potential exposures to arsenic on wellness, including stress effects" and "identify, design and implement appropriate design improvements and identify appropriate management responses to avoid or reduce the severity of any predicted unacceptable health risks.

Since 2017, the University of Laurier has been leading the development of the Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine Study with various rights and stakeholders. The University of Laurier's research team will lead the 2021 implementation of this study and will also independently lead the engagement related to the dissemination of the results of the study with the support of the GMRP.

The overall design and approach to the study has been significantly informed by input by Rights Holders and Stakeholders. An Advisory Committee was created in 2019-2020 as a mechanism for relevant stakeholders and expert departments to feed into the development and implementation of the Study. This committee provides ongoing input on health expertise, and knowledge of regional and community level issues to Dr. Shankardess, the Principal Investigator. Membership of the Advisory Committee consists of representatives from:

1. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)
2. Government of Northwest Territories (GNWT) – Department of Environment and Natural Resources
3. Government of Northwest Territories (GNWT) - Department of Health and Social Services
4. Health Canada (HC)
5. City of Yellowknife
6. Yellowknives Dene First Nation (YKDFN)
7. North Slave Métis Alliance (NSMA)
8. Giant Mine Oversight Board (GMOB)
9. University of Wilfred Laurier Research Team

Specific responsibilities of the Advisory Committee include:

- provide technical expertise and advice for the development of the Study
- provide community perspective, expertise and advice in the development of the study
- provide input and advice to Dr. Shankardess for the implementation of the study
- provide advice on best practices and policies to ensure proper implementation
- provide advice on the development of policies for collection, use and disclosure of personal health information
- monitor the implementation of the Study and provide input into refinement opportunities
- assist in the development of a Communications Plan
- ensure communications are carried out according to the approved Plan
- provide assistance, if required, to carry out identified communication activities

The Research Team may, from time to time, enlist the help of other experts and professionals as well as part-time researchers to aid in the implementation of the monitoring program, therefore the establishment of the Technical Committee also took place during 2019-2020. The purpose of the Hoèła Weteèts'eèdeè Technical Committee will be to provide technical expertise, and best practice information regarding such topics as stress, mental health and the unique pressures of the North, surveying youth, and asking potentially-triggering questions. Membership of the Technical Committee includes YKDFN Community Wellness, GNWT-HSS, NTHSSA, GMOB, Health Canada, and WLU.

The GMRP will report on the progress and results of the Hoèła Weteèts'eèdee` Understanding Community Well-being around Giant Mine Study in the Water Licence Annual Report (Section 8.0). This will include how the GMRP will use the results of the study (e.g., implementing appropriate design improvements and identify appropriate management and communication responses).

B1.13 Perpetual Care Plan Development

The GMRP is also required through the Giant Mine Remediation Project Environmental Agreement, to develop a comprehensive PCP that addresses improvements in records management, communications with future generations, long-term access to funds for the Project, and an analysis of different possible future scenarios that might affect the Perpetual Care of Giant Mine.

There has been substantial engagement on perpetual care requirements and long-term risk communication outside of the ongoing engagement activities that the GMRP undertakes. The following work has been completed by signatories of the Environmental Agreement and will be used to help develop the Perpetual Care Plan moving forward:

- Alternatives North and Yellowknife Dene First Nation held two workshops from September 26-27, 2011 to learn from lessons of perpetual care from other sites and situations in the North and elsewhere in Canada and the world, to better understand the perpetual care requirements for the Giant Mine, to identify goals and principles for the perpetual care of the Giant Mine site, and to develop options and preferences for communities, periodic review, ongoing research into new technologies, and institutions or systems to ensure all of this happens.
- In March 2012, The Pembina Institute prepared the Giant Mine Perpetual Care Funding Options report for Alternatives North as a submission to the Mackenzie Valley Environmental Impact Review Board. The report identified and evaluated perpetual care funding options and made recommendations on funding for long-term care and maintenance for Giant Mine.
- The Toxic Legacies Project examined the history and legacy contamination at Giant Mine. The project was a partnership among researchers at Memorial and Lakehead Universities, the Goyatiko Language Society, and Alternatives North. The project held a series of community workshops to look way to communicate research results in a way that would engage the community of Yellowknife and the broader concerns public.

    - Specific GMRP engagement initiatives with respect to the development of the Perpetual Care Plan includes:
    - GMRP PCP Desktop Study; Completed in June 2019
    - Gaea Consulting Onboard: July 2019 to carry out interviews completed with various stakeholders and rights holders to help inform the PCP Framework.
    - Perpetual Care Plan Workshop- October 2019 to review the draft PCP Framework to determine if there is general agreement on keeping the component and sub-component. Review the draft PCP Framework components to determine what can be omitted - and why? Also determine if there are components to add- and why? Reviewed & validated PCP Draft Framework by workshop attendees
    - The GMRP established a Perpetual Care Plan Advisory Task Force in October 2019 to provide support and recommendations to the GMWG about the development of a comprehensive PCP. The Task Force includes representatives from all signatories to the Environmental Agreement.

- PCP Advisory Task Force has been meeting since November 2019 and completed the following:
    - Review and validate the PCP Draft Assumptions Section.
    - Draft and finalize the TOR for the Task Force.
    - Review and validate the PCP Draft Framework to ensure it is consistent with amendments to the assumptions section.
    - Reviewed emergency management desktop study – helped to establish next steps for a desktop review with stakeholders/rights holders.
    - Conducted a review of EA transcripts/water licence proceeding transcripts to ensure PCP thinking was captured.
- The GMRP will engage with the Giant Mine Working Group and the public prior to the submission (both draft and subsequent versions of the PCP) to the Giant Mine Oversight Board, to gather input and feedback into the Plan (Table 7-1). As per Schedule 1, Condition 2 iii), the GMRP will also document engagement taken related to the Perpetual Care Plan in the Annual Water Licence Report.
- The remediation decisions made by the GMRP inherently result in land-use constraints being established for the Site. Rights and stakeholders have expressed concerns during the 2019/2020 Water Licence process regarding the end land use objectives for the Project; however, the land-use planning process for identifying future land use of the Site is outside of the authority of the GMRP Team. The GMRP Team will work with parties responsible for land-use planning and rights and stakeholders to understand the constraints that will exist post-closure. Furthermore, the GMRP Team has committed to developing a land-use constraint map that will be included a component of the Perpetual Care Plan to help inform discussions on long-term risk communications.

B1.14 Borrow

Engagement Sessions held December 3-5, 2019 with the communities of NSMA and YKDFN, in addition to the GMRP Working Group, including the Yellowknife Historical Society and the Back Bay Community Association. The objectives of the sessions were to:

1. understand which selected borrow sources had concerns for who, and for what reasons
2. understand what additional selection factors should be considered

As a result of the input received the following considerations were suggested as new selection criteria for borrow locations.

Input from the Working Group:

- borrow plan must be driven by closure criteria, cost reduction/increased efficiency, fewer sites higher volume, avoid creating new pits, avoid contaminated areas, reduce visual impacts, communicating to future generations?, revegetation considerations at NWP3 and A1 pit, investigate other locations not already considered, power needs and GHG.

Input from the NSMA:

- geochemical, worker safety must be assured, haul distance considerations, reduce disruptions to the public fewer sites with higher volumes , avoid creating new pits, reduce visual impact, avoid areas that are being used by the public(hiking), other: plant trees along road to obstruct view to NWP1&2

Input from the YKDFN:

- Worker safety to be must be assured, hauling distance considerations, reduce disruptions to the public, reduce greenhouse gas emissions through design choices, avoid contaminated areas, reduce visual impact, holistic vision of the site as a whole, and not just individual component.
- YKDFN specific comments on fine grain borrow sources: water management highlighted as potential issues, limit depth of the sites to avoid standing water, not to create landscape that looks like 'Swiss cheese', consider filling with coarse grain borrow/capping so they don't collect water, dust was highlighted as a concern, other: outcrops/highwalls currently serve as windbreaks, larger signs to warn public of the arsenic and the contaminated site and sloped pits, consideration for some revegetation for A1 pit and

The locations of A1 Highwall, NWP 1&2, and NWP 3 were presented as preferred and potential locations as borrow sources, with specific feedback requested.

- NWP1&2 feedback has received favorable responses due to short haul distances, minimal visual impact, considerations for planting trees, however concern for impacts from landfill.
- NWP3- favorable response, short haul cycle, in location of existing quarry, considerations for aesthetics (ridge, trees), traffic considerations though:
  - YKDFN: suggested that the area is not used due to existing pollution and loss of land rights, concern for water seepage across the highway, avoid the creation of ponding water,

The input received will help guide decisions for the Project Team which will be reflected in the Borrow Design Plan, and Borrow and Explosives Management Plan. The Project Team will communicate with rights and stakeholders on the final borrow locations once the material balance and volumes are finalized.

B1.15 Aquatics Engagement

Over the next number of years, the GMRP will be engaging with rights and stakeholders on a series of aquatic related aspects of the remediation project. The engagement is designed to ensure that GMRP in-water components are designed in a way that considers the needs and expectations of the GMRP, rights and stakeholders and regulators. Furthermore, the engagement is intended in increase trust and understanding from rights and stakeholders in the way in which the GMRP monitors and manages Project-related impacts to the aquatic environment. The following aspects of the GMRP will be engaged on during the Project's aquatic engagement work:

- Baker Creek design
- DFO offsetting requirements for in-water work in Baker Creek
- Aquatics Effects Monitoring Program (AEMP; Yellowknife Bay) Design and Baseline Special Study
- DFO offsetting requirement for in-water work in Yellowknife Bay monitoring and Yellowknife Bay future conditions

As part of this work, the GMRP has formed an AAC (Table 4.2-1) made up of a small group of rights holders and stakeholders who would participate in some or all of the aquatics engagement activities. The Committee will allow for participants with a keen interest in the GMRP aquatics environment to actively participate in meaningful conversations and exploration of concepts. The objective of the Committee is for participants to develop a deeper knowledge of the Project, the regulatory framework, the aquatic environment and environmental monitoring concepts.

B1.16 Community Based Monitoring Program

As a result of engagement, the GMRP has documented concerns from YKDFN and NSMA which has highlighted that concerns with respect to re-contamination of sediment in Baker Creek and aquatic environments continue to be the highest priority. The concerns are rooted in fish having continued access to Baker Creek and being exposed to high levels of contaminants. Therefore, the project is exploring ways to address these concerns via a community-based monitoring program.

In addition, the Project has heard the desire from YKDFN to participate in on-going, long-term monitoring on Site, in all areas, to ensure risks are communicated, and monitoring results are disseminated to their communities. The Project is committed to working with rights holders to address these concerns and is evaluating various methodologies and tools (e.g., Healthy Country Planning) for developing stewardship plans that reflect community values and perspectives. This work is currently under development, and more information will be made public and incorporated into this Plan when it becomes available. Preliminary meetings with both the NSMA and the YKDFN took place in 2019/2020 and additional discussions on a potential community-based monitoring program will take place outside of the AAC.

B1.17 Socio-Economic

The GMRP spans a wide variety of topics and has a wide range of responsibilities including social, economic, human health, and environmental considerations. The Water Licence process is focused on the environmental considerations of the project, specifically related to the use of water and deposit of waste on land and in water. The MVLWB, and therefore the Water Licence requirements, is focused on GMRP uses of water and land.

However, GMRP engagement is broader than only the requirements of the MVLWB. And the Project recognizes the potential impact of the GMRP on the Northern economy. As such, the GMRP is working with organizations and programs to promote capacity-building to ensure a collaborative approach to maximize the benefits to Northern and Indigenous groups and businesses.

In 2019, the GMRP completed a major update to the Socio-economic Strategy and made it available to the public. In collaboration with rights- and stakeholders, the Project has developed a Socio-economic Implementation Plan to guide the Project's and its partners' actions in delivering tools to ensure socio-economic benefits from the Project. The goal of this Implementation Plan is to maximize economic opportunities for Northerners and local Indigenous peoples through employment and procurement, address socio-economic impacts, and mitigate potential barriers. The objectives of this Implementation Plan are as follows:

- Clarify communicate socio-economic barriers, opportunities and benefits.
- Coordinate with rights and stakeholders to minimize negative impacts, build capacity and deliver benefits.
- Improve socio-economic planning and performance, leading to a strengthened social licence.

The GMRP Team will be communicating progress on the Socio-economic Implementation Plan as the Project moves into remediation. A list of Key Performance Indicators (KPI) and Targets, for a subset of KPIs, will be used to demonstrate the Project's socio-economic performance. The Targets are a benchmark to measure the Project against, focusing on those that encourage and drive performance and are more directly under the control or influence of the Project. Reporting on KPIs and Targets will be annually in the GMOB Annual Report and done via the development of a Snapshot document to share publically.

The GMRP Team has also committed to continuing to engage with several socio-economic committees to ensure that proper direction and guidance is provided to the Project Team and the MCM as it relates to the socio-economic activities on the GMRP (Table 4.2-1). Additional details regarding the status of socio-economic activities on the GMRP can be found on the Project's website.

The MCM is responsible for the following socio-economic commitments:

- Develop an Indigenous Benefits Plan during the implementation of the remediation project.
- Complete, at minimum, two Labour Capacity Study updates.
- Structure work packages and sub-contracts to maximize opportunities for Indigenous and northern businesses.

- Use Indigenous Opportunities Considerations (IOCs) in subcontractor tenders.
- Use the Procurement Strategy for Aboriginal Businesses (PSAB), where competition is achievable in the market place.

As part of the Socio-economic Strategy, GMRP identified 15 strategies (immediate and long-term) to address these barriers - work is already underway for 10 of these. To make sure that the Project is well-positioned to maximize socio-economic opportunities, GMRP's Socio-economic Working Group (SEWG) was joined by other experts, rights and stakeholders in early February 2020 to identify actions for successful implementation of the Socio-economic Strategy over fiscal years 2020-21 and 2020-22. The participants worked in small groups and plenary to identify a set of actions related to **Training, Employment,** and **Procurement**, as well as other cross-cutting items, to link to the three distinct streams of activity identified in the Strategy.

Between February and June of 2020, the actions were refined and combined with the existing 15 strategies. The February 2020 meetings that have the potential to increase socio-economic benefits coming from the Project, but are to be undertaken by parties outside of the GMRP.

APPENDIX C GMRP Traditional and Local Knowledge Engagement Considerations

C1.0 TRADITIONAL AND LOCAL KNOWLEDGE STUDIES, ENGAGEMENT AND CONSIDERATIONS

The consideration and incorporation of Traditional Knowledge has been integrated into project planning and activities through the consultation and engagement processes we undertake with rights holders on various project works, as well as the overall Closure and Reclamation Plan. The GMRP Team is committed to continuing to incorporate Traditional Knowledge into our implementation strategy as part of site remediation.

Understanding and incorporating YKDFN and NSMA traditional and local Indigenous knowledge, along with perceptions and values is an important component of the GMRP to benefit all people affected and to have the broadest possible knowledge base to achieve the best possible results. Refer to Appendix B, for a detailed overview of the GMRP's history of engagement and incorporation of Traditional Knowledge.

C1.1 The Giant Mine – Our Story: Impacts of the Yellowknife Giant Mine on the Yellowknives Dene – A Traditional Knowledge Report YKDFNLEC (2005)

In 2005, the Land and Environment Division of the YKDFN carried out a specific Giant Mine Traditional Knowledge Report documenting the stories and histories of the Yellowknives, and the impact and legacy issues with respect to the operation of the Giant Mine. This report provides more information on the historical environment and traditional use of the Wiilideh lands, and cultural significance of the Weledeh area and the area now known as the Giant Mine site. The GMRP funded this initiative with the YKDFN.

C1.2 Traditional Knowledge Study – Trailmark 2018/2019

Government of the Northwest Territories funded the YKDFN to contract Trailmark to carry out a Traditional Knowledge Study 2018-19.

This study or framework is intended to assist the YKDFN with its participation in the Giant Mine Remediation Project process. It establishes expectations and guidelines for the GMRP on YKDFN local and traditional knowledge identifies, based on knowledge from YKDFN members and staff, strategic opportunities for YKDFN traditional and local knowledge input into the Project, and identifies research and follow-up monitoring needs.

This work has allowed for specific opportunities to incorporate traditional and local knowledge through the implementation of a number of engagement initiatives to inform the design and development of the water license package (e.g., the development of the Closure Plan, Surface Design Engagement (SDE)Quantitative Risk Assessment, and Archeological Impact Assessment).

C1.3 Summary of Traditional Land-Use by the Indigenous Métis People in the Yellowknife Bay Area (2020)

In 2020, the NSMA carried out a Land-use study with a focus on the Yellowknife Bay area, including the Giant Mine site, drawing out knowledge from elders and analyzing relevant documents. The GMRP funded this study with the intent to use the knowledge incorporated to provide more information on Traditional uses of the area now known as the Giant Mine Site.

C1.4 Environmental Assessment Period

In the period between 2007 and 2010, the GMRP Team engaged with Indigenous organizations and other rights and stakeholders to share the detailed design and the overall direction that the Project was taking towards a final remediation plan for the site. In September 2009, the GMRP Team hosted public tours of the Giant Mine as part of this engagement. The input received from this engagement resulted in the Project carrying out a focused engagement session in 2010, co-hosted with the Giant Mine Community Alliance (no longer an operating group) on the frozen block method, remediation and environmental site quality. Additionally, the following topics were discussed during the engagement session:

- Indigenous community engagement approaches and inclusion of Traditional/Local Knowledge and involvement in monitoring.
- Legacy issues: impacts to land use, impacts to wildlife/environment, apology and compensation.
- Arsenic toxicity and mobility.
- Earthquake and climate change considerations.
- Off-site arsenic impacts.

GMRP Commitments, relevant to the Closure and Reclamation Plan directly, included:

1) Active freeze equipment remains on site as a contingency.
2) Identification of YKDFN archaeological and burial sites.
3) Work cooperatively with the YKDFN on the development of the remediation plan and its implementation.
4) Incorporation of Traditional Knowledge into remediation activities.

C1.5 Giant Mine Environmental Assessment 2007-2014. Report of Environmental Assessment – Section 12

Section 115 of the *Mackenzie Valley Resource Management Act* (MVRMA) required the Environmental Assessment process to consider the protection of the cultural well-being and the importance of conservation to the well-being and way of life of Indigenous peoples. It documented evidence pertaining to the effects of the Project on the traditional use of the Project area and downstream. The REA page 185 reads:

> *"The Aboriginal Parties, and particularly the Yellowknives Dene, described to the Board the nature of the loss they suffered to their traditional use of the land because of the Giant Mine. They have told the Board how the area, was close to communities and used for fishing, hunting, trapping, harvesting berries, traditional teas, medicinal plants, traditional trails and burial sites. In their statements to the Board, it was clear that they believe impacts of Giant Mine continue to affect them. The Yellowknives Dene recognize that much of the damage is likely irreparable, and that the mine site is never going to be used in the same way in the future as it was before Giant Mine. The Yellowknives Dene reflected on what the land provided in the past and the little benefit they received from Giant Mine."*

Individual stories and statements from various members of our Indigenous communities are further presented and documented in the September 12, 2014 EA Public Hearings transcripts.

C1.6 Site Stabilization Plan (SSP)

The Site Stabilization Plan (SSP), which included the decontamination and deconstruction of the roaster complex and underground stabilization, was developed with extensive engagement and input from rights and stakeholders. Key concerns heard from rights and stakeholders about the SSP included potential impacts to air quality in the community (specifically in Ndilǫ). As a result, an Air Quality Monitoring Program (AQMP) was developed. This included the installation of a series of air monitoring stations on the perimeter (fence line) of the Giant Mine site, implementation of site-specific activity driven monitoring stations, and three community stations located in Ndilǫ (site selection in consultation with YKDFN staff and the Giant Mine Advisory Committee (GMAC), the Yellowknife marina and Moyle Park (Niven).

C1.7 Human Health and Ecological Risk Assessment 2015-2017

The Human Health and Ecological Risk Assessment carried out on the GMRP by CanNorth (CanNorth 2018) Consulting during 2015-2017 involved input and significant contributions from Traditional Knowledge and local knowledge holders during various aspects of its design and data collection.

The scope of work phase of the assessment determined the need for separate distinct communities to be recognized based on differences in traditional land use, food consumption and lifestyles. This resulted in three specific communities to be recognized: Yellowknife, which included the membership of the North Slave Métis, Ndilǫ residents and Dettah residents. These meetings allowed the GMRP consultants to gather further information on concerns regarding land use activities (e.g., swimming in Ndilǫ waters, and fishing in Yellowknife Bay) to determine appropriate exposure pathways to be assessed within the study.

A critical piece of the assessment was to have a good understanding of the dietary habits of the communities to calculate potential contaminants exposure through the established pathways. Previous studies on the amount of food people ate were completed in the YKDFN community by the Centre for Indigenous Peoples' Nutrition and Environment in the mid to late 1990's. During GMAC and GMWG meetings during the study design stages, the GMRP and CanNorth were informed by the YKDFN that the outcome of the 1996 dietary survey is likely skewed now as diets have changed significantly as a result of a decline in caribou populations and harvesting restrictions. It was suggested that a new dietary survey be undertaken. Three workshops were held, and a dietary survey questionnaire was developed to gather information on what country foods people from YKDFN and NSMA eat and where they harvest their country food. This information was used in the risk assessment to help reduce uncertainty in the use of data collected almost 30 years ago

CanNorth assessed all the existing environmental data for soil, water, air, sediment and vegetation in the Yellowknife area for both on-site, and off-site. They suggested that a comprehensive country food sampling program be carried out to understand the use of the lands in and around the Giant area for hunting and harvesting, and to analyze the arsenic concentrations in those foods and medical plants to quantify current exposures. A total of 172 samples were submitted by community members (78 samples from the YKDFN members and 7 samples submitted by NSMA). These samples ranged from berries to moose meat, to medicinal plants. All sample locations were recorded to establish a spatial understanding of contaminant concentrations and land use in general. The community participation in this voluntary sampling program was exceptional and hadn't been carried out in a risk assessment at this level in Canada. This input significantly contributed to a more accurate assessment of human health risks for residents.

C1.8 Surface Design Engagement (SDE)

Significant participation from the YKDFN community members and elders occurred during the Surface Design Engagement. In addition, participation from the NSMA, on a more minimal scale. Input received during SDE engagement included:

Baker Creek: There was overall agreement that Baker Creek should remain onsite rather than being relocated elsewhere and resulting in additional land disturbances and new contamination of previously undisturbed areas. Community members supported a wider channel that can handle floods safely, and that contaminated sediments in the creek should be removed. There was and continues to be community concern surrounding fish access into Baker Creek, the continued off-site/upstream arsenic loadings and the subsequent contamination of fish and human health risks to those who may end up eating those fish. Others rights and stakeholders thought Baker Creek was good fish habitat, and has been deemed so by DFO, and the risk to human health would be very low. However, in order to address the YKDFN and NSMA concerns regarding contaminated fish consumption, the GMRP are including large fish tissue sampling/monitoring into their Aquatic Effects Monitoring Program (AEMP) and are exploring the design development of a Community-Based Monitoring (CBM) Program, having initiated preliminary discussions with the YKDFN and the NSMA in the joint development of a CBM program.

***Pits**:* Community and elder concerns surrounding pits included safety of people and wildlife having access to the open pits (e.g., falling, injury). It was recommended that the pits be filled to address this issue, and eliminate the need for on-going security, fencing, and ineffective boulder placement. The recommendation for filling of pits also included linkages to the desire to reduce the footprint of the mine as much as possible and consider the use of tailings as fill material. The community, and specifically the elders, requested the pit fill/covers not be allowed to revegetate and that they remain as a reminder to future generations of the legacy contamination and impacts associated with the site. Based on this input, the GMRP made the decision to fill the open pits (final details as to full vs partial fill to come) with clean rock material, and not vegetate.

Tailings: Similar to the community issues raised with the pits, footprint considerations and communicating with future generations were drivers for decisions made with the Tailings ponds. The GMRP will consolidate the South Tailings Pond within the Central and North ponds, and the tailings covers will not be revegetated.

***Contaminated Soils**:* Additional areas having historical tailings spill impacts were identified by community members. These areas are undergoing current project investigation to determine the extent of contamination and proposed remedial activities. With respect to known contaminated soil areas, the community wanted soils to be cleaned up to the best extent as possible, again without significantly disturbing undisturbed areas. Instead, they recommended sampling and testing with signs or access controls where there might be areas that could present a potential risk to people. It was agreed that the townsite would be remediated to residential guidelines; however, this did not indicate that neither community members nor elders were supportive of future land use, especially residential, in the townsite area, nor other areas. Concerns remain surrounding a continued human risk to residual or buried contaminants even after remediation activities are completed.

***Land Use**:* The YKDFN community specifically wanted the site to remain off limits to people, so that future generations would never be exposed to any of the buried tailings, arsenic dust, soils and residual risk. A monument of some sort was recommended by all rights and stakeholders, and the GMRP is committed to a Perpetual Care Plan which will explore a number of options for communication to future generations. Final land decisions will be under the authority of the GNWT- Department of Lands or the City of Yellowknife (depending on lease area land tenure). However, the interests of affects parties and the constraints associated with specific areas will be communicated clearly to the respective land management authorities.

The YKDFN community and NSMA has indicated on many an occasion the desire to be involved in long- term monitoring of the site and the GMRP has made commitments to include both the NSMA and YKDFN in the development of that program and to ensure that members are involved.

C1.9 Baker Creek Alignment

The GMRP brought forward the realignment options analysis to GMAC in October 2017 to present the various options and the criteria used to evaluate them, and to receive input on additional considerations and an alignment preference. GMAC concerns specifically surrounded ice buildup within the channel and the need to address seasonal fluctuations. Examples were provided of historical icing issues in the area. There was specific recommendation to ensure appropriate widening would be carried out in order to mitigate rare icing scenarios. GMAC also recommended that the route be maintained in an alignment that doesn't result in additional site or land disturbance. There was consensus on the alignment route recommended by the GMRP engineers.

Further details regarding the specific in-creek decisions, habitat details are part of conversations with DFO. The GMRP remains committed to update the YKDFN community on those discussions and include community knowledge to further influence design and stream habitat considerations.

C1.10 Effluent Treatment Plant Outfall

The objectives of the outfall location engagement sessions during September and November 2016, with the YKDFN, GMAC, and GMWG, were to clarify the changes from the diffuser to the outfall (as a result of issues raised during the Environmental Assessment process), and to receive input on the three potential outfall locations along the shoreline of Back Bay. During community engagement many of the concerns raised from community members and elders identified issues surrounding ice thickness, additional land disturbance, and potential impacts to a traditional and culturally important site located at the mouth of Yellowknife River. It was recommended that the GMRP investigate the possibility of a location near the mouth of Baker Creek. An area already disturbed and known by community members to have activity. As a result of this community feedback, the GMRP brought back information for evaluation of a fourth option near the outlet/vicinity of Baker Creek. That location was determined as the preferred choice by both the community and the GMRP. Concerns identified included remaining questions on the impacts to fish and ecosystem habitat, water quality at the outlet of Baker Creek, and the influence the outfall may have on the receiving environment. The GMRP, through its detailed design work and baseline water monitoring continues to investigate these concerns and refine design to mitigate any issues.

C1.11 Non-Hazardous Landfill Siting

Engagement on the six on-site landfill locations and their subsequent evaluation criteria and process occurred with GMAC in October of 2017. As a result of these discussions, GMAC members supported the recommended location of Area 3 - within the core industrial area, with the caveat that further heritage and archeological work be undertaken to ensure siting will not have any impacts on areas of cultural significance. Since that time the GMRP has undertaken an Archeological Impact Assessment in 2018 with traditional knowledge input from interviews conducted with elders by Trailmark. An NSMA elder was also consulted with. These interviews informed the focus of the field component, specifically investigating areas designated for closure and reclamation activities. The field program included a number of YKDFN field assistants, and their former Traditional Knowledge expert Randy Freeman. As a result of the findings, the GMRP has committed to altering the boundaries of the potential borrow area (potential source area 5) to ensure the remediation project does not disturb this important traditional use area. The AIA report has been completed. Further details of the AIA are found in the Archeological Impact Assessment section below.

C1.12 Heritage Overview Assessment (HOA) 2013

At the request of the YKDFN, a Heritage Overview Assessment was conducted for the Giant Mine area, by Altamira Consulting Ltd on behalf of Det'on Cho Corporation. The purpose of the HOA was to identify the nature and extent of heritage resources (archaeological and historic) within the Giant Mine Study area and to determine the need for additional heritage assessment work prior to the startup of land disturbance activities associated with the remediation.

The Report describes general discussion on past land use and traditional land use. Four previously identified archaeological sites, discovered in the 50s, and 60's, containing small artifacts, have been recorded with the Prince of Wales Heritage Center within their NWT Cultural Places Program.

A visual inspection of the Site area was undertaken in October 2012 with the YKDFN Land and Environment Department, Traditional Knowledge staff member and a Traditional Knowledge holder. Field work consisted of revisiting the known or previously recorded archaeological sites in the Project Area along with a visual survey of selected areas. No new archaeological sites were recorded during the field survey although five new Traditional Use sites were recorded. The HOA did not consist of the incorporation of any testing or collection of materials or artifacts. The assessment indicated that these traditional uses sites would be further defined and additional archaeological and historic sites will likely be identified during a more detailed and formal archaeological impact assessment, which is scheduled for summer of 2018. A site investigation will aim to identify and properly document any heritage resources, archaeological remains and/or artifact locations and the proposal of appropriate methods to preserve and protect mitigate all heritage locations as identified during the field assessment. The implementation of site-wide remediation activities will aim to avoid any disruption or disturbance of the identified features, where possible, while completing the necessary clean-up remediation project. The GMRP is fully aware of these locations identified in the HOA and will ensure that disturbance activities on Site (e.g., borrow sources), will not have an impact.

C1.13 Archeological Impact Assessment (2018)

Golder Associates Ltd. (Golder) conducted an Archaeological Impact Assessment (AIA) in support of the Giant Mine Remediation Project on behalf of Crown-Indigenous Relations and Northern Affairs Canada and Public Services & Procurement Canada in July 2018. This work was carried out under Northwest Territories Class 2 Archaeologist Permit No. 2018-002 issued by the Prince of Wales Northern Heritage Centre (PWNHC), Government of Northwest Territories. The field program was carried out with the assistance of Yellowknives Dene First Nations members/representatives.

In preparation and planning for the field component of the AIA, the GMRP and Golder met with numerous affected and interested parties, including: Yellowknives Dene First Nation (including the Giant Mine Advisory Committee [GMAC], the Elders Senate, and staff), an elder from the North Slave Métis Alliance, archaeologists at the PWNHC, members of the Yellowknife Historical Society and City of Yellowknife Heritage Committee. As well, Trailmark interviewed a number of elders and knowledge holders to identify past use areas and areas of high potential to produce a figure used to help guide the field component.

Up to four members and/or representatives of the YKDFN participated in each day of the field investigation. Areas of high archaeological potential overlapping with areas of planned or potential areas of remediation were investigated. As well, previously recorded archaeological sites and traditional use areas were revisited. The 2018 field program examined 21 proposed borrow sources, two soil remediation areas, 4 known archaeological sites, and 8 known traditional use areas within the project area. Assessment consisted of pedestrian reconnaissance, visual inspection of ground surface exposures and shovel testing to document and evaluate archaeological and traditional use sites.

No archaeological or traditional use sites were identified in 17 of the assessed borrow source areas and there are no further archaeological concerns with these developments. Four of the borrow source areas (A1 Pit Highwall, Brock Pit Area, B2 Area, Potential Source Area 5) and the two soil remediation areas did contain archaeological or traditional use sites within or adjacent to their boundaries. This included three revisited and four newly recorded archaeological sites (KcPh-1, KcPh-3, KdPg-4; Giant 18-1, Giant 18-2, Giant 18-3, Giant 18-4), as well as eight revisited and one newly recorded traditional use site (TU-1 to 9). It is recommended that site recording and evaluation have adequately mitigated most of these sites and there are no further archaeological concerns.

The exceptions are:

- Giant 18-1: additional feature mapping is recommended at this 1940's exploration camp if it is determined soil remediation efforts will impact this site.
- TU-1: site avoidance is recommended of this traditional use campsite/lookout area by altering the boundaries of Potential Source Area 5.

The GMRP has committed to altering the boundaries of the potential borrow area (potential source area 5) to ensure the remediation project does not disturb this important traditional use area. As well, the GMRP has committed to further archaeological work pending results from the ongoing traditional knowledge work of Trailmark and YKDFN, or if remediation activities in the future include areas not assessed during the 2018 AIA.

Results of the AIA were presented to the Giant Mine Working Group in October 2018, and to YKDFN staff/representatives in November 2018. A combined report back on the AIA results to the wider YKDFN community took place in January 2019 with Trailmark, who presented their YKDFN traditional knowledge/land use research.

C1.14 Water Licence Engagement

Through the MVLWB Regulatory Process, the GMRP participated within the regulated process and had opportunity to hear from intervenors directly, and more specifically from community members during the Public Hearings on areas that are of concern to them.

YKDFN

The YKDFN presented during the Public Hearings on January 23, 2020 which defined their areas of interest *page 13-17*, with four overarching considerations for effective mitigation.

1) Current freeze plan is not sufficient remediation or an effective strategy for permanent mitigation for the risk to our way of life.

2) Need for a community benefits agreement that addresses and accommodates the Yellowknives Dene's rights, including title and other interests….We feel that a socioeconomic strategy should not be used in lieu of a community benefits agreement or some type of economic benefits agreement

3) Acknowledgement and acceptance of accountability in the form of compensation and apology for the Yellowknives Dene for the damage caused by the Giant Mine.

4) A robust community-based monitoring initiative led by the Yellowknives Dene must be established and included as a core component of the oversight and perpetual care of the giant Mine. Moreover, Yellowknives Dene must be included as a co-partner in the general monitoring program.

5) Additional requests: Communication Plan of the Project that is co-developed with the Yellowknvies and based on our communications and culture. This was in response to concerns from community members on the safety of their foods.

Pages 13-37 of the January 23, 2020 transcripts further describe the history and impacts of Giant Mine on the people.

Short excerpt:

"The YKDFN is primarily concerned about the impacts of the Giant Mine being mitigated effectively, and the risks of the Giant Mine being managed effectively. The YKDFN support the Giant Mine Remediation Project as a means to achieving these ends. This is why the YKDFN have participated in many aspects of the GMRP. It is why members have shared their knowledge and concerns with the Project and this Board for years. It is why the YKDFN are here today to tell you that the current process to remediation the Giant Mine and mitigate its effects has not accommodated the Yellowknives Dene Treaty and Aboriginal rights. The Yellowknives Dene believe that in its current form, the water license process is not capable of accommodating the Yellowknives Dene's rights either, and although the Yellowknives Dene are eager to participate in and support activities that seek to mitigate the risk posed by the Giant Mine, the Yellowknives Dene view the water license process as a small piece attempting to mitigate the long term damage Giant has caused. There are greater issues related to the water license to the Yellowknives Dene. As such, we feel that this process is a stepping stone towards the path to reconciliation. These issues have existed for over seventy years. However to put this in perspective the conversation with Canada on our legacy issues only began to see movement as of last year. We want everyone to acknowledge that we have Elders in this room that have witnessed impacts from the mine throughout their entire life…..

Elders say that the Giant Mine displaced our people from the heart of our territory. It contaminated our lands, water and the fish, animals, plants and medicines that we rely on. It destroyed the food security that we had ready to hand in Wiiliideh and in the country taken up the surrounding mine. It's position was unknown to us for many years. All of this happened in spite of the promises of Treaty 8, in violation to our Aboriginal rights, including our title and our Dene laws, which give shape to our stewardship responsibilities towards the fish, plants and animals who share our territory.

Pages 71-242 of the January 23, 2020 Transcripts include public comments from many YKDFN community members. The majority of the concerns focused on traditional land use concerns, and food security, on the freeze not being a permanent solution, and apology and compensation.

NSMA

During their closing arguments during the Public Hearing on January 24, 2020, the NSMA expressed some minor concerns regarding engagement.

- More thorough discussions regarding the development of the updated Aquatic Effects Monitoring Plan and Baker Creek Remediation Plan are required
- A comprehensive Adaptive Management Plan should be created in cooperation with the NSMA and YKDFN.
- Environmental and social monitoring before, after and during remediation, including reports of progress
- Funding commitments with contingency funds and annual updates from the project in order to measure success completion of the project

C1.15 Quantitative Risk Assessment

The QRA was initiated in 2018. The QRA engagement process aimed to meet the requirements of Measure 5 as well as the GMRP's engagement goals of rights and stakeholders being well-informed about the Project and having the opportunity to be involved in the exchange of information regarding the project. The QRA explored possible impacts on Indigenous Way of Life by engaging a small number of members of the Yellowknives Dene First Nation and the North Slave Métis Alliance. Instead of using numbers and calculations to describe the risks, the impacts on Way of Life were explored through discussion in four meetings with the Yellowknives Dene First Nation and three meetings with the North Slave Métis Alliance. Participants asked about the land and the risks at Giant Mine. They used maps and words to describe their concerns and things that are important to them. This information is captured in nine 'narratives' in the QRA report. Yellowknives Dene First Nation members and North Slave Métis Alliance members also made recommendations to the Project Team as part of this process.

Yellowknives Dene First Nation Knowledge Holders recommended a number of ways to stop bad things from occurring with the Project. The six most discussed recommendations included:

1. Continuing education in the school system and the community, as well as education on the site (e.g., visitor centre).
2. Using solar panels, to support the power requirements of the cleaned-up site, provide employment opportunities, discourage other possible negative uses of the site, and address climate change concerns.
3. Potentially giving the site meaning for the community in the future by developing it as a place for education and mourning, to reform a connection to the land.
4. Maintaining monitoring of the wildlife, plants, and water on site and in the area into the future.

5. Making sure community members are involved in the communications and monitoring programs into the future.
6. Putting more emphasis on the forward thinking of preparedness. We need to leave a positive legacy to our children and grandchildren.

North Slave Métis Alliance Knowledge Holders recommended a number of ways to stop bad things from occurring with the Project. The six most discussed recommendations included:

1. Using solar panels, to support the power requirements of the remediated site, provide employment opportunities, and discourage other possible negative uses of the site.
2. Having the City of Yellowknife take on more of a role regarding the communication strategy around the Mine Site and how this area could be a potential tourism opportunity.
3. Creating an interpretive centre to educate both local people and tourists about the site.
4. Ensure community awareness of the potential risks associated with the use of the land and the harvesting and consumption of traditional foods from areas near the site.
5. Ensuring long-term water and sediment testing/monitoring programs for the mouth of Baker Creek, Back Bay, and Yellowknife Bay are in place.
6. Regularly communicate results from the water and sediment testing/monitoring programs to the public.

The QRA report will be finalized and the results will be used to improve the design including design changes and changes to monitoring and management plans. The QRA results will also be used to inform the Project's Perpetual Care Plan, Engagement Plan as well its Emergency Response and Emergency Communication Plans. This could include updating how parties will manage long term risks and communicate with future generations.

C1.16 Perpetual Care Plan Development

There has also been substantial engagement on perpetual care requirements and long-term risk communication outside of the ongoing engagement activities that the GMRP undertakes. The following work that was carried out with specific community focus included:

Alternatives North and Yellowknife Dene First Nation held two workshops from September 26-27, 2011 to learn from lessons of perpetual care from other sites and situations in the North and elsewhere in Canada and the world, to better understand the perpetual care requirements for the Giant Mine, to identify goals and principles for the perpetual care of the Giant Mine site, and to develop options and preferences for communities, periodic review, ongoing research into new technologies, and institutions or systems to ensure all of this happens. The Toxic Legacies Project examined the history and legacy contamination at Giant Mine. The project was a partnership among researchers at Memorial and Lakehead Universities, the Goyatiko Language Society, and Alternatives North. The project held a series of community workshops to look way to communicate research results in a way that would engage the community of Yellowknife and the broader concerns public. The GMRP established a Perpetual Care Plan Advisory Task Force in October 2019 to provide support and

recommendations to the GMWG about the development of a comprehensive PCP. The Task Force includes representatives from all signatories to the Environmental Agreement. The work taken place on the PCP has not to date included the broader community however will be considered in the next phases of development.

Through various engagement initiatives the GMRP undertakes we continue to hear from Elders the need to think about ways to communicate to future generations. This will likely be a focus for community input moving forward on the development of the PCP.

C1.17 Borrow

Engagement Sessions held December 3-5, 2019 with the communities of NSMA and YKDFN, in addition to the GMRP Working Group, including the Yellowknife Historical Society and the Back Bay Community Association. The objectives of the sessions were to:

1. understand which selected borrow sources had concerns for who, and for what reasons
2. understand what additional selection factors should be considered

As a result of the input received the following considerations were suggested as new selection criteria for borrow locations from the perspective of YKDFN and NSMA communities.

Input from the NSMA:

- geochemical, worker safety must be assured, haul distance considerations, reduce disruptions to the public fewer sites with higher volumes , avoid creating new pits, reduce visual impact, avoid areas that are being used by the public(hiking), other: plant trees along road to obstruct view to NWP1&2

Input from the YKDFN:

- Worker safety to be must be assured, hauling distance considerations, reduce disruptions to the public, reduce greenhouse gas emissions through design choices, avoid contaminated areas, reduce visual impact, holistic vision of the site as a whole, and not just individual component.
- YKDFN specific comments on fine grain borrow sources: water management highlighted as potential issues, limit depth of the sites to avoid standing water, not to create landscape that looks like 'Swiss cheese', consider filling with coarse grain borrow/capping so they don't collect water, dust was highlighted as a concern, other: outcrops/highwalls currently serve as windbreaks, larger signs to warn public of the arsenic and the contaminated site and sloped pits, consideration for some revegetation for A1 pit.
- Specifically, Elders were very much concerned about the potential of water quality impacts from borrow activities, and wanted the Project to reduce the likelihood of the creation of ponding, and impacts to already existing water bodies.

The locations of A1 Highwall, NWP 1&2, and NWP 3 were presented as preferred and potential locations as borrow sources, with specific feedback requested.

- NWP1&2 feedback has received favorable responses due to short haul distances, minimal visual impact, considerations for planting trees, however concern for impacts from landfill.
- NWP3- favorable response, short haul cycle, in location of existing quarry, considerations for aesthetics (ridge, trees), traffic considerations though,
    - YKDFN: suggested that the area is not used due to existing pollution and loss of land rights, concern for water seepage across the highway, avoid the creation of ponding water,

The input received will help guide decisions for the Project Team which will be reflected in the Borrow Design Plan, and Borrow and Explosives Management Plan.

C1.18 Aquatics Engagement

Over the next number of years, the GMRP will be engaging with rights and stakeholders on a series of aquatic related aspects of the remediation project. The engagement is designed to ensure that GMRP in-water components are designed in a way that considers the needs and expectations of the GMRP, rights and stakeholders and regulators. Furthermore, the engagement is intended in increase trust and understanding from rights and stakeholders in the way in which the GMRP monitors and manages Project-related impacts to the aquatic environment. The following aspects of the GMRP will be engaged on during the Project's aquatic engagement work:

1. Baker Creek design
2. Department of Fisheries and Oceans (DFO) offsetting requirements for in-water work in Baker Creek
3. Aquatics Effects Monitoring Program (AEMP; Yellowknife Bay) Design and Baseline Special Study
4. DFO offsetting requirement for in-water work in Yellowknife Bay monitoring and Yellowknife Bay future conditions

As part of this work, the GMRP has formed an Aquatics Advisory Committee (AAC) (Table 4.2-1) made up of a small group of rights holders (YKDFN and NSMA) and stakeholders who would participate in some or all of the aquatics engagement activities. The Committee will allow for participants with a keen interest in the GMRP aquatics environment to actively participate in meaningful conversations and exploration of concepts.

This engagement initiative has just been implemented at the time of the drafting of this Engagement Plan. Input will be documented and recorded to include Traditional Knowledge and community knowledge into the various aspects listed above.

C1.19 Community Based Monitoring Program

As a result of engagement, the GMRP has documented concerns from YKDFN and NSMA which has highlighted that concerns with respect to re-contamination of sediment in Baker Creek and aquatic environments continue to be the highest priority. The concerns are rooted in fish having continued access to Baker Creek and being exposed to high levels of contaminants. Therefore, the project is exploring ways to address these concerns via a community-based monitoring program. In addition, the Project has heard the desire from YKDFN to participate in on-going, long-term monitoring on Site, in all areas, to ensure risks are communicated, and monitoring results are disseminated to their communities. The Project is committed to working with rights holders to address these concerns and is evaluating various methodologies and tools (e.g., Healthy Country Planning) for developing stewardship plans that reflect community values and perspectives. This work is currently under development, and more information will be made public and incorporated into this Plan when it becomes available. Preliminary meetings with both the NSMA and the YKDFN took place in 2019/2020 and additional discussions on a potential community-based monitoring program will take place outside of the AAC.

APPENDIX D Emergency Communications Plan

Giant Mine Remediation Project

Emergency Communications Plan

Revised May 2020

1.0 Purpose

An “emergency” is an abnormal situation that requires prompt action, beyond normal procedures, in order to limit damage to persons, property or the environment.

This plan’s purpose is to guide the Giant Mine Remediation Project Team in its emergency communications. Effective communication management is imperative before, during, and after an emergency to help prevent injury or loss of life to help limit damage to assets and property, to help maintain public services, to assist in the process of recovery, and to help maintain or restore public confidence in the government.

The purpose of this document is:

1. To formalize the Giant Mine Remediation Project Team’s (Project Team) approach to communicate openly and transparently with the public in the event of an emergency at the site that could have an impact on, or be perceived as having an impact on, either human health and safety or on the environment.
2. To identify ‘the public’ to be the citizens of Yellowknife, Ndilo and Dettah, which are in close proximity to the Giant Mine Remediation Project site (the site), and to ensure the public is made aware, in a timely manner, of emergencies on site that may affect them.
3. To identify external audiences, their information needs, and approaches to meet those needs.
4. To set out the process for communicating throughout the emergency, including steps to be taken and the communication roles and responsibilities in responding to a site emergency
5. To ensure all Project Team staff who may be involved in responding to emergencies understand the communications process.
6. To ensure up-to-date contact information is readily available in the event of an emergency.

2.0 Emergency Communications Response Team (ECRT)

Communications activities with the public will vary between incidents and will be dependent on the magnitude of the incident and its impact to the public and environment.

This section describes the roles and responsibilities of the Emergency Communications Response Team (ECRT) members involved in emergency communications. Other Project Team members, and roles, may be added based on the incident and required needs.

In the event of an emergency at the Giant Mine site, the Incident Commander (as defined in the Emergency Plan) will need to reach the Project team lead. If the first person on the following list cannot be reached, the Incident Commander should continue through the list until they reach an initial point of contact. That person will act as the Regional lead, with approval delegation for decisions in that role, until otherwise notified that a team member who features higher on the list is available to assume the role.

1. Natalie Plato
2. Curtis Duffy
3. Candace DeCoste
4. Chris Thomas
5. Myranda Bolstad

2.1 Members of the ECRT

1. CIRNAC
    a. CIRNAC GMRP Regional Lead
    b. CIRNAC Communications Officer
    c. CIRNAC Senior Management Representative (as required)
2. PSPC
    a. PSPC Operations Representative
    b. PSPC Communications Officer
    c. PSPC Senior Management Representative (as required)
3. GNWT Representative
4. Main Construction Manager / Mine Manager

2.2 Mandate of the ECRT

- The ECRT is the main point of contact/organizing group from a communications perspective in the event of an emergency at the site.
- The ECRT will gather and clarify details of the incident and outline the appropriate steps required to disseminate information to the public, via either CIRNAC communications on behalf of the Project spokesperson (that is, Deputy Director or Director, or delegated authority in their absence), or by the spokesperson where appropriate.
- The ECRT, through the spokesperson (the Project Deputy Director or Project Director as departmentally-approved alternate) and online media such as the giant.gc.ca website and @GiantMine Twitter feeds, will also continue updating the public as the situation or response activities are carried out. The GC North Facebook feed may also be used, as appropriate, in consultation with the DG Comms, and would be handled by the Digital Strategy Team.

2.3 Roles and Responsibilities of the ECRT

1) CIRNAC

a. CIRNAC GMRP Regional Lead – Natalie Plato or designated alternate

- Chair of ECRT (represents the Project on the Incident Command Team)
- Decision-making authority (also identifies issues that need more senior approvals)
- Liaise with other CIRNAC Senior Management
- Provide updates to ECRT
- Acts as the representative for CIRNAC on the Incident Command team; as such, liaise directly with PSPC Operations representative, the MCM contractor, key rights and stakeholders, and external emergency response personnel for communications-related purposes
- Media spokesperson
    - Should be onsite and have access to up-to-date information related to the incident.
    - Will have to be aware of confidentiality and privacy matters related to worker incidents.
    - Will be the same as the project's regular spokesperson.
    - Primary source of information for media and other interested parties but will work collaboratively with other groups that have jurisdiction and experience with emergency response including the City of Yellowknife, RCMP, GNWT, and YKDFN if applicable. As per below, the Incident Commander will be responsible for liaising with these parties in relation to operations (that is, emergency actions required on site).

- Depending on the nature of the incident, the ECRT may request that a subject matter expert accompany the spokesperson to provide technical assistance if required. PSPC, CIRNAC, and contractor representatives will support the Spokesperson as Subject Matter Experts as required.

b. CIRNAC Communications Representative– Myranda Bolstad or designated alternate

- Prepare media lines, in conjunction with PSPC Communications where appropriate
- Prepare Public Service Announcements, in conjunction with PSPC Communications where appropriate, and distribute to target media for area, if warranted.
- Initiate expedited approvals processes (described below), including liaising with the Minister's Office (MINO) and CIRNAC - HQ Communications to obtain appropriate and timely approvals on communications products.
- Facilitate all media requests.
- Organize media briefings, as required, in conjunction with PSPC Communications where appropriate.
- Organize and ensure web and social media updates, liaising with emergency web publishers, social media publishers, and emergency translators.
- Liaise with other organizations with social media followings (such as City of Yellowknife and YKDFN) to encourage sharing of information posts, as appropriate.
- Liaise with PSPC and GNWT Communications as well as other co-proponent external communications channels, as required.
- Prepare and distribute media reports to CIRNAC Public Affairs and the Giant Mine internal distribution list, as required.

c. CIRNAC Senior Management Representative (as required) – Chris MacInnis or alternate

- Decision-making authority, after Regional lead
- Secures decision-making authority for issues, as identified with Regional lead, that are above level Giant Mine Remediation Project ability to authorize
- Liaise with other federal Government Senior Management as required, to ensure they remain informed throughout the process

2) PSPC

a. PSPC Operations Representative – Brad Mueller or designated alternate

- Liaise with CIRNAC GMRP Regional Lead/Main Construction Manager/Mine Manager
- Provide updates to ECRT
- Provide updates to PSPC Senior Management
- Provide updates to PSPC Communications
- Co-ordinate onsite activities
- Provide subject matter/technical expertise to media with spokesperson, if required

b. PSPC Communications Representative – Sharon Nelson or designated alternate

- Provide support to CIRNAC Communications Officer in preparing media lines, web content, and social media content, as appropriate
- Liaise with HQ Communications, if required, seeking timely and appropriate approvals on communication products

c. PSPC Senior Management Representative (as required) – Maria Rice or designated alternate

- Decision-making authority (for issues that need more senior approvals from PSPC, as identified by PSPC Operations Representative)
- Liaise with CIRNAC GMRP Senior Management, as required

3) GNWT

a. GNWT Representative – Erika Nyyssonen or designated alternate

- Liaise with GNWT Senior Management and Communications

4) Main Construction Manager (Parsons Inc.)

a. Mine Manager – Doug Hayes or designated alternate

- Leads Incident Command Team to respond to emergency event
- Notifies external Emergency Responders (fire department, RCMP, ambulance, and other organizations) as required for operations/logistics (not communications)
- Communicates information to and liaises with CIRNAC GMRP Regional Lead, PSPC, and onsite contractors
- Provide updates to ECRT

- Liaise with other organizations such as City of Yellowknife, Yellowknives Dene First Nation, regulatory agencies, RCMP, WSCC with regard to operations/logistics (that is, actions required for emergency purposes, not as it relates to providing information for communications purposes, which is done by the GMRP Regional lead.)
- Coordinates all activities on site (i.e., external groups/agencies that need to access site)

5) Other Organizations- if and when required

- Depending on the type of emergency, other Project Team members or contractors may be called in to work with the ECRT to provide subject matter expertise.
- Outside agencies and organizations, such as:

a. The GNWT- Municipal and Community Affairs- Emergency Measures Office (MACA)

b. City of Yellowknife, YKDFN, and NSMA

c. the RCMP

d. WSCC

e. Regulatory Agencies (e.g., ECCC, DFO, MVLWB)

Their assistance in communicating with the general public would be requested by the Emergency Communications Response Team (ECRT) as appropriate (e.g., City has an existing and extensive communications network, and the City may activate its Emergency Measures Plan. If such a case arose, the City and the Project Team would work together to alert residents.

**Please see Annex 1A for ECRT contact information.*

2.4 Emergency Communications Response Process for ERCT

The processes and procedures described below are intended to be used and adapted as necessary across a range of potential emergencies, and are consistent with CIRNAC's overall emergency response approach.

2.4.1 During an Emergency

In the event of an emergency that requires public communications, the CIRNAC GMRP Regional Lead gathers the ECRT together to initiate the following:

1. **SHARE INFO**: Share all available information with the ECRT to ensure accurate, timely information is relayed to all parties.

2. **UPDATE FREQUENCY**: Develop interval for regular updates, information sharing and, if required, meetings. In addition to the initial notice of emergency, frequency will include updates at regular intervals for ongoing situations, as well as a minimum of one post-emergency update once the situation is addressed. Frequency of updates will reflect an appropriate timeframe for the emergency in question and will not depend on developments to the situation; that is, updates may include advising the public that the situation remains the same as the previous update.
3. **ASSESS**: Develop an assessment of the communications environment including identifying:
    a. Whether there is an immediate or perceived risk to the public that requires media communication via Public Service Announcement (PSA) from the Project team. *See Annex 2 for PSA template.*
    b. Whether key rights and stakeholders need to be contacted immediately (*see Annex 1 for key parties)*.
    c. Which other external parties may require updates.
    d. Determine what the frequency (time interval) and nature of media updates should be based on current and expected level of media interest and to determine what follow up information should be delivered. For example, in the case of a spill or release, determine the frequency for releasing monitored data and the tool to release that information *See Annex 3 for template of holding lines.*
    e. What parties other than the Project Team may be expected to comment, and what they will likely communicate. (i.e., inspectors in the case of a spill).
    f. What team member(s) should be designated responsibility for communicating with key rights and stakeholders; that is, if in the interest of time or in the absence of the availability of the Regional lead, which team member(s) will take on the task of contacting key parties directly.
    g. What other Departmental communications tools should be used to communicate the emergency, including the Project's web page and Twitter and the Departmental Social Media channels. Rapid response writing, translation and Internet coding/posting services should be engaged. *See Annex 1 for key contact and procedural information for translation, web, and social media. See Annex 2 for web and social media messaging template.*
4. **MONITOR**: Monitor the media environment to ensure public communications are effective and can be adjusted as needed. Media relations and public environment monitoring are ongoing, and can be enhanced/expanded as needed, with the assistance of additional communications team members. Arrange press conferences/media availability on short notice as needed.
5. **HUMAN RESOURCES:** Consider human resource requirements and obligations. These include assessing whether communications staff members need to be reassigned within the Project Team to support communications during an emergency response and whether a representative from communications needs to be part of the Incident Command Team, in the event of a major incident.
6. **COMMUNICATION MATERIALS**: Compile and update pre-approved materials, and develop new materials needed for the specific emergency, in consultation with subject matter experts.

2.4.2 Post Emergency

Following an emergency, the work of the ECRT is not complete. The following outlines some activities required to continue communicating and learning from the incident:

- Provide comment on the situation as appropriate with internal and external audiences as normal operations resume.
- Continue providing monitoring data as required.
- Rebuild relationships with key rights and stakeholders, if required. This will be led by the Engagement team.
- Host public forums or sessions if required.
- Participate in departmental or broader post-mortem evaluations (i.e., with external stakeholders), and evaluate communications efforts (lessons learned, website statistics, correspondence analysis, etc.) and public environment analysis.
- Adjust emergency communications processes and procedures as required.

3.0 Communications Products

Media will be referred to Myranda Bolstad, Senior Communications Officer (867-669-2578) or to her designated alternate. *See Annex 3 for status update template.*

Products, such as media lines, web updates or emails, will be developed by the ECRT, with the CIRNAC Communications Officer leading the process.

3.1 Communication Methods

The Project team will also ensure the generic line (867- 669-2426) is staffed throughout the emergency to field calls from the general public and deliver status updates based on a pre-existing template (See annex 2C).

a. Local media bulletins (PSAs)
b. Giant Mine website (see Annex 1D for process)
c. Giant Mine twitter account
d. Giant Mine newsletter distribution list, as appropriate
e. Other organizations communications networks, as appropriate
f. Direct warnings from police or firefighters, if necessary and appropriate
g. Government of Canada Facebook channels, as appropriate

3.2 Communication Material Content

Information to be shared will include the following:

- an explanation of the extent of the emergency
- protection measures being implemented
- the status of the emergency response and the actions being taken to resolve the situation
- actions public should take to stay safe
- steps taken to address concerns
- steps to be taken to prevent similar emergencies in the future
- contact details for sources of additional information

Other details to share includes the following messages:

- request that public follow any specific information that is relayed via radio (e.g., public service announcements) or community authority (door-to-door information or notice, for example, evacuation to a safe location)
- specific health and safety instructions as it relates to the emergency (for example, stay indoors to reduce exposure to air or dust or shut windows)
- A notification to say tuned to local radio and check website or social media for regular updates and any further instructions

3.3 Internal Approval Process

The Communications Officer will request approvals from:

- NWT Region Communications Manager
- Regional Director, PSPC
- GNWT ECRT Representative
- Director and Deputy Director, GMRP
- Senior Director, NSCP
- Director General Communications Branch

Please note, if time pressures require, the Senior Director, NCSP, can approve on behalf of all GMRP representatives and material can go directly to the Director General, Communications Branch (DG Comms).

The DG Comms, in conjunction with the Senior Director, will determine which products need additional approval levels, for example, ADM or ministerial, or if they can be sent as information only. Products will also be sent to the Regional Director General, NWT Region, for information, as appropriate.

4.0 Emergency Response Plans

Most on-site emergencies may be handled by the Project Team and its internal contractors however in some cases the Project Team may require assistance from community first responders (e.g., Municipal Fire Department).

The Project Team, through its contractors, has comprehensive emergency response plans to address most foreseeable emergencies on site. Copies are available at the Project Office and at site. The operational responses protocols are described and addressed in detail in the appropriate Emergency Response Plans listed here:

A) Spill Contingency Plan

- Applies to the site as a whole; describes the hazardous materials onsite, spill response training and procedures (including individual spill response plans in the Appendix), response team organization (and spill response communication flow plan), spill response resources, general spill containment and remediation, system component failures and prevention, potential environmental emergencies and procedures, and emergency contacts.

B) Project Safety, Health and Environmental Plan

- Outlines the Safety Health and Environmental (SG&E) requirements and guidelines developed by Parsons for activities at the Giant Mine site. When implemented, these requirements will protect site personnel, visitors, the public, and the environment from incidents caused due to SH&E hazards. Appendices Include:
  - Medical Management Plan (MMP)
  - Subcontractor Safety, Health and Environmental Plan (SSHEPs)
  - Health and Safety Forms, Checklists, and standard operating procedures
  - Activity Hazard Analysis
  - WHMIS Binder/Safety Data Sheets
  - Underground Mine Entry and Accessibility Procedures - Parsons conducted an underground fire response drill in December 2019.
  - Risk Register and Legal Compliance Register

C) Emergency Management and Response Plan (EMRP)

i) Underground Fire Plan

- Applies to the underground of the mine site; describes the notification sequence in case of an underground fire, the emergency procedures in refuge stations, contact lists, control centre information (e.g., location), and responsibilities and duties in case of underground fire.

ii) Surface Emergency and Fire Safety Plan

- Applies to the surface of the mine site; describes procedures for sounding the fire alarm, responsibilities and duties in case of fire, procedures for confining and controlling fires, and fire training and prevention

5.0 Emergency Communications

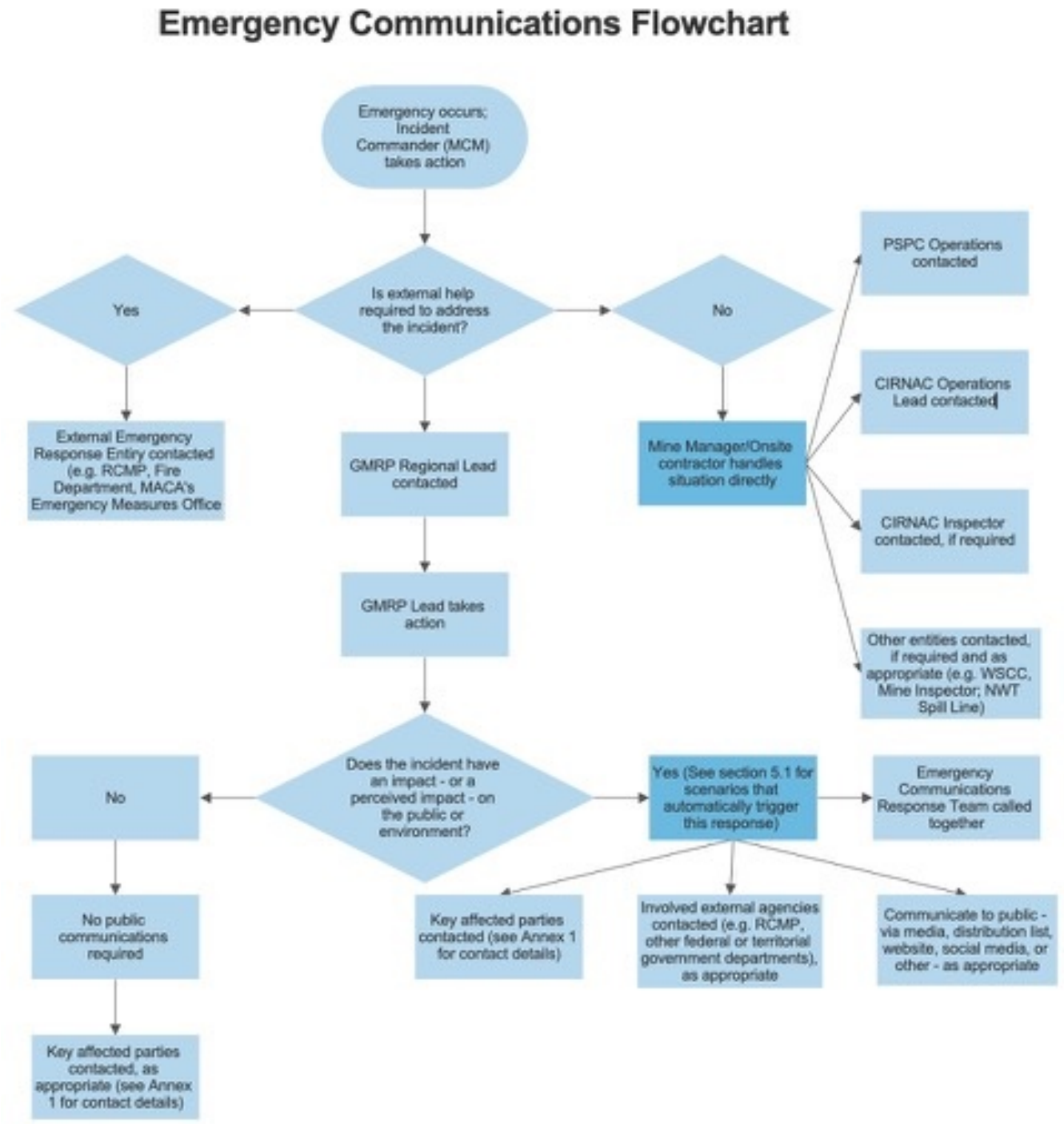
1. The onsite Main Construction Manager/Mine Manager is responsible for communicating with external emergency responders and/or inspectors in the event of an incident, as outlined in the situation-specific emergency response plan.
2. Key rights and stakeholders (see Annex 1 b), such as the City of Yellowknife Administration and the Yellowknives Dene First Nation, North Slave Métis Alliance, will be informed as soon as possible of any incident potentially impacting the public or environment, or that could be perceived as having the potential to do so. This will be done by phone or email, by a designated member of the ECRT, depending on the nature of the incident and the urgency.
3. The general public will be informed via local media and through existing project communications tools such as Twitter, the GMRP website or e-newsletter, as well as by community authorities if required. Urgent communications to media will be distributed through an emailed departmental news release or Public Service Announcement, if necessary. These could also be sent to the GMRP newsletter distribution list, as appropriate. The Departmental social media channels could also be used, as appropriate. Translation or interpretation into Indigenous languages will be considered, where appropriate.
4. If appropriate, media briefings will be organized following the initial notification. If safe and possible, media briefings will take place at the site, to give media, and thus the public, a visual idea of what's happening. These will be followed by updates at set intervals, as appropriate, from the communications officer or via further briefings, as necessary depending on the nature of the emerge. Interpretation into Indigenous languages will be considered, where appropriate.
5. Other communications tools (such as the Giant website homepage and Twitter) will be used to share information throughout the incident as well as post-emergency (e.g., monitoring data, lessons learned, etc.)
6. **See Annex 1 for parties/media contact lists.*

5.1 Incidents for immediate external party notification

Incidents which have an impact or perceived impact on the public or environment:

1. loss of life incidents
2. incidents that are likely to require a stoppage of traffic along the bypass to the Ingraham Trail or prevent access to the marina
3. incidents that may require evacuation of nearby areas (e.g., the Giant Mine boat launch and the NWT Mine Heritage facilities)
4. incidents that require the general public to take action (e.g., staying inside and/or keeping windows shut)
5. Any other incidents likely to be the source of significant public concern or media interest

5.2 Emergency Communications Flowchart



5.3 External Audiences: Key Rights and stakeholders, Involved Agencies

Various groups will be notified of emergencies that occur on site. Depending on the nature of the emergency they may be contacted for action, or after the fact for information purposes. Priority will be given to rights holders and parties who may have a role in mobilizing members of the community in the event of an emergency.

The City of Yellowknife can activate their own Emergency Management Plan in the event of an incident. Depending on the severity of the incident the MACA Minister could declare a State of Emergency under the Emergency Management Act. If this happens, MACA Emergency Management Organization would have a responsibility and role to play in communications on behalf of the City of Yellowknife. In addition, in the event of loss of life, the RCMP and the Coroner should also be advised.

The following list should not be considered exhaustive, but is representative of the stakeholders groups that could be included in emergency communication activities, depending on the nature of the incident. **See Annex 1B for key affected party contact List.*

i) The Yellowknives Dene First Nation

ii) North Slave Métis Alliance

iii) City of Yellowknife

iv) Other Government of the Northwest Territories Departments

   i. Department of Health and Social Services

   ii. Department of Infrastructure

   iii. Department of Municipal and Community Affairs *(Emergency Management Organization)*

v) Mackenzie Valley Land and Water Board

vi) Giant Mine Oversight Board

vii) Yellowknife-area media

viii) NWT Spill Line

ix) WSCC- Mine Inspector

x) CIRNAC Inspector

ANNEX 1

CONTACT INFORMATION

Annex 1A - Emergency Communications Response Team (ECRT) Contacts

Initial Team Point of Contact

In the event of an emergency at the Giant Mine site, the Incident Commander will need to reach Project team lead. If the first person on the following list cannot be reached, the Incident Commander should continue through the list until they reach an initial point of contact.

1. Natalie Plato

REDACTED (personal cell phone)

867-445-6499 (work cell phone)

2. Curtis Duffy

867-444- 9400 (work cell phone)

REDACTED (personal cell phone)

3. Candace DeCoste

REDACTED (personal phone)

867-444-9783 (work cell phone)

4. Chris Thomas

REDACTED (personal cell phone)

REDACTED (personal landline)

867-669-2430 (work phone)

5. Myranda Bolstad

REDACTED (personal cell phone)

867-445-9681 (work cell phone)

Crown Indigenous Relations and Northern Affairs Canada

- **CIRNAC GMRP Regional Lead**
- ***Lead*: Deputy Director, GMRP -** Natalie Plato, REDACTED, (867) 445-6499 Natalie.Plato@aandc-aadnc.gc.ca
- ***Backup:* Senior Engineer, GMRP -** Curtis Duffy, **REDACTED (cell),** Curtis.duffy@canada.ca
- **CIRNAC Senior Management Representative**

- Lead: **Director, GMRP -** Chris MacInnis, 613-447-2779 (Cell) 819-994-8756 (Work), chris.macinnis@canada.ca
- ***Backup:*** Miguel Lariviere, Manager, Engineering, GMRP 819-635-6312 (Cell) REDACTED (Home), Miguel.lariviere@canada.ca

- **CIRNAC Communications Officer**
- ***Lead*: Communications Officer, NWT Region -** Myranda Bolstad, (867) 669-2578, REDACTED (personal cell), myranda.bolstad@canada.ca
- ***Backup(PSPC)*: Communications Officer, PSPC -** Sharon Nelson, PSPC, (780) 292 0659, sharon.nelson@pwgsc.gc.ca
- ***Backup(CIRNAC)*: Manager, Corporate Secretariat and Communications -** Kim Walker, (867) 669-2839, Kimberly.walker@canada.ca

Public Services and Procurement Canada

- **PSPC Operations Representative**
- ***Lead*: Project Manager- Bradley** Mueller; 867-766-8361 / (c) 867-444-9282, bradley.Mueller@pwgsc.gc.ca
- ***Backup*: Project Manager -** Carlos Philipovsky, (867) 445-3570, carlos.philipovsky@pwgsc.gc.ca

- **PSPC Senior Management Representative**
- ***Lead*: Regional Director, Environmental Services and Contaminated Sites -** Maria Rice , (204) 999- 6665 (cell) Maria.Rice@pwgsc.gc.ca

***Backup*: Senior Project Manager - Doug Townson, (867) 445-6135 (cell), (867) 766-8366, Doug.townson@pwgsc.gc.ca**

Government of the Northwest Territories Representative

- ***Lead***: Senior Advisor, GMRP - Erika Nyyssonen, (867) 767- 9236 ext 53179, (867) 445-6474, Erika_Nyyssonen@gov.nt.ca
- ***Backup***: , Technical Specialist - Alex Lynch (867) 767-9236 ext 53190, (867) 587-6651 (cell), Alex_Lynch@gov.nt.ca

Main Construction Manager (Parsons Inc.)

- ***Lead:*** Mine Manager - Doug Hayes , (867) 668-1036, doug.hayes@parsons.com

- ***Backup:*** Manager of Health and Safety, Lex Lovatt, (867) 688-2240, lex.lovatt@parsons.com

***Backup*:** Senior Project Manager - Dayal Madhavan, (403) 620-1588, dayal.madhavan@parsons.com

Executive Level

- **Lead: NCSP Senior Director –** Lou Spagnuolo, REDACTED, lou.spagnuolo@canada.ca
- **NCR Communications**
- **Lead: Director General, ISC/CIRNAC Communications –** Aruna Sadana, **REDACTED**
- aruna.sadana@canada.ca

9.1 Annex 1B– Key Affected Parties Contact Information

Priority for contact will be given to rights holders and stakeholders who play a key role in mobilizing members of the communities.

The Yellowknives Dene First Nation

a. Chiefs and Council

Lead: Chief Sangris (Dettah)

Telephone: REDACTED

Lead: Chief Betsina (Ndilo)

Telephone: REDACTED

b. Administration

Lead: Jason Snaggs (CEO)

Telephone: REDACTED

Lead: William Lines (Community Liaison and Technical Advisor)

Telephone: REDACTED

Lead: Ryan Peters (Public Works Manager)

Telephone: REDACTED

North Slave Métis Alliance

Lead: Bill Enge (President)

Email: bill.enge@nsma.net

Telephone: REDACTED

Lead: Adelaide Mufandaedza (Manager)

Email: adelaide@nsma.net

Telephone: REDACTED

Backup: Administrative Assistant (can direct to appropriate staff in office)

Telephone: (867) 873-6762

Other Government of the Northwest Territories Departments

a. Department of Health and Social Services

Lead: Allan Torng, Environmental Health Advisor

Email: Allan_Torng@gov.nt.ca

Phone: (867) 767-9063 ext. 49220

b. Department of Infrastructure

Lead: Cameron Wilson, Regional Superintendent.

Email: Cameron_Wilson@gov.nt.ca

Phone: (867) 767-9049 ext 31186 (office); REDACTED (cell)

c. Department of Municipal and Community Affairs (Emergency Management Organization)

Lead: EMO Emergency Line

Phone: (867) 930-2303

City of Yellowknife

Lead: Eric Bussey, Director, Public Safety, City of Yellowknife

Telephone: 867.920.5661

Cellphone: REDACTED

Fax: 867.920-5649

Email: ebussey@yellowknife.ca

Alternate:

24 Hour Municipal Enforcement Line: 867.920.2303

Mackenzie Valley Land and Water Board

Lead: Shannon Allerston

Telephone: - 867.669.0506

Giant Mine Oversight Board

Lead: Ben Nind, Senior Director

Cellphone: REDACTED

Telephone: 867.675.0788

Lead: David Livingstone, GMOB Chair

Cellphone: REDACTED

Telephone: 867.675.0788

Yellowknife-area media (see 1C)

Annex 1C – Key media contact information

In the event of an emergency, a Public Service Announcement (PSA) should be sent to key local media. Local periodicals are not included given their publishing schedules. See Annex 6B for the PSA template.

Key Northern Media (subject to change)		
Journalist	**Media Outlet**	**Contact Info**
(Various reporters)	CBC North	Press releases: cbcnorthpress@cbc.ca Newsroom: cbcnorth@cbc.ca
(Various reporters)	L'Aquilon	ykjournaliste@northwestel.net
(Various reporters)	Northern News Services (includes Yellowknifer)	editorial@nnsl.com
Ollie Williams (Head of Programming/News)	Cabin Radio	ollie@cabinradio.ca
Various reporters	Radio Taiga	civr@radiotaiga.com
Charlotte Morritt-Jacobs	APTN	cmorrittjacobs@aptn.ca; info@aptn.ca
(Various reporters)	CKLB Radio (Native Communications Society)	news@cklbradio.com
(Various reporters)	Moose FM	100news@moosefm.com

Annex 1D – Social Media and Web Contact Information

1. @GiantMine and @MineGiant Twitter
   Login: via hootsuite.com
   [PERSONAL INFORMATION REDACTED]

   Procedural note: Tweets must go out in English and French simultaneously. *See Annex 6D for pre-approved Twitter messaging.*

2. Website
   Contact: [PERSONAL INFORMATION REDACTED]

   Procedural note: French and English text must go live simultaneously. Request that it goes in the Yellow Alert Box on the pages just off the giant.gc.ca splash page. *See Annex 6D for a template for pre-approved web content. If new text must be prepared, translation bureau information is below.*

3. For new information that is not yet translated, send your documents to the Translation Bureau online through the Online Ordering System and dial 1-855-997-3300 (Canada and the United States) or 819-997-3300 (national capital region) to immediately follow up. This can be initiated by a CIRNAC Communications Officer in the absence of GMRP administrative officers available.

ANNEX 2

TEMPLATES

Annex 2A – Public Service Announcement Template

Tweet – @GiantMine Emergency Alert – [Situation] has occurred at the site. While the Response Team works to address the situation, please stay away from the site and follow instructions from emergency personnel. Visit giant.gc.ca for more information.

Tweet – Alerte d'urgence de la @MineGiant – [Situation] a eu lieu sur le site. Pendant que l'équipe d'intervention règle la situation, tenez-vous loin du site et suivez les directives du personnel d'urgence. Consultez giant.gc.ca pour en savoir plus.

MEDIA ADVISORY

Public Service Announcement – Emergency at the Giant Mine Site

Yellowknife, Northwest Territories - On **DATE, TIME** an incident occurred on the Giant Mine site. This involved [**BRIEF DETAILS TO DESCRIBE INCIDENT].** [If applicable: This has included **[NO or NUMBER OF]** injuries/fatalities reported at this time.]

An Emergency Response Team has been dispatched and is working to address the situation.

While the Response Team works to address the situation, members of the public are asked to keep their distance from the site and follow any instructions from emergency personnel. The Project team will continue to provide updates as more details become available.

[If applicable: A media availability will take place at LOCATION at TIME.]

For more information (media only)

Myranda Bolstad

Senior Communications Officer

867-669-2578/867-445-9681 (cell)

myranda.bolstad@canada.ca

AVIS AUX MÉDIAS

Message d'intérêt public – Urgence sur le site de la mine Giant

Yellowknife (Territoires du Nord-Ouest) – Le **DATE,** à **HEURE**, un incident s'est produit sur le site de la mine Giant. La situation implique [**BREFS DÉTAILS DÉCRIVANT L'INCIDENT].** [Le cas échéant : À l'heure actuelle, on dénombre **[NOMBRE]** morts et **[NOMBRE]** blessés.]

Une équipe d'intervention d'urgence a été envoyée sur les lieux pour régler la situation.

Pendant que l'équipe d'intervention remédie à la situation, on demande aux citoyens de se tenir loin du site et de suivre les directives du personnel d'urgence. L'équipe de projet fera le point à mesure que les détails se préciseront.

[Le cas échéant : Un point de presse sera tenu le DATE/HEURE, à/au [LIEU].]

Pour de plus amples renseignements (médias seulement)

Myranda Bolstad

Agente principale des communications

867-669-2578/867-445-9681 (cell.)

myranda.bolstad@canada.ca

Suivez-nous sur Twitter : @MineGiant

Annex 2B – Communications Templates

Status Update Template

This template's purpose is provide a basic script guideline for anyone on the Emergency Response Communications Team to use in direct communication with the public. It can also be used as a voicemail message on the GMRP contact line.

First status update:

On **DATE, TIME** an incident occurred on the Giant Mine site. This involved [**BRIEF DETAILS TO DESCRIBE INCIDENT].** [If applicable: This has included **[NO or NUMBER OF]** injuries/fatalities reported at this time.]

An Emergency Response Team has been dispatched and is working to address the situation.

While the Response Team works to address the situation, members of the public are asked to keep their distance from the site and follow any instructions from emergency personnel. The Project team will continue to provide updates as more details become available. For media inquiries, please contact our communications staff at 867-669-2578 [**or alternate**].

Ongoing status updates:

This is an update with regard to the **DATE, TIME** incident that occurred on the Giant Mine site. As previously noted, this involved [**BRIEF DETAILS TO DESCRIBE INCIDENT].**

The Emergency Response Team continues to work to address the situation. Since the incident, steps taken have included: **[BRIEF OUTLINE OF ACTIONS]** [If applicable: This incident has included **[NO or NUMBER OF]** injuries/fatalities reported at this time.]

While the Response Team works to address the situation, members of the public are reminded to keep their distance from the site and follow any instructions from emergency personnel. The Project team will continue to provide updates as more details become available. For media inquiries, please contact our communications staff at 867-669-2578 [**or alternate**].

Status update after the emergency is resolved:

This is an update with regard to the **DATE, TIME** incident that occurred on the Giant Mine site. The Emergency Response Team has reported that the incident has been contained and an emergency situation is no longer occurring.

As previously noted, this incident involved [**BRIEF DETAILS TO DESCRIBE INCIDENT].** Since the incident, steps taken have included: **[BRIEF OUTLINE OF ACTIONS]** [If applicable: This incident has included **[NO or NUMBER OF]** injuries/fatalities reported at this time.] The Project would like to thank the public for their cooperation with emergency personnel during this inquiries. For media inquiries, please contact our communications staff at 867-669-2578 [**or alternate**].

Annex 2C – Web and Social Media Content Templates

Note: Additional messaging can be developed, approved, and translated to replace this text where details are available; however, in the meantime, to ensure regular updates as the situation develops, the following pre-approved messaging can be used to address the situation quickly and regularly.

Web (for yellow alert box) - English:

Emergency Alert – An emergency alert is in place for the Giant Mine as a result of (incident). An Emergency Response Team has been dispatched and is working to address the situation. While the team works to address the situation, members of the public are asked to keep their distance from the site and follow any instructions from emergency personnel.

Web (for yellow alert box) - French:

Alerte d'urgence – Une alerte d'urgence est en vigueur pour la mine Giant en raison (incident). Une équipe d'intervention d'urgence a été envoyée sur place. Pendant que l'équipe règle la situation, on demande aux citoyens de se tenir loin du site et de suivre les directives du personnel d'urgence.

Pre-approved social media messaging for Twitter:

Initial Status (English)

@GiantMine Emergency Alert – [Situation] has occurred at the site. While the Response Team works to address the situation, please stay away from the site and follow instructions from emergency personnel. Visit giant.gc.ca for more information.

Initial (French)

Alerte d'urgence de la @MineGiant – [Situation] a eu lieu sur le site. Pendant que l'équipe d'intervention règle la situation, tenez-vous loin du site et suivez les directives du personnel d'urgence. Consultez giant.gc.ca pour en savoir plus.

Hourly update (English)

@GiantMine Emergency Alert – [Situation] is ongoing at the site. While the Response Team continues address the situation, please stay away from the site and follow instructions from emergency personnel.

Hourly update (French)

Alerte d'urgence de la @MineGiant – [Situation] est en cours sur le site. Pendant que l'équipe d'intervention règle la situation, tenez-vous loin du site et suivez les directives du personnel d'urgence. *End of emergency situation (English)*

[Situation] at the @GiantMine site has been addressed and there is no longer an emergency alert in place. The Project team thanks the public for their cooperation while responders worked to address the situation.

End of emergency situation (French)

La [Situation] sur le site de la @MineGiant a été réglée et l'alerte d'urgence est levée. L'équipe de projet remercie la population de sa collaboration pendant l'intervention.

ANNEX 3
HOLDING LINES

Annex 3A – Holding Lines

KEY MESSAGES:

- An incident *(expand if possible – e.g., injured worker or spill)* occurred at the Giant Mine site on *(insert date).*
- An Emergency Response Team has been dispatched and is working to address the situation.
- While the Response Team works to address the situation, members of the public are asked to keep their distance from the site and follow any instructions from emergency personnel. The Project team will continue to provide updates as more details become available.
- IF INCIDENT IS STAFF RELATED: The health and safety of onsite workers is of utmost importance to the Government of Canada.
- IF THE INCIDENT INVOLVED AN INJURY: In the interest of respecting worker privacy, we cannot speak in detail about worker(s)'s status.
- IF INCIDENT IS ENVIRONMENT RELATED (i.e., spill): The health and safety of Northerners and the protection of the environment are top priorities for the Government of Canada.
- *(if required)* Our thoughts go out to the families and friends of those affected by today's incident.

If pressed

- This is all the information we have at this time. We will share more details as we learn more.

  OR

- This incident is currently under investigation, and we cannot comment on until the investigation is complete.
- The contractor develops and adheres to a site specific health and safety plan and all employees take safety seriously. Health and safety is the responsibility of all parties at Giant Mine, including Crown-Indigenous Relations and Northern Affairs Canada, Public Services and Procurement Canada, the territorial Workers' Safety and Compensation Commission, the Contractor, and its employees.

ANNEX 4

LIST: EXTERNAL PARTY REVIEW RECORD

Name	Organization	Date
	Giant Mine Working Group	April 9, 2020
Bill Slater, Technical Advisor	Giant Mine Working Group	April 16, 2020
Todd Slack	City of Yellowknife	May 15, 2020
William Lines	Yellowknives Dene First Nation	May 20, 2020
Jessica Hurtubise	North Slave Métis Alliance	July 2020
Ben Nind	Giant Mine Oversight Board	July 2020
Emily King	Municipal and Community Affairs	August 2020