



Nunavut Impact Review Board

2021 Annual Report

Jericho Diamond Mine

Shear Diamonds (Nunavut) Corp.

NIRB File No. 00MN059



November
2021

Report Title: The Nunavut Impact Review Board's 2020 – 2021 Annual Monitoring Report for the Jericho Diamond Mine Project (NIRB File No. 00MN059)

Project: Jericho Diamond Mine Project

Project Location: Kitikmeot Region, Nunavut

Land Tenure: Inuit Owned and Crown Land

Project Owner: Shear Diamonds (Nunavut) Corp.

Monitoring Officer: Keith Morrison, Manager, Impact Assessment

Monitoring Period: October 2020 – September 2021

Date Issued: November 9, 2021

Photos by: Crown-Indigenous Relations and Northern Affairs Canada
Nunavut Impact Review Board

Cover photo: Photo taken M. Yetman, Crown-Indigenous Relations and Northern Affairs Canada

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1.0 INTRODUCTION

The Nunavut Impact Review Board (NIRB or Board) was established through Articles 10 and 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)*, Article 12 and is responsible for post environmental assessment monitoring of projects in accordance with Article 12, Part 7 of the *Nunavut Agreement*.

Pursuant to Section 12.7.1 of the *Nunavut Agreement*, the establishment of a project-specific monitoring program may be outlined by the terms and conditions contained in a NIRB Project Certificate, recommendations stemming from a Part 4 *Nunavut Agreement* determination, or approvals issued by the Nunavut Water Board (NWB). Monitoring programs may specify responsibilities for the Proponent, the NIRB, or federal or territorial government. The purpose of such a monitoring program is outlined in Section 12.7.2 of the *Nunavut Agreement* as follows:

- a) *to measure the relevant effects of projects on the ecosystemic and socio-economic environments of the Nunavut Settlement Area;*
- b) *to determine whether and to what extent the land or resource use in question is being carried out within the predetermined terms and conditions;*
- c) *to provide the information base necessary for agencies to enforce terms and conditions of land or resource use approvals; and*
- d) *to assess the accuracy of the predictions contained in the project impact statements.*

This document has been prepared by the NIRB to address requirements of Section 12.7.2 of the *Nunavut Agreement* and details monitoring activities that occurred during the 2020-2021 reporting period. This report also provides an assessment of the following items:

- Success or failure of the terms and conditions within Project Certificate No. 002;
- Adequacy of the monitoring program including ecosystemic and socio-economic impacts of the Project pursuant to Section 12.7.3(c) of the *Nunavut Agreement*;
- Adequacy of Appendix D of the Jericho Project Certificate in its direction to the Proponent regarding Project-specific monitoring; and

Details related to the remediation and stabilization works undertaken by CIRNAC and approved by the Board under NIRB File No. 16UN058, are provided throughout the 2020-2021 Monitoring Report.

1.1. Project History and Current Status

On July 14, 2004, pursuant to Section 12.5.12, Article 12 of the *Nunavut Agreement*, the NIRB issued the Jericho Diamond Mine Project Certificate No. 002 (Project Certificate No. 002) to Tahera Corporation Limited (Tahera) following the environmental assessment of the Jericho Diamond Mine Project (Jericho Project or the Project). In 2008 after commencing construction, Tahera filed for creditor protection and the mine was managed by Indian and Northern Affairs Canada and placed in temporary closure until the site was purchased. Shear Diamonds (Nunavut) Corp. (Shear) purchased of the Jericho Diamond Mine in August 2010 and on August 23, 2011, the NIRB issued Amendment #2 to the Project Certificate No. 002 in the name of Shear Diamonds (Nunavut) Corp.

On January 22, 2014, then Minister of Aboriginal Affairs and Northern Development declared the Jericho Diamond Mine Site abandoned by Shear and assumed control of the site as per the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA)* and the *Territorial Land Use Regulations*. The Jericho Mine site remains in temporary closure under the management of CIRNAC who conducted remediation and stabilization activities at the site from 2017 to 2019, with additional work carried out in 2020 and 2021 under NIRB File No. 16UN058.

The Project is currently under surveillance and monitoring by CIRNAC in accordance with their Operation, Maintenance and Surveillance Plan (OMS). The Plan involves an initial three (3) years of monitoring the effectiveness of the site stabilization work. Further OMS plans were defined by the results of the initial three (3) year program. The site is currently in Phase 2 (years 4-10) of the OMS. It should be noted that even though the site has been abandoned, the Jericho Project still remains subject to the conditions of Project Certificate No. 002 assigned to Shear.

For further Project history, please see [Appendix I](#).

1.2. Project Components

The Jericho Project is a diamond mine situated in the West Kitikmeot region of Nunavut, approximately 430 kilometres (km) southwest of Cambridge Bay and 240 km southeast of Kugluktuk. The site consists of a single open pit mine, processing facility, Processed Kimberlite Containment Areas (PKCA) and waste rock piles, as well as a camp and support buildings to house approximately 200 persons, fuel tank farm with capacity for 13 million litres of fuel¹, an airstrip, and roads connecting site infrastructure. The mine is primarily located on Crown land with access and other infrastructure, including an explosives storage area and emulsion plant, as well as the waste rock piles on Inuit Owned Land (IOL).

¹ Decommissioned and remediated as part of 16UN058 “Jericho Site Stabilization Project”

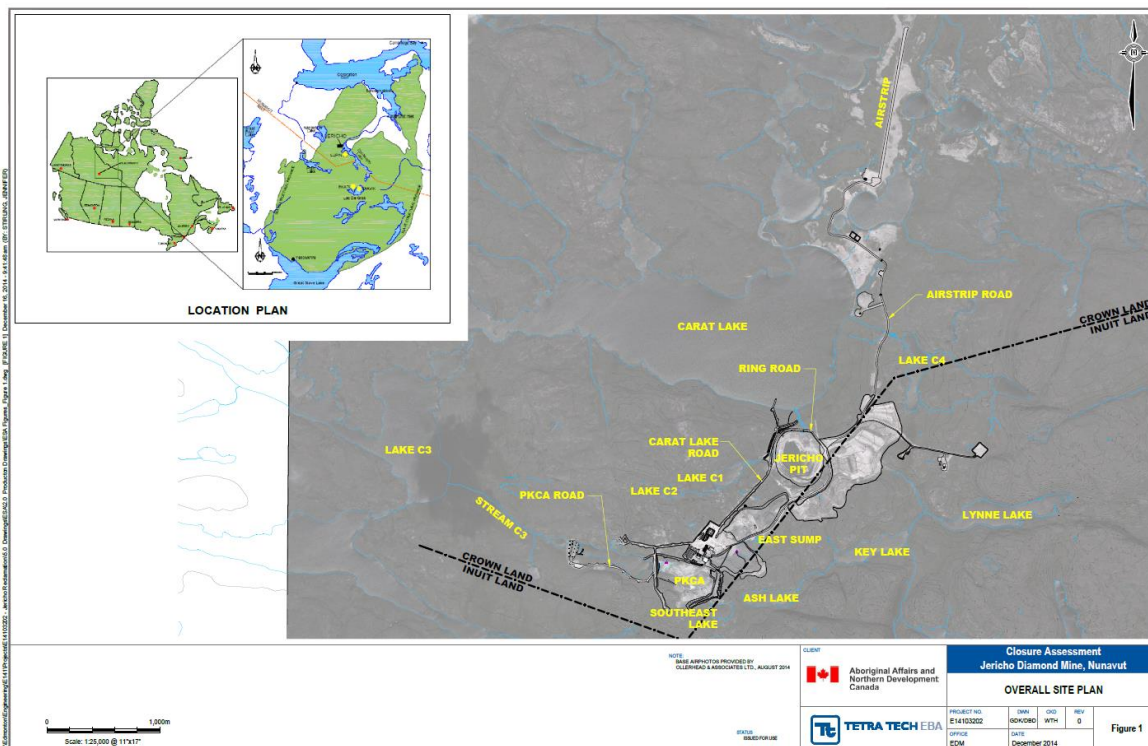


Figure 1: Overall Site Plan²

2.0 MONITORING ACTIVITIES

2.1. Reporting Requirements

After acquiring the site, Shear requested on June 3, 2011 that the NIRB re-issue Project Certificate No. 002 to reflect the new owner of the Project and provided specific commitments to bring the site into monitoring and reporting compliance. Appendix D of the Jericho Project Certificate prescribes the reports which the Proponent is required to submit to the NIRB, specifically quarterly reports, an annual report, and updated management plans as required. Board recommendations issued for the reporting years between 2012 and 2020 requested that Shear provide a discussion on its intentions for reporting while the site continued in care and maintenance, as well as to submit any outstanding reports. Shear has been non-compliant.

As a result of Shear's non-compliance with the water licence, Aboriginal Affairs and Northern Development Canada (AANDC) intervened as per the *NWNSRTA* and noted in correspondence received by the NIRB on July 2, 2013 that the scope of its management of the Jericho Mine site at that time would encompass the management of several specific risks,

² Public Registry ID: 305395

including: site water during freshet; tailings; fuel; and hazardous waste.³ The site has since been declared abandoned, and under the stewardship of CIRNAC. On December 4, 2020, the Board issued its most recent set of recommendations to Shear, CIRNAC, and the Kitikmeot Inuit Association (KIA) requesting that they provide an update to the NIRB on the activities that are being undertaken to manage the risks identified at the Jericho site. See [Section 2.6](#) for responses to the NIRB's 2020 Recommendations for additional information.

2.1.1. Proponent Annual Report as per Project Certificate Appendix D

On October 3, 2006 (subsequently revised and re-issued November 20, 2007), the NIRB issued Appendix D of the Project Certificate No. 002 which provides direction to the Proponent, the NIRB's Monitoring Officer, and government departments regarding the monitoring program as established pursuant to Section 12.7 of the *Nunavut Agreement*. Appendix D of the Jericho Project Certificate requires the Proponent to develop a comprehensive post-environmental assessment monitoring program (PEAMP) and submit an annual report to the NIRB by April 30 of each year the Project is in operation until the post-closure phase. As outlined in Appendix D, the annual report must provide details of the Proponent's efforts to comply with the Project Certificate No. 002. The annual report also must include at a minimum, a discussion of the results of the PEAMP based on all relevant data collection, analysis of various topics related to the ecosystemic and socio-economic environment, and a discussion of the effectiveness of mitigation measures and recommendations for adaptive management. Furthermore, the Proponent is required to provide a status update of compliance with all authorizations and applicable regulations and guidelines associated with the Project.

Appendix D of the Project Certificate No. 002 further requires the Proponent to submit quarterly reports to the NIRB, due at the end of October, January, April, and July of each year, commencing October 31, 2007, to document current and planned infrastructure development at the site.

After its acquisition of the Jericho Mine site in 2010, Shear committed to submitting the required reports to the NIRB on numerous occasions: during the initial acquisition of the Project and request by Shear that the NIRB reassign the Project Certificate No. 002;⁴ through the renewal process for the Type "A" Nunavut Water Board water licence;⁵ and in-person during the NIRB's 2012 Site Visit.⁶ The last annual report for the Jericho Project was submitted to the NIRB by Tahera on May 16, 2008 for the 2007 reporting year and the last

³ Public Registry ID: 288133

⁴ Public Registry ID: 288072

⁵ Public Registry ID: 288119

⁶ Public Registry ID: 288459

quarterly report submitted to the NIRB was provided by Tahera on January 24, 2008 outlining construction activities taken during the fourth quarter in 2007. To date the NIRB has not received annual or quarterly reports, or supporting information, from Shear as required by Appendix D.

2.2. Wildlife Monitoring

Terms and Conditions 3 and 9 through 18, of the Project Certificate No. 002 outline operational and monitoring requirements with regards to wildlife and birds. The Wildlife Mitigation and Monitoring Plan (WMMP) for the Jericho Project, prepared by Tahera details the Proponent's proposed methods for conducting wildlife monitoring activities, describes options to mitigate potential impacts to wildlife, and provides direction to site staff. On May 15, 2007, Tahera submitted a fourth draft of its WMMP in accordance with Term and Condition 10. After consultation with the Government of Nunavut – Department of Environment and Environment Canada (now Environment and Climate Change Canada), it was determined that the WMMP as submitted adequately satisfied the requirements of the Project Certificate No. 002.

In the June 3, 2011 correspondence to the NIRB, Shear committed to implementing the measures proposed in the WMMP, which required that Shear compile and submit a Wildlife Mitigation and Monitoring Report annually as well as prepare a comprehensive analysis of the Plan every three (3) years beginning in 2009. The submission further stated that “during care and maintenance Shear will record wildlife sightings in the field and around the mine site. These sightings will be included in the quarterly report to be submitted to the NIRB”.⁷ To date the NIRB has not received any of the reports from Shear, nor has it received any annual wildlife data, analyses, or discussion to meet this requirement.

2.3. Socio-Economic Monitoring

Terms and Conditions 42 through 49 outline the Board's requirements for socio-economic monitoring of the Jericho Project.

Inuit Impact and Benefit Agreement

On October 1, 2007 the NIRB received a report from the KIA outlining its experience with the implementation of the Inuit Impact and Benefit Agreement (IIBA) for the Jericho Project. In its June 3, 2011 letter to the NIRB, Shear clarified that while the site remained in care and maintenance, obligations in the IIBA had been suspended except for those related to employment and contracting, and that opportunities for these would be limited while the site remained in this phase. No further information regarding the IIBA has been received by the NIRB.

⁷ Public Registry ID: 288072

Socio-Economic Monitoring Committee

Term and Condition 44 requires that as a supplement to the IIBA, a Socio-Economic Monitoring Committee (SEMC) be established to monitor and report on socioeconomic impacts in relation to the Jericho Project. While the NIRB received the Jericho Diamond Mine 2007 Socio-Economic Monitoring Report from the Kitikmeot Socio-Economic Monitoring Committee (identified in the report as previously being established as the Jericho SEMC) on August 18, 2009, no further correspondence regarding socio-economic monitoring for the Project have been received by the NIRB.

2.4. Compliance Monitoring

Through compliance monitoring, regulators, and other parties assess whether a project being carried out meets the terms established through legislation, regulations, instruments, commitments, and agreements applicable to project activities. Compliance monitoring is a requirement of the NIRB's Appendix D of the Project Certificate No. 002.

2.4.1. Compliance with the NIRB Project Certificate

As previously discussed, Shear has not submitted the reports as required to the NIRB or undertaken the mitigation and monitoring activities committed to, and is therefore non-compliant with the requirements of Project Certificate No. 002, including Appendix D. Although many terms and conditions of the Project Certificate No. 002 were not applicable during the 2020-2021 reporting year as the mine site was non-operational and no Shear staff were on-site, select Terms and Conditions remain applicable including Conditions 3 and 10 related to Wildlife Mitigation and Monitoring, and Condition 35 which requires that fencing or suitable deterrents be employed at the landfills or waste storage areas on site.

2.4.2. Compliance Monitoring by Regulatory Authorities

Appendix D of the Project Certificate No. 002 sets out expectations for Regulatory Authorities (Authorizing Agencies) collaborative monitoring for the Jericho site. Agencies with responsibilities related to the monitoring program are requested to provide compliance reports to the NIRB by April 30th of each year.

2.4.3. Kitikmeot Inuit Association

The KIA is responsible for holding land tenure permits for Shear as well as maintaining several agreements with regards to the function of the site and use of resources for the Jericho Project. On September 10, 2014 the KIA provided an update to the NIRB which indicated that the organization views AANDC as the primary regulator for the Project and confirmed that it would be collaborating with AANDC to ensure that the portion of the project site on Inuit Owned Land (IOL) is properly abandoned. The emulsion plant, explosive storage units, and ammonium nitrate storage pad as well as the waste rock piles are located on IOL.

Although the majority of the stabilization works related to site water management, tailing storage facilities, fuel and hazardous waste storage and waste management have been completed by CIRNAC on Crown land. The long-term plans and stabilization activities regarding of the site infrastructure and the waste rock piles on IOL are unknown.

Waste Rock Piles

The chemistry of the waste rock pile, the chemical reaction rates, the presence of minerals within the pile that can either cause or neutralize acidic water are currently unknown. If reactive the timing of poor-quality drainage can occur over years to many decades. Without seepage quality and quantity monitoring it is uncertain what the impacts are or could potentially be to the receiving environment.

In 2018, 2019, and 2020 the NIRB requested that the KIA provide their long-term plans for dismantling/reclaiming/remediating site infrastructure (e.g., roads, buildings, waste rock piles) and restoring the area to natural conditions, with a discussion on any monitoring expected to occur following the completion of site reclamation. Additionally, in 2019 and 2020 the NIRB requested that KIA provide a detailed update on their site stabilization activities including monitoring of the waste rock pile, waste rock seeps, and contact water to date as well as any completed reclamation efforts at the Jericho Diamond Mine. No written updates have been received from the KIA with regards to the Project site conditions on IOL or any plans for monitoring.

2.4.4. Crown-Indigenous Relations and Northern Affairs Canada

CIRNAC is responsible for issuing Crown land leases for the Jericho Project and conducting land use inspections required under the *Territorial Lands Act* and the *Territorial Lands Regulations*, as well as conducting inspections under the *NWNSRTA* for compliance to water licence(s) that have been issued by the NWB.

The Jericho Mine site remains in temporary closure under the management of CIRNAC and has been since it was declared abandoned in 2014.

Between 2017 to 2019 CIRNAC undertook mine site stabilization activities which focused on restoring the abandoned site to an environmentally safe condition, stabilizing the site to prevent water accumulation, and preventing the environmental migration of contaminants into surrounding ecosystems. The Jericho Diamond Mine Site Stabilization Project has now been completed and is now being monitored by CIRNAC in accordance with an Operation, Maintenance and Surveillance (OMS) Plan which is currently in Phase 2 (Years 4 – 10). The initial OMS plan consisted of an initial three (3) year program which includes three (3) years of monitoring to observe the effectiveness of the site stabilization work, from 2018-2020. OMS activities include surveillance of the Processed Kimberlite Containment Area (PKCA)

cap, the West Dam breach, Divider Dyke breach, Petroleum Hydrocarbon (PHC) Containment Cell and the Open Pit C1 diversion, outflow and water quality. Beginning in 2020 CIRNAC has added the additional Pit Lake water parameters and Cell B/C water sampling to the final year of each phase of the OMS plan to check the long-term water quality prior to making adjustments to the OMS plan.

On December 31, 2020, the NIRB received the Jericho Diamond Mine Site Stabilization Project 2020 Annual Report⁸ from CIRNAC as required pursuant to the Monitoring and Reporting Requirement 2 of the Screening Decision Report, dated December 22, 2012 (NIRB File No: 16UN058). The report summarizes the activities undertaken for the year; provides maps and photos of the site showing areas of remediation work; and includes the *Jericho Mine Site – Operation, Maintenance and Surveillance Program 2020 Report*.

Management and Monitoring of Water

2020 Reporting Year

CIRNAC's remediation goals included returning the water flow to its original state as much as practical at the Jericho site. Water flow works included re-routing the C1 Diversion to redirect water into the Open Pit to allow the eventual formation of a Pit Lake and breaching the pit wall to allow the original natural flow of surface water into Carat Lake to be restored. Additional water works included grading the existing tailings in Cell A to allow water to flow in its original direction, lowering the top and creating a breach in Dyke A, and breaching the West Dam to restore the original surface water flow.

The 2020 surveillance program indicated that the site continued trending toward stability, with only minor erosion observed. The water level in the pit is estimated to have risen four (4) meters between 2019 and 2020, while photos from the fall 2021 CIRNAC site visit indicate several additional meters of rise in 2020-2021. The fill rate appears close to the original estimated rate to eventually reach overflow in the timeframe of 2028-2032.

In 2014 an initial characterization of the water quality at the Jericho site was conducted and the water quality met the criteria set by the Canadian Council of Ministers of the Environment (CCME) water quality guidelines for the protection of freshwater aquatic life. In June 2017 prior to the water works being conducted CIRNAC collected water samples for analysis and compared the results against the effluent discharge limits set by the NWB and the CCME water quality guidelines for the protection of freshwater aquatic life. The results of the water testing showed all samples met the criteria except for uranium in the Pit Lake water, although the uranium levels had decreased since sampling was done in 2007. Pit lake water samples are normally taken twice per season. During site stabilization activities from 2017 to 2019 the results showed that uranium levels had increased to above

⁸ Public Registry ID: 332317

CCME guidelines; likely due to water that was pumped from the PKCA and greywater that was pumped from the camp. In 2019 pit lake water samples were taken in June and September and analysis indicated that uranium concentrations were at its lowest values reported since July 2007. The September 2020 samples demonstrated further decrease in the uranium concentrations that, while still above CCME guidelines, is near the predicted 9-13 year final concentration.

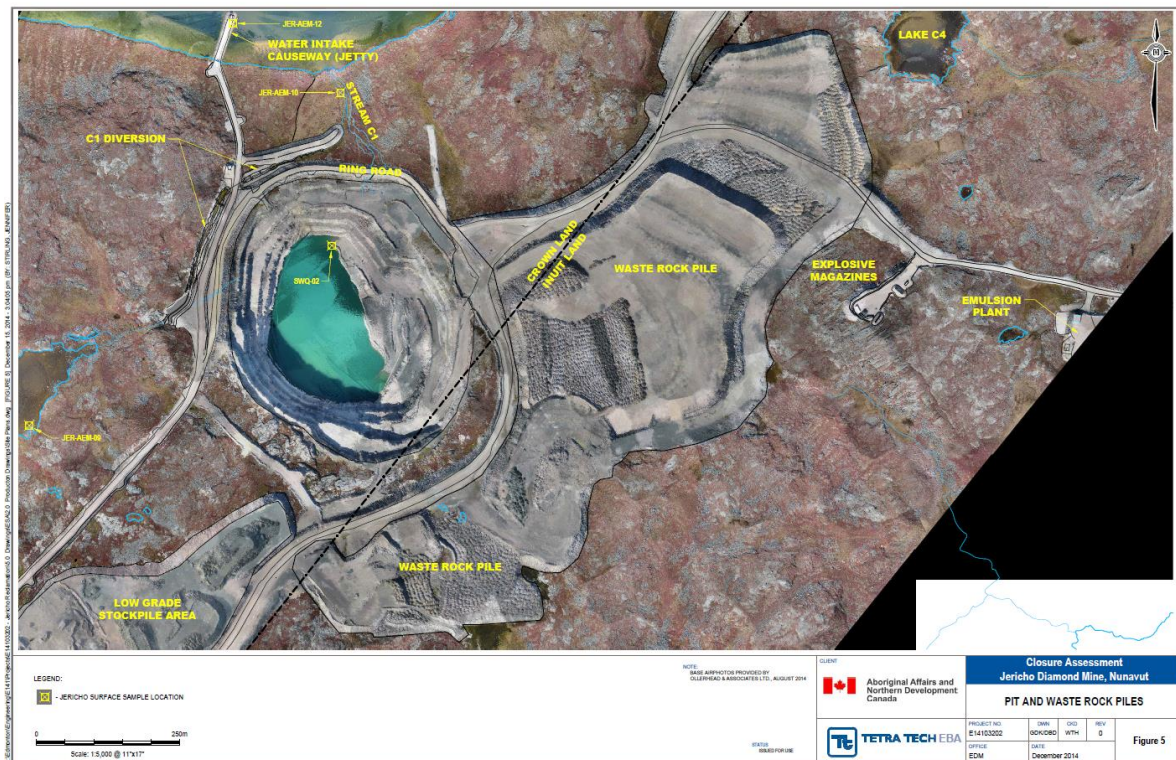


Figure 2: Water Diversion Channels and Pit⁹

Management of Tailings

2020 Reporting Year

Remediation work in the Process Kimberlite Containment Area (PKCA) has included grading the existing tailings in Cell A to allow water to flow in its original direction (west) and capping the fine tailings with course grained kimberlite tailings to prevent erosion and to prevent dust being transported by wind. In 2020 as part of the OMS plan, visual inspections were conducted by CIRNAC in August-September. Due to COVID-19 restrictions, the planned June site visit was cancelled and only the September site visit occurred. A small amount of ponded water was observed in September, as would be expected. The leading edge of the tailings cover is eroding back and exposing some saturated tailings. Minor erosion channels have developed in different areas of the PKCA. “Potholes”

⁹ Public Registry ID: 305395

that were noted in 2019 appear to have changed, increasing and decreasing in size as snowmelt and water fills and washes out the depressions.

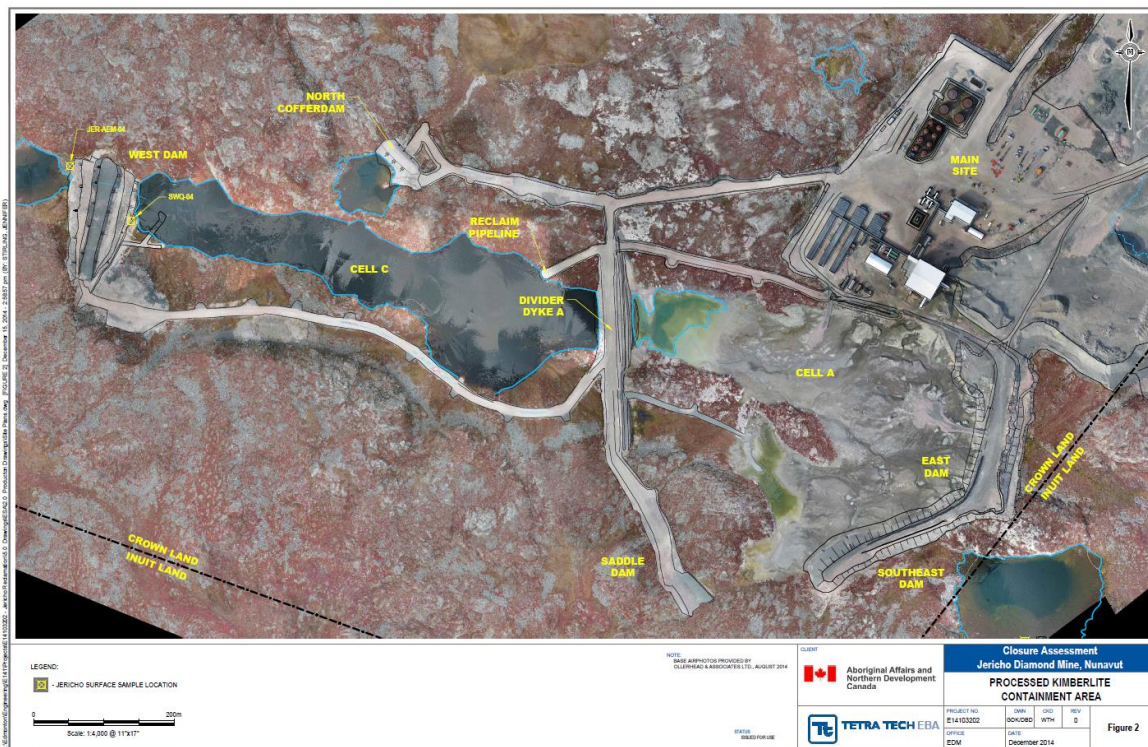


Figure 3: Processed Kimberlite Containment Area¹⁰

Management of Fuel Storage

2020 Reporting Year

Prior to 2017 there was fuel stored on-site in above ground storage tanks (mostly residual amounts) located mainly in the Tank Farm but also in other areas around site. In 2017 and 2018 all the above ground fuel tanks and drums were cleaned and decommissioned, with the wash water treated. Hazardous materials were consolidated, packaged, and transported offsite for disposal at licenced facilities. All hydrocarbon contaminated soil was placed into a lined storage cell (Petroleum Hydrocarbon Contaminated Soils Cell (PHC)) in the existing lined tank farm and covered with fine grained tailings. Current fuel storage is limited to small amount of drummed diesel fuel being stored within the Truck Shop Building which has an in-ground sump to contain any fuel spills.

Wildlife

2020 Reporting Year

CIRNAC has reported that a grizzly bear was observed on August 31st, 2020 at the airstrip and was chased away by the Wildlife Monitor.

¹⁰ Public Registry ID: 305395

Additional details related to the management of the above items and pertaining to CIRNAC's responses to the NIRB's 2020 Board Recommendations can be found in [Section 2.6](#).

2.4.5. Fisheries and Oceans Canada

Fisheries and Oceans Canada's (DFO) authority is legislated pursuant to the *Fisheries Act* to issue Authorization NU-00-0068 which bears relevance to items addressed in Terms and Conditions 4 and 19 through 24 of the Jericho Project Certificate. DFO did not visit the site in 2020.

2.4.6. Natural Resources Canada

In July 2005 Natural Resources Canada (NRCan) issued a licence to Dyno Nobel Nunavut Limited under Section 7 of the *Explosives Act* for the storage and manufacture of explosives at the Jericho Mine site. In correspondence received by the NIRB on May 7, 2014, NRCan provided indication that it would be discontinuing annual reporting regarding the Jericho Diamond Mine Project as there was no longer a licence associated with the site and all explosive materials had been removed from the site.

2.5. NIRB Site Update

Due to travel limitations caused by the COVID-19 pandemic, NIRB was unable to perform a site visit in 2021. CIRNAC staff carried out operations and maintenance activities on site in August 2021 and provided photos based on a list of locations requested by the NIRB.

2.6. Responses to the NIRB's 2020 Recommendations

As a result of the NIRB's findings through its 2019-2020 monitoring program, on December 4, 2020 the Board made the following recommendations to Shear, CIRNAC, and KIA to assist in compliance with Project Certificate No. 002 and to ensure the NIRB has all information necessary to adequately discharge its mandate with respect to provisions within Section 12.7 of the *Nunavut Agreement* as they pertain to the Jericho Project.

TABLE 1 – NIRB 2019 Recommendations and Responses

Board Recommendation	Response
<p>Recommendation 1: The Board continues to remind Shear Diamonds (Nunavut) Corp. that submission of the following outstanding submissions is required to address areas of non-compliance:</p> <p>a) 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019 annual reports;</p>	<p>No response received from Shear</p>

Board Recommendation	Response
<p>b) Quarterly reports for 2010 through 2020; and</p> <p>c) Wildlife monitoring data from 2010 through 2020.</p> <p>These outstanding reports are to be provided within 90 days.</p>	
<p>Recommendation 2: The Board requires the Proponent (Shear Diamonds (Nunavut) Corp.) to provide a proposed plan of action to remedy the overall non-compliance with the Project Certificate No. 002.</p> <p>The plan of action is to be provided within 90 days.</p>	<p>No response received from Shear</p>
<p>Recommendation 3: The Board requests that Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) provide a contingency plan for inspection and potential moving or dismantling of the Carat Lake pumphouse in order to prevent collapse into Carat Lake in the event of erosion or future ice buildup and movement.</p> <p>This information should be provided to the Board in the 2021 CIRNAC site report.</p>	<p>CIRNAC removed the pumphouse and accompanying infrastructure from the jetty during their site visit in August-September 2021.</p>
<p>Recommendation 4: Board requests that the Kitikmeot Inuit Association provide a detailed update on their site stabilization activities including monitoring of the waste rock pile, waste rock seeps, and contact water to date as well as any completed reclamation efforts at the Jericho Diamond Mine.</p> <p>The Board also requests that the Kitikmeot Inuit Association provide their long-term plans for dismantling/reclaiming/remediating site infrastructure (e.g., roads, buildings, waste rock piles) and restoring the area to natural conditions, with a discussion on any</p>	<p>No response received from KIA.</p>

Board Recommendation	Response
<p>monitoring expected to occur following the completion of site reclamation.</p> <p>This information should be provided to the Board by March 31, 2021.</p>	

3.0 FINDINGS AND CONCLUSIONS

After purchasing the Jericho Diamond Mine, Shear committed to operating under the plans and procedures put in place by Tahera to address the requirements of the Project Certificate No. 002. The site continues to remain unmanned by Shear personnel, and the company remains non-responsive to inquiries. During the 2020-2021 monitoring period, the NIRB did not receive any documentation that would indicate that Shear had been conducting monitoring activities at the Jericho Mine site. Shear remains non-compliant with many requirements under the Project Certificate No. 002, including the monitoring requirements under Appendix D.

As a result of Shear's failure to implement requirements of the Project Certificate No. 002 at site, the Board is unable to provide a detailed assessment, as required by Section 12.7.2 of the *Nunavut Agreement*, to determine the success or failure of these terms and conditions to mitigate predicted impacts associated with the Jericho Project. However, due to the site remaining non-operational, most of the impacts for which the terms and conditions of the Jericho Diamond Mine Project Certificate No. 002 were written, are not likely being realized. Based on the undertaking of more substantial stabilization activities by CIRNAC, under the Ministerial authority to "take any reasonable measures to prevent, counteract, mitigate or remedy any resulting adverse effects on persons, property or the environment"¹¹, the relevance of many terms and conditions within the Jericho Project Certificate No. 002, particularly those related to areas where more substantial stabilization works were undertaken, are reduced.

The coordination of Regulatory Authorities as intended through the recommendations of the Appendix D of the Project Certificate No. 002 remains a key component of the NIRB's ongoing monitoring efforts for the site, and the NIRB will continue to work with these agencies in the absence of Shear and in the development of long-term monitoring and maintenance objectives.

¹¹ Public Registry: 288611

Prepared by: Keith Morrison
Title: Manager, Impact Assessment
Date: November 9, 2021
Signature:

A handwritten signature in black ink, appearing to be 'K. Morrison', followed by a long horizontal line.

Reviewed by: Kelli Gillard Pag, CTAJ
Title: Manager, Project Monitoring
Date: November 9, 2021
Signature:

A handwritten signature in blue ink, reading 'Kelli Gillard'.

APPENDIX I: FILE HISTORY

The following table provides an overview of the regulatory regime associated with the Jericho Project.

Table 1: Regulatory File History

DATE	
July 14, 2004	NIRB issued the Jericho Diamond Mine Project Certificate No. 002, pursuant to Article 12, Section 12.5.12 of the <i>Nunavut Agreement</i> , to Tahera Corporation Limited (Tahera).
December 2004	Tahera requested that the Project Certificate be reissued to reflect the updated Project ownership.
January 19, 2005	NIRB issued Amendment #1 of the Project Certificate No. 002 in the name of Benachee Resources Inc., a wholly owned subsidiary of Tahera ¹² .
2005	Tahera commenced construction of the mine.
July 2006	Jericho Diamond Mine fully operational.
October 3, 2006	NIRB issued Appendix D to the Jericho Project, which sets out the responsibilities of the Proponent in carrying out project-specific monitoring, as well as the responsibilities of relevant territorial and federal agencies.
November 20, 2007	Appendix D revised and re-issued.
January 16, 2008	Tahera filed for creditor protection, citing insufficient funds to operate and the Jericho Mine was placed into care and maintenance.
December 12, 2008	Indian and Northern Affairs Canada (INAC) ¹³ intervened and assumed control of the Jericho Mine site pursuant to Section 89 of the <i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> in order to maintain existing environmental protection measures. The site was temporarily closed until it was purchased. ¹⁴
August 2010	Shear Diamonds (Nunavut) Corp. (Shear) purchased the Jericho Diamond Mine and requested that the NIRB reassign the Project Certificate to reflect the new ownership. ¹⁵

¹² Public Registry ID: 288095 and 280750

¹³ Indian and Northern Affairs Canada (INAC) Aboriginal Affairs and Northern Development Canada (AANDC) was renamed Indigenous and Northern Affairs Canada (INAC) and then subsequently again renamed to Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)

¹⁴ Court File No. 08-CL7355, Court Order of Justice Morawetz, dated December 12, 2008 available at: http://www.farberfinancialgroup.com/services/a_farber_partners_inc/corporate_insolvency_restructuring/engagements_current.php?id=36

¹⁵ Public Registry ID: 288072

2011	The site remained under care and maintenance as Shear evaluated the site mineral resources. Shear worked to update its permits and bring the site back into compliance with the intent of resuming mining operations within the following two (2) years.
August 23, 2011	NIRB issued Amendment #2 to the Project Certificate No. 002 in the name of Shear Diamonds (Nunavut) Corp. ¹⁶
December 21, 2011	The Nunavut Water Board (NWB) issued a renewed Type “A” Water Licence to Shear for the Jericho Mine site on December 21, 2011. Within the NWB’s Reasons for Decision issued to the Minister of Aboriginal Affairs and Northern Development, Shear was required to provide securities totaling \$3,389,074 to Aboriginal Affairs and Northern Development Canada (AANDC) to be held in trust. ¹⁷
September 2012	Shear issued notice that due to the low diamond prices the site would be minimally staffed, stockpile re-evaluation suspended, and discontinued exploration at the site.
October 2012	Site was placed into temporary closure by Shear. Shear issued a Temporary Shutdown Plan to the NWB and AANDC outlining procedures completed for site shutdown; potential risks at site; a site visit schedule to address the risks; and notice that ongoing monitoring would be discontinued.
December 2012	A Compliance Plan for the Jericho site was posted on the NWB’s Public Registry site at the end of 2012 which noted that it was not in a financial position to provide the outstanding securities amount of \$321,074. ¹⁸
March 8, 2013	AANDC issued notice to Shear that due to continued failure to manage specific environmental issues on-site, AANDC’s Contaminated Sites Program would be conducting periodic work at the Jericho Mine site to manage the specific issues noted.
December 2013	Shear’s Chief Restructuring Officer provided notification of its plans regarding refinancing of the project with the goal of re-opening the Jericho Mine.
December 19, 2013	AANDC provided additional detail on the status of the securities, indicating that: <i>...the Department currently has \$6,618,556 in cash-equivalent and \$1,701,858 in debentured security under the Crown land lease and type A water license for the Jericho mine site. The work done on-site by the Department</i>

¹⁶ Public Registry ID: 288034 and 288075

¹⁷ Public Registry ID: 288124

¹⁸ Author unknown, 2AM-JER1119 Compliance Plan. September 30, 2012.

	<i>from June to October 2013 to manage water levels and ensure tailings management is maintained has cost approximately \$232,000.¹⁹</i>
January 22, 2014	Then Minister of Aboriginal Affairs and Northern Development declared the site abandoned by Shear and assumed control of the site as per the <i>Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Territorial Land Use Regulations</i> . ²⁰
November 2014	NIRB received notification of resignation of the last remaining Shear Director.
September 30, 2016	NIRB received a referral to screen Indigenous and Northern Affairs Canada's (INAC) "Jericho Mine Site Stabilization Project" (NIRB File No. 16UN058) from the Nunavut Planning Commission.
December 22, 2016	NIRB issued its Screening Decision Report for the Project, approving the stabilization activities as proposed.
April 21, 2017	NIRB received a revised summary of stabilization works to be conducted at the Jericho site which were considered to be within the original scope as assessed.
July 24, 2017	NIRB issued a Screening Decision Report for INAC's "Jericho Site Stabilization - Amendment", approving additional works and activities proposed as part of the overall stabilization undertaking. ²¹

¹⁹ Public Registry ID: 288610

²⁰ Public Registry ID: 288611

²¹ Public Registry: www.nirb.ca/project/125012

The following table provides an overview of NIRB's monitoring associated with the Jericho project since 2004:

Table 2: NIRB's Monitoring History

DATE		ACTIVITY UNDERTAKEN
2004	July	The NIRB issued Project Certificate No. 002 and Tahera applied for authorizations to commence construction of the mine.
2005		Tahera commenced construction of the mine.
2006	June	NIRB conducted its site visit.
2006	July	Jericho site and diamond mine fully operational.
2007		Due to logistical issues a NIRB site visit was not conducted.
2008	January	Tahera filed for creditor protection citing insufficient funds to operate the mine; site placed under care and maintenance.
2008	August	NIRB conducted its site visit.
2008	December	Indian and Northern Affairs Canada (INAC; now Crown-Indigenous Relations and Northern Affairs Canada) intervened ²² and assumed control of the site in order to maintain existing environmental protection measures as Tahera could not continue to support the care and maintenance of the Jericho site.
2009	July	NIRB conducted its site visit.
2009	September	INAC completed site closure, contractors ceased occupation of the site, and regular monitoring continued.
2010	August	Shear Minerals Ltd. (renamed Shear Diamonds (Nunavut) Corp.) completed purchase of Tahera's assets including the Jericho Diamond Mine.
2011	July	NIRB conducted its site visit as no site visit was conducted between 2009 and 2011 as INAC had completed its site closure and was only conducting periodic inspections.
2011		The site remained under care and maintenance as Shear evaluated the site mineral resources. Shear worked to update its permits and bringing the site back into compliance with the intent of resuming mining operations within the following two (2) years.
2011	August	The NIRB reissued Project Certificate No. 002 to Shear.
2011	December	The NWB issued the renewal Type "A" Water License to Shear.
2012	August	The NIRB conducted its annual site visit.
2012	September	Shear issued notice that due to low diamond prices the site would be minimally staffed, stockpile re-evaluation suspended, and discontinue exploration at the site.
2012	October	Shear issued Temporary Shutdown Plan to the NWB and AANDC outlining procedures completed for site shutdown; potential risks at site; a site visit schedule to address the risks; and notice that ongoing monitoring would be discontinued.

²² Court File No. 08-CL7355, Court Order of Justice Morawetz, dated December 12, 2008 available at: http://www.farberfinancialgroup.com/services/a_farber_partners_inc/corporate_insolvency_restructuring/engagements_current.php?id=36

DATE		ACTIVITY UNDERTAKEN
2012	December	The Board issued its recommendations to Shear regarding the 2012 monitoring commitments and compliance to the Project Certificate No. 002.
2013	June	NIRB conducted its 2013 site visit.
2013	November	The Board issued its recommendations to Shear regarding the 2013 monitoring commitments and compliance to the Project Certificate No. 002.
2013	December	Shear's Chief Restructuring Officer provided notification of its plans regarding refinancing of the Project with the goal of re-opening the Jericho Mine.
2014	January	Then Minister of Aboriginal Affairs and Northern Development declared the site abandoned.
2014	April	The NIRB received notice of Shear's Chief Restructuring Officer's resignation.
2014	June	The NIRB conducted its 2014 site visit.
2014	November	The Board issued its recommendations to Shear and AANDC regarding the 2013 monitoring commitments and compliance to the Project Certificate No. 002.
2014	November	The NIRB received notification of resignation by the last remaining Shear Director.
2015	January	AANDC submitted information and site inspection reports regarding water monitoring and sampling, water releases on-site, and mitigation measures to manage previously identified risks.
2015	June	The NIRB requested updates from agencies regarding compliance to the Project Certificate No. 002.
2015	June	The NIRB conducted its 2015 site visit.
2015	October	The Board issued its 2015 recommendations to Shear, INAC, and Fisheries and Oceans Canada (DFO).
2015	December	INAC submitted its response to the NIRB's request for information regarding ongoing activities at the Jericho Diamond Mine and submitted its responses to the NIRB's 2014-2015 Board Recommendations.
2016	January	DFO submitted its response to the NIRB's request for information regarding ongoing activities at the Jericho Diamond Mine and submitted its responses to the NIRB's 2014-2015 Board Recommendations.
2016	June	The NIRB conducted its 2016 site visit.
2016	November	The Board issued its 2016 recommendations to Shear, INAC, and DFO.
2016	December	The NIRB issued its Screening Decision Report for INAC's "Jericho Mine Site Stabilization" proposal (NIRB File No. 16UN058), approving the proposed remediation and stabilization works at the Jericho site.
2017	April	INAC submitted its response to the NIRB's 2015-2016 recommendations.

DATE		ACTIVITY UNDERTAKEN
2017	April	INAC submitted a revised summary of remediation and stabilization works to be conducted at the Jericho site (NIRB File No. 16UN058).
2017	June	DFO submitted its response to the NIRB's 2015-2016 recommendations.
2017	July	The NIRB issued its Screening Decision Report for INAC's proposed "Jericho Site Stabilization – Amendment", approving proposed amendments to the Jericho Site Stabilization Project (NIRB File No. 16UN058).
2017	August	The NIRB conducted its 2017 site visit.
2017	September	The NIRB received INAC's Water Resources Inspection Report
2017	November	The Board issued its 2017 recommendations to Shear, CIRNAC, and DFO.
2018	January	DFO submitted its response to the NIRB's 2016-2017 recommendations.
2018	May	The NIRB received CIRNAC's Annual Report for remediation and stabilization works conducted at the Jericho site (NIRB File No. 16UN058).
2018	June	The NIRB conducted its 2018 site visit
2019	February	DFO submitted its response to NIRB's 2017-18 recommendations.
2019	March	CIRNAC submitted its response to NIRB's 2017-18 recommendations.
2019	April	CIRNAC submitted 2017 Annual Report Supplemental Information.
2019	June	The NIRB received CIRNAC's Annual Report for remediation and stabilization works conducted at the Jericho site (NIRB File No. 16UN058).
2019	June	The NIRB conducted its 2019 site visit
2020	May	The NIRB received CIRNAC's Annual Report for remediation and stabilization works conducted at the Jericho site (NIRB File No. 16UN058).
2020	May	CIRNAC submitted its response to NIRB's 2018-19 recommendations.
2020	December	The NIRB received CIRNAC's Annual Report for remediation and stabilization works conducted at the Jericho site (NIRB File No. 16UN058).