



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Public Works and Government Services Canada  
100-167 Lombard Avenue  
Winnipeg  
Manitoba  
R3B 0T6  
Bid Fax: (204) 983-0338

**SOLICITATION AMENDMENT**  
**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du**  
**fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Public Works and Government Services Canada  
Northern Contaminated Site Program  
ATB Place North Tower  
10025 Jasper Avenue  
Edmonton  
Alberta  
T5J 1S6

<b>Title - Sujet</b> Gordon Lakes Site Supervision	
<b>Solicitation No. - N° de l'invitation</b> EW699-170956/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> INAC EW699-170956	<b>Date</b> 2016-09-30
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$NCS-080-10871	
<b>File No. - N° de dossier</b> NCS-6-39117 (080)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2016-11-08</b>	<b>Time Zone</b> Fuseau horaire Central Daylight Saving Time CDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Almonte, Cathleen	<b>Buyer Id - Id de l'acheteur</b> ncs080
<b>Telephone No. - N° de téléphone</b> (204) 229-3862 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

### **Gordon Lakes Site Supervision**

*Amendment No. 001 is hereby issued to modify Solicitation No. EW699-170956/A as follows:*

1. **INSERT:** Reference attached PDF document titled, "Annex A".

2. Reference SI5 Bidders Conference and amend as follows:

**DELETE:** in its entirety

**INSERT:** the following revised clause:

#### **SI5 BIDDERS CONFERENCE**

An optional bidders' conference teleconference will be held via WEBEX on **October 11, 2016**. The teleconference will begin at **9:00 CDT**. The scope of the requirement outlined in the bid solicitation will be reviewed during the conference and questions will be answered. It is recommended that bidders who intend to submit a bid participate.

Bidders are requested to communicate with the Contracting Authority before the teleconference to register and get participation and access details. Bidders should provide, in writing, to the Contracting Authority, the name(s) of the person(s) who will be participating and a list of issues they wish to table no later than **October 10, 2016, 14:00 CDT**.

Any clarifications or changes to the bid solicitation resulting from the bidders' conference will be included as an amendment to the bid solicitation. Bidders who do not attend will not be precluded from submitting a bid.

*If your bid has already been forwarded and you wish to revise the same, this revision should reach the Bid Receiving Unit identified before the closing date. The bid number and closing date are to be clearly identified.*

Return Bids to: Bid Receiving – PWGSC  
Room 100 – 167 Lombard Avenue  
Winnipeg, Manitoba, R3B 0T6

**ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.**

# **STATEMENT OF WORK**

**GORDON LAKE SITE SUPERVISION AS AND WHEN CONTRACT**

**FOR**

**GORDON LAKE GROUP REMEDIATION, GORDON LAKE, NORTHWEST TERRITORIES**



**Prepared by:** Northern Contaminated Sites Group  
Public Works and Government Services Canada

**Prepared for:** Contaminated Sites Program, NWT Region  
Indigenous and Northern Affairs Canada

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## 1. Definitions

1. Remediation Contract: The tender specifications and resultant contract currently posted on the Public Works and Government Services Canada Buy and Sell website for the Remediation of the Gordon Lake Sites: <https://buyandsell.gc.ca/procurement-data/tender-notice/PW-NCS-013-10831>
2. Gordon Lake Group (GLG) Remediation Prime Consultant Services: The work identified in this Statement of Work (SOW) and the identified services for the “Departmental Representative” in the Remediation Contract and associated specifications and drawings.
3. The Client: Indigenous and Northern Affairs Canada (INAC)
4. The Project Authority: Public Works and Government Services Canada (PWGSC) – Environmental Services and Contaminated Sites Management (ESCSM)
5. The Contract Authority: Public Works and Government Services (PWGSC) – Environmental Services Acquisitions Team (ESAT)
6. The Consultant: The Prime Consultant, Departmental Representative, Site Supervisor, full-time representative on-site and Engineer of Record for the GLG Remediation Contract responsible for scope of work as defined in this document and the Remediation Contract.

## 2. Background

In addition to the tender specifications for the GLG Remediation, the background documents for the GLG remediation project is provided here (access is provided once requested from Cathleen Almonte: [Cathleen.Almonte@pwgsc-tps qc.gc.ca](mailto:Cathleen.Almonte@pwgsc-tps qc.gc.ca)):

<https://projectpoint.buzzsaw.com/client/pwgsc-tps qc-wst/ENV/Gordon%20Lakes%20Tender>

## 3. Objective

To achieve the objectives of the (GLG) Remediation Contract, the Project Authority requires, on behalf of the Client, Prime Consultant services to manage, administer, and provide expert review of the work carried out by the remediation Contractor.

The remediation work will be done in accordance with the GLG Remediation Contract and the project goals that are to be addressed while implementing the remediation work generally encompass the following:

1. Minimize human health and safety risks
2. Protect fish, wildlife and vegetation
3. Protect water quality
4. Minimize environmental impacts during remediation
5. Return the site to its original condition where possible
6. Minimize long term care and maintenance
7. Apply overall cost-effectiveness considerations

8. Ensure remediation work is in accordance with remediation contract
9. Ensure the remediation is compliant to the requirements defined within the remediation contract specifications

## 4. Hazards

Hazards that may be encountered at the GLG sites include but are not limited to the following:

1. Abandoned site buildings such as cabins and shacks;
2. Abandoned infrastructure such as core racks, docks and concrete pads;
3. Co-mingled, metals and petroleum hydrocarbon (PHC) impacted soil;
4. Mine openings including but not limited to
  - a. Shafts;
  - b. Trenches;
  - c. Underground Workings;
5. Non-hazardous waste such as wood and metal debris;
6. Tailings;
7. Unfired Explosives;
8. Waste Rock;
9. Wildlife.
10. Hazardous waste including but not limited to:
  - a. leachable lead paint;
  - b. batteries;
  - c. asbestos;

For a comprehensive list of hazards see the Hazardous and Non-hazardous Material Inventory in Appendix A of the Gordon Lake Remediation Tender Specifications and the Site Wide Hazard Assessment report documented under the supplemental documents.

## 5. SCOPE OF WORK

The scope of work includes the work identified in this Statement of Work (SOW) and the identified services for the "Departmental Representative" in the GLG Remediation Contract Specifications and applies to the Consultant and any Sub-Consultants or Specialty Consultants disciplines that may be required for the Gordon Lake Group (GLG) Remediation Prime Consultant Services.

### 5.1. Assume the Responsibilities as the Engineer of Record

1. Review documents associated with the design of the GLG Remediation project which includes but is not necessarily limited to:
  - a. Current Issued for Tender (IFT) Specifications and Drawings
  - b. Remediation Contractor Bid and Associated Contractor Schedule
  - c. Approved Change Orders
  - d. Approved Shop Drawings Submittals
  - e. Design Information including but not limited to
    - i. Design Report
    - ii. Any additional survey information available: lidar, maps, Phase III Report drawings and Remediation Action Plan (RAP) drawings in .dwg

- iii. Thermal modeling data inputs and results for the Tier II landfill (if available)
  - iv. All analytical results in .xls format and any certificates of analysis not appended to other reports
  - v. Additional tender quantity calculation information (notes, reports, spreadsheets)
  - vi. Specification in word (.doc) format
  - vii. Drawings in AutoCAD (.dwg) format
  - f. The above noted information is provided on Buzzsaw (access is provided once requested from Cathleen Almonte: [Cathleen.Almonte@pwgsc-tpsgc.gc.ca](mailto:Cathleen.Almonte@pwgsc-tpsgc.gc.ca)):
    - i. <https://projectpoint.buzzsaw.com/client/pwgsc-tpsgc-wst/ENV/Gordon%20Lakes%20Tender>
2. Work with Contractor to develop, approve, stamp and issue Issued for Construction (IFC) drawings and specifications for the project.
  3. Update, change and modify the current design specifications as required during construction activities to facilitate the remediation of the GLG sites. This includes but is not necessarily limited to:
    - a. Development of Contemplated Change Notices
    - b. The updating of drawings and specifications
    - c. Developing and issuing new drawings as specifications as required

## **5.2. Site Supervision and Contract Administration Services**

### **5.2.1. General**

1. Review and be familiar with the GLG Remediation project contract documents and all supporting/referenced documents.
2. Provide continuous supervision while the Remediation Contractor is on site.
3. Provide all confirmatory inspections, testing, specialized testing and confirmatory sampling in a timely manner as to not delay remediation work.
4. Provide clarification instructions, Contemplated Change Notices, and Change Orders as required.
5. Provide site instructions as it relates to the Consultant's role on and offsite.
6. Consider and evaluate any suggestions or modifications to the documents advanced by the Contractor and immediately report these to the Project Authority with comments.
7. Convey instructions regarding the required standards of workmanship to the Contractor.
8. Communicate formally with the Contractor via memorandum form only. When this form is issued, the Consultant will immediately file copies with the Project Authority.
9. Ensure that the Project Authority is notified promptly when key pieces of components of materials and equipment are delivered, so that these parties can arrange for the appropriate personnel to have an opportunity to inspect same prior to installation.
10. Protect Human Remains, Archaeological Remains and Items of Historical Scientific Interest

### **5.2.2. Supervision**

1. Supervise, inspect, co-ordinate and monitor all aspects of the remediation work during the construction.
2. Supervise and ensure remediation work is in accordance with the Gordon Lake Remediation Contract
3. Liaise with the Project Authority as required.
4. Supervise, review and approve contractor survey and measurements
5. Provide Work Measurements
6. Be responsible for the measurement of all work to be done on a unit-cost basis.
7. Be responsible for the measurement of percentage completion of lump sum item.
8. Supervise soil excavation activities, collect confirmation samples, inspect and report of results, confirm compliance to Remediation Contract.

### **5.2.3. Inspections and Testing**

1. Provide inspection for all aspects of the project, maintaining daily records of all work.
  - a. This includes regulatory compliance verification in accordance with but not limited to AHJ, Land Use permit and Water Licence
2. Inspect the Contractor mobilization and demobilization activities.
3. Accompany the Project Authority on inspections and record comments or instructions of the Project Authority.
4. Assist in the preparation of all deficiency, Substantial Completion, preliminary, and final reports in collaboration with the Project Authority.
5. Conduct Substantial Completion Inspection of site.
6. Conduct Final Inspection of site.
7. Issue Substantial Completion and final deficiency reports.
8. Assist (as required) in release of holdback upon satisfactory completion.
9. Provide on part-time basis Sub-Consultants or Speciality Consultants required to perform specialized on-site inspections.
10. Provide Specialized Inspection and Testing as required.
11. Test materials to meet the specifications, compaction testing, supervision of material placements, confirmation of compliance to all permits and assistance to the Contractor.
12. Inspect materials and prefabricated assemblies and components at their source or assembly plant, as necessary for the progress of the project.
13. Assess quality of work and identify, in writing to the Project Authority, all defects and deficiencies observed at time of such inspections.
14. Inspect materials and prefabricated assemblies and components at their source or assembly plant, as necessary for the progress of the project.
15. Make on-site observations and spot checks of the work to determine whether the work, materials and equipment conform to the Contract Documents and supplementary documentation.
16. Provide specialized services by Environmental, Geotechnical and Demolition as required during the remediation work and as outlined in the Gordon Lake Remediation Contract.
17. Assist the Project Authority in briefing the testing firm on required services, distribution of reports, communication lines, etc.
18. Assist the Project authority in evaluating firm's invoices for services performed.

19. Ensure that the tests and inspections required by the Contract Documents are conducted, and should observe these tests and report the results in the daily log.
20. Provide non-resident inspection services by qualified personnel to ensure compliance with Contract Documents. These personnel will be fully knowledgeable with technical and administrative requirements of project.
21. Establish a written understanding with Contractor as to what stages or aspect of the work are to be inspected prior to being covered up.
22. Notify the Project Authority if the test results do not meet the specified requirements, or if the Contractor does/do not have tests undertaken as required.

#### **5.2.4. Review and Approve**

1. Review and approve As-Built and Record Drawings.
2. Review and Approve Contractor's Progress Payments with a written letter address to the Project Authority.
3. Review and process shop drawings.
4. Review testing methods, data of inspection/testing agencies.
5. Verify quantities of materials received and record work progress through review and verification of Contractor survey data and measurements.
6. Review and approve all test reports and take necessary action with Contractor when work fails to comply with Contract requirements. The Project Authority will be immediately notified when tests fail to meet project requirements and when corrective work will affect the schedule.
7. Review all Contractor's submissions as outlined in the specifications including, but not limited to the Site Specific Health and Safety Plan, the Worker Orientation Seminar documents, the Contract Work Breakdown Structure, Spill Contingency Plan, Emergency Response Plan, Waste Management Plan, Sediment and Erosion Control Plan, Detailed PHC Impacted Soil Treatment Plan, Quarry Operations Plan, Construction Plans, etc.

#### **5.2.5. Site Safety**

1. Adhere to Contractor's Site Specific Health and Safety Plan (SSHASP).
2. Attend Contractor Worker Orientation Seminar.
3. In case of emergencies, the Consultant is empowered to stop the work, or give orders to protect the safety of the workers or property and contact the Project Authority immediately for further instruction.
4. The Consultant will conduct a Site Safety Survey of the Contractor and the Gordon Lake Site once during each field season. The Consultant will fill out and submit the Site Safety Survey form located in Appendix A Site Safety Survey.

#### **5.2.6. Work Measurement**

1. If work is based on unit prices, The Consultant will measure, review survey measurements and record the quantities for verification of monthly progress claims and the Final Certificate of Completion.

2. When Contemplated Change Notice, Change Orders or Task Authorizations are to be issued based on Unit Prices, the Consultant will keep accurate account of the work and record dimensions and quantities.

### **5.2.7. Meetings**

1. The Consultant will arrange, attend and conduct meetings as defined in Remediation Contract, and weekly teleconference meetings throughout the entire construction period. Attendees to include:
  - a. Client Department
  - b. Project Authority
  - c. Consultant and in-house staff, as required
  - d. Contractors and their Subcontractors.
2. The Consultant will attend the meetings, record the issues and decisions and prepare and distribute minutes to all attendees within two (2) days of the meeting.
3. Attend all Community Meetings with Project Authority, Client, Contractor and Community members. Consultant will record the minutes and distribute them as outlined in the specifications and contractor proposal.
4. Attend all other construction meetings implemented by the Contractor and record subjects of interest, as it pertains to the implementation of the remediation work.

### **5.2.8. Records and Reporting**

#### **5.2.8.1. Daily reporting**

1. Environmental health and safety reporting, including but not limited to:
  - a. Incident reports
  - b. Tracking of non-reportable health and safety and environmental incidents – i.e. near misses
2. Record and Report daily site activities
3. Finalize project documentation and accounts.
4. Gather, verify and report information required for Water Licence (WL), Land use Permit (LUP) and all other applicable regulations and licence requirements.
5. Review, track and provide feedback on the actual project schedule using the Contractor Contract Work Breakdown Structure and the accepted Contractor's Project Schedule.
6. Assess quality of work and identify, in writing to the Project Authority, all defects and deficiencies observed at time of such inspections.
7. Monitor the progress of Contractors' work, compliance with all drawings and specifications, time schedules, quality standards and progress reports.
8. Track labour and equipment usage, camp occupancy, Aboriginal participation and the activities completed by personnel and equipment daily.
9. Report on Contractors maintaining specified quality and schedules, ensuring that Contractors are monitoring delivery of critical materials and equipment.
10. Any directions, clarifications or deficiency lists will be issued in writing to the Project Authority, with a copy to the Contractor.

11. Keep the Project Authority informed of the progress and quality of the work and report any defects or deficiencies in the work observed during the course of the site reviews.
12. Report if materials and equipment are being incorporated into the project prior to approval of relative shop drawings or samples.
13. Advise the Contractor of any deficiencies or unapproved deviations via memorandum and report immediately to the Project Authority any of these on which the Contractor is/are tardy or refuses to correct.

The Consultant will submit a Daily Report for duration of field work (Example located in Appendix B Daily Report Example) to the Project Authority which is a recording of but not limited to:

1. Weather conditions, particularly unusual weather relative to construction activities in progress.
2. Major material and equipment deliveries.
3. Daily activities and major work done.
4. Health and Safety meetings.
5. Start, stop or completion of activities.
6. Presence of inspection and testing firms, tests taken and results.
7. Unusual site conditions experienced.
8. Significant developments, remarks.
9. Special visitors on-site.
10. Authorities given Contractor to undertake certain or hazardous works.
11. Environmental incidents.
12. Reports.
13. Stop work requests by the Project Authority.
14. Summary of work completed to date.

Copies of the Daily Reports are to be provided to the Project Authority at the end of the project within the Post Construction Summary Report.

#### **5.2.8.2. Interim Construction Summary Report**

The Consultant will submit an interim construction summary report to be completed following each construction season and after the remediation work is completed. An example of the table of contents for the post construction summary report is included in Appendix C Example Table of Contents Post Construction Summary Report.

#### **5.2.8.3. Quarterly reporting**

The Consultant will fill out and submit Quarterly Reporting each quarter of the year of the project. The required Quarterly Reporting form is located in Appendix D Quarterly Reporting.

#### **5.2.8.4. Aboriginal Opportunities Consideration (AOC)**

Record and report Aboriginal worker hours on site and Aboriginal Sub Contractor Content (to be provided by Contractor with each Progress Payment) in accordance with the Remediation

Contract Aboriginal Opportunities Consideration (AOC). Confirm with Contractor Monthly the current AOC hours and AOC Sub Contractor Content and rectify any discrepancies.

#### **5.2.9. Budget/Cash Flow**

Once the Project Authority has accepted the Contractor's cost breakdown, the Consultant will:

1. Monitor budget/cash flow requirements as required on a site by site basis.
2. Review value of progress of work against the approved cost breakdown. When each trade is regularly reviewed against the Project Schedule and the cost breakdown, it quickly becomes apparent whether the Contractor is on budget and is generating the appropriate cash flow for the work.
3. Record all discrepancies and agreed remedial measures.

#### **5.2.10. Permits Licences and Authorities having Jurisdiction**

The Consultant will gather, verify and report information required for Water Licence (WL), Land use Permit (LUP) and all other applicable regulations and licence requirements. The permits are not currently available. Example permits and associated requirements are provided in Appendix E Example Land Use Permit and Water License.

The Consultant is responsible for regulatory compliance tracking to ensure the work is being carried out in accordance with all applicable codes, and authorizations etc.....

#### **5.2.11. Contractor's Project Schedule**

The Consultant will:

1. Obtain a Project Schedule from the Contractor as soon as possible after Contract award and ensure proper distribution.
2. Review and advise to ensure that the schedule has detailed components of the work shown separately.
3. Use the schedule as the basis for evaluating the progress of the work, once the Project Authority has reviewed the Contractor's Project Schedule.
4. Record all discrepancies and agreed remedial measures.
5. Keep accurate records of causes of delays.
6. Make every effort to assist the Contractor to avoid delays.
7. Only the Project Authority may authorize any request for Time Extensions. Authorization will be issued in writing.

#### **5.2.12. Shop Drawings**

1. The Consultant will review, discuss, record problems and identify agreed remedial action. Monitor and record the progress of shop drawing review. Record parties designated for action and follow up.

2. On completion of project, The Consultant will include copies of reviewed shop drawings to the Project authority as part of the Post Construction Report. The Consultant will ensure that shop drawings include the project number and are recorded in sequence.
3. The Consultant will verify the number of copies of shop drawings required. Consider additional copies for Client's and the Authorities having Jurisdiction office.
4. Shop drawings will be stamped: "Checked and Certified Correct for Construction" by the Contractor and stamped: "Reviewed" before returning to the Contractor.

**5.2.13. Site Instructions**

1. The Consultant will provide clarifications on Plans and Specifications or site conditions, as required in order that project not be delayed.
2. The Consultant will record Contractor's acknowledgement of receipt of all site instructions, ensure and record that required action does not have an impact on cost or schedule.
3. The Consultant will provide the Project Authority information with any additional detail drawings as and when required to properly clarify or interpret the Contract Documents, in a timely manner.

**5.2.14. Change Orders**

1. The Consultant does not have authority to change the work or the price of the Contract without a Project Authority approved Change Order or instructions in writing from the Project Authority.
2. Change Orders will cover all changes, including those not affecting the cost of the project, such as schedule, substitutions, etc.
3. The Consultant will prepare Contemplated Change Notices (CCN), quotations, reviews and unapproved Change Orders (CO). This includes monitoring and recording the progress of CCN and CO. Work in addition to the current contract will not proceed without written approval from the Project Authority.
4. The Project Authority will issue the approved CCN and CO to the Contractor, with a copy to the Consultant.
5. The practice of "trade offs" is not allowed.

**5.2.15. Contractor's Progress Payments**

1. Each month, the Contractor submits a progress claim for work and materials as required in the Contract. The claims are made by completing the following forms where applicable:
  - a. Request for Payment.
  - b. Cost Breakdown for Unit and/or combined Price Contract or Cost Breakdown for Fixed Price Contract.
  - c. Statutory Declaration: Progress Claim.
2. The Consultant will determine the amounts owing to the Contractor based on the progress of the work and certify payments to the Contractor.

3. The Consultant will review and sign a separate letter recommending payment of the Progress payment (indicating the amount of the approved invoice in dollars) and promptly forward claims to the Department for processing.

**5.2.16. Payment for Materials on Site**

1. The Contractor may claim for payment of material on site, but not yet incorporated in work.
2. A detailed list, checked and verified by the Consultant, of materials with supplier's invoice showing price of each item will accompany each claim.
3. Items will be listed separately on the Detail Sheet showing the breakdown list and total.

**5.2.17. Substantial Completion Inspection**

1. The Consultant will verify that all items are correctly stated and ensure that completed documents and any supporting documents are given to the Project Authority for processing.
2. Payment requires completion and signing, by the parties concerned, of the following documents:
  - a. Certificate of Substantial Performance,
  - b. Cost Breakdown for Fixed Price Contract, or Cost Breakdown for Unit or Combined Price Contract,
  - c. Inspection and Acceptance,
  - d. Statutory Declaration Certificate of Substantial Performance,
  - e. Worker's Compensation Board Certificate.

**5.2.18. Final Inspection**

1. The Consultant will inform the Project Authority when satisfied that all work under the Contract has been completed, including all deficiency items listed during the Substantial Inspection. The Project Authority and the Client will be in attendance for the final inspection.
2. The final payment to Contractor requires completion and signing by the parties concerned, of the following documents:
  - a. Certificate of Completion.
  - b. Cost Breakdown for Fixed Price Contract or Cost Breakdown for Unit and/or Combined Price Contract.
  - c. Inspection and Acceptance.
  - d. Statutory Declaration Certificate of Completion.
  - e. Worker's Compensation Clearance Certificate.
  - f. Trades' Certificates as appropriate.
3. The Consultant will verify that all items are correctly stated and ensure that completed documents and any supporting documents are given to the Project Authority for processing.

**5.2.19. Post Construction**

1. The Contractor is responsible for correcting all defects in the work during the warranty period, except for damage caused by misuse, abuse or neglect by others including the building occupants.
2. The Project Authority will promptly notify the Consultant in the event that defects or alleged defects appear in the work of the Contractor.
3. The Consultant will investigate all defects and alleged defects in the work promptly and issue appropriate instructions to the Contractor until all work is satisfactorily completed.

**5.2.20. Human Remains, Archaeological Remains and Items of Historical or Scientific Interest**

The Consultant will notify the Project Authority immediately if such finds are discovered and obtain further instructions on action to be taken.

**5.2.21. Risk management**

The Consultant will assist the Project Authority in:

1. identifying risk elements based on past experience, using a proposed checklist or other available lists
2. qualifying/quantifying probability of risk event and their impact on project or related work (low, medium, high)
3. applying a dollar value to all risk/probability impact events
4. preparing contingency plans for possible changes to the work, budget and schedule
5. prioritizing risk events (i.e. concentrate efforts on risk event with high probability and medium to high impact)
6. developing risk management plan (i.e. evaluate alternatives for mitigation of risks involved)
7. implement risk mitigation on items and approaches approved by the Project Authority

**5.2.22. Lines of Communication and Coordination**

The Project Authority is responsible for the project and is the liaison between the Consultant and the Client Department. The Consultant will:

1. Correspond only with the Project Authority and not communicate directly with the Client department unless authorized in writing by the Project Authority. If so authorized, the Consultant will provide to the Project Authority, a copy of any such correspondence and/or summary of discussions with the Client.
2. Ensure that all communications carry Project Authority's Project Title, Project Number, File Number and name of person to whom correspondence is addressed.
3. Advise the Project Authority of any changes that may affect schedule or budget, or are inconsistent with instructions or written approvals previously given or decisions previously agreed to.
4. Detail the extent and reasons for the changes and obtain confirmation in writing as soon as feasible.

During Site Supervision and Construction Contract Administration Services, the Consultant will provide to the Project Authority the following:

1. A copy of any correspondence and/or summary of discussions with the Contractor.
2. During all phases of project delivery, the Consultant will:
  - a. Coordinate and assume responsibility for the work of any and all Sub-Consultants and Specialists Consultants retained by the Consultant.
  - b. Ensure clear, accurate and ongoing timely and responsive communication of concept, budget, and scheduling issues.
  - c. Ensure adequate inspection services and provide answers to all Contractors' questions in a timely and responsive manner.

### **5.2.23. Project Authority Quality Assurance Reviews**

1. The Project Authority may conduct Quality Assurance Reviews on reports, drawings, schedules, and costs estimates prepared by the Consultant, in a manner and at stages noted herein. The Consultant will respond in writing to Project Authority's comments, in a timely manner and will be held accountable for delays if proper and timely responses do not occur.
2. Such reviews are not intended as a check against errors or omissions contained within the documents submitted. The Consultant is responsible for any such errors or omissions, regardless of any review by the Project Authority.
3. While the Project Authority acknowledges the Consultant's obligations to meet project requirements, the project delivery process entitles Project Authority to review the work. Project Authority reserves the right to reject undesirable or unsatisfactory work. The Consultant will obtain the Project Authority's acceptances during each of the project stages.
4. Acceptances indicate that, based on a general review of material for specific issues, the material is considered to comply with governmental and departmental objectives and practices and that overall project objectives should be satisfied. The acceptance does not relieve the Consultant of professional responsibility for the work and compliance with the terms and conditions of the Contract.
5. The Project Authority acceptances do not preclude the possibility that the work may be determined to be unsatisfactory at later stages of review (e.g. there may be more than one (1) draft version of a report required).
6. Acceptances by the Client and other agencies and levels of government will be obtained to supplement the Project Authority acceptances. The Consultant will assist the Project Authority in securing all such acceptances and adjust all documentation as required by such authorities when securing acceptance.

### **5.3. Codes and Standards**

1. All criteria will be in accordance with the current edition of Canadian Codes and Standards, and, any other relevant Codes as applicable. If territorial, local or municipal codes and bylaws are more stringent, they will take precedence.

2. Regulations, by-laws, and decisions of "Authorities having jurisdiction" will be observed. In cases of overlap, the most stringent will apply.
3. The Consultant will identify and communicate with all jurisdictions applicable to the project.
4. For material properties (both physical and chemical), methods of fabrication, tests, etc., reference should be made to the latest editions of CSA Standards and the Canadian General Standards Board, or to local standards if they are more stringent.

#### **5.4. Hazardous Materials/Waste Audits and Abatement Monitoring**

1. The Consultant will conduct site inspections during abatement as necessary to ensure appropriate abatement procedures are being followed, according to the specifications.
2. The Consultant's responsibilities will include ensuring that the containment area is properly set up.
3. The Consultant will inspect post remediation work areas to determine whether areas are suitably cleaned.

### **6. Assumptions for Consultant Proposal**

The following assumptions will be used by the Consultant for the development of the Financial Proposal:

1. Contractor Schedule and CAT Train path provided in Appendix F Assumed Contractor Schedule and CAT Train
2. Provisional cost sum of \$200,000 for laboratory analysis of confirmation samples.
3. Consultant Inspection of Mobilization and Demobilization Activities:
  - a. Conduct four (4) onsite inspection of the Contractor Mobilization and Demobilization Activities:
    - i. At the completion of the Contractor Mobilization Sea Lift activities while the Contractor is still onsite.
    - ii. During the Contractor Mobilization CAT Train Operations
    - iii. At the completion of the Demobilization Sea Lift loading activities while the Contractor is still onsite.
    - iv. During the Contractor Demobilization CAT Train Operations
  - b. Assume Consultant costs to Yellowknife.

The Consultant financial proposal may be updated based on the actual Contractor Work Plan and Schedule as agreed upon by the Consultant and Project Authority.

### **7. Project Deliverables:**

1. The deliverables include but are not limited to:
  - a. Daily Reports

- b. All recorded minutes for each meeting presided over by the Resident Engineer;
- c. Memos, project clarifications as required
- d. Annual Progress Reports
- e. Interim Progress Report upon completion of remediation activities
- f. Post Construction Summary Report
- g. All documentation and submittals provided by Contractor
- h. Contractor Progress Claim Approval Letters as required
- i. INAC Quarterly Socio Economic performance indicator tables
- j. Site Safety Surveys
- k. Construction contract administrative related documents
- l. Contractor ABORIGINAL OPPORTUNITIES CONSIDERATIONS REPORTING
  - i. Aboriginal Labour Content
  - ii. Aboriginal Content for Sub-Contracting/Business Content
- m. Reporting as Required for LUP, WL and any other Authority Having Jurisdiction (AHJ) requirements.

## **Appendix 1 Site Safety Survey**



### Site Safety Survey

Section 1			
Site #	Site Name	Date of Survey	Time of Survey
Location	Surveyor	Survey of	

Section 2									
Yes	No	N/A	Site Health and Safety/Certification Information	Yes	No	N/A	Wildlife Mitigation		
			Emergency Response Numbers Present Posted (Posted in a Heavy Traffic Area of Camp)				Wildlife Monitors Present and/or in Contact via Radio Communication with All Working Groups		
			Contact List and Location of Site Medic, Medic Facilities and Site Safety Officer posted				Wildlife Monitors Carrying Firearms are FAC certified		
			Site Specific Health and Safety Plan Present and Available Complete with: <ul style="list-style-type: none"> <li>• Emergency Response Plan</li> <li>• Wildlife Management Plan</li> <li>• Spill Contingency Plan</li> </ul>				Wildlife Management Plan in Place, to include but not limited to: <ul style="list-style-type: none"> <li>• Proper waste storage and disposal</li> <li>• Proper fishing/hunting policies posted and implemented</li> </ul>		
			Land Use Permit Posted				Wildlife Encounter Procedures in Place		
			Water License Posted				Wildlife Monitor Firearms Have Been Tested and are Functional		
			Camp Rules Posted				Wildlife Monitor Firearms are stored properly when not in use		
			Camp Electrical/Fire Inspection Certificate Posted				Non Lethal implements provided to Wildlife Monitors:		
			Record of All Workers on Site Having Taken Worker Orientation Seminar (WOS)						
			Other:				Other:		
Comments:				Comments:					
Yes	No	N/A	Training and Certification	Yes	No	N/A	Hazardous Materials Storage		
			All Workers/Working Groups Have Radio Communication Capability.				Placards in Place		
			Workers Present Know Where Site Specific Health and Safety Plan is Available on Site.				Person to Complete TDG Coordination and Forms has TDG Certification		
			Workers have Required Training for Assigned Work Activities:				Hazardous material storage: inventory and storage areas are logged		
			First Aid				PCB Storage Area:		
			TDG –				Storage Area Secure		
			WHMIS –				Authorized Personnel Only		
			Asbestos				PCB Binder Up to date		
			HAZWOPER –						
			PCB Abatement						
			Demolition Specialization						
			Other:				Other:		
Comments:				Comments:					
Yes	No	N/A	Environmental	Yes	No	N/A	WHMIS		
			No Visible Oil Releases and/or Staining Present				No Unlabelled Chemicals Observed		
			Waste Management Program in Place				MSDS sheets available		
			Housekeeping Program in Place/Clean and Orderly				Products Effectively Stored and Anchored (Where Applicable)		
			Spill Kits Available				Flammables Stored in Secure Non-Combustible Cabinet		
			Other:				Other:		
Comments:				Comments:					



Yes	No	N/A	<b>Fuel and Materials Storage</b>	Yes	No	N/A	<b>Compressed Gas &amp; Propane Cylinders</b>
			Secondary Containment Provided for Fuel Storage where required				Stored Upright and Secured
			Tanks Labeled with EC Registration Stickers				Caps in Place When Not in Use
			Properly Sized Spill Kit Available, as per LUP				Removed from Work Area When Empty
			Racks and Shelves Provided				Shut off at Bottle When Not Used
			Storage Areas Orderly				Equipment and Hoses in Good Repair
			Stacked Material Secured				Stored Away from Electrical Contact
			Pallets Stacked Securely				Not Stored in Stairways and Egress Routes
			Chemicals Properly Labeled and Properly Secured				Flashback Arrestors in Place
			Single Walled Tanks below Volume Threshold Requiring Secondary Containment, as per LUP				No Smoking Sign Posted and/or properly identified
			No Bottom Feed Tanks Present				Storage Racks Are Noncombustible (Steel)
			Fuel Tanks Are Protected from Traffic				
			Other:				Other:
Comments:				Comments:			
Yes	No	N/A	<b>Vehicles and Mobile Equipment</b>	Yes	No	N/A	<b>Fire Prevention</b>
			Equipment Maintenance Program in Place				Emergency Fire Equipment Available
			Warning devices operative (lights, back-up alarms)				Trained Fire Response Personnel in Place
			Speed limit observed				Extinguishers Available/Adequate and Identified
							"No Smoking" Posted As Required
			Extinguishers Installed/Inspected				Fire Drills Conducted
			Daily Pre-Operation Inspections Conducted (Log books completed /Walk Around Procedures)				Combustibles Properly Stored
							Smoking in Designated Areas Only
			Two-Way Radios in Use				Fire Alarm System in Place
			Hand Signal Procedures in Place				Fire extinguishers tested monthly (check to see if they are Labeled, charged and in working condition)
			Vehicles Are Generally Clean (Windows Free from Dust/Mud)				Fire blankets available where required
			Beacon and Buggy Whips Present on Vehicles (*Required at Mines Act Sites)				Records of fire extinguishers being serviced available
			Wheel Chocks in Place When Equipment in Park(*Required at Mines Act Sites)				Protection from welding flash in place
			Other:				Other:
Comments:				Comments:			
Yes	No	N/A	<b>At Risk Behaviors</b>	Yes	No	N/A	<b>Other Requirements/Specialties etc.</b>
			Failing to Use Adequate Personal Protection Equipment				Confined Spaces Identified
			Working Unsafely				Accident Prevention, Investigation and Reporting Program Apparent and in Place
			Unsafe Use of Tools or Equipment				Records of Safety Meetings and Tailgate Meetings Present
			Unsafe Conditions Present (please list)				Proper welding procedures in place
			Visible Signs of Drugs or Alcohol Use				Proactive HSE Items/Programs in Place
			Camp Rules not being followed				Racks and shelves provided
							Storage areas orderly
							Stretcher on site
							Appropriate Emergency Medical Transportation available on-site
							Adequate First Aid supplies present and First Aid attendant on site



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## Appendix 2 Daily Report Example

## Project Daily Report

<b>Client:</b>	PWGSC	<b>Report No.:</b>	48
<b>Project:</b>	CAM-A Environmental Site Remediation		
<b>Project No.:</b>	60300481	<b>PWGSC Project No.:</b>	R.040716
<b>Contractor:</b>	E. Gruben's Transport Ltd.	<b>Site Superintendent:</b>	Lee Visutski
<b>Location:</b>	CAM A (Sturt Point)		
<b>Day:</b>	Friday	<b>Date:</b>	July 18, 2014
<b>Temperature:</b>	5 C                      3 C	<b>From:</b>	7:00 AM                      7:00 PM
<b>Report by:</b>	Amber Zilinsky	<b>Weather:</b>	Rain, windy (>55 kph with gusts >90 kph)

**Number of Personnel On-Site :**

Company	Total # Workers	Total # Inuit - Beneficiary of the NLCA	Notes
AECOM	2	0	
EGT	14	7	
PWGSC or AANDC	0	0	
<b>Total</b>	<b>16</b>	<b>7</b>	
<b>Accidents/Incidents/H&amp;S Issues</b>			
None			
<b>Description</b>			
<b>Site Services and Maintenance</b>			
Regular camp services being provided.			
<b>Road Maintenance:</b> General road maintenance ongoing.			
<b>Remediation</b>			
<b>Granular Production:</b> Borrow development at BA-13.			
<b>Demolition / Hazmat Removal:</b> None.			
<b>Waste Collection &amp; Disposal:</b> None.			
<b>Buried Debris Areas:</b> Landfill regrade underway (Landfill A).			
<b>Contaminated Soil Excavation:</b> Tier II soil excavation completed to approximate design limits; waiting confirmatory sample results before backfilling. Type B soil excavation completed to approximate design limits; confirmatory sampling indicates further excavaton required.			
<b>Type B PHC Soil Treatment:</b> Soil samples submitted to laboratory; confirmatory sampling indicates soils are below applicable objectives.			
<b>Other:</b> Transport of various materials from Camp Area to beach area and TSA for eventual barge transport. Transport of excess granular material from BA-15 to barge landing.			
<b>Communications/Submissions</b>			
None			
<b>Environmental Inspection</b>			
None.			
<b>Notes</b>			
<b>Flights:</b> None			
<b>Casual meals:</b> None			
<b>Wildlife sightings:</b> Various Birds (Geese, Gulls, Ducks and Sandpipers), Rabbits			

**Vehicles and Heavy Equipment Use:**

No	Description	Comments	Hrs
1	CAT D6M Dozer	Landfill A Regrade	12
1	Komatsu PX31 Dozer	Landfill A (idle)	0
1	CAT 330 Excavator	Loading for Landfill Regrade	12
1	CAT 950G Loader	Camp Area (idle)	0
1	CAT 950B Loader	Camp Area (idle)	0
1	Kenworth Fuel Truck	Refuelling Runs	2
1	Tow-Behind Packer	Landfill A (idle)	0
1	Terex TA-27 Rock Truck	Landfill A Regrade	12
1	Terex TA-27 Rock Truck	Landfill A Regrade	12
1	Ford F250 Flat-Deck Pickup w/ Water Tank	Water Run	2
4	Ford F350 Pickup	Various Use Throughout Site	12
3	Quad ATV	Various Use Throughout Site	12
1	Quad ATV	Various Use Throughout Site	12
1	John Deere Gator ATV	Various Use Throughout Site	12
1	Kubota ATV	Various Use Throughout Site	12
1	Kubota ATV	Various Use Throughout Site	12

**Project Daily Photo Record:**



**Picture 1: Landfill A Regrade.**



**Picture 2: Borrow Area BA-13.**



**Picture 3: Transport of Excess Material from BA-15.**



**Picture 4: Barge Landing Restoration.**

## **Appendix 3 Example Table of Contents Post Construction Summary Report**

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## **Appendix 4 Quarterly Reporting**

### Quarterly Report Template Overview and Navigation

This Quarterly Report Template is made up of the following tabs. You can click on the buttons below to navigate to the various tabs. A brief description is provided next to each button.

Instructions	This tab provides a set of instructions for completing this template
Worksheet 1 - Emp & Training	This tab is used to track the socio-economic make-up of all personnel involved with this project - both your employees and those of your subcontractors. Employee gender, status as well as total hours worked and hours of training received are to be tracked in this sheet. <i>This data is used to determine whether departmental employment targets are being met, not to validate contract specific AOC targets.</i>
Worksheet 2 - Suppliers	This tab is used to compile data related to the project-related goods and services you have provided to the project, and to report on the socio-economic makeup of your organization, and that of your sub-contractors. <i>This data is used to determine whether departmental contractual targets are being met, not to validate contract specific AOC targets.</i>
Worksheet 3 - EHS and Events	This tab is used to compile data related to Environment, Health & Safety, as well as community consultations, media events and other engagements which you or your subcontractors have conducted.
Worksheet 1 - Example	Examples of completed worksheets are provided in these tabs for your reference.
Worksheet 2 - Example	
Worksheet 3 - Example	
Glossary	This tab provides definitions of key terms used in this template for your reference.

Quarterly Report Template Instructions		
<b>General:</b>		
Please complete and submit this Quarterly Report in accordance with the schedule below:		
<b>Report</b>	<b>Months Included</b>	<b>Due Date</b>
Q1 Report	April, May, June	
Q2 Report	July, August, September	
Q3 Report	October, November, December	
Q4 Report	January, February, March	
Please note that "Supplier" refers to the "Main Contractor" for the purposes of completing the attached worksheets.		
<b>Worksheet 1 - Employment and Training</b>		
<p><b>Purpose:</b> The purpose of this section is to compile data on all supplier employees and sub-contracted employees working on the project. The Contaminated Sites Program has set employment targets in its commitment to bring economic benefit to the North through the delivery of its contaminated sites projects.</p> <p>The data reported is used to determine whether the Northern Contaminated Sites Program is meeting its employment commitments under:</p> <ol style="list-style-type: none"> <li>2015-2020 Northern Affairs Organization Performance Measurement Strategy - Required by Treasury Board Secretariat's Policy on Transfer Payments and Policy on Evaluation.</li> <li>Departmental Performance Report (DPR) - The DPR is a report on the Plans and Priorities for the fiscal year as set by the Department, which includes the Northern Affairs Organization.</li> </ol> <p>Please note that this data is NOT being used to validate your AOC targets as part of your contract(s) relating to the project. Validation relating to your AOC targets is done by the Project Manager (PM) or the Departmental Representative (DR).</p>		
<b>Instructions:</b>		
<p><b>General:</b></p> <ul style="list-style-type: none"> <li>Data is to be completed for all main contractor employees including any/all sub-contracted employees working on the project.</li> <li>The same file/worksheets will be used by each main contractor for all four quarters, completing only the applicable quarter each time.</li> <li>Worksheets are only required for main contractors. It is expected that sub-contractor information is collected and presented in the main contractor worksheets.</li> <li>Do not re-arrange the order of the employees. It is important to keep all of the employees in the same order during reporting for all quarters such that it can be transferred effectively to the INAC quarterly report.</li> <li>New employees should be added to the bottom of the list, if they are required, for the subsequent quarter and highlighted in green.</li> <li>Do not delete employees from the list even if they no longer work on the project or are not required for a subsequent quarter.</li> </ul>		
<b>Supplier Name:</b>		
The Supplier Name is the name of the Main Contractor.		
<b>AOC Employment Target:</b>		
Please enter the employment target (%) as identified in the original contract. If there is no AOC Employment target, please enter "NA".		
<b>Relationship to Supplier:</b>		
If an employee works directly for the main contractor ENTER "Supplier Internal Resource". For employees who work for subcontractors please enter name of the subcontractor.		
<b>Employee ID:</b> This does not need to be the Employee name, it is a unique identifier as determined by the Supplier. Once set, it must remain the same from Q1 to Q4 for the specific employee it was assigned. Two employees may not have the same Employee ID.		
<b>Employee Category:</b>		
Only one box shall be checked with an "x" for each employee. Employees that have an AOC designation are considered to be Northern Aboriginal, though are tracked separately so that we can determine the benefit that the AOC Targets bring to Indigenous people in the North.		
<b>Total Hours Worked:</b>		
Please enter the hours worked by an employee for the respective reporting Quarter. This is not a running total. If no hours were worked by the employees, please enter zero. Do not leave blank and do not delete the employee.		
<b>Training:</b>		
For the various training categories please enter the number of hours spent on training for that specific quarter for each employee. This is not a running total. If no hours were spent in training by the employee, please enter zero.		
<b>Worksheet 2 - Suppliers</b>		
<p><b>Purpose:</b> The purpose of this section is to compile data related to the project related goods and services provided by the suppliers and their subcontractors. The Contaminated Sites Program has set contract targets in its commitment to bring economic benefit to the North through the delivery of its contaminated sites projects.</p> <p>The data reported is used to determine whether the Northern Contaminated Sites Program is meeting its contracting commitments under:</p> <ol style="list-style-type: none"> <li>2015-2020 Northern Affairs Organization Performance Measurement Strategy - Required by Treasury Board Secretariat's Policy on Transfer Payments and Policy on Evaluation.</li> </ol>		
<b>Instructions:</b>		
<p><b>General:</b></p> <ul style="list-style-type: none"> <li>Data is to be provided for any goods and services provided by the main contractor, and their subcontractors, related to the project. This includes main contractor and subcontractor fees. Main supplier/contractor fees are to be listed as a "Supplier Internal Cost" and subcontractor fees are to be included in the total recorded for the individual subcontractor.</li> <li>Worksheets are only required for main contractors. Subcontractor information must be collected and presented in the main contractor worksheets.</li> <li>The same file/worksheets will be used by each main contractor for all four quarters, completing only the applicable quarter each time.</li> <li>Do not rearrange the order of the internal resources and subcontractors. It is important to keep all of the resources and subcontractors in the same order during reporting, for all quarters, such that it can be transferred effectively to the INAC quarterly report.</li> <li>New main contractor resources and subcontractor resources should be added to the bottom of the list, if they are required, for a subsequent quarter and highlighted in green.</li> <li>Do not delete Supplier internal costs/subcontractors from the list, as identified in column C of the worksheet, even if they are no longer required for a subsequent quarter.</li> </ul>		
<b>Supplier Name:</b>		
The Supplier Name is the name of the Main Contractor.		
<b>AOC Financial Target:</b>		
Please enter the Financial target (%) as identified in the original contract. If there is no AOC Financial target, please enter "NA".		
<b>Supplier Categorization:</b>		
<ul style="list-style-type: none"> <li>Supplier Name - Name of the prime supplier/contractor who provided the goods or services. Contractor fees must be included here as a "Internal Supplier Cost". You may choose to list it separately from other "Internal Supplier Cost" line items, or combine them.</li> <li>If the goods and services are provided directly by the main contractor ENTER "Supplier Internal Costs".</li> <li>If the goods and services are provided by the Subcontractor ENTER the subcontractors name.</li> <li>Essentially, at the end of Q4 all costs that were billed should equal what is entered in this spreadsheet.</li> </ul>		
<b>Supplier Category:</b>		
Applicable to how the main contractor identifies themselves - only one box should be checked with an "x" per supplier/contractor. This is also applicable for the subcontractor.		
<b>Supplier Utilization:</b>		
Use this Quarter - If project related goods or services was used in a particular quarter, for which is being reported, put an "x" in this column. Will assume if left blank, that it was not used for that particular quarter. It is necessary to put an "x" if a cost is indicated for the quarter, or the costs will not tabulate.		
<b>Value (\$):</b>		
In each Quarter where project related goods or services have been supplied by a main supplier/contractor or subcontractor, place the total value of the goods and/or services provided during the quarter. This is not a running total.		
<ul style="list-style-type: none"> <li>Do not include GST in the Value costs.</li> <li>It is necessary to put an "x" if a cost is indicated for the quarter, or the costs will not tabulate.</li> </ul>		
<b>Worksheet 3 - EHS &amp; Events</b>		
<p><b>Purpose:</b> To compile data related to Environmental Health and Safety, as well as statistics such as numbers of community consultations, engagements and media events.</p>		
<b>Instructions:</b>		
<b>General:</b>		
Enter your company name in the Supplier area. Enter statistics as required. You are expected to roll up your subcontractor EHS/Event data and combine with your company's data into your report.		

















### Worksheet 3 - EHS and Events

Supplier Name	
---------------	--

Categories	Metrics	Quarter: 1
<b>EHS Performance</b>		
<b>Incidents, Inspections and Audits</b>		
<b>Safety Incidents</b>	Major Incident	# of incidents
	Moderate Incident	# of incidents
	Minor Incident	# of incidents
	Near misses	# of near misses
<b>Environmental Incidents</b>	Environmental Incidents	# of incidents
	Spill Volume (L)	
<b>Inspections / Audits</b>	Inspections/Audits (external)	# performed
		# non-compliances
	Inspections/Audits (internal)	# performed
		# non-compliances
<b>Other Corrective Actions</b>	New procedures	# procedures
	Other initiatives	# initiatives
<b>Consultations, Engagements and Media Events</b>		
<b>Events</b>	Consultations	# consultations
		# persons
	Community Engagements	# community engagements
		# persons
	Media Events	# media events

### Worksheet 3 - EHS and Events

Supplier Name	
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Categories	Metrics	Quarter: 2
<b>EHS Performance</b>		
<b>Incidents, Inspections and Audits</b>		
<b>Safety Incidents</b>	Major Incident	# of incidents
	Moderate Incident	# of incidents
	Minor Incident	# of incidents
	Near misses	# of near misses
<b>Environmental Incidents</b>	Environmental Incidents	# of incidents
		Spill Volume (L)
<b>Inspections / Audits</b>	Inspections/Audits (external)	# performed
		# non-compliances
	Inspections/Audits (internal)	# performed
		# non-compliances
<b>Other Corrective Actions</b>	New procedures	# procedures
	Other initiatives	# initiatives
<b>Consultations, Engagements and Media Events</b>		
<b>Events</b>	Consultations	# consultations
		# persons
	Community Engagements	# community engagements
		# persons
	Media Events	# media events

## Worksheet 3 - EHS and Events

Supplier Name

Categories	Metrics	Quarter: 3
<b>EHS Performance</b>		
<b>Incidents, Inspections and Audits</b>		
<b>Safety Incidents</b>	Major Incident	# of incidents
	Moderate Incident	# of incidents
	Minor Incident	# of incidents
	Near misses	# of near misses
<b>Environmental Incidents</b>	Environmental Incidents	# of incidents
		Spill Volume (L)
<b>Inspections / Audits</b>	Inspections/Audits (external)	# performed
		# non-compliances
	Inspections/Audits (internal)	# performed
		# non-compliances
<b>Other Corrective Actions</b>	New procedures	# procedures
	Other initiatives	# initiatives
<b>Consultations, Engagements and Media Events</b>		
<b>Events</b>	Consultations	# consultations
		# persons
	Community Engagements	# community engagements
		# persons
	Media Events	# media events

### Worksheet 3 - EHS and Events

Supplier Name	

Categories	Metrics	Quarter: 4
<b>EHS Performance</b>		
<b>Incidents, Inspections and Audits</b>		
<b>Safety Incidents</b>	# of incidents	
Major Incident	# of incidents	
Moderate Incident	# of incidents	
Minor Incident	# of incidents	
Near misses	# of near misses	
<b>Environmental Incidents</b>	# of incidents	
Environmental Incidents	Spill Volume (L)	
<b>Inspections / Audits</b>	# performed	
Inspections/Audits (external)	# non-compliances	
Inspections/Audits (internal)	# performed	
Inspections/Audits (internal)	# non-compliances	
<b>Other Corrective Actions</b>	# procedures	
Other initiatives	# initiatives	
<b>Consultations, Engagements and Media Events</b>		
<b>Events</b>	# consultations	
Consultations	# persons	
Community Engagements	# community engagements	
Community Engagements	# persons	
Media Events	# media events	





**Worksheet 1 - Employment and Training Record**

Supplier Name ACME General Construction	AOC Employment Target (%) 25%
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Relationship to Supplier: Please specify "Supplier Internal Resource" or indicate the Subcontractor Name if applicable	Employee Categorization						Employee ID	Employee Gender
	Southern, Aboriginal	Southern, Aboriginal	Northern, Aboriginal	Northern, Non-Aboriginal	Aboriginal	Aboriginal		
Supplier Internal Resource Emp 1							M	
Supplier Internal Resource Emp 2							F	
Supplier Internal Resource Emp 3							M	
Supplier Internal Resource Emp 4							F	
Supplier Internal Resource Emp 5							M	
Supplier Internal Resource Emp 6							F	
Supplier Internal Resource Emp 7							M	
Supplier Internal Resource Emp 8							F	
Expert Abatement Inc EA Emp 1							M	
Expert Abatement Inc EA Emp 2							F	
Expert Abatement Inc EA Emp 3							M	
Expert Abatement Inc EA Emp 4							F	
Northern Excavation NE Emp 1							M	
Northern Excavation NE Emp 2							F	
Northern Excavation NE Emp 3							M	
PM Project Management PM Emp 1							F	
PM Project Management PM Emp 2							M	

Total Hours Worked by Employee for Current Quarter	EHS						Training						General Training (Non-EHS)
	Policy & Proc Awareness	HAZWOPR	WHMIS	First Aid	Wildlife safety and Health and Safety	Water safety	Fire response	Other	Spills response	Other	Environmental		
229.00	9.00	2.00	8.00	3.00	-	-	9.00	7.00	6.00	9.00	9.00	9.00	9.00
274.00	3.00	2.00	-	8.00	7.00	9.00	2.00	3.00	7.00	9.00	9.00	8.00	8.00
14.00	9.00	4.00	7.00	-	5.00	5.00	5.00	7.00	9.00	1.00	5.00	5.00	5.00
111.00	1.00	2.00	10.00	9.00	6.00	9.00	1.00	-	5.00	6.00	6.00	2.00	2.00
39.00	9.00	-	6.00	-	7.00	10.00	3.00	4.00	1.00	9.00	2.00	2.00	2.00
68.00	9.00	6.00	2.00	9.00	5.00	4.00	3.00	6.00	9.00	5.00	6.00	6.00	6.00
226.00	-	-	9.00	8.00	4.00	-	3.00	9.00	-	10.00	-	2.00	2.00
88.00	1.00	-	7.00	10.00	3.00	3.00	-	9.00	1.00	1.00	1.00	9.00	9.00
88.00	9.00	10.00	6.00	6.00	3.00	8.00	2.00	2.00	3.00	8.00	7.00	7.00	7.00
45.00	1.00	9.00	9.00	7.00	5.00	9.00	7.00	3.00	5.00	2.00	10.00	10.00	10.00
42.00	1.00	4.00	8.00	10.00	7.00	2.00	9.00	8.00	6.00	3.00	9.00	9.00	9.00
74.00	8.00	5.00	9.00	4.00	3.00	3.00	5.00	8.00	5.00	3.00	9.00	4.00	4.00
218.00	10.00	-	1.00	-	2.00	4.00	9.00	-	9.00	7.00	9.00	4.00	4.00
99.00	2.00	9.00	4.00	7.00	-	1.00	4.00	6.00	9.00	7.00	9.00	1.00	5.00
173.00	8.00	5.00	5.00	1.00	8.00	5.00	4.00	2.00	9.00	4.00	9.00	4.00	5.00
236.00	-	6.00	5.00	6.00	-	5.00	10.00	1.00	9.00	-	6.00	6.00	1.00
51.00	1.00	1.00	5.00	4.00	-	3.00	10.00	9.00	9.00	1.00	1.00	4.00	4.00

**Worksheet 1 - Employment and Training Record**

<b>Supplier Name</b>	AOC Employment Target (%)
ACME General Construction	25%

Relationship to Supplier: Please specify "Supplier Internal Resource" or "Internal Resource" or indicate the Subcontractor Name if applicable 1	Employee Categorization						Employee ID 2	Employee Gender	Employee Category 3										
	Southern, Non-Aboriginal	Southern, Aboriginal	Non-Northern, Non-Aboriginal	Non-Northern, Aboriginal	Northern, Aboriginal	Aboriginal Opportunity Consideration													
Supplier Internal Resource							Emp 1	M											
Supplier Internal Resource							Emp 2	F											
Supplier Internal Resource							Emp 3	M											
Supplier Internal Resource							Emp 4	F											
Supplier Internal Resource							Emp 5	M											
Supplier Internal Resource							Emp 6	F											
Supplier Internal Resource							Emp 7	M											
Supplier Internal Resource							Emp 8	F											
Expert Abatement Inc							EA Emp 1	M											
Expert Abatement Inc							EA Emp 2	F											
Expert Abatement Inc							EA Emp 3	M											
Expert Abatement Inc							EA Emp 4	F											
Northern Excavation							NE Emp 1	M											
Northern Excavation							NE Emp 2	F											
Northern Excavation							NE Emp 3	M											
PM Project Management							PM Emp 1	F											
PM Project Management							PM Emp 2	M											

Total Hours Worked by Employee for Current Quarter	EHS										EHS		EHS		EHS		EHS		General Training (Non-EHS)	
	Policy & Proc Awareness	HAZWOPR	WHMIS	First Aid	Wildlife safety	Water safety	Fire response	Other	Spills response	Other	Environmental	Other								
174.00	3.00	7.00	3.00	1.00	1.00	-	10.00	2.00	2.00	9.00	2.00	9.00	2.00	9.00	2.00	9.00	2.00	9.00	2.00	9.00
44.00	10.00	2.00	-	3.00	2.00	2.00	10.00	4.00	4.00	6.00	4.00	6.00	4.00	6.00	4.00	6.00	4.00	6.00	4.00	6.00
122.00	7.00	10.00	4.00	10.00	4.00	4.00	2.00	8.00	2.00	8.00	5.00	7.00	8.00	5.00	7.00	10.00	8.00	5.00	7.00	10.00
159.00	2.00	3.00	2.00	4.00	7.00	3.00	-	3.00	-	3.00	-	4.00	3.00	-	4.00	6.00	3.00	-	4.00	6.00
31.00	6.00	-	3.00	9.00	4.00	7.00	2.00	9.00	-	9.00	-	9.00	-	9.00	-	2.00	9.00	-	2.00	9.00
129.00	7.00	9.00	5.00	4.00	4.00	7.00	1.00	4.00	4.00	1.00	4.00	1.00	4.00	1.00	4.00	1.00	4.00	1.00	4.00	1.00
50.00	10.00	-	-	10.00	10.00	5.00	-	2.00	-	3.00	-	3.00	-	3.00	-	7.00	1.00	-	7.00	1.00
41.00	6.00	2.00	-	5.00	4.00	-	2.00	1.00	1.00	10.00	1.00	10.00	1.00	10.00	1.00	6.00	1.00	1.00	6.00	1.00
168.00	9.00	8.00	8.00	2.00	-	3.00	1.00	8.00	1.00	3.00	1.00	8.00	1.00	3.00	1.00	7.00	1.00	3.00	7.00	1.00
173.00	10.00	4.00	6.00	7.00	10.00	3.00	1.00	10.00	1.00	5.00	1.00	10.00	1.00	5.00	1.00	7.00	1.00	5.00	7.00	1.00
157.00	9.00	2.00	9.00	4.00	5.00	10.00	4.00	8.00	4.00	10.00	4.00	8.00	4.00	10.00	4.00	10.00	4.00	10.00	4.00	10.00
190.00	9.00	8.00	7.00	10.00	6.00	5.00	10.00	7.00	6.00	5.00	10.00	7.00	6.00	5.00	10.00	7.00	6.00	5.00	10.00	7.00
273.00	-	8.00	5.00	7.00	4.00	2.00	7.00	4.00	2.00	6.00	6.00	4.00	2.00	6.00	6.00	4.00	2.00	6.00	6.00	4.00
88.00	-	3.00	6.00	10.00	9.00	-	5.00	8.00	-	8.00	-	8.00	-	8.00	-	3.00	6.00	-	3.00	6.00
22.00	10.00	9.00	9.00	4.00	7.00	5.00	10.00	4.00	7.00	5.00	10.00	4.00	7.00	5.00	10.00	4.00	7.00	5.00	10.00	4.00
284.00	8.00	-	4.00	3.00	6.00	1.00	6.00	1.00	6.00	1.00	6.00	1.00	6.00	1.00	6.00	1.00	6.00	1.00	6.00	1.00
286.00	2.00	2.00	1.00	2.00	4.00	-	5.00	2.00	4.00	-	5.00	2.00	4.00	-	5.00	2.00	4.00	-	5.00	2.00









### Worksheet 3 - EHS and Events

Supplier Name	ACME General Construction
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Categories		Metrics	Quarter: 1
<b>EHS Performance</b>			
<b>Incidents, Inspections and Audits</b>			
<b>Safety Incidents</b>			
	Major Incident	# of incidents	0
	Moderate Incident	# of incidents	0
	Minor Incident	# of incidents	0
	Near misses	# of near misses	0
<b>Environmental Incidents</b>			
	Environmental Incidents	# of incidents	1
<b>Inspections / Audits</b>			
	Inspections/Audits (external)	Spill Volume (L)	355
		# performed	1
	Inspections/Audits (internal)	# non-compliances	2
		# performed	2
		# non-compliances	0
<b>Other Corrective Actions</b>			
	New procedures	# procedures	0
	Other initiatives	# initiatives	1
<b>Consultations, Engagements and Media Events</b>			
<b>Events</b>			
	Consultations	# consultations	1
		# persons	25
	Community Engagements	# community engagements	0
		# persons	0
	Media Events	# media events	1

### Worksheet 3 - EHS and Events

<b>Supplier Name</b>
ACME General Construction

Categories		Metrics	Quarter: 2
<b>EHS Performance</b>			
<b>Incidents, Inspections and Audits</b>			
<b>Safety Incidents</b>			
	Major Incident	# of incidents	1
	Moderate Incident	# of incidents	1
	Minor Incident	# of incidents	2
	Near misses	# of near misses	1
<b>Environmental Incidents</b>			
	Environmental Incidents	# of incidents	0
	Spill Volume (L)		0
<b>Inspections / Audits</b>			
	Inspections/Audits (external)	# performed	0
	Inspections/Audits (internal)	# non-compliances	0
		# performed	0
		# non-compliances	0
<b>Other Corrective Actions</b>			
	New procedures	# procedures	0
	Other initiatives	# initiatives	0
<b>Consultations, Engagements and Media Events</b>			
<b>Events</b>			
	Consultations	# consultations	2
		# persons	10
	Community Engagements	# community engagements	1
		# persons	60
	Media Events	# media events	0

### Worksheet 3 - EHS and Events

Supplier Name
ACME General Construction

Categories		Metrics	Quarter: 3
<b>EHS Performance</b>			
Incidents, Inspections and Audits			
Safety Incidents			
	Major Incident	# of incidents	0
	Moderate Incident	# of incidents	0
	Minor Incident	# of incidents	0
	Near misses	# of near misses	0
Environmental Incidents			
	Environmental Incidents	# of incidents	0
	Spill Volume (L)		0
Inspections / Audits			
	Inspections/Audits (external)	# performed	0
	Inspections/Audits (internal)	# non-compliances	0
		# non-compliances	0
Other Corrective Actions			
	New procedures	# procedures	0
	Other initiatives	# initiatives	0
<b>Consultations, Engagements and Media Events</b>			
Events			
	Consultations	# consultations	0
		# persons	0
	Community Engagements	# community engagements	0
		# persons	0
	Media Events	# media events	0

### Worksheet 3 - EHS and Events

Supplier Name
ACME General Construction

Categories		Metrics	Quarter: 4
<b>EHS Performance</b>			
<b>Incidents, Inspections and Audits</b>			
<b>Safety Incidents</b>	Major Incident	# of incidents	1
	Moderate Incident	# of incidents	0
	Minor Incident	# of incidents	0
	Near misses	# of near misses	0
<b>Environmental Incidents</b>	Environmental Incidents	# of incidents	0
	Spill Volume (L)		0
<b>Inspections / Audits</b>	Inspections/Audits (external)	# performed	0
		# non-compliances	0
	Inspections/Audits (internal)	# performed	2
		# non-compliances	0
<b>Other Corrective Actions</b>	New procedures	# procedures	1
	Other initiatives	# initiatives	1
<b>Consultations, Engagements and Media Events</b>			
<b>Events</b>	Consultations	# consultations	0
		# persons	0
	Community Engagements	# community engagements	3
	Media Events	# persons	75
		# media events	0

Glossary	
Term:	Definition:
Aboriginal Employee	Section 35 of the Constitution Act recognizes three groups of Aboriginal people (Indians, Métis and Inuit) as descendants of the original inhabitants of North America. For the purposes of the socio-economic employment and training data, the Aboriginal Employee categories include First Nation, Inuit and/or Métis individuals who are working, either on-site or off-site, performing services related to the project for a contractor, subcontractor or supplier who has a contract with INAC or PWGSC to do work related to the project. Aboriginal employees of INAC or PWGSC are not included in this category.
Aboriginal Opportunities Consideration (AOC)	Point-rated evaluation criteria used within a competitive solicitation process which evaluate Bidders on the basis of the type and extent of commitments made to maximizing participation from the Indigenous population within the affected land claim area. Bidders are required to submit an AOC proposal demonstrating their proposed approach to implementing this component. Upon Award, the successful Bidder's proposed AOC target become a firm commitment under the contract.
Aboriginal Supplier	As defined by the Procurement Strategy for Aboriginal Business, an enterprise that is: a sole proprietorship, limited company, cooperative, or not-for-profit organization in which Aboriginal persons have majority ownership and control (meaning at least 51 percent), and in which, in the case of a business enterprise with six or more full time employees, at least 33 percent of the full-time employees are Aboriginal persons; or, a joint venture or consortium in which an Aboriginal business or Aboriginal businesses as defined above have at least 51 percent ownership and control.
Awareness – EHS Policy and Procedures Training	General training, provided to individuals working on the project site, related to the Environmental Health and Safety (EHS) policies and procedures that apply to the site.
Community Engagement	Includes events that involve the community that are not considered formal Consultations to fulfill Duty to Consult requirements. Examples of engagement activities include meetings, workshops, discussion groups, formal dialogue, sharing knowledge, site tours, and other activities where input is sought related to the project.
Consultation	Formal Consultations that fulfill the Duty to Consult requirements related to the potential or established Aboriginal or Treaty rights recognized and affirmed in section 35 of the Constitution Act, 1982. The specific requirements for formal Consultation are outlined in the Government of Canada document: Aboriginal Consultation and Accommodation Updated Guidelines for Federal Officials to Fulfill the Duty to Consult (March 2011). Please see:
	<a href="http://www.asdnc-aandc.gc.ca/eng/1100100014664/1100100014675">http://www.asdnc-aandc.gc.ca/eng/1100100014664/1100100014675</a>
Corrective Action	A corrective action within the project, on-site, which is implemented to improve operations, reduce risk to health and safety and/or the environment. Generally, this new procedure would be a direct result of an incident, inspection and/or audit.
Environmental Incident	<p><b>A release or spill that is reportable as stipulated in federal or territorial legislation or in a license or permit applicable to the project.</b> Resources to determine whether a spill or release needs to be reported can be found through the following resources:</p> <ul style="list-style-type: none"> <li>• Yukon – Schedule A of the Spill Regulations of the Environment Act, Please see: <a href="http://www.env.gov.yk.ca/environment-you/spills.php">http://www.env.gov.yk.ca/environment-you/spills.php</a></li> <li>• Northwest Territories – Schedule B of the Spill Contingency Planning and Reporting Regulations. See: <a href="http://www.enr.gov.nt.ca/sites/default/files/reports/guide%20to%20spill%20contingency%20planning%20and%20reporting.pdf">http://www.enr.gov.nt.ca/sites/default/files/reports/guide to spill contingency planning and reporting.pdf</a></li> <li>• Nunavut - Schedule B of Consolidation of Spill Contingency Planning and Reporting Regulations . <a href="http://www.gov.nu.ca/sites/default/files/gnjustice2/justice/documents/Consolidated%20Law/Original/ENVIRONMENTAL%20PROTECTION%20ACT/633404216382987500-243762148-Reg558.pdf">http://www.gov.nu.ca/sites/default/files/gnjustice2/justice/documents/Consolidated%20Law/Original/ENVIRONMENTAL%20PROTECTION%20ACT/633404216382987500-243762148-Reg558.pdf</a></li> <li>• Federal - Canadian Environmental Protection Act (CEPA, 1999). For releases: Sections 95, 169, 179 and 212. For environmental emergencies: Section 201. Fisheries Act. "If there occurs a deposit of a deleterious substance in water frequented by fish that is not authorized under this Act, or if there is a serious and imminent danger of such an occurrence, and detriment to fish habitat or fish or to the use by humans of fish results or may reasonably be expected to result from the occurrence, then every person shall without delay notify an inspector, a fishery officer or an authority prescribed by the regulations if the person at any material time."</li> </ul> <p><b>CEPA and Fisheries Act reporting requirements and contact information:</b> <a href="https://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=EED2E58C-1">https://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=EED2E58C-1</a></p>
First Aid Training	Emergency First Aid, Wilderness First Aid, Cardiopulmonary Resuscitation (CPR) Level C training provided to individuals working on the project site.
HAZWOPER Training	Occupational Safety and Health Administration (OSHA, USA) Hazardous Waste Operations and Emergency Response (HAZWOPER) training provided to individuals working on the project site.
Inspections/Audits (external)	<p>An environmental, health and safety site inspection or audit performed by a third party expert:</p> <ul style="list-style-type: none"> <li>•A representative of an authority that has jurisdiction over the site, excluding INAC;</li> <li>•A consultant retained by INAC;</li> <li>•A representative from the project management body, excluding INAC (e.g. Territory, or Third Party Site Operator, Owner or Lessee).</li> </ul>
Inspections/Audits (internal)	An environmental, health and safety site inspection or audit performed by INAC staff.
Major Incident	An incident resulting from activities performed at the project site that results in a severe and irreversible disability, impairment, injury, illness or fatality to an individual or individuals.
Media Events	Any radio, television, social media, Internet or newspaper reports and/or media tours that cover the project.
Minor Incident	An incident resulting from activities performed at the project site that results in injury or illness that inconveniences an individual or individuals.
Moderate Incident	An incident resulting from activities performed at the project site that results in a reversible disability, impairment, injury or illness that temporarily alters the lives of an individual or individuals.
Near Misses	An incident resulting from activities performed at the project site, which did not result in any disability, impairment, injury, illness or fatality, but had the potential to do so.
New Procedure	A new procedure within the project, on-site, which is implemented to improve operations, reduce risk to health and safety and/or the environment. Generally, this new procedure would be a direct result of an incident, inspection and/or audit.
Northern Employee	A person with permanent residence of greater than six months in any of the three territories. Does not include employees of INAC or PWGSC.
Northern Supplier	A company with a head office, or other regional office, in any of the three territories.
Quarter	Q1 = April to June (inclusive), Q2 = July to September (inclusive), Q3 = October to December (inclusive), Q4 = January to March (inclusive)
WHMIS Training	Workplace Hazardous Materials Information System (WHMIS) training provided to individuals working on the project site.

## **Appendix 5 Example Land Use Permit and Water License**



## SAHTU Land and Water Board Water Licence

Pursuant to the *Mackenzie Valley Resource Management Act*, the *Waters Act* and Regulations, the SAHTU Land and Water Board, hereinafter referred to as the Board, hereby grants to

**Aboriginal Affairs and Northern Development Canada (AANDC) –  
Contaminant and Remediation Directorate (CARD)**

(licencee)

of **Box 1500, Yellowknife, NT X1A 2R3**  
(Mailing Address)

hereinafter called the Licencee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Mackenzie Valley Resource Management Act*, the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this licence.

Licence Number	<u>S15L8-001</u>
Licence Type	<u>"B"</u>
Location	<u>Great Bear Lake Mine Sites: Sawmill Bay, Silver Bear Mines, El Bonanza/Bonanza Mines and Contact Lake Mine</u>
Purpose	<u>Water use and Waste disposal reclamation and remediation of mining sites</u>
Effective Date of Licence	<u>July 24, 2015</u>
Expiry Date of Licence	<u>July 23, 2017</u>

This Licence issued and recorded at Fort Good Hope includes and is subject to the annexed conditions.

SAHTU Land and Water Board

  
Witness

  
Chairman

**This Licence and conditions shall be kept on site.  
If you have any questions please call the SAHTU Land & Water Board at  
(867) 598-2413**

**SAHTU LAND AND WATER BOARD**  
**Water Licence**

**LICENSEE:** AANDC-CARD

**LICENCE NUMBER:** S15L8-001

**EFFECTIVE DATE OF LICENCE ISSUANCE:** July 24, 2015

**TERM OF THE LICENCE:** Two (2) years

**TERMS AND CONDITIONS**

**Table of Contents**

Part A:	Scope and Definitions
Part B:	General Conditions Annual Report – Schedule 1
Part C:	Conditions Applying to Water Use
Part D:	Conditions Applying to Waste Disposal
Part E:	Conditions Applying to Abandonment and Restoration
Part F:	Conditions Applying to Stream Crossings
Part G:	Conditions Applying to Modifications
Part H:	Conditions Applying to Contingency Planning
Part I:	Conditions Applying to Undertaking



## **PART A: SCOPE AND DEFINITIONS**

### **1. Scope**

- a) This Licence entitles Aboriginal Affairs and Northern Development Canada - Contaminants and Remediation Directorate (AANDC-CARD), the use of Waters and depositing of Waste for miscellaneous undertakings in remediation and restoration of the Great Bear Lake Mine Sites and associated uses in the Northwest Territories:

Site	Latitude (°N)	Longitude (°W)	Area (ha)
Silver Bear Mines			4165
- Terra Mine	65.6042	118.1153	
- Northrim Mine	65.6011	117.9669	
- Smallwood Mine	65.5667	117.9333	
- Norex & Graham Vein	65.5833	117.8932	
Contact Lake Mine	65.9833	117.8000	1480
El Bonanza/Bonanza	66.0078	118.1306	875
Sawmill Bay	65.7206	118.9206	2322

- b) This Licence entitles AANDC-CARD to use water for miscellaneous undertakings, in remediation and reclamation and associated uses, for camp use, and decontamination. The water sources are as follows:

Water Source	Volume (m <sup>3</sup> )	Latitude (°N)	Longitude (°W)
Camsell River (PII)	100		
Great Bear Lake (PIII)	100		

- c) This Licence is issued, subject to the conditions contained herein, with respect to the taking of water and the depositing of Waste of any type in any Waters or in any place under any conditions where such waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor-in-Council under the *Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations; and
- d) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.



## **2. Definitions**

In this Licence: S15L8-001

**Act** means the *Mackenzie Valley Resource Management Act* and/or the *Waters Act*, S.N.W.T. 2014. C.18.

**Analyst** means an Analyst designated by the Minister under Section 65(1) of the *Waters Act*.

**Blackwater** means waste from toilets

**Baseline** means pre-remediation water quality monitoring conditions

**Bagged Toilet Waste Disposal Facility** means the area and associated infrastructure designed to contain bagged Toilet Wastes (honey bags) as describe in an approved Waste Management Plan.

**Board** means the Sahtu Land and Water Board established under Section 60(1) of the *Mackenzie Valley Resource Management Act*.

**Contingency Planning** means a plan to establish a state of readiness that will enable prompt and effective response to possible spill or system failure.

**Discharge** means the direct or indirect release of any Water or Waste to the Receiving Environment.

**Engagement Plan** means a document, developed in accordance with the *Board's Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits* describing proposed engagement with affected parties and stakeholders for the life of the proposed undertaking.

**Licensee** means the holder of this Licence.

**Freeboard** means the vertical distance between the water line and the crest on a dam or dyke's upstream slope

**Greywater** means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes.

**Minister** means a duly appointed member of the Executive Council who is responsible for the *Act* or the department responsible for administering that *Act*.

**Ordinary High Water Mark** means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level. In inland lakes, wetlands, or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately



aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

**Process Water** means water used for, but not limited to, washing drums, barrels, equipment, soil and buildings and the decontamination of items and objects related to remediation and reclamation.

**Receiving Environment** means the aquatic environment that receives Water or Waste released from an undertaking.

**Regulations** means Regulations proclaimed pursuant to Section 63 of the *Act*.

**Remediation** means the removal, reduction or neutralization of substances, Wastes or hazardous materials from a site so as to prevent or minimize any adverse effects on the environment nor or in the future

**Sewage** means all toilet wastes (Black water) and greywater.

**Spill Contingency Plan** means a document, developed in accordance with Indian and Northern Affairs Canada's *Guidelines for Contingency Planning* that describes the set of procedures to be implemented to minimize the effects of a spill.

**Surveillance Network Program** means a monitoring program established to define environmental sampling and analysis requirements, to collect water quality data, and to assess Discharge quality, Licence compliance, and potential impact to the environment.

**Toilet Wastes** means all human excreta and associated products, but does not include greywater (see Blackwater).

**Toxicity Bioassays** means tests used to determine if components that might be harmful to vegetation, microorganisms, aquatic species, as well as animals or humans are present, but are not normally detected in routine chemical analysis.

**Waste** means waste as defined by Section 1 of the *Waters Act*.

**Waste Disposal Facilities** mean all facilities designated for the disposal of Waste.

**Waste Management Plan (WMP)** – a document, developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan* that describes the methods of waste management from waste generation to final disposal.

**Watercourse** means a natural watercourse, body of water or water supply, whether usually containing water or not, and includes groundwater, springs, swamps, and gulches, as defined in the Northwest Territories Waters Regulations.

**Water Licence Inspector** means an Inspector designated by the Minister under Section 9 of the *Waters Act*.

**Water Quality Monitoring Plan** means the document included in Appendix G of the application.



**Waters** means any inland water, whether in a liquid or frozen state, on or below the surface of the land in the Northwest Territories;



## **PART B: GENERAL CONDITIONS**

1. The Licensee shall ensure that a copy of this Licence is maintained at the Project site at all times.
2. The Licensee shall manage Waters and Waste with the objective of minimizing the effects of the Project activities on the quality of Waters in the Receiving Environment through the appropriate use of mitigation measures, monitoring, and follow-up actions.
3. The Licensee shall operate in accordance with any Management Plan(s) approved pursuant to the conditions of this Licence and with any revision to the Plans as may be made from time to time.
4. The Licensee shall comply with the Schedules, which are annexed and form part of the Licence.
5. The Licensee shall comply with the “**Surveillance Network Program**” annexed to this Licence, and any amendment to the said “**Surveillance Network Program**” as may be made from time to time.
6. The “**Surveillance Network Program**” may be modified at the discretion of the Board.
7. No later than March 31<sup>st</sup> of the year following the calendar year reported, the Licensee shall file an **Annual Report** with the Board for the life of the Water Licence which shall contain the information set out in Schedule 1, Item 1.
8. Meters, devices or other such methods used for measuring the volumes of water used shall be installed, operated and maintained by the Licensee to the satisfaction of the Board and the Water Licence Inspector.
9. The Licensee shall within thirty (30) days of the issuance of this Licence, post the necessary signs, where applicable, to identify the stations of the “**Surveillance Network Program**”. All postings shall be located and maintained to the satisfaction of the Water Licence Inspector. Within this timeframe, the submission of a map and GPS coordinates is also required for all “**Surveillance Network Program**” stations.
10. The Licensee shall submit the results of the **Annual Summer Site Inspection** to the Board in the **Annual Report** as set out in Schedule 1, which shall contain the details and results of the inspection as set out in Part E, Item 3.
11. The Licensee shall adhere to the approved **Engagement Plan**. The Plan shall be in accordance with the Mackenzie Valley Land and Water Board’s *Engagement Guidelines for Applicants and Holders of Land Use Permits and Water Licences*, (2014), or subsequent versions.
12. The Licensee shall review the **Engagement Plan** annually and shall submit updates to the Board for approval at the following times:
  - a) A minimum of 60 days prior to any proposed changes to the approved Plan; and
  - b) Upon the request of the Board.



## **PART C: CONDITIONS APPLYING TO WATER USE**

1. The Licensee shall obtain all fresh water for miscellaneous undertakings, for remediation and reclamation and associated uses, for camp use and decontamination from water sources identified in the application and listed above in Part A, or as otherwise approved by the Inspector.
2. Water obtained for miscellaneous undertakings, in remediation and reclamation and associated uses, includes water taken for camp use and decontamination.
3. The annual quantity of freshwater used for all purposes shall not exceed 100 cubic metres.
4. The water intake hoses and/or pumps shall be equipped with a screen designed to ensure no entrainment or impingement of fish, as per DFO requirements.
5. The Licensee shall minimize the total amount of Waters used by the Project using appropriate water conservation methods, such as but not limited to, recycling of Process Water.
6. The Licencee shall maintain water uptake logs for all utilized sources. The water uptake logs shall include the following information: identification of water source, volume of water withdrawn per trip in cubic meters, cumulative uptake per source, time of uptake, date of uptake, and contractor and employee identification.



#### **PART D: CONDITIONS APPLYING TO WATER AND WASTE MANAGEMENT**

1. The Licensee shall ensure that any fuels, chemicals or Waste(s) associated with this undertaking do not enter any Waters.
2. Prior to the commencement of site activities, the Licensee shall design and submit to the Board for approval a Domestic **Waste Management Plan** which contains the following:
  - a) A detailed list of waste treatment and disposal plans
  - b) A listing of expected waste types and quantities to be shipped off-site.
  - c) Treatment, testing and disposal methods for all waste products to be transported off-site.
3. The Licensee shall operate in accordance with the **Waste Management Plan**, once approved. The Plan shall be in accordance with the Mackenzie Valley Land and Water Board's Guidelines for Developing a Waste Management Plan (2011), or subsequent editions.
4. The Licensee shall dispose of all Blackwater, Sewage, Grey water and Process Water as described in the approved **Waste Management Plan**, unless otherwise authorized in writing by an Inspector.
5. The Licensee shall review the **Waste Management Plan** annually and shall submit updates to the Board for approval at the following times:
  - a) A minimum of 60 days prior to any proposed changes to the approved Plan; and
  - b) Upon request of the Board.
6. All Hazardous Wastes must be handled according to the *Transportation of Dangerous Goods Act* and removed for disposal to an approved waste disposal facility outside of the Northwest Territories.
7. The Licensee shall notify the Board and the Water Licence Inspector, in writing, forty-eight (48) hours prior to the shipping of any Hazardous Wastes.
8. The Licensee shall not at any time deposit Hazardous Wastes into a Solid Waste Facility in the Northwest Territories.
9. Absorbent material used to collect spills shall be disposed of in accordance with the Waste Management Plan, once approved.



10. All Sewage and Grey Water effluent discharged from the Project at the “Surveillance Network Program” Stations shall meet the following effluent quality standards:

PARAMETER	MAX. CONCENTRATION
Suspended Solids	100 mg/L
Mineral Oil and Grease	5 mg/L
BOD <sub>5</sub>	100 mg/L
Fecal Coliforms	1 x 10 <sup>4</sup> CFU/100mL

11. All Process water effluent discharged from the process water treatment plant will meet the appropriate criteria for the following:

Parameter	Concentration Limit
Volatile Hydrocarbons	15 mg/L
pH	6 - 9
Extractable Hydrocarbons	5 mg/L
Non-aqueous phase liquid/free product	Not present
Phenols	20 µg/L
Arsenic (total)	100 µg/L
Copper (dissolved)	200 µg/L
Cadmium (dissolved)	10 µg/L
Mercury (total)	0.6 µg/L
Nickel (dissolved)	200 µg/L
Lead (dissolved)	50 µg/L
Zinc (total)	1000 µg/L
Chromium (total)	100 µg/L
Cobalt (dissolved)	50 µg/L

12. The waste discharged shall have a pH between 6 and 9, and no visible sheen of oil and grease.
13. The Licencee shall not deposit raw, untreated sewage on the land surface.



## **PART E: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION**

1. Within 180 days of the effective date of this Licence, the Licensee shall submit a **Water Quality Monitoring Plan** to the Board for approval. The Plan shall include, but not be limited to, the following information:
  - a) A summary of all Great Bear Lake Remediation Program water quality monitoring results to date;
  - b) A schedule for pre-remediation (Baseline) monitoring;
  - c) Updated Construction Phase monitoring requirements;
  - d) Recommended sites for inclusion into the Surveillance Network Program; and
  - e) Updated Post-Construction Monitoring Plan.
2. The Licensee shall monitor the project area affected by activities relating to the issued Water Licence for a minimum of five (5) years to ensure that mitigation, reseeded, erosion control and restoration efforts have been successful. These efforts shall be performed to the satisfaction of the Board and the Water Licence Inspector.
3. The Licensee shall monitor and inspect the project location for the parameters set out in Part E: Item 1, once in the summer months to ensure that efforts to fulfill the conditions are successful. The inspection results shall be to the satisfaction of the Board and the Water Licence Inspector.
4. The Licensee shall submit a written report documenting the **Annual Summer Site Inspection** as set out in Part B, General Conditions, Item 10.
5. All disturbed areas relating to Water Licence activities shall be restored, and reseeded with an approved natural or native seed mixture.



## **PART F: CONDITIONS APPLYING TO STREAM CROSSINGS**

1. The Licencee shall ensure that only clean snow is used on all stream crossings and that no debris is left on the surfaces of the crossings.
2. Stream crossings shall be v-notched or completely removed before spring break-up to facilitate natural flow.
3. The removal of naturally occurring material from the bed or banks of any stream below the ordinary high water mark is not permitted other than what has been outlined in the submitted Remedial Action Plans.
5. The Licencee shall not cut or modify any stream banks during the building and maintenance of the proposed Winter Road.
6. The Licencee shall not cut or modify any stream banks unless previously identified in the remediation and reclamation plans, Phases I-III.
7. The Licencee shall not ford wet watercourses or areas of overflow unless previously identified in the remediation and reclamation plans, Phases I-III, or authorized in writing by the Water Licence Inspector.
8. The Licencee shall not destroy or damage beaver dams or lodges, and minimize disturbance to beaver activities.
9. The Licencee shall comply with the most recent version of the "*Department of Fisheries and Oceans Protocol for Temporary Winter Access Water Crossings for Oil and Gas Activities in the Northwest Territories*".
10. The Licencee shall comply with the most recent version of the "*Department of Fisheries and Oceans Ice Bridges Operational Statement*".
11. The Licencee shall ensure that stream crossings occur at a 90-degree angle to the channel.
12. The Licencee shall ensure that stream crossings have the proper ice thickness to carry the anticipated loads and that no debris is left of the surface of the crossings.



## **PART G: CONDITIONS APPLYING TO MODIFICATIONS**

1. The Licencee may, without written approval from the Board, carry out Modification(s) to the planned undertakings provided that such Modification(s) are consistent with the terms of this Licence and the following requirements are met:
  - a) the Licencee has notified the Board in writing of such proposed Modification(s) at least thirty (30) days prior to beginning the Modification(s);
  - b) such Modification(s) do not place the Licensee in contravention of either the Licence or the Act;
  - c) the Board has not, during the thirty (30) days following notification of the proposed Modification(s), informed the Licensee that review of the proposal will require more than thirty (30) days; and
  - d) the Board has not rejected the proposed Modification(s).
2. Modification(s) for which all of the conditions referred to in Part G, Item (1), have not been met may be carried out only with written approval from the Board.
3. The Licencee shall provide to the Board as-built plans and drawings of the Modification(s) referred to in this Licence within ninety (90) days of completion of the Modification(s).



## **PART H: CONDITIONS APPLYING TO CONTINGENCY PLANNING**

1. The Licencee shall maintain a copy of the **Emergency Response Plan** on-site in a readily available location to the satisfaction of the Water Licence Inspector.
2. The Licencee shall ensure that petroleum products, hazardous material and other Waste(s) associated with the project do not enter any Waters.
3. The Licencee shall review the **Spill Contingency Plan** annually and modify the plan as necessary to reflect changes in Regulations, operations and technology. Any proposed Modification(s) shall be submitted to the Board for approval.
4. **Site-specific Spill Contingency Plans** shall be developed for all locations where refined petroleum products will be stored and used for refueling with copies being distributed to operators in the field. These Plans should include, but not be limited to:
  - a) An inventory of response and clean-up equipment,
  - b) A site map with location of storage facilities, and the location of emergency equipment with spill response and clean-up equipment; and
  - c) A cover page that clearly identifies: The NWT 24-hour Spill Report Line and the name, job title and 24-hr telephone number for the person(s) responsible for activating the Spill Contingency Plan.
5. If, during the period of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a.) employ the appropriate Spill Contingency Plan;
  - b.) report the incident immediately via the (24) Hour NWT Spill Report Line. Currently the number is (867) 920-8130;
  - c.) report the unauthorized discharge of Waste to the Board within (24) hours; and
  - d.) submit to a Water Licence Inspector, a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.
5. The Licencee shall report spills to the NT-NU 24-hour Spill Report Line (867) 920-8130, fax (867) 873-6924, and/or e-mail [spills@gov.nt.ca](mailto:spills@gov.nt.ca) in accordance with the *NT-NU Spill Reporting Protocol*, the *NT-NU Spill Report Form*, and the *Instructions for Completing the NT-NU Spill Report Form*.



**PART I: CONDITIONS APPLYING TO THE UNDERTAKING**

1. The Licencee shall ensure all refueling and storage of fuels, chemicals or deleterious substances are located a minimum of 100 metres from the Ordinary High Water Mark of any Watercourse.
2. The Licencee shall ensure that all fuels in excess of 4000 litres stored on-site are contained in an approved double-walled or self-berming storage tank(s), and located within a bermed area incorporating a synthetic liner that is considered to be impermeable to leakage and is capable of containing 110% of the total volume of largest fuel tank(s) employed within the bermed area.
3. The Licencee shall ensure that all project activities are confined to locations as described in the Water Licence application.
4. The Licencee shall ensure that the undertaking conforms to a Letter of Advice as may be issued to the Licensee by the Department of Fisheries and Oceans.
5. Materials cleared from the project site shall not be placed within one hundred (100) metres of the Ordinary High Water Mark of any Watercourse or in such as a manner as to enter any Watercourse.
6. All sites affected by project and camp activities shall be stabilized, groomed, reseeded and landscaped as necessary and suitable erosion control measures implemented to minimize sediment deposition into Watercourse(s).
7. The Licensee shall not operate any machinery within 150 m of any suspected or known historical or archaeological site or 500 m of a burial ground.
8. The Licencee shall make every effort to ensure that no historical or archaeological site will be affected by this operation.
9. The Licencee shall not move any equipment when one or more caribou are within five hundred (500) metres.
10. The Licencee shall make every effort to retain riparian vegetation.

**SAHTU LAND AND WATER BOARD**

  
\_\_\_\_\_  
**Witness**

  
\_\_\_\_\_  
**Larry Wallace  
Chairman**



## Annex A: Surveillance Network Program (SNP)

### SAHTU LAND AND WATER BOARD

LICENCEE: **AANDC-CARD**  
LICENCE NUMBER: **S15L8-001**  
EFFECTIVE DATE OF LICENCE: **July 24, 2015**  
EFFECTIVE DATE OF SURVEILLANCE NETWORK PROGRAM: **July 24, 2015**

#### SURVEILLANCE NETWORK PROGRAM

##### A. Location of Surveillance Stations

<u>Station Number</u>	<u>Description</u>
S15L8-001(1)	Treated sewage effluent prior to disposal
S15L8-001(2)	Treated greywater prior to disposal
S15L8-001(3)	Treated Process water prior to disposal
S15L8-001(4)	Camsell River (intake)
S15L8-001(5)	Great Bear Lake (intake)

##### B. Sampling and Analysis Requirements

1. Any Water collected at SNP Station S15L8-001(4) and S15L8-001(5) shall be sampled at the beginning of the construction (and/or care and maintenance) season and sampled monthly thereafter for duration of site activities and analyzed for the following parameters:

Parameter	
Volatile Hydrocarbons	Cadmium (dissolved)
pH	Mercury (total)
Extractable Hydrocarbons	Nickel (dissolved)
Non-aqueous phase liquid/free product	Lead (dissolved)
Phenols	Zinc (total)
Arsenic (total)	Chromium (total)
Copper (dissolved)	Cobalt (dissolved)



2. Any effluent discharged at SNP Stations S09L8-001(1) and S09L8-001(2) shall be sampled prior to disposal and analyzed for the following parameters and shall not exceed criteria as per Part D (10) of the Licence:

Total Suspended Solids  
Extractable Hydrocarbons  
BOD<sub>5</sub>  
Fecal Coliforms  
pH

3. Any effluent discharged from SNP Station S15L8-001(3) shall be sampled prior to disposal and analyzed for the following parameters and shall not exceed criteria as per Part D (11) of the Licence.

Parameter	Concentration Limit
Volatile Hydrocarbons	15 mg/L
pH	6 - 9
Extractable Hydrocarbons	5 mg/L
Non-aqueous phase liquid/free product	Not present
Phenols	20 µg/L
Arsenic (total)	100 µg/L
Copper (dissolved)	200 µg/L
Cadmium (dissolved)	10 µg/L
Mercury (total)	0.6 µg/L
Nickel (dissolved)	200 µg/L
Lead (dissolved)	50 µg/L
Zinc (total)	1000 µg/L
Chromium (total)	100 µg/L
Cobalt (dissolved)	50 µg/L

4. Sample frequency may be altered at the request/approval of the Water Licence Inspector.
5. All analyses shall be performed in a laboratory approved by the Analyst

**C. Quality Assurance and Quality Control (QA/QC)**

1. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater" or by such other methods as may be approved by an Analyst.
2. All analysis shall be performed in a laboratory approved by an Analyst.
3. The Licensee shall have a Quality Assurance/Quality Control plan which includes field and laboratory requirements and which must meet with the approval of an Analyst.
4. The plan referred to in Part 4, Item 2 (above) shall be implemented as approved by an Analyst.



**D. Reports**

1. The Licencee shall, unless otherwise requested by the Water Licence Inspector, include all of the data and information required by the "Surveillance Network Program" in the Licencee's Annual Report, which shall be submitted to the Board by March 31<sup>st</sup> of the year following the calendar year being reported.



**Schedule 1**  
**Part B: General Conditions**

1. The Annual Report referred to in Part B, Item 7, shall include, but not be limited to, the following information:
  - a) the monthly and annual quantities in cubic metres of fresh water obtained from all sources;
  - b) the monthly and annual quantities in cubic metres of each and all Waste(s) discharged;
  - c) an itemized list indicating the names, uses and quantities of all substances which were used during the remediation and reclamation operation;
  - d) a summary of all remediation and reclamation activities as they relate to Water use and Waste disposal;
  - e) tabular summaries of all data generated under the "Surveillance Network Program";
  - f) a list of unauthorized discharges;
  - g) the details and results of the required **Annual Summer Site Inspection**;
  - h) the details and results of the **Water Quality Monitoring Plan**;
  - i) a camp set-up schematic for each phase;
  - j) a summary of all remediation and reclamation activities carried out at each site during the previous calendar year, including progress made to develop the schedule for Phase II and III implementation, and a description of any work planned by the Licensee for the upcoming year;
  - k) any revision to the **Engagement Plan**;
  - l) any revisions to the **Spill Contingency Plan**, once approved by the Board;
  - m) any revisions to the **Waste Management Plan**, once approved by the Board;
  - n) any revisions to the approved **Remedial Action Plan(s)**;
  - o) any other details on water use or Waste disposal requested by the Board by March 31<sup>st</sup> of the year being reported; and
  - p) A map depicting all the SNP Stations with GPS locations.





**Mackenzie Valley Land and Water Board**  
**7th Floor - 4922 48th Street**  
**P.O. Box 2130**  
**YELLOWKNIFE NT X1A 2P6**  
**Phone (867) 669-0506**  
**FAX (867) 873-6610**

April 2, 2014

File: MV2014X0002

Mr. Ron Breadmore  
AANDC-CARD  
PO Box 1500, 4920 52 Avenue  
YELLOWKNIFE NT X1A 2R3

Email: ron.breadmore@aandc-aadnc.gc.ca

Dear Mr. Breadmore:

**Issuance of Type A Land Use Permit**  
**Great Slave Lake Remediation Project - Outpost Island, Blanchett Island, Copper Pass**

Attached is Land Use Permit MV2014X0002 granted by the Mackenzie Valley Land and Water Board (MVLWB) in accordance with the *Mackenzie Valley Resource Management Act*. This Permit has been approved for a period of five years commencing April 2, 2014 and expiring April 1, 2019.

AANDC-CARD is reminded that if waste was to enter surface waters, directly or indirectly, operations must be suspended and a Water Licence would be required prior to recommencing operations.

AANDC-CARD shall adhere to the commitments made in their responses to reviewer comments dated February 14, March 11, and March 14, 2014.

A copy of all related correspondence and documents has been filed on the Public Registry at the office of the MVLWB. Please be advised that this letter, with its attached procedures, inspection reports, and related correspondence is part of the Public Registry and is intended to keep all interested parties informed of the manner in which the Permit's requirements are being met. All Public Registry material will be considered if an amendment to the Permit is requested.

The full cooperation of AANDC-CARD is anticipated and appreciated. If you have any questions or concerns, please contact Miki Ehrlich at (867) 766-7469 or email mehrlich@mvlwb.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "W. Hagen".

Willard Hagen  
Chair

Copied to: Distribution List

Attachments:



**Land Use Permit**

Permit Class	Permit No	Amendment No
A	MV2014X0002	

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

Aboriginal Affairs and Northern Development Canada –  
Contaminants and Remediation Directorate

Permittee

to proceed with the land use operation described in the Application of:

Signature Mr. Ron Breadmore	Date January 9, 2014
Type of Land Use Operation Remediation Work	
Location Outpost Island, Blanchet Island, Copper Pass, NT	

This Permit may be assigned, extended, discontinued, suspended, or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at Yellowknife this 2 day of April, 2014

Signature Chair

Signature Witness

Commencement Date

April 2, 2014

Expiry Date

April 1, 2019

**ATTENTION**

It is a condition of this Permit that the Permittee comply with the provisions of the *Mackenzie Valley Resource Management Act* and Regulations and the terms and conditions set out herein. A failure to comply may result in suspension or cancellation of this Permit.

## Conditions Annexed to and Forming Part of Land Use Permit #MV2014X0007

### Part A: Scope of Permit

1. This Permit entitles Aboriginal Affairs and Northern Development Canada – Contaminants and Remediation Directorate (AANDC-CARD) to conduct the following land-use operation:
  - a) Conduct remedial work at three sites: Outpost Island Mine Site, Blanchet Island Mine Site, and Copper Pass Mine Site, as described in the Remedial Action Plan (RAP) submitted for each site;
  - b) Establish temporary camps;
  - c) Use heavy equipment;
  - d) Fuel Storage; and
  - e) Re-establish an historic overland route as a winter road.

All activities are to take place within:

Minimum Latitude: 61°44'05.5" N

Minimum Longitude : 111°51'45.7" W

Maximum Latitude: 62°24'35.9" N

Maximum Longitude : 113°27'43.5" W

2. This Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, item 1 of this Permit.
3. Compliance with the terms and conditions of this Permit does not absolve the Permittee from the responsibility for compliance with the requirements of all applicable federal, territorial, and municipal legislation.

### Part B: Definitions

**Act** - the *Mackenzie Valley Resource Management Act*.

**Archaeological Impact Assessment** - as defined by the Prince of Wales Northern Heritage Centre – Guidelines for Developers.

**Board** - the Mackenzie Valley Land and Water Board established under Part 4 of the *Mackenzie Valley Resource Management Act*.

**Durable Land** - land that is able to withstand repeated use, such as gravel or sand with minimal vegetative cover.

**Engineered Structure** – any structure or facility that is normally designed and approved by a Professional Engineer, including but not limited to caps and covers designed for reclamation activities.

**Fuel Storage Container** - a container for the storage of **petroleum** or **allied petroleum products** with a capacity of less than 230 litres.

**Fuel Storage Tank** - a closed container for the storage of **petroleum** or **allied petroleum products** with a capacity of more than 230 litres.

**Greywater** - all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

**Habitat** - the area or type of site where a species or an individual of a species of wildlife naturally occurs or on which it depends, directly or indirectly, to carry out its life processes.

**Inspector** - an Inspector designated by the Minister under the *Mackenzie Valley Resource Management Act*.

**Minister** - the Minister of Indian Affairs and Northern Development.

**Ordinary High Water Mark** - the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level. In inland lakes, wetlands, or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

**Professional Engineer** – a person who is registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists in accordance with the Engineering and Geoscience Professions Act. S.N.W.T. 2006, V.16, or subsequent editions, as a Professional Engineer, and whose principal field of specialization is appropriate to address the components of the project at hand.

**Secondary Containment** - containment that prevents liquids that leak from Fuel Storage Tanks or containers from reaching outside the containment area and includes double-walled Tanks, piping, liners, and impermeable barriers.

**Sewage** - all toilet wastes and Greywater.

**Sewage Disposal Facilities** - Sump(s) and/or Sewage collection tank(s) and/or storage containers designed to hold Sewage.

**Spill Contingency Plan** - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada's *Guidelines for Spill Contingency Planning* (April 2007), that describes the set of procedures to be implemented to minimize the effects of a spill.

**Sump** - a man-made pit or natural depression in the earth's surface used for the purpose of depositing waste material, such as non-Toxic Drilling Waste or Sewage, therein.

**Toxic Material** - a substance that enters or may enter the environment in a quantity or concentration or under conditions such that it:

- a) Has or may have an immediate or long-term harmful effect on the environment or its biological diversity;
- b) Constitutes or may constitute a danger to the environment on which life depends; or
- c) Constitutes or may constitute a danger in Canada to human life or health.

**Waste** = any garbage, debris, or chemical or toxic material to be used, stored, disposed of, or handled on land, and also as defined in section 51 of the Act.

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**Waste Management Plan (WMP)** - a document, developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan*, that describes the methods of waste management from waste generation to final disposal.

**Watercourse** - a natural body of flowing or standing water or an area occupied by water during part of the year, and includes streams, springs, swamps and gulches but does not include groundwater.

**Part C: Conditions Applying to All Activities** (headings correspond to subsection 26(1) of the Mackenzie Valley Land Use Regulations)

**26(1)(a) Location and Area**

- |    |  |                        |
|----|--|------------------------|
| 1. | The Permittee shall locate all camps on Durable Land or previously cleared areas.  | CAMP LOCATION          |
| 2. | The Permittee shall not conduct a quarry operation within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | QUARRY SETBACK         |
| 3. | The Permittee shall not conduct this land-use operation on any lands not designated in the complete application.   | LOCATION OF ACTIVITIES |

**26(1)(b) Time**

- |    |  |                        |
|----|--|------------------------|
| 4. | At least 48 hours prior to the commencement of this land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867)669-2449.  | CONTACT INSPECTOR      |
| 5. | At least 48 hours prior to commencement of this land-use operation, the Permittee shall provide the following information, in writing, to the Board <u>and</u> an Inspector:<br><ul style="list-style-type: none"> <li>a) the name(s) of the person(s) in charge of the field operation;</li> <li>b) alternates; and</li> <li>c) all methods for contacting the above person(s).</li> </ul>  | IDENTIFY AGENT         |
| 6. | At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:<br><ul style="list-style-type: none"> <li>a) the plan for removal or storage of equipment and materials; and</li> <li>b) when final cleanup and reclamation of the land used will be completed.</li> </ul>  | REPORTS BEFORE REMOVAL |
| 7. | The Board, for the purpose of this operation, designates March 31 as spring break-up.  | SPRING BREAK – UP      |
| 8. | The Permittee shall file an annual progress report with the Board not later than March 31 following the calendar year reported, which shall contain at a minimum the following information:<br><ul style="list-style-type: none"> <li>a. A summary of any remediation work completed during the year and an outline of any work anticipated for the next year;</li> <li>b. Any engineering studies/designs, or remediation research completed or updated during the year,</li> <li>c. A description of important research results that will be used to inform remediation planning going forward;</li> </ul> | ANNUAL PROGRESS REPORT |

- d. A summary of monitoring activities conducted under the Final Monitoring Plan (FMP), including:
  - i) Updated maps illustrating all the sampling sites;
  - ii) Summaries of all data and information generated under the FMP;
  - iii) An analysis and interpretation of the data collected and any trends identified under the FMP;
  - iv) An evaluation of any identified environmental changes relative to baseline conditions and a discussion of the significance of these changes;
  - v) A description of any adaptive management measures or contingency measures that will be undertaken to address monitoring results; and
  - vi) Recommendations for refining the FMP to improve its effectiveness as required.
- e. A summary of residual risks on the sites to environmental, human and wildlife health;
- f. A revised timeline for completing the overall remediation of the three project sites;
- g. The monthly and annual quantities in cubic metres of fresh water obtained from all sources; and
- h. A list of unauthorized discharges.

**26(1)(c) Type and Size of Equipment**

- |     |  |                               |
|-----|--|-------------------------------|
| 9.  | The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application. | ONLY<br>APPROVED<br>EQUIPMENT |
| 10. | The Permittee shall use portable ramps during loading or unloading of ships or barges.   | PORTABLE<br>RAMPS             |

**26(1)(d) Methods and Techniques**

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|-----|--|-------------------|
| 11. | The Permittee shall construct and maintain the overland portion of winter roads with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation. | WINTER ROADS      |
| 12. | The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse.  | STORAGE ON<br>ICE |

**26(1)(e) Type, Location, Capacity, and Operation of All Facilities**

- |     |   |                     |
|-----|---|---------------------|
| 13. | The Permittee shall ensure that the land use area is kept clean at all times.   | CLEAN WORK<br>AREA  |
| 14. | The Permittee shall not locate any Sump within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | SUMPS FROM<br>WATER |

**26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land**

- |     |   |   |
|-----|---|---|
| 15. | The Permittee shall submit for approval a Sediment and Erosion Control Plan. This Plan must receive Board approval prior to commencement of operations. This Plan shall include, at minimum:  | SEDIMENT AND<br>EROSION<br>CONTROL PLAN |
|     | a) The details of sediment and erosion control measures implemented prior to, during, and after remediation activities are completed, until all disturbed areas are completely stabilized (including quarrying sites);  |   |
|     | b) Measures to be used to avoid re-suspension of contaminated material via wind and water erosion (including dust management);  |   |
|     | c) Measures to be used to mitigate potential impacts to aquatic habitat at barge landing sites;   |   |
|     | d) Measures to be taken to mitigate potential impacts to aquatic habitat at the dock removal site at Outpost Island;  |   |
|     | e) Plans for the decommissioning of all roads and access routes, and the restoration of natural drainages impacted by any crossings associated with both historic and present use;  |   |
|     | f) Plans for the decommissioning and restoration of all quarry locations;   |   |
| 16. | The Permittee shall adhere to the Sediment and Erosion Control Plan, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | SEDIMENT AND<br>EROSION<br>CONTROL      |
| 17. | The land-use operation shall not cause obstruction to any natural drainage.   | NATURAL<br>DRAINAGE                     |
| 18. | The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses.   | PROGRESSIVE<br>EROSION<br>CONTROL       |
| 19. | The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.  | PREVENTION OF<br>RUTTING                |
| 20. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting.  | SUSPEND<br>OVERLAND<br>TRAVEL           |
| 21. | The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.  | VEHICLE<br>MOVEMENT<br>FREEZE-UP        |
| 22. | The Permittee shall not use any materials other than clean snow and water in the construction of snow fills.  | SNOWFILL<br>MATERIALS                   |

- |     |  |                                  |
|-----|--|----------------------------------|
| 23. | Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all snowfills from stream crossings, unless otherwise authorized in writing by an Inspector. | REMOVE OR V-NOTCH<br>SNOWFILLS   |
| 24. | The Permittee shall minimize approach grades on all Watercourse crossings.   | MINIMIZE<br>APPROACH             |
| 25. | The Permittee shall slope the sides of waste material piles, excavations, and embankments — except in solid rock — to a minimum ratio of 2:1 vertical, unless otherwise authorized in writing by an Inspector.           | EXCAVATION<br>AND<br>EMBANKMENTS |
| 26. | The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.  | EXCAVATE<br>NEAR<br>WATERCOURSE  |

**26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material**

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|-----|--|--------------------------------|
| 27. | Prior to the expiry date of this Permit or the end of operations, whichever comes first, the Permittee shall backfill and restore all Sumps, unless otherwise authorized in writing by an Inspector.   | BACKFILL<br>SUMPS              |
| 28. | The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the GNWT Spill Contingency Planning and Reporting Regulations, the Permittee shall: <ul style="list-style-type: none"> <li>a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130;</li> <li>b) report each spill to an Inspector within 24 hours; and</li> <li>c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days.</li> </ul> | REPORT SPILLS                  |
| 29. | The Permittee shall dispose of all combustible waste petroleum products by removal to an approved disposal facility.   | WASTE<br>PETROLEUM<br>DISPOSAL |

**26(1)(h) Wildlife and Fish Habitat**

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|-----|---|-------------------|
| 30. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT<br>DAMAGE |
|-----|---|-------------------|

**26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage**

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|-----|--|---|
| 31. | The Permittee shall submit to the Board for approval a revised Waste Management Plan in accordance with MVLWB's 2011 "Guidelines for Developing a Waste Management Plan". This Plan must receive Board approval prior to commencement of operations. | SUBMIT<br>REVISED WASTE<br>MANAGEMENT<br>PLAN |
|-----|--|---|

- |     |   |                      |
|-----|---|----------------------|
| 32. | The Permittee shall adhere to the Waste Management Plan, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | WASTE<br>MANAGEMENT  |
| 33. | The Permittee shall keep all garbage and debris in a secure container until disposal.   | GARBAGE<br>CONTAINER |
| 34. | The Permittee shall dispose of all garbage, waste, and debris as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector.   | REMOVE<br>GARBAGE    |
| 35. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan.   | SEWAGE<br>DISPOSAL   |

**26(1)(j) Protection of Historical, Archaeological, and Burial Sites**

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|-----|--|---|
| 36. | The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or burial ground.   | ARCHAEOLOGIC<br>AL BUFFER               |
| 37. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site.  | SITE<br>DISTURBANCE                     |
| 38. | The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: <ul style="list-style-type: none"> <li>a) immediately suspend operations on the site; and</li> <li>b) notify the Board at (867)669-0506 or an Inspector at (867)669-2449, and the Prince of Wales Northern Heritage Centre at (867) 920-6182 or 873-7688.</li> </ul> | SITE<br>DISCOVERY AND<br>NOTIFICATION   |
| 39. | For Blanchet Island and Outpost Island: Prior to any new land disturbance, the Permittee shall conduct an Archaeological Impact Assessment of the sites where disturbance is planned and shall submit a summary report to the Board and the Prince of Wales Northern Heritage Centre.  | ARCHAEOLOGIC<br>AL IMPACT<br>ASSESSMENT |

**26(1)(k) Objects and places of recreational, scenic, and ecological value**

*Intentionally left blank*

**26(1)(l) Security Deposit**

- |     |  |  |
|-----|--|--|
| 40. | All costs to remediate the area under this Permit are the responsibility of the Permittee. | RESPONSIBILITY<br>FOR<br>REMEDICATION<br>COSTS |
|-----|--|--|

**26(1)(m) Fuel Storage**

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|-----|--|--|
| 41. | The Permittee shall not place any Fuel Storage Containers or Tanks within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.   | FUEL NEAR WATER                                |
| 42. | The Permittee shall ensure that all fuel caches have adequate Secondary Containment.   | FUEL CACHE<br>SECONDARY<br>CONTAINMENT         |
| 43. | The Permittee shall set up all refueling points with Secondary Containment.  | SECONDARY<br>CONTAINMENT -<br>REFUELING        |
| 44. | The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses.   | FUEL<br>CONTAINMENT                            |
| 45. | The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours.   | FUEL ON LAND                                   |
| 46. | The Permittee shall mark all stationary fuel caches and fuel storage facilities with flags, posts, or similar devices so that they are at all times plainly visible to local vehicle travel.   | MARK FUEL<br>LOCATION                          |
| 47. | Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to an Inspector and the Board.  | REPORT FUEL<br>LOCATION                        |
| 48. | The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock, except for containers currently in use.   | SEAL OUTLET                                    |
| 49. | The Permittee shall submit to the Board for approval a revised Spill Contingency Plan in accordance with Aboriginal Affairs and Northern Development Canada's 2007 "Guidelines for Spill Contingency Planning". This Plan must receive Board approval prior to commencement of operations.                       | SUBMIT<br>REVISED SPILL<br>CONTINGENCY<br>PLAN |
| 50. | The Permittee shall adhere to the Spill Contingency Plan, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | SPILL<br>CONTINGENCY<br>PLAN                   |
| 51. | Prior to commencement of operations, the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills.  | SPILL<br>RESPONSE                              |
| 52. | All equipment that may be parked for two hours or more, should have a haz-mat/drip tray under it or be sufficiently diapered. Leaky equipment shall be repaired immediately.   | DRIP TRAYS                                     |

- |     |  |                    |
|-----|--|--------------------|
| 53. | The Permittee shall clean up all leaks, spills, and contaminated material. | CLEAN UP<br>SPILLS |
|-----|--|--------------------|

**26(1)(n) Methods and Techniques for Debris and Brush Disposal**

- |     |  |                          |
|-----|--|--------------------------|
| 54. | The Permittee shall progressively dispose of all brush and trees and shall complete all brush disposal; all disposal shall be completed prior to the expiry date of this Permit. | BRUSH<br>DISPOSAL/ TIME  |
| 55. | The Permittee shall not clear areas larger than identified in the complete application.  | MINIMIZE AREA<br>CLEARED |

**26(1)(o) Restoration of the Lands**

- |     |  |                                     |
|-----|--|-------------------------------------|
| 56. | The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector. | SAVE AND<br>PLACE ORGANIC<br>SOIL   |
| 57. | The Permittee shall level all stockpiles of granular material located within the land use area prior to the expiry date of this Permit.                      | NO STOCKPILES                       |
| 58. | Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used.   | FINAL CLEANUP<br>AND<br>RESTORATION |
| 59. | Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.                        | NATURAL<br>REVEGETATION             |
| 60. | The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so.  | PROGRESSIVE<br>RECLAMATION          |

**26(1)(p) Display of Permits and Permit Numbers**

- |     |  |                |
|-----|--|----------------|
| 61. | The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. | DISPLAY PERMIT |
|-----|--|----------------|

**26(1)(q) Biological and Physical Protection of the Land**

- |     |  |                                  |
|-----|--|----------------------------------|
| 62. | The Permittee shall not move any equipment or commence any drilling when one or more caribou are within five hundred (500) metres.   | CARIBOU<br>DISTURBANCE           |
| 63. | If migratory birds or their nesting areas, or any species at risk are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb these animals. | MIGRATORY<br>BIRD<br>DISTURBANCE |

64. The Permittee shall submit to the Board for approval an Interim Monitoring Plan at least 30 days prior to commencement of operations. The Interim Monitoring Plan shall outline all components that will be monitored and describe the site-specific monitoring that will be conducted to identify impacts to these components from Project-related activities. Site-specific remediation target levels shall be included for each component being monitored.

INTERIM  
MONITORING  
PLAN

65. The Permittee shall submit to the Board within five months of issuance a Final Project Monitoring Plan for approval. This plan shall include, but is not limited to the following:

SUBMIT FINAL  
PROJECT  
MONITORING  
PLAN

- a) A summary of the potential impacts of the Project on the biological and physical components of the environment;
- b) A summary of mitigation measures in place to prevent, reduce, or manage these potential impacts;
- c) A list of all components to be monitored;
- d) A map and attached table or detailed legend illustrating monitoring and sampling locations;
- e) A description, including detailed rationale, of the site-specific monitoring activities required to identify impacts from Project-related activities;
- f) A description of monitoring protocols, methodologies, parameters, and frequency specific to each type of monitoring identified in Item (d) above;
- g) A description of the quality assurance and quality control measures followed for each monitoring type;
- h) A description of how baseline water and soil quality will be determined;
- i) Site specific remediation target levels for each component being monitored;
- j) A description, including detailed rationale, of the monitoring endpoints (action levels) for each parameter monitored;
- k) A description of response actions (contingency plans) to be carried out if the action levels are exceeded; and
- l) Any other item as directed by the Board.

66. The Permittee shall adhere to the approved Final Project Monitoring Plan and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval.

FINAL PROJECT  
MONITORING  
PLAN

- |     |   |                                       |
|-----|---|---------------------------------------|
| 67. | The Licensee shall submit to the Board by April 1, 2017, a "Reclamation Completion Report" detailing the Reclamation work undertaken by or for the Permittee. The "Reclamation Completion Report" shall include, but not be limited to, the following:                                | RECLAMATION<br>COMPLETION<br>REPORT   |
|     | a) a comparison of actual results with predicted results, remedial specifications, and trends;  |                                       |
|     | b) a review and analysis of the performance of engineered structures, surface and ground water quality, hydrology, geotechnical and re-vegetation monitoring data; and  |                                       |
|     | c) A reassessment of the monitoring programs and recommendations for the next phase of the monitoring program.  |                                       |
| 68. | The Permittee shall submit to the Board six months prior to the end of operations for approval a Long-Term Monitoring Plan.   | LONG TERM<br>MONITORING<br>PLAN       |
| 69. | The Permittee shall ensure that all Engineered Structures are constructed and maintained following the recommendations of the Professional Engineer responsible for the design, including but not limited to recommendations regarding field supervision and inspection requirements. | ENGINEERED<br>STRUCTURES              |
| 70. | The Permittee shall maintain construction records and as-built documentation for all Engineered Structures and make them available at the request of the Board or an Inspector.   | CONSTRUCTION<br>/ AS-BUILT<br>RECORDS |
| 71. | The Permittee shall adhere to the approved Engagement Plan and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval.                      | ENGAGEMENT<br>PLAN                    |
| 72. | If any Plan is not approved by the Board, the Permittee shall revise the plan according to the Board's direction and re-submit it to the Board for approval.  | RESUBMIT PLAN                         |
| 73. | All revised plans submitted to the Board shall include a brief summary of the changes made to the Plan.   | SUMMARY OF<br>CHANGES                 |
| 74. | The Permittee shall, upon request from the Board, submit additional Plans, revise Plans, or conduct studies as the Board deems necessary.   | ADDITIONAL<br>PLANS/STUDIES           |

## Annex A Schedule

Supplemental information to be submitted by Permittee as required through Land Use Permit Conditions

<b>Permit Condition</b>	<b>Report Title/Require Action</b>	<b>Timeline for Submission</b>
8	Annual Progress Report	Annually on March 31
15	Sediment and Erosion Control Plan	Must receive Board approval prior to commencement of operations
31	Revised Waste Management Plan	Must receive Board approval prior to commencement of operations
49	Revised Spill Contingency Plan	Must receive Board approval prior to commencement of operations
64	Interim Monitoring Plan	At least 30 days prior to commencement of operations
65	Final Monitoring Plan	Within five months of issuance
67	Reclamation Completion Report	April 1, 2017
68	Long-term Monitoring Plan	Six months prior to the completion of operations



Mackenzie Valley Land and Water Board  
7th Floor - 4910 50th Avenue  
P.O. Box 2130  
YELLOWKNIFE NT X1A 2P6  
Phone (867) 669-0506  
FAX (867) 873-6610

## Reasons for Decision

Issued pursuant to paragraph 40(2)(c) of the *Mackenzie Valley Land Use Regulations* (MVLUR) and section 121 of the *Mackenzie Valley Resources Management Act* (MVRMA)

Land Use Permit Application	
Preliminary Screener	MVLWB
Reference/File Number	MV2014X0002
Applicant	Aboriginal Affairs and Northern Development Canada – Contaminants and Remediation Directorate
Project	Remediation - Outpost Island, Blanchett Island, Copper Pass, NT

### Decision from Mackenzie Valley Land and Water Board Meeting of

April 2, 2014

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With respect to this Application, notice was given in accordance with sections 63 and 64 of the MVRMA. There was no public hearing held in association with this Application.

#### Decision

The Board is satisfied that:

- the development has been screened pursuant to the MVRMA;
- any potential adverse environmental effects are insignificant or mitigable with known technology; and
- there is no likelihood that the proposed development might be a cause of public concern.

After reviewing the submissions of the Applicant, the written comments received by the Board and the Staff Report prepared for the Board, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and Regulations made thereunder, has determined that:

Land Use Permit MV2014X0002 be issued subject to the terms and conditions contained therein.

The Board's reasons for this decision are as follows:

- The Board is satisfied that appropriate consultation has been conducted and that advice has been sought and considered, in accordance with sections 63 and 64 of the MVRMA.
- It is the opinion of the Board that the terms and conditions attached to MV2014X0002, pursuant to the MVRMA, will ensure that any potential environmental impacts resulting from this development are not significant.
- The use of land proposed by the Applicant is of a nature contemplated by the MVRMA.
- The Board has notified the Applicant, through a statement included in the scope of this Permit, that compliance with the terms and conditions of this Permit has no effect on the Permittee's responsibility for compliance with the requirements of any other legislation.
- The operation will likely contribute to the socio-economic well-being and economic development of the region.
- The Board has reviewed the information contained in the March 20, 2014 Staff Report regarding environmental impacts and/or public concerns.

Land Use Permit MV2014X0002 contains provisions that the Board feels necessary to ensure and monitor compliance with the MVRMA and the Regulations made thereunder and to provide appropriate safeguards in respect of the Applicant's use of the land affected by the Permit.

SIGNATURE

Mackenzie Valley Land and Water Board



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Chair

April 2, 2014

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Date

## **Appendix 6 Assumed Contractor Schedule and CAT Train**

