



Abandonment and Reclamation Policy for Inuit Owned Lands Qikiqtani Inuit Association - (Version 2.0)

1.0 Introduction

Article 19 of the Nunavut Land Claims Agreement establishes private ownership of selected surface and subsurface lands for Inuit and specified substances. The Qikiqtani Inuit Association (QIA) – Department of Lands and Resources, is responsible for the management of surface Inuit Owned Land parcels throughout the Qikiqtani Region. Inuit Owned Lands (IOLs) were selected for a variety of reasons based on community preferences. Categorically, IOLs were selected based on values assigned to both renewable and non-renewable resources such as:

- principal or other wildlife harvesting areas
- significant biological productivity or of value for conservation purposes
- high potential for propagation, cultivation or husbandry
- current or potential occupation by outpost camps
- value for sport camps or other tourist opportunities
- known or potential mineral deposits
- value for various operations and facilities associated with the development of non-renewable resources
- commercial value
- archaeological, historical or cultural importance

QIA receives and reviews land tenure applications for access to IOLs.. In granting access to IOL, QIA approves all project plans. QIA requires all plans submitted with an application are executable

standalone documents with adequate rational, detail and appropriate referencing to any supplemental materials. Appropriate referencing shall include the document name, author, section, and page number.

An Abandonment and Reclamation Plan (A&R plan) is required for access to IOL for all exploration and development projects.¹ In general, an A&R plan outlines the plans and process the Tenant will undertake to reclaim IOL to a level acceptable to QIA. A Tenants A&R plan is to only address impacts specific to IOL. A key feature in granting rights to IOLs includes the establishment of a financial security deposit. Financial security deposits are required to protect QIA against potential reclamation liabilities associated with project specific use of IOL. **Appendix A** provides a select list of relevant documents Tenants may elect to provide guidance in developing an A&R plan. QIA does not endorse or reject the contents and use of these documents. Furthermore, QIA is aware numerous documents exist in addition to those referenced in this document. .

This policy applies to all land uses carried out on IOL throughout the Qikiqtani Region. However, as the potential impacts to IOL can vary significantly depending on the type and duration of specific land uses, the policy will be applied in a manner that reflects the scale, scope and nature of the land use activity. This policy does not limit any additional requirements that may be set-out in project specific licences and leases issued by QIA. Tenants are advised to consult any policy or procedural documents adopted by QIA for additional guidance on Tenant requirements. Policy or procedural documents may form an extension of this Abandonment and Reclamation Policy.

2.0 QIA's Guiding Principles on Reclamation

To ensure that future generations of Inuit will be able to enjoy the land as Inuit do today, Nunavut Tunngavik Incorporated (NTI) and the Regional Inuit Associations require users of IOL to return the land to a safe and stable condition that maintains the ecosystem integrity and that is consistent with Inuit societal and cultural needs and aspirations. QIA requires that all A&R documents are developed with an awareness of NTI's Reclamation Policy.

Consistent with NTI's Reclamation Policy the goals of reclamation and the obligations of the land user are as follows:

- Reclamation should be planned and executed so as to achieve a site which is physically, chemically, and biologically stable upon closure
- Reclamation should result in a site which is aesthetically and environmentally compatible with the surrounding undisturbed landscape
- Site-specific reclamation requirements should be consistent with locally valued ecosystem components and regional planning objectives, including land use plans
- Integration of Inuit Qaujimajatuqangit (IQ) and consultation with Community Land and Resources Committee(s) (CLARC)²
- Reclamation should result in a site in which all applicable federal and territorial laws of general application related to public health and safety requirements are met and risks to human health are minimized

¹ Exploration includes early exploration through advanced exploration. Development includes pre-development site preparation through construction and operation. Development includes projects other than mining.

² Qikiqtani Inuit Association Community Lands and Resources Committee Manual. 1996.

- Land use operations should be planned and conducted in a manner that minimizes reclamation requirements at closure
- Land users should undertake progressive reclamation, consistent with approved terms and conditions and reclamation plans
- Land users should employ international best practices for arctic conditions, as well as federal and territorial legislation, regulations and guidelines, in the planning and carrying out of reclamation
- Land users should undertake any research necessary for them to be able to meet reclamation objectives
- Land users may be required to undertake post-activity monitoring to confirm reclamation objectives have been achieved

3.0 Abandonment and Reclamation Objectives and Criteria

An A&R plan should be sufficiently developed to act as a standalone document, tailored to project plans, with adequate detail to guide QIA through the review of a Tenant's abandonment and reclamation program. In the event an A&R plan does not contain sufficient information for on-site execution, QIA may elect to reject the plan.

Commonly, A&R plans contain general reclamation goals, along with specific objectives and criteria to reclaim each project component. Criteria are detailed to a level that can provide a measure of success or failure of the objective. A Tenant may complement their submission through opinion and argument presented in other literature (scientific journal articles, policy and guidelines from other jurisdictions) and/or with relevant on-site supporting information. If a Tenant chooses to use outside information as a basis of opinions formed in their submission, supporting documentation shall be appropriately referenced and provided to QIA upon request.

QIA maintains that the CLARC(s) play an important role in providing project approval and determining appropriate terms and conditions, including A&R outcomes. Consultation with the CLARC(s) both prior to and during the review process must be considered as important steps in the project application and planning process. Tenants are advised to consult any policy or procedural documents adopted by QIA for additional guidance on Tenant requirements for consultation.

QIA recommends the following items are contained in an A&R plan:

- Description of the environment³
- Description of site development, facilities and operations
- Method of fuel storage
- Reclamation objectives and closure criteria
- Application and discussion of use of Inuit Qaujimagatuqangit and consultation with Community Land and Resources Committee(s) including Tenant discussions on project impacts and reclamation goals, objectives and criteria for each project component
- Detailed records of community consultation sessions
- Progressive reclamation

³ This is meant to encompass land use history, baseline environmental conditions and current environmental conditions.

- Temporary closure
- Permanent closure reclamation activities
- Contingencies
- Schedule
- Financial security estimates
- Post reclamation monitoring program
- Reclamation research including appendices with supporting studies, plans, etc.

4.0 Financial Security Estimation

From a liability perspective, mature and intrusive projects will require a financial security estimate. A simplistic financial security estimate without evidence and detail may not be accepted as sufficient by QIA. A financial security estimate requires a detailed review of project specific information relative to what is represented in the A&R plan. Commonly, Tenants have employed the RECLAIM model as a tool to develop a financial security estimate.⁴ It is QIA's position that the RECLAIM model does not offer a fully transparent assessment of security costs, nor does RECLAIM represent the best interest of Inuit as private landowners.⁵

The Tenant shall estimate the financial security amount to complete the A&R plan. When presenting and describing unit costs values and quantities, the Tenant shall report all results in a manner that is methodic and self-explanatory. Evidence shall be provided (e.g., material quantities based on "For Construction" drawings, number of surface and groundwater samples, clear calculations for person-hours used, quotes and invoicing from Third Party Contractors and suppliers, etc.) to support unit costs and quantities. If there is uncertainty in how quantities and unit cost values are calculated, the Tenant shall clearly outline the limitations in obtaining costing accuracy and propose a contingency to account for unknowns and limitations. QIA will assess the level of confidence in the evidence presented by the Tenant, and make adjustments to the contingency value if the evidence is not sufficient. In many instances, an individual cost estimate associated with a particular project component is a function of numerous associated costs. Therefore, QIA requires both a comprehensive summary of project security estimates, as well as, individual component justification. **Appendix B** contains tables that may aid a Tenant in developing a methodical framework to present a financial security costing estimate. These examples are not complete and do not represent all required budget line items for such activities. QIA requires a detailed line item breakdown of each cost to complete reclamation of each component. This may increase the level of confidence in the evidence presented. Furthermore, QIA requires all A&R plan submissions include a completed version of QIA's concordance table presented in **Appendix C**. When completing a financial security costing estimate, the Tenant is strongly encouraged to contact QIA if uncertainty exists in how to determine an acceptable estimate.

In reviewing a Tenant's A&R plan and financial security estimate, QIA reserves the right to conduct an independent security estimate for the proposed project. QIA's security estimate may consider identified deficiencies in the Tenant's A&R plan and security estimate; impact of assumptions on security amount; uncertainty in unit cost values and quantities; and risk to QIA. In addition to a deterministic approach to estimate security, QIA may elect to use probabilistic methods to aid in understanding the impact of

⁴ Indian and Northern Affairs Canada. 2002. Mine Site Reclamation Policy for Nunavut. Ottawa, ON.

⁵ Michael Wenig. 2008. Security Issues Arising from Water Licencing on Private Lands in the Northwest Territories and Nunavut. Canadian Institute of Resource Law. Calgary, AB.

assumptions and uncertainties in the input values on the security value. QIA may elect to use an approved proprietary model, such as RE\$TORE, to develop a deterministic and probabilistic financial security estimate, as well as to understand QIA risk.

4.1 Assumptions

In developing a security estimate, assumptions may be made to narrow the scope of the assessment. QIA requires the ability to make direct contact with Tenant contractors and suppliers in order to determine level of involvement and clarify security costs officially. QIA requires the following assumptions are observed:

- Incorporation of QIA's CLARC A&R objectives and criteria
- A scenario where QIA assumes authority over project components on IOL
- Security costs should equal 100% of the cost for an independent third-party contractor to reclaim the site
- Security costs are based on an independent third-party contractor and equipment, including mobilization and demobilization
- An independent third-party contractor may be required to enter into a commercial lease with QIA and agree to standard terms and conditions (i.e., lease administration costs, tipping fees and water compensation)
- Transportation rates (including air travel, marine shipping and overland haul) must be supported by site-specific invoicing and or cost quotations
- Camp operation costs must be supported by site-specific invoicing or cost quotations
- Assumed use of on-site fuel for reclamation purposes is not acceptable
- Salvage values for on-site equipment and materials are not accepted as a security credit
- Review and approval of all plans associated with infrastructure development, including stamped and signed as-constructed documentation (e.g., drawings, reports, etc.) by a qualified Engineer registered with Association of Professional Engineers, Geologists and Geophysicists of the NWT and Nunavut (NAPEGG)
- Security should be posted in a form that is readily available to QIA, retains its value throughout the land use activity, and is beyond the control of the land user or its creditors in the event of insolvency.
- Progressive reclamation credits may be applied against a security amount once proven through QIA assessment and authorization
- IOL aggregates are used in completing a reclamation program for any project element requiring aggregates
- Potential transboundary impacts to IOL due to activities not on IOL will be considered

4.2 Progressive Reclamation

QIA holds financial security to ensure the project area will be reclaimed in a manner consistent with QIA's objectives and criteria. Progressive reclamation activities planned and implemented will be verified by QIA. On-site verification of completed progressive abandonment and reclamation will only occur once as-built construction reports with record drawings are filed with the appropriate authorities, including QIA. The financial security held for a specific project element will only be released once QIA

has completed its verification process. This includes confirmatory inspection and verification. If reclaimed to a satisfactory level QIA will issue a release letter to the Tenant identifying satisfactory reclamation of project elements. Partial completion of progressive reclamation efforts, such as the completion of physical works in the absence of as-built construction reports and record drawings, will not result in financial security credits.

4.3 Limitations

Though every attempt may be made during a financial security assessment to capture all project components, there may be limitations when assigning financial values to elements of A&R plans. Therefore, all A&R plans shall include a detailed description of the A&R plan and security estimate limitations, as well as, identify and detail all line items where security values cannot be accurately estimated or predicted.

5.0 Closing Statements

Though many projects do not occur exclusively on IOL, QIA is committed to applying the contents of this policy where appropriate. From QIA's perspective this includes the review of all components associated with any given project.

Extraordinary costs associated with A&R plan review and approval borne by QIA will be charged back to the Tenant.

QIA lease agreements with the Tenant will form additional conditions including how A&R plans will be updated and administrated (i.e. scheduling timelines for updates).

QIA recognizes abandonment and reclamation planning and financial security estimates are a dynamic portion of project planning and development. QIA will commit to regular updates to this policy in order to better serve the interests of Inuit and project developers.

**APPENDIX A:
REFERENCE MATERIALS**

Indian and Northern Affairs Canada. 1992. Mine Reclamation in Northwest Territories and Yukon.

Indian and Northern Affairs Canada. 2002. Mine Site Reclamation Policy for Nunavut.

Indian and Northern Affairs Canada. 2006. Mine Site Reclamation Guidelines for the Northwest Territories.

Northwest Territories Water Board and Department of Indian Affairs and Northern Development. 1990. Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories.

Nunavut Tunngavik Incorporated. 2008. Reclamation Policy.

Wenig, Machael. 2008. Security Issues Arising from Water Licensing on Private Lands in the Northwest Territories and Nunavut. Canadian Institute of Resource Law. Calgary, AB.

**APPENDIX B:
FINANCIAL SECURITY COSTING TABLES**

Table 1: Project Component Summary

Identifier	Infrastructure, operation, management action	Description and reference documents	Total cost	Limitations in developing a financial security value	Contingency due to limitations
A	(example: Acid Rock Drainage)				
B	(example: backhaul shipping costs)				

Table 2: Individual Component Details (example: Acid Rock Drainage)

Identifier	Description	Total Line Cost	Unit Cost	Total Quantity Required	Evidence and Justification for Unit Cost and Total Quantities Required
A	Quarry concession fees	A x B	\$/m ³	B m ³	
A	Transportation of buffering rock	(C x E) + (D x E)	\$/per person hour (C) \$/equipment hour (D)	Total Hours (E)	
A	Placement of rock	(C x E) + (D x E)	\$/per person hour (C) \$/equipment hour (D)	Total Hours (E)	

Table 3: Individual Component Details (example: Backhaul Shipping Cost)

Identifier	Description	Total Cost	Unit Cost	Total Quantity Required	Evidence and Justification for Unit Cost and Total Quantities Required
B	Sealift of materials to Montreal		\$/ m ³ \$/ kg		
B	Barge for loading/off-loading materials		\$/day	Number of days	
B	Stevedoring costs in Montreal		\$/ m ³ \$/ kg		
B	Land transportation costs to final disposal facility		\$/ m ³ \$/ kg		

Table 4: Inventory of Tenant Materials at Site (example: Heavy Construction Equipment)

Identifier	Item	Location	Quantity	Mass (kg)	Volume (m ³)
A	Caterpillar 315C	Main Camp	1	16,402	63.2

APPENDIX C:
CONCORDANCE TABLE

The following concordance table has been prepared to characterize the content of a Tenant's Abandonment and Reclamation submission to the Qikiqtani Inuit Association (QIA). The concordance table is consistent with the principles of QIA's *Abandonment and Reclamation Policy for Inuit Owned Lands ('the Policy')*. It is the Tenant's responsibility to submit an Abandonment and Reclamation plan, along with supporting information, which satisfies the Policy. QIA requires Tenants to submit a completed concordance table with their submission.

Item	QIA Policy	Tenant Response
1	Have all reports and plans including addendums and responses been submitted?	
2	Are the submitted reports and plans executable standalone documents with adequate rational and detail?	
3	Do all reports and plans contain appropriate referencing (document name, author, section, and page number) to all supporting information?	
4	Do the reports and plans demonstrate a firm understanding, of QIA's <i>Guiding Principles on Reclamation</i> and provide rationale on how these principles have been satisfied?	
5	Has IQ and consultation with Community Land and Resources Committee(s) been applied? Has the Tenant provided detailed community consultation records?	
6	Are all the components that are considered in the abandonment and reclamation plan listed?	
7	Does each component of the project have an abandonment and reclamation objective(s) and criteria?	
8	Has an A&R plan been provided with a financial security estimate?	
9	Have Table 1, 2, 3 and 4 of Appendix B been used in completing the financial security estimate?	
10	Has evidence been provided to support the Policy assumptions for all reports and plans?	
11	Has the Tenant contacted QIA if uncertainty existed in how the Tenant was to determine an acceptable estimate?	