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Baffinland Iron Mines Corporation

**PROPOSAL
TREATMENT PLAN – HYDROCARBON CONTAMINATED SOIL
MILNE INLET, MARY RIVER PROJECT
NUNAVUT**

PE14101092

January 2010

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1.0 INTRODUCTION

1.1 GENERAL

EBA Engineering Consulting Ltd. (EBA) is pleased to provide this proposal to Baffinland Iron Mines Corporation (Baffinland) for consulting services related to the treatment of hydrocarbon contaminated soil at their Mary River project.

EBA's understanding of the project objectives and details are the following:

- EBA's scope is to develop a plan for the treatment of hydrocarbon soils from Baffinland's fuel farms at the Milne Inlet site and Mary River site;
- The quantity of contaminated soil is estimated to be 3500 m³ and primarily consists of liner bedding sand and gravels inside the fuel farms;
- The fuel farm is lined with a HDPE liner which may be able to be converted to a treatment facility;
- The fuel farm infrastructure (bladders and piping) will be removed in 2010; therefore, preparation for the treatment area can be in late 2010, or 2011; and
- Treatment can be over 3 years (or less) beginning in 2011.

1.2 PROJECT DESCRIPTION

EBA will prepare a plan for the treatment of the soil. The plan will include:

- A treatment methodology and a plan for the treatment of the soil;
- Design for the treatment facility;
- A proposed cleanup criteria for the soil;
- Amendment types and quantities;
- Operation plan for the facility including tilling procedures, tilling equipment requirements, amendment application procedures and application rates, water management within the facility;
- Monitoring plan during operations including groundwater sampling, surface water sampling, contaminated soil sampling; and
- Closure Plan.

The manual is intended to have sufficient detail that it can be submitted to the regulatory bodies to obtain authorization to construct and operate the facility.

1.3 PROJECT CHALLENGES

The existing fuel farm area is a geomembrane lined facility. It will be available as a landfarm facility; however, there are several challenges to using the existing facility.

It is understood that the soil in the fuel farm is wet. Treatment of the hydrocarbon soil requires moisture and oxygen. Saturated soil does not treat very well. A means to drain and partially dry the soil will be required. It is anticipated that the contaminated soil is sitting directly on the geomembrane liner. It will be difficult to till the soil within the lined facility or to move the soil without damaging the liner. These issues must be considered when developing the plan.

Baffinland has an idea of the fuel loss that may have occurred in the facilities; however, it is understood that there has been little sampling of the soil within the lined facility. The spatial extent of the contaminated soil and concentrations is unknown.

2.0 APPROACH AND METHODOLOGY

A phased approach to the project is recommended given the unknowns and project challenges. A preliminary treatment plan will be developed based on our knowledge of site conditions. The site conditions will be based on both EBA experience and site observations by Baffinland personnel. The preliminary treatment plan can be used to procure the amendments, equipment, and construction materials, if required.

A site visit will be carried out following the removal of the tank bladders. It has been assumed that the bladders will be removed by the end of July. The extent of contamination will be evaluated at this time through sampling and analytically testing. A combination of PID and analytical tests will be used to characterize the area. The PID will be “calibrated” with analytical samples collected. The current proposal is based on 120 PID measurements and 30 BTEX CCME F1 to F4 tests.

EBA will prepare a regrading civil works plan by mid August. The intent of the civil works plan is to reduce the amount of water that will be impounded within the tankfarm berms the following freshet and summer. The plan will be based on visual observations and PID measurements. The analytical results will likely be available 7 days after the samples have been shipped. The results will be considered in the civil works plan when they are available.

The soil treatment plan will be finalized after site observations this summer. The site observations will confirm that the method of treating the soils is practical or whether some adjustments to the plan are required. It is also recommended that the soil samples be collected and tested to determine the spatial extent of the contamination and concentrations.

It has been assumed that detailed as-builts and topography are available and no additional surveying will be required for design.

A weekly report will be prepared to keep Baffinland informed of the project progress.

The proposed schedule is as follows.

TABLE 3 PROPOSED SCHEDULE	
Item	Completed by:
Records Review, Consultation with Baffinland	January 15, 2010
Preliminary Treatment Plan	March 15, 2010
Site Visit and Sampling	August 1, 2010
Civil Works Recommendations	August 15, 2010
Final Treatment Plan	November 30, 2010

Key members of EBA's team have coordinated or managed numerous Landfarms, Landfills, Phase I, II, and III Environmental Site Investigations, Risk Assessments, Hazmat assessments, Development of Remediation Action Plans, design and remediation for northern abandoned mines, former military bases, and DEW line sites. These have included environmental studies or assessments related to the northern projects listed in Table 1, among others:

TABLE 1: NORTHERN ENVIRONMENT PROJECTS
• Third-party report review, Phase III Environmental Site Assessment, Bullmoose Mine, NT (INAC)
• Third-party report review, Phase III Environmental Site Assessment, Ruth Mine, NT (INAC)
• Third-party report review, Phase II Environmental Site Assessment, Blanchet Island, NT (INAC)
• Phase II Environmental Site Assessment, Outpost Island / Philmore Mine, NT (INAC)
• Phase II Environmental Site Assessment, O'Connor Lake Mine, NT (INAC)
• Phase II Environmental Site Assessment, West Bay / Black Ridge Gold Mine, NT (INAC)
• Phase II Environmental Site Assessment, Spider Lake, NT (INAC)
• Detailed Environmental Site Assessment, Axe Point Former Military Site, NT (PWGSC)
• Hydrogeological Study at Axe Point Former Military Site, NT (DIAND)
• Phase III Environmental Site Assessment, Silver Bear Mines (geotechnical and environmental) (PWGSC and DIAND)
• Phase III Environmental Site Assessment, Johnson Point, NT (includes geotechnical and geophysical) (DIAND)
• Site Supervision for Remediation and Clean-up, Johnson Point (PWGSC)
• Environmental Site Investigations and Remedial Options Review, Grainger Fuel Cache site, NT (DIAND)
• Environmental Site Investigations and Remedial Options Review, Cat Camp site, NT (DIAND)
• Phase II Environmental Site Assessment, North Inca Mine Site, NT (DIAND)
• Phase I Environmental Site Assessment, Liten and Old Parr Mines, NT (DIAND)
• Phase II Environmental Site Assessment and Hazmat Survey, Hay River Facility, NT (NorthwesTel)
• Phase II Environmental Site Assessment, Repeater Station Site, Garry Island, NT (NorthwesTel)
• Phase II Environmental Site Assessment, Repeater Station Site, Pullen Island, NT (NorthwesTel)

TABLE 1: NORTHERN ENVIRONMENT PROJECTS

<ul style="list-style-type: none"> Phase II and III Environmental Assessment and Site Remediation, Snare Repeater Station Site, NT (NorthwesTel)
<ul style="list-style-type: none"> Phase II and III Environmental Site Assessment, Former Power Plant Site, Baker Lake, NU (Nunavut Power)
<ul style="list-style-type: none"> Drybones Bay diamond exploration: environmental assessment, permitting and environmental management
<ul style="list-style-type: none"> Prairie Creek mine: environmental assessment, permitting and environmental management
<ul style="list-style-type: none"> Tamerlane Pine Point mine project: baseline environmental studies in support of anticipated environmental assessment and permitting
<ul style="list-style-type: none"> Peregine Diamond project: environmental and geotechnical studies in support of LDH drilling program
<ul style="list-style-type: none"> Arctic Pilot Project to transport LNG from Melville Island, Nunavut to southern markets
<ul style="list-style-type: none"> Offshore Beaufort Sea oil and gas exploration drilling programs from drillships, caisson islands and sacrificial beach islands
<ul style="list-style-type: none"> Tuktoyaktuk Harbour dredging and shoreline infrastructure development
<ul style="list-style-type: none"> American Beaufort Sea offshore exploration drilling programs from drillships and bottom-founded caissons
<ul style="list-style-type: none"> Esso Resources Canada Ltd. Norman Wells environmental update study in support of Water Licence Renewal
<ul style="list-style-type: none"> Canadian Petroleum Association position on Yukon North Slope and ANWR oil and gas exploration/development
<ul style="list-style-type: none"> Cyprus Anvil Mine (Faro) baseline aquatic studies, Yukon.
<ul style="list-style-type: none"> Northern municipal and land development engineering, water supply and treatment, road and other facilities engineering projects
<ul style="list-style-type: none"> Tyhee Gold Project: Prepared Project Description Report to support its application for a Water License and a Land Use Permit for the development of a gold mine near Discovery, NT
<ul style="list-style-type: none"> Seabridge Gold Inc., Courageous Lake Property, NT: Nehtruh-EBA provided environmental services in the fields of due diligence, data gap analysis, environmental permitting, archaeological survey, community consultation, water quality survey, wildlife surveys, hydrometric surveys, amongst others
<ul style="list-style-type: none"> GNWT, MACA, Abandoned landfill, Lutsel Ke', NT: Nehtruh-EBA conducted a Phase I, II and III Environmental Site Assessment, followed by a screening-level Human Health and Ecological Risk Assessment
<ul style="list-style-type: none"> Development of Remediation Action Plan for the Axe Point Former Military Base (geophysics, environmental, geotechnical and risk assessment)
<ul style="list-style-type: none"> Ferguson Lake Mineral Exploration Project: environmental baseline studies and regulatory documentation, Nunavut
<ul style="list-style-type: none"> EKATI Diamond Mine: construction permitting, environmental monitoring studies and permitting for the development of the Sable, Pigeon and Beartooth kimberlite pipes
<ul style="list-style-type: none"> Victoria Island diamond exploration: environmental assessment, permitting and environmental management
<ul style="list-style-type: none"> CanTung Mine re-activation: environmental assessment, permitting and ongoing environmental management

Several of EBA's northern landfarm and hydrocarbon treatment soil projects are listed in Table 2.

TABLE 2 NORTHERN LANDFARM PROJECTS			
Location	Client	Project	Year
Clyde River, NU	NWT Power	Power Station Clean Up and Landfarm Construction	2003
Taloyoak, NU	NWT Power	Spill Clean up, Containment Facility and Landfarm Construction	1998–2006
EKATI Diamond Mine, NT	BHP Billiton Diamonds Inc.	Landfarm Design and Operations Manual	2000
Jericho Diamond Mine, NU	Tahera Diamond Corporation	Landfarm Design and Operations Manual	2006
Cape Christian (Clyde River, NU)	INAC	Project Management – Landfarm/Biopile Construction	2009
DEW Line Clean Up (NU, NT) Cape Dyer, Dewar Lakes, Hall Beach, Mackar Inlet, Nicholson Point, Hall Beach, Longstaff Bluff	Defence Construction Canada	Landfarm Construction Siting, and Construction Quality Control testing	1998–2009 ongoing
Repulse Bay, NU	NWT Power	Power Station Clean Up and Landfarm Design Construction and Operation	2000
Tibbitt to Contwoyto Winter Road	Joint Venture	Lockhart Camp Clean up and Landfarm and Operation Management	2005
Chesterfield Inlet	NWT Power	Power Station Clean Up and Landfarm Design Construction and Operation	2000
Inuvik	Transport Canada	Landfarm Operation, Tilling, Confirmatory Sampling	2009
Fort Smith, NT	Thebacha Campus, Aurora College	Contaminated Soil Removal, Landfarm Construction, Operation and Maintenance	2002

3.0 PROJECT TEAM

The personnel proposed for this project have extensive site assessment and remediation experience. We would like to highlight the following key individuals:

Mr. Bill Horne, P.Eng., Principal Consultant

Mr. Horne will be the principal consultant for the project. He will provide technical direction and review of the project. Mr. Horne has over 20 years experience in northern mines and contaminated sites clean up. He was the project manager for the geotechnical aspects of the DEW Line Clean Up project and numerous contaminated site cleanups.

Mr. Horne has been responsible for the waste management at many mines in the Canadian and Russian Arctic.

Mr. Herb Ziervogel, P.Eng., Project Manager

Mr. Ziervogel has over 19 years of engineering experience in contaminant hydrogeology, soil and groundwater remediation and environmental geophysics. He is a registered professional engineer with NAPEG, and specializes in the design and execution of large-scale field programs and remediation projects in remote locations. Mr. Ziervogel has conducted environmental work at over 50 locations throughout the Northwest Territories and Nunavut. He was the resident engineer for the cleanup at the Cape Christian remediation and landfarm project located south of the Mary River Project. Mr. Ziervogel was also responsible for many of the NWT Power landfarms over the past decade.

Ms. Aaron Sneddon, B.Sc., Geol.I.T., Lead Site Assessor, Supervisor of Soil Separation and Stockpiling and LTU Soil Cultivation

Ms. Sneddon is a geologist who has approximately four years of experience in site assessment, remediation and groundwater studies. Ms. Sneddon is experienced soil and groundwater sampling for environmental site assessments, and confirmatory sampling of excavations and stockpiled material. She has been responsible for site assessments at numerous hydrocarbon contaminated sites in Yellowknife, Fort Smith, and other communities in the Northwest Territories; abandoned mines in the Northwest Territories; DEW Line sites in Nunavut; Bigstone Cree Nation Alberta Municipal Affairs sites; and various landfills. Ms. Aaron Sneddon will act as the lead field assessor.

Detailed resumes of the above-mentioned members of the team, as well as other members, are in Appendix A.

4.0 COST ESTIMATE

A cost estimate for the project is included in Appendix E. The estimated cost for the project phases is as follows:

Preliminary Landfarm Design and Operation Manual	\$27,979
Site Visit and Sampling	\$29,449
Civil Works Recommendations	\$4,106
Finalize Landfarm Design and Operations Manual	\$8,379
Total	\$69,913

The project will be billed on a time and material basis with the costs not to exceed the authorized amount without prior authorization. The project will be billed using the rate schedule in Appendix D and billed on a monthly basis.

5.0 SITE INVESTIGATION WAIVER STATEMENT

To minimize the risk of damage to underground utilities, locating and marking of all underground services will be completed by the property owner (or their representative) prior to any intrusive field investigation operations. It is assumed that any private utilities within the investigation areas, such as buried power and gas lines, will be identified and located by the property owner (or their representative) prior to commencement of any field investigation program. Because EBA cannot verify or rely on the accuracy of this information, EBA will not accept responsibility for damage, or cause for delay, to any party for private or public utilities not properly identified and or located. Any and all costs resulting from the damaged utility, and or utilities, as a result of our investigation will be the responsibility of Baffinland Iron Mines Corporation.

6.0 CONFIDENTIALITY STATEMENT

This proposal is the property of EBA Engineering Consultants Ltd. (EBA). It is protected by copyright for intellectual property. The contents are regarded as “commercial confidential.” In accordance with “The Freedom of Information and Protection of Privacy Act - Disclosure Harmful to Business Interests of a Third Party,” no part of this proposal may be disclosed to another party without the express written authority of EBA. If the recipient of the Proposal chooses not to accept it, it shall be returned to EBA without delay.

7.0 CLOSURE

This proposal will be undertaken subject to the General Conditions in Appendix B, which will be incorporated into the report. With respect to contractual terms, this assignment will be undertaken subject to the sample Services Agreement in Appendix C, unless other Contractual Terms are executed by both parties.

We trust this proposal meets your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

EBA Engineering Consultants Ltd.



Bill Horne, M.Sc., P.Eng.
Principal Consultant, Arctic Region
Direct Line: 780.451.2130 x276
bhorne@eba.ca

/jnc

APPENDIX A

APPENDIX A RESUMES

Bill T. Horne, P.Eng.**Principal Consultant – Arctic Division**

Mr. Horne is a Senior Engineer with 25 years of experience in engineering for contaminated sites and geotechnical and permafrost engineering for oil and gas facilities, mining, hydrocarbon, and municipal projects in Northwest Territories, Yukon, Alaska, Alberta, Russia, and the Beaufort Sea. Areas of expertise include industrial plant site development, heavy equipment foundations, water and tailings dam designs, tailings deposition management, geothermal and deformation modelling, landfill and landfarm design, and project management.

Project Experience – Contaminated Sites

- Senior Geotechnical Engineer for the DEW Line Clean Up Project. Twenty-one sites are being decommissioned. Responsible for the Geotechnical assessments at all sites. Frozen landfills were designed for the contaminated soil. Initial site characterization, construction, and post-closure monitoring were carried out. Was responsible for the landfill design, thermal analysis, and geotechnical parameters for the construction specification. Project manager for EBA's role in overseeing the hydrocarbon assessment at several of the DEW Line sites. This was a team approach in conjunction with other consultants involved in the project. Client: DCC/UMA Engineering. Project Duration: 17 years.
- Cape Dyer DYE-M Beach Fuel Tankfarm - Principal Engineer for the evaluation, clean up and re-construction of the tank farm for NWSO. Contaminated soil was removed from the area, and area was reconstructed for new double wall tanks. The contaminated soil was stockpiled for future treatment. EBA was responsible for the design and quality control of the new tank farm containment area. An armoured drainage swale was designed to divert the freshet coming through tankfarm area. An as-built report was provided including as-built drawings and quality assurance testing results. Client: NWSO. Project Duration: 2 years.
- INAC Military Sites Clean Up Protocol - Mr. Horne was involved the development of the clean up protocol for the INAC Military sites and was a participant on the Technical Advisory Committee for the project. He was the primary author the landfill design guidelines and the effects on climate change, and was also the primary author for the failure modes and effects analysis for the project. He reviewed the INAC protocols and was the project manager for the finalizing the protocol documents. Client: INAC. Project Duration: 2 years.
- Cape Christian Site Remediation – Project Manager for providing site resident engineering services for the site remediation. Resident engineering services included overseeing the contractors clean up efforts, evaluating progress and preparing task authorizations. EBA also provided environmental testing of contaminated soils and hazmat materials throughout the project. Geotechnical quality control testing was provided throughout the project. Client: PWGSC/INAC. Duration: 1 year and extension to 2 years.

Education

B.Sc., Civil Engineering, 1983,
University of Calgary, Calgary,
AB

M.Sc., Geotechnical
Engineering, 1987. University of
Alberta, Edmonton, AB

Years of Experience: 25

Years in Designated Role: 2

Years with EBA: 22

Office: Edmonton, AB

Summary of Experience

Geotechnical and Permafrost Engineering, foundation analysis and design, earth dam designs, numerical modelling, and construction drawings and specifications for variety of mining and energy projects and contaminated sites

Geotechnical site investigation, foundations and earth embankment designs

Affiliations

Member, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)

Licensee, Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut (NAPEGG)

Member, Canadian Geotechnical Society (CGS) Member, Geotechnical Society of Edmonton (GSE)

- **Hydrocarbon Contaminated Sites.** Was the project engineer for the assessment and clean up of numerous fuel stations in Alberta over a period of 3 years for a variety of clients. A combination of drilling, sampling and ground penetrating radar was used to evaluate the sites. Many of the sites were cleaned up with excavation and off site soil disposal. On-site treatment was used at some sites which included landfarms, vapour extraction systems and pump recovery systems.
- **Principal Engineer for Johnson Point environmental assessment and remedial action plan.** A Phase III assessment was carried out for the high arctic oil and gas exploration staging facility on Banks Island. Environmental sampling, geophysical surveys and geotechnical assessments were used to characterize existing landfills and contaminated soil areas. A hazmat survey was also carried out on the infrastructure. A remedial action plan was prepared which included a clean plan and cost estimate for the clean up. Client: INAC, Project Duration: 1 year.

Arctic Geotechnical Projects

- **Senior Project Engineer for the design and construction of a tailings facility for the Kubaka Gold Mine, Magadan, Russia.** Developed thickened tailings deposition scheme including a water retention dam. Mr. Horne prepared the design, construction drawings and specifications, and oversaw the dam construction. Client: Kinross, Project Duration 10 years.
- **Principal Engineer for the foundation design of the PIN3 Long Range Radar site reconstruction.** This project involved carrying out a geotechnical and geo-environmental site investigation. Foundation options include a piled foundation or concrete thrust blocks. Client: DCC, Project Duration 2 years.
- **Senior Project Engineer for a deep permafrost site investigation in Yamal, and Arkangel, Russia.** Continuous coring was used to obtain undisturbed permafrost samples to 300 m below the ground surface. Geophysical logging was used to further identify the lithology and ice-rich zones. The information was used for thaw subsidence analysis for oil production wells. Client: Timan Pechora Corporation, Project Duration 2 years.
- **Gahcho Kue Diamond Mine.** EBA Principal Engineer for the geotechnical, and waste water management for the Gahcho Kue Diamond Mine Feasibility Study. EBA components of the project include water and tailings management, lake dewatering, site infrastructure planning, and environmental aspects of the waste water and lake dewatering. Client: DeBeers, Mountain Province, Project Duration 1 year.

Construction Drawings and Specifications

- **Roberts Bay Mine Site Reclamation – Tender drawings and specifications** were prepared for the Roberts Bay Mine tailings pond closure, new landfill construction and landfill remediation. Client: PWGSC, Project Duration 3 years.
- **Jericho Mine - Tailings Dams – Tender drawings and specifications** were prepared, and construction included blasted rock key trenches, frozen placed fill, geomembrane liners, and rip-rap. Client: Tahera, Project Duration 3 years
- **Jericho Mine – Closure – Care and Maintenance – Specifications** were prepared for the Care and Maintenance contract after the mine was closed and care of the mine taken over by INAC. Client PWGSC, Duration 1 year.

Publications

Kubaka Mine Tailings Design, Construction and Operation of Frozen Core Dam: A Case Study, ASDSO West Regional Conference 2001.

DEW Line Landfills, IWCSE 2002 Conference, Edmonton, AB

Permafrost Containment Landfills at Arctic DEW Line Sites, 56th Canadian Geotechnical Conference, 2003.

DEW Line Landfill Design and Construction, ASCE Conference, Edmonton, Alberta, 2004.

Performance Measures of Arctic Landfills, Assessment and Remediation of Contaminated Sites in Arctic and Cold Climates, (ARCSACC), 2005.

Rationalizing Climate Change for Design of Structures on Permafrost: A Canadian Perspective, Ninth International Conference on Permafrost, Fairbanks, 2008.

Herb D. Ziervogel, P.Eng.

EDUCATION

B.Sc.	University of Manitoba	1986	Geological Engineering
B.A.	University of Winnipeg	1992	Philosophy

Mr. Ziervogel has 19 years of engineering experience working in the fields of contaminant hydrogeology, soil and groundwater remediation, risk assessment and environmental geophysics. His particular specialty is the design and execution of large-scale field investigation programs, and conducting remediation at contaminated sites. Mr. Ziervogel is very experienced in conducting Phase I Environmental Site Assessments (ESAs), as well as Phase II and III ESAs of underground storage tank sites, industrial and commercial properties, mine site, landfills, arctic and remote sites. Mr. Ziervogel has also conducted hazardous materials sampling on a variety of sites. Mr. Ziervogel has also conducted remedial work at approximately 100 sites and has designed, built, and operated landfarms in the Arctic, bioventing systems in northern regions, and treated sites using ORC and various chemical oxidation products. Mr. Ziervogel has also remediated sites using soil vapour extraction, biosparging technology and MNA.

Mr. Ziervogel has conducted environmental work in all four western Canadian provinces, as well as Alaska, Yukon Territory, Northwest Territories, Nunavut and the Province of Ontario. Mr. Ziervogel is also a qualified expert in soil and groundwater contamination for the Court of Queen's Bench, Alberta and has written and presented papers at 14 conferences throughout Canada. His paper for the 49th Annual Canadian Geotechnical Conference was selected for the keynote address.

The following outlines Mr. Ziervogel's experience with specific descriptions and involvement.

ENVIRONMENTAL SITE ASSESSMENTS

- Conducted Phase III investigation of creosote and pentachlorophenol contaminated wood preserving site (former Northern Wood Preservers) in Prince Albert, Saskatchewan. The project used geo-statistics to evaluate the distribution of contaminants on site, and determine the cause of the contamination. Project Cost: \$250,000.
- Conducted a delineation study of pentachlorophenol and dioxin/furan contaminated site at former White Pass Railway Site in Carcross, Yukon Territory. Project Cost: \$50,000.
- Conducted combined Phase I and III ESAs of 25 power plant sites in NWT and Nunavut. Project Cost: \$800,000. The work included asbestos surveys and hazardous material assessment.
- Conducted groundwater monitoring, background soil sampling, and delineation study of the former Syncrude Edmonton Research Centre in northeast Edmonton. The site was contaminated with heavy hydrocarbons, zinc and chromium. This site was one of the first industrial sites to be awarded a reclamation certificate by Alberta Environmental Protection. Project Cost: \$250,000.
- Conducted over 600 environmental site assessments of various properties across Western and Northern Canada, as well as Alaska.

MINE SITE ASSESSMENTS

- Project Manager for four Phase II Site Assessments at mine sites at Westbay, Outpost Island, O'Connor Lake and Spider Island in NWT. Project included Screening Level Risk Assessments. Project Cost: \$500,000.
- Conducted a Phase III ESA of five mine sites at Silver Bay mines in NWT. Project Cost: \$200,000.
- Evaluated site assessment data for a gold mine in Yellowknife, NWT.
- Project Manager for Phase III ESA at DeBeers Kennady Lake Exploration Camp.
- Responsible for field sampling and occupational health and safety at an abandoned uranium mine (Rayrock Mine) in the Northwest Territories. Assisted in evaluation of remediation options at this site.

MILITARY SITE ASSESSMENT AND REMEDIATION

- Project Manager for Hydrogeological study at the former Axe Point Military Base in NWT.
- Project Manager for a Phase III ESA of former US Military Base at Axe Point in NWT. Project Cost: \$200,000.
- Conducted landfarm evaluation and sampling at CFB Wainwright.
- Project Manager for Phase III ESA and Screening Level Risk Assessment at CFB Namao.
- Conducted CEAA Environmental Assessments for construction and demolition project at CFB Wainwright.

REMEDIAL PROJECTS

- Responsible for remediating a site with abandoned drums and transformers containing PCBs. Product and wastes were removed from the site for destruction at Swan Hills, Alberta.
- Responsible for product recovery in groundwater at a former transportation facility (former Greyhound facility) in Edmonton. Approximately 20,000 litres of diesel product were recovered from the site. Project Cost: \$500,000.
- Project Manager for remediation of heavy hydrocarbon contaminated study and soils at the former Syncrude Edmonton Research Centre in northeast Edmonton. Approximately 50,000 cubic metres of soil were excavated and removed at the site. Project Cost: \$3,000,000.
- Project Manager for remediation of wood preservative contaminated site (former Northern Wood Preservers) in Saskatchewan. Project involved supervision of excavation of contaminated soils and product to be eventually bioremediated off-site.

- Conducted, supervised and project managed landfarming operations at five Nunavut Power Plant locations. Project Cost: \$1,000,000.
- Supervised operations of 30 landfarms and biopiles for remediation of hydrocarbon contaminated soils across Alberta.
- Project Manager for successful remediation, using ORC, beneath a building contaminated with BTEX.
- Project Manager for removal and remediation of 10 underground storage tanks and contaminated soil at CFB Griesbach to military sites and Namao.
- Project Manager for five bioventing projects in Alberta and NWT. Project Cost: \$100,000 per site.
- Project Manager for three Monitored Natural Attenuation Projects at service stations in Alberta.
- Project Manager for removal of 4 underground storage tanks at communications facilities for airports in northern Alberta.
- Conducted pilot trial for chemical oxidation study and installation of waterloo emitter system for protection of shoreline at Baker Lake in NWT. Project Cost: \$250,000.
- Project Manager for remediation of over 100 contaminated sites across Western and Northern Canada.

RISK ASSESSMENT

- Project Manager for a human health risk assessment of an industrial site in northeast Edmonton, contaminated with heavy hydrocarbons and trace metals. Project Cost: \$100,000.
- Project Manager for a risk assessment of a petrochemical plant in Fort Saskatchewan, Alberta. The site was contaminated with chlorinated organics.
- Project Manager for a risk assessment of an abandoned landfill at an airport in northern British Columbia. The site was contaminated with DDT, polyaromatic hydrocarbons, and trace metals. An estimated 7,000 buried drums are at the site.
- Project Manager for sediment toxicity assessments at four Northern Saskatchewan Lakes. Project Cost: \$150,000.
- Project Manager for screening level ecological risk assessment at salt impacted transportation yard in Stony Plain, Alberta.
- Conducted a human health risk assessment of hydrocarbon contaminated site caused by a leaking UST, at a communications facility for the Calgary International Airport in southern Alberta. The site was in an agricultural area.
- Assisted in two risk assessments of sites with leaking underground storage tanks.

LANDFILLS

- Conducted site search for regional landfill for the Regional Municipalities of Wood Buffalo in Fort McMurray, Alberta.
- Conducted site assessments of landfills at Johnson Point on Banks Island, NWT and at the former Axe Point Military Site, NWT.
- Conducted evaluations of landfills at O'Chiese and Sundance First Nations in Alberta.
- Senior review for site assessment and delineation of landfill to determine setback distance for housing development in St. Albert, Alberta.
- Conducted site assessment for landfill closure at Fort McKay First Nation, Alberta.

ENVIRONMENTAL GEOPHYSICS

- Assisted in Atomic Energy of Canada's Ground Penetrating Radar Research Program for identifying fractures and faults in the Canadian Shield as part of evaluating sites for their suitability for disposal of nuclear wastes. Also conducted electromagnetic and magnetic surveys and analyzed geophysical data of these sites.
- Carried out geophysical surveys using ground penetrating radar, EM-31, and magnetometer as part of environmental assessments of the oil fields, wells, batteries, pipelines and tank farms in the Kenai Peninsula, Alaska.
- Other geophysical projects include: an earth resistivity survey at the Yellowknife Airport, borehole geophysical surveys of the Lac du Bonnet Batholith, sonar on various lakes in Manitoba looking for signs of recent seismic activity in the lacustrine sediments and assisting in the correlation of acoustic and physical properties of core taken from Amauligak Hole #1 from the Beaufort Sea. Also conducted road radar surveys of pavement thicknesses at several Alberta communities.

HAZARDOUS MATERIALS

- Conducted asbestos surveys at 25 power plants in Nunavut and Northwest Territories.
- Conducted asbestos surveys, PCB and lead in paint surveys and other hazardous materials at the former U.S. military base at Axe Point and at Johnson Point, NT.
- Supervised clean-up of an illegal PCB transformer dump site south of Edmonton.
- Conducted asbestos survey and wrote specification for asbestos clean-up at Iqaluit airport.
- Conducted air monitoring for VOCs on five separate projects.

MISCELLANEOUS ENVIRONMENTAL PROJECTS

- Worked as a Fisheries Biologist Technician and Hydrology Technician at the Experimental Lakes Area near Kenora, Ontario for the Federal Department of Fisheries and Oceans. Specific duties included: collection and analysis of chemical and hydrological data for a terrestrial acid rain experiment; maintenance of a meteorological station; and sampling, identification, and tagging freshwater fish species at experimental and control lakes.
- Conducted air monitoring on four different projects.
- Reviewed environmental compliance audits for highway maintenance yards in Alberta.
- Conducted legal sampling for illegal sewage lagoon in Northwest Territories.
- Written specifications and has tendered over 50 projects ranging from above and underground storage tank replacements, excavations, ex-situ and in-situ remediation projects and reclamation.

GEOLOGY

- Assisted in mapping a portion of the Kissinew Gneissic Region located north of Flin Flon, Manitoba.
- Mapped and produced a report for the Department of Fisheries and Oceans on the Geology of part of the Experimental Lakes Area in Northwestern Ontario as part of study on acid rain.

EMPLOYMENT HISTORY

1990 - Present	Project Engineer – Environment Practice EBA Engineering Consultants Ltd. Edmonton, Alberta
1989 - 1990	Junior Engineer MESL Engineering Ltd. Hinton, Alberta
Feb - Oct 1989	Fisheries and Hydrology Technician Dept. of Fisheries and Oceans Experimental Lakes Area, Ontario
Jan - Mar 1987	Geological Services, Junior Geologist Government of Manitoba Winnipeg, Manitoba
Aug - Dec 1986	Geophysics Research Assistant Atomic Energy of Canada Ltd. Pinawa, Manitoba
May - Aug 1986	Quality Assurance Technician Aggregate Resources Co. Richer, Manitoba

May - Sept 1985 Junior Geologist
 Government of Manitoba
 Flin Flon, Manitoba

COURSES

Certificate	Haztech Canada	1991	Groundwater & UST Remediation
Course	University of Alberta	1991	Statistics for Experimenters
Certificate	University of Wisconsin-Milwaukee	1992	Risk Assessment
Course	University of Alberta	1992	Environmental Soil Chemistry
Course	University of Alberta	1993	Clay Mineralogy
Certificate	Haztech Canada	1993	Bioremediation
Certificate	Calgary Environmental Conference	1995	Reclamation of Wellsites and Related Leases
Course	University of Alberta	1996	Waste Utilization
Course	Athabasca University	2000	Environmental Law
Course	Battelle	2001	Monitored Natural Attenuation
Course	University of Athabasca	2007	Geochemistry of Metals

PROFESSIONAL ACTIVITIES

Member	Association of Professional Engineers and Geoscientists of Manitoba
Member	Northwest Territories Association of Professional Engineers, Geologists and Geophysicists
Member	Association of Professional Engineers, Geologists and Geophysicists of Alberta
Member	National Groundwater Association
Expert Witness	Court of Queen's Bench, Alberta

TECHNICAL PUBLICATIONS

Applications of Geostatistics to Geo-Environmental Engineering: Two Case Studies, Co-author presented to the 47th Annual Canadian Geotechnical Conference.

Environmental Science and Economics: Some Thoughts, Presented to the 48th Annual Canadian Geotechnical Conference.

Reduction of Contaminated Soils into Landfills: Opting for Risk Based Clean-up Criteria for Gasoline and Diesel Contaminated Soils, Presented to the 17th Annual Canadian Waste Management Conference.

Remediation of Syncrude's Edmonton Research Centre: Presented to the 49th Annual Canadian Geotechnical Conference.

A Case Study of the Remediation of Syncrude's Research Centre and the Changes Made in Syncrude's Research operations. Presented to the 18th Annual Canadian Waste Management Conference.

Accelerated Site Characterization for Northern Communities. Presented to the 2001 Assessment and Remediation of Contaminated Sites in Arctic and Cold Regions Conference.

Intrinsic Bioremediation of an Arctic Spill, Presented to the 55th Annual Canadian Geotechnical Conference.

Diatom, Cyanobacterial and Microbial mats as indicators of hydrocarbon contaminated arctic streams and waters, Presented to the 2003 Assessment and Remediation of Contaminated Sites in Arctic and Cold Regions Conference.

Evaluation of Amendments and temperature on the rate of Anaerobic Biodegradation of Repulse Bay Soils, Poster Presentation to the 2003 Assessment and Remediation of Contaminated Sites in Arctic and Cold Regions Conference.

Arctic Remediation, Presented to the 2003 Enviro-Test Environmental Seminar.

Biogeochemistry of Hydrocarbon Impacted Waters, Presented to the 2004 RemTech Conference.

Biogeochemistry of Hydrocarbon Impacted Sites in Contaminated Arctic, Presented to Edmonton Geotechnical Society, March 2004.

Bioventing at a Heating Oil Spill site in Yellowknife, Northwest Territories, Presented to the 2005 Assessment Remediation of Contaminated sites in Arctic and Cold Regions Conference.

Phase III Environmental Site Assessment, former Nunavut Power Generating Station, Bake Lake in Nunavut, poster presentation to the 2007 Assessment and Remediation of Contaminated Sites in Arctic and Cold Regions Conference.



APPENDIX B

APPENDIX B GENERAL CONDITIONS – ENVIRONMENTAL REPORT



ENVIRONMENTAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these “General Conditions”.

1.0 USE OF REPORT AND OWNERSHIP

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA's client. EBA does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by EBA shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. The Client warrants that EBA's instruments of professional service will be used only and exactly as submitted by EBA.

Electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

3.0 NOTIFICATION OF AUTHORITIES

In certain instances, the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by EBA in its reasonably exercised discretion.

APPENDIX C

APPENDIX C SERVICES AGREEMENT

EBA ENGINEERING CONSULTANTS LTD. SERVICES AGREEMENT

14940 - 123 Avenue • Edmonton, Alberta T5V 1B4 • p. 780.451.2121 • f. 780.454.5688

Project Name:	Milne Inlet Hydrocarbon Contaminated Soil Treatment Plan		
Project Location:	Mary River Project, NU		
Project Date:	December 2009		
Client Name:	Baffinland Iron Mines Corporation		
Contact Person:	Dick Matthews	Phone: 416.814.3966	Fax: 416.364.0193
Client Address:	Suite 1016, 120 Adelaide Street West	Email: dick.matthews@baffinland.com	
	Toronto, ON, M5H 1T1		
Invoice To:			
Purchase Order No.:			
EBA Services:	Geotechnical/Geo-environmental		
EBA Project Manager:	Bill Horne	Direct Line:	780.451.2130 x276
EBA Project/Proposal No.:	E14101092	Phase No.:	
Agreed Budget:	Fees: \$48,519	Other: —	Disbursements: \$4,480
	Total Budget: \$51,839	GST: \$2,519	Retainer: —

Thank you for your instructions in connection with this Project. EBA Engineering Consultants Ltd. (hereinafter referred to as EBA) is proceeding with the work defined below upon the following terms and conditions.

ARTICLE 1 – BINDING AGREEMENT

- 1.1 The following conditions shall be binding upon, and shall govern the mutual rights and obligations between you (hereinafter referred to as the CLIENT) and EBA in the provision of services by EBA for this Project.

ARTICLE 2 – SCOPE OF SERVICES

- 2.1 The scope of services shall be as agreed in EBA's Proposal No. PE14101092, or in the absence of a proposal, as requested by the CLIENT from time to time (hereinafter referred to as the Services).

ARTICLE 3 – TERMS OF PAYMENT

- 3.1 The CLIENT will pay EBA as consideration for the performance of the Services, in accordance with the above-noted proposal, or in the absence of a proposal, in accordance with EBA's Schedule of Rates in effect at the time of signing this Services Agreement.
- 3.2 Invoices will be issued monthly or as outlined in the proposal. Invoices are payable within 30 days unless otherwise agreed in writing. Interest of 1.5% per month (18% annually), shall be payable on all amounts not paid within 30 days.

ARTICLE 4 – EXTRA SERVICES

- 4.1 The CLIENT shall have the right to request EBA to perform services in connection with the Project that are in addition to the Scope of Services ("Extra Services") and EBA may, subject to agreement on the payment for such Extra Services, agree to perform such Extra Services, such agreement not to be unreasonably withheld. The CLIENT shall pay EBA for the performance of the Extra Services in accordance with EBA's schedule of rates in effect at that time. All other conditions within this Services Agreement shall apply to the provision of the Extra Services.

ARTICLE 5 – LIMITATION OF LIABILITY

- 5.1 In consideration of the provision of the Services, the CLIENT agrees that any and all claims which it has or hereafter may have against EBA in any way arising out of or related to EBA's duties and responsibilities pursuant to this Services Agreement, whether such claims are in contract or other tort, shall be limited to \$200,000.
- 5.2 In no event shall EBA be liable for any Loss which is occasioned by a delay beyond the control of EBA, or for any Loss which in any manner relates to a loss of earnings, profits or products, economic loss, delay, business interruption or which relates to special damages or consequential damages caused in any manner whatsoever, or any other damages which are not direct damages flowing from a breach of EBA's standard of care. EBA shall not be liable for any pre-existing environmental site conditions and any such Loss incurred by EBA shall be for the CLIENT's account.
- 5.3 Any action or claim by the CLIENT against EBA in contract or other tort in connection, or arising out of the Services provided by EBA shall be commenced within and not later than two (2) years from the date of (a) EBA's last Invoice for the Project; (b) the Suspension Date as set out in Article 12; (c) the Certificate of Completion or Substantial Performance for the Project; or (d) the termination of EBA's Services, whichever occurs first (the "Limitation Period"). The CLIENT further agrees that, following the expiration of the Limitation Period, EBA's liability for any claim brought by the CLIENT shall absolutely cease to exist and the CLIENT shall bring no legal proceedings against EBA.

- 5.4 The CLIENT expressly agrees that EBA's employees shall have no personal liability to the CLIENT in respect of this Project, whether in contract or other tort, and/or any other cause of action in law. Accordingly, the CLIENT expressly agrees that it will bring no legal proceedings against any of EBA's employees or principals in their personal capacity.
- 5.5 The CLIENT recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising out of the presence of those materials. In consideration of these risks, and in consideration of EBA providing the Services requested, the CLIENT agrees that EBA has no liability with respect to any issues relating to contaminants or other hazardous wastes located on the subject site.
- 5.6 In further consideration of EBA providing the Services to the CLIENT in connection with the Project in which contaminants and hazardous wastes are involved, the CLIENT agrees that in connection with incidents and claims initiated by third parties involving contaminants and hazardous wastes, the CLIENT shall indemnify, defend and hold harmless EBA of and from any and all suits, actions, legal, administrative or arbitration proceedings, claims, demands, damages, penalties, fines, losses, costs and expenses of whatsoever kind of character, arising or alleged to arise out of the Services of EBA or any claims against EBA arising or alleged to arise from the acts, omissions or work of others. Such indemnification shall apply to the fullest extent permitted by law, regardless of fault or breach of contract by EBA and shall include the fees and charges of solicitors in defending or advising EBA as to such claims. Without limiting the generality of the foregoing, such indemnity extends to claims which arise out of the actual or threatened disbursement, discharge, escape, release or saturation (whether sudden or gradual) of any contaminant or hazardous waste in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface soils, water or watercourses, persons, objects or any other tangible matter.
- 5.7 With respect to monitoring wells and all other installations that may have been installed by EBA, such devices are the property of the CLIENT; the CLIENT agrees to therefore indemnify, defend and hold harmless EBA from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor costs, arising or alleged to arise either in whole or in part out of Services provided by EBA, whether the claim be brought against EBA for breach of contract, negligence or other tort.

ARTICLE 6 – INSURANCE

- 6.1 If the CLIENT should obtain a course of construction insurance policy in connection with any construction project for which the Services are provided, the CLIENT shall cause EBA to be a Named Insured to that policy, and shall maintain and keep in force that policy during the construction period.

ARTICLE 7 – SAFETY

- 7.1 EBA is only responsible for the activities of its employees on the job site and is not responsible for the supervision of any other persons whatsoever. The presence of EBA employees on site shall not be construed in any way to relieve the CLIENT or any other persons on site from their responsibility for job site safety.
- 7.2 The CLIENT undertakes to inform EBA of all hazardous conditions, or possible hazardous conditions, which are known to it. The CLIENT recognizes that the activities of EBA may uncover previously unknown hazardous materials or conditions and that such discovery may result in the necessity to undertake emergency procedures to protect EBA employees, other persons and the environment. EBA shall, as soon as practical, report to the CLIENT the need to undertake emergency procedures. These procedures may involve additional costs outside of any budgets previously agreed upon. The CLIENT agrees to pay EBA for any expenses incurred as a result of such discoveries and to compensate EBA through payment of additional fees and expenses for time spent by EBA to deal with the consequences of such discoveries.

ARTICLE 8 – STANDARDS OF CARE AND WARRANTY

- 8.1 In the performance of professional Services, EBA will use the degree of care and skill ordinarily exercised under similar circumstances by other members of its profession practicing in the same or similar localities, based on the current state of practice. No other warranty or guarantee expressed, implied or statutory is made or intended by this Services Agreement.
- 8.2 The CLIENT recognizes that conditions may vary from those encountered at the locations where tests, borings or samplings are made by EBA and that the data, interpretation and recommendations of EBA are based solely on the information available. There is no warranty expressed or implied by EBA, that any investigation can fully delineate all subsurface features and characteristics.
- 8.3 EBA is not responsible for the interpretation by others of the information developed under this Services Agreement.
- 8.4 The CLIENT shall be responsible for reporting the results of any investigation to the relevant regulatory agency if such reporting is required and the CLIENT acknowledges that EBA may be required by law to disclose information to regulatory agencies and hereby consents to such disclosure.

ARTICLE 9 – DISCLOSURE OF INFORMATION BY CLIENT

- 9.1 The CLIENT agrees to fully cooperate with EBA with respect to the provision of all available information pertinent to the Services being performed by EBA. The CLIENT acknowledges that in order for EBA to properly provide the service, EBA is relying upon the full disclosure and accuracy of any such information. If the CLIENT becomes aware of any information provided to EBA that is inaccurate or incomplete, the CLIENT shall forthwith notify EBA of any error in the previous information provided to EBA.
- 9.2 Reports and other Services of EBA shall be performed by EBA on the assumption that information provided by the CLIENT or by any person on behalf of or with instructions from the CLIENT is correct. EBA shall not be liable to the CLIENT for any loss, damage or extra cost arising from any inaccuracy of such information.
- 9.3 If any information furnished by the CLIENT is determined by EBA to be inaccurate or incomplete, EBA shall notify the CLIENT and EBA shall be entitled to make any necessary changes in any reports, design documents or construction documents at the expense of the CLIENT.

ARTICLE 10 – CONFIDENTIAL INFORMATION

- 10.1 EBA shall not disclose any confidential information of the CLIENT relating to the Project communicated to or acquired by EBA in the course of carrying out the Services which, if known by others, would have a material and adverse effect on the business and operations of the CLIENT. EBA shall use such confidential information only for purposes that relate to the performance of the Services and not for any other purpose without the consent of the CLIENT. Similarly, the CLIENT shall not disclose any confidential information of EBA's communicated to or acquired by the CLIENT except as may be required by others who are performing work or Services in connection with the Project and who have entered into a Confidentiality Agreement satisfactory to EBA.

- 10.2 Confidential information shall not include any information which:
- (a) was at the time of disclosure or thereafter became part of the public domain through no act or omission of EBA or the CLIENT, or
 - (b) became available to EBA or the CLIENT from a third party who did not acquire such confidential information under an obligation of confidentiality either directly or indirectly from EBA or the CLIENT, or
 - (c) was known to EBA at the time of disclosure thereof by the CLIENT and vice versa, or
 - (d) was required to be discussed by law.
- 10.3 The provisions of this section shall be in force during the period the Services are being performed and shall remain in force for a period of five years from the date of EBA's last Invoice for the Project.

ARTICLE 11 – INTELLECTUAL PROPERTY

- 11.1 All concepts, products or processes produced by or resulting from the Services rendered by EBA in connection with the Project, or which are otherwise developed or first reduced to practice by EBA in the performance of Services, and which are patentable, capable of trademark, trade secret, industrial designs, proprietary information or know-how, or intellectual property (collectively "Intellectual Property"), shall be and remain the property of EBA, and other than as hereinafter set forth, the CLIENT shall not use, infringe upon or appropriate such Intellectual Property without the express written agreement and remuneration of EBA.
- 11.2 The CLIENT shall have a non-exclusive, worldwide royalty-free licence to use Intellectual Property for the life of the Project, and for no other purposes or project.

ARTICLE 12 – SUSPENSION

- 12.1 If the Project or any part thereof is suspended by the CLIENT for any reason, the CLIENT may suspend the performance of the Services in whole or in part on 45 days notice to EBA (such date being the "Suspension Date"). The CLIENT shall pay EBA in accordance with the provisions for remuneration for Services performed or incurred up to and including the Suspension Date and for any additional time and expenses which are necessary or incidental to the suspension of the Services which are expended or incurred subsequent to the Suspension Date or which are requested by the CLIENT subsequent to the Suspension Date.

ARTICLE 13 – TERMINATION

- 13.1 Either party hereto may, at its option, terminate this Services Agreement forthwith by written notice in the event the other party is adjudged bankrupt, or a receiver is appointed on account of its insolvency or it enters into an arrangement for the benefit of its creditors.
- 13.2 Either party shall be entitled to terminate this Services Agreement on fifteen (15) days written notice to the other party in the event the other party is in substantial default of its obligations pursuant to this Services Agreement and such default has not been corrected or reasonably commenced to be corrected within fifteen (15) days following receipt of written notice of such default.

ARTICLE 14 – UNDERGROUND STRUCTURES AND UTILITIES

- 14.1 It is the responsibility of the CLIENT to provide EBA with assistance in locating underground structures and utilities in the vicinity of any construction, exploration or investigation. EBA shall also rely upon third-party sources in order to determine the existence and approximate location of any underground structures and utilities of any kind. The CLIENT acknowledges that EBA shall not be responsible for any damage or any consequential damage done to any such subsurface structures or utilities. The CLIENT agrees to accept all liabilities and costs associated with the repair, replacement or restoration of any damage caused by EBA or its independent contractor(s) or subconsultant(s) in the performance of the Services.

ARTICLE 15 – FORCE MAJEURE

- 15.1 If either party is impacted in whole or in part by any event of force majeure including without limitation any act of God, war, riot, labour dispute, change in law, terrorism, civil unrest, flood, strike, fire, or any cause beyond the control of such party (except for financial inability), then such party so impacted shall be relieved of its obligations herein. Any party so impacted in whole or in part by force majeure shall promptly give the other party notice of the force majeure event including reasonably full particulars in respect thereof. Any of the party so impacted shall also be entitled to an equitable adjustment of the Services Agreement, which may include an increase in price, extension of time or other equitable relief as in good faith is reasonable, appropriate and supportable.

ARTICLE 16 – REPORTS

Use of Reports

- 16.1 The report pertains to a specific site, a specific development and a specific scope of service. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary assessment.
- The report and the recommendations contained in it are intended for the sole use of EBA's CLIENT. EBA does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's CLIENT unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user without recourse to EBA.
- 16.2 The report is subject to copyright and shall not be reproduced either wholly or in part without prior, written permission of EBA. Additional copies of the report, if required, may be obtained upon request.

Limitations of Report

- 16.3 The report is based solely on conditions which exist on site at the time of EBA's investigation. The CLIENT, and any other parties using the report with the express written consent of the CLIENT and EBA, acknowledge that conditions affecting the assessment of the site can vary with time and that the conclusions and recommendations set out in the report may be time sensitive.
- 16.4 The CLIENT, and any other party using the report with the express written consent of the CLIENT and EBA, also acknowledges that the conclusions and recommendations set out in the report are based on observations and testing on the subject site and that conditions may vary across the site which, in turn, could affect the conclusions and recommendations made.
- 16.5 The CLIENT acknowledges that EBA is neither qualified to, nor is it making, any recommendations with purchase, sale, investment, or development of the property, the decisions on which are the sole responsibility of the CLIENT.

Information Provided to EBA by Others

- 16.6 During the performance of the work and the preparation of the report, EBA may rely on information provided by persons other than the CLIENT. While EBA endeavours to verify the accuracy of such information when instructed to do so by the CLIENT, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.

ARTICLE 17 – GENERAL

- 17.1 This Services Agreement represents the entire integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations, understandings or agreements, either written or oral, made or exchanged between the parties.
- 17.2 The CLIENT may not assign this Services Agreement except with the consent of EBA, which consent shall not be reasonably withheld.
- 17.3 This Services Agreement shall be governed by and construed in accordance with the laws of the Province or Territory in which EBA's contracting offices are located without given effect to conflict of law considerations. Any action brought to enforce or interpret this Services Agreement may be brought and prosecuted only in the Courts of that province or in the appropriate Federal Court in that province. Before submitting a dispute to the Courts, the parties agree to submit such disputes to senior management to attempt to resolve the dispute.
- 17.4 Nothing in this Services Agreement shall create or shall be construed so as to create the relationship of principal and agent between the CLIENT and EBA, and for all purposes, EBA shall be an Independent Contractor in performing the Services.
- 17.5 No waiver by either party hereto of any breach of any of the covenants herein contained shall take effect or be binding upon that party unless the same be expressed in writing and any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other future breach.
- 17.6 The invalidity of any provision or unenforceability thereof shall not affect the validity or enforceability of any other provisions hereof.
- 17.7 The provisions of Articles 3, 5, 9, 10, 11, 13, 16 and 17 shall survive the suspension or termination of this Services Agreement.

IN WITNESS WHEREOF the parties hereto have duly executed and entered into this SERVICES AGREEMENT the day and year first above written.

The Parties, intending to be legally bound, have made, accepted and executed this SERVICES AGREEMENT as of the Date noted above:

KEVIN JONES, SR. PROJECT DIRECTOR,
Print Name and Title ARCTIC REGIONS

MICHAEL ZUROWSKI, EXEC. VICE PRESIDENT
Print Name and Title

Per:

[Signature]
Signature (EBA Engineering Consultants Ltd.)

Per:

[Signature]
Signature (Client)

MARCH, 1, 2010

Date

03 MARCH 2010

Date

APPENDIX D

APPENDIX D EBA RATE SCHEDULE

2009 FEE SCHEDULE
Effective January 1, 2009
(All amounts in Canadian dollars)



1.0 PERSONNEL - HOURLY RATES

Professional Engineer/Scientist	E1/S1	\$115	Technical Services	T0	\$ 78
	E2/S2	\$125		T1	\$ 89
	E3/S3	\$146		T2	\$ 104
	E4/S4	\$167		T3	\$119
	E5/S5	\$195		T4	\$134
	E6+/S6+	\$240		T5	\$154
				T6	\$174
Word Processor Operator	WP	\$ 83			

Hourly rates are surcharged by up to 50 percent for legal expert testimony work due to the interruptive nature of these assignments on other work commitments.

2.0 SUPPORT SUPPLIES AND COMMUNICATIONS

- Internal photocopying, internal reprographics, fax, postage and local courier costs
- Charged as 4 percent of total personnel hourly rate charges.

3.0 VEHICLES

All vehicles charged at \$0.60 per km plus negotiated day rate.

4.0 DISBURSEMENTS

- Subconsultants, contractors, hotels, airfares and other such third-party expenses
- Cost plus 10 percent

5.0 PAYMENT

Fees are billed monthly and are due upon receipt. Interest accrues at 1.5 percent per month (18 percent per annum) on accounts not paid within 30 days of the date on our invoice.

6.0 LABORATORY/MATERIALS TESTING SERVICES

As per "Schedule of Rates for Materials Testing Services" unless otherwise quoted.

7.0 NOTIFICATION OF CHANGES TO FEE SCHEDULE

Quoted rates are subject to change with notice during a project to reflect reclassification of personnel and salary adjustments. Projects extending beyond the calendar year are subject to changes in rates consistent with new fee schedules.

8.0 GOODS AND SERVICES TAX

The schedule of fees does not include GST. Where applicable, GST will be added and shown separately on the invoice.

APPENDIX E

APPENDIX E PROJECT BUDGET

PROJECT BUDGET						
Phase No.	Item/Individual	Classification	No. of Units	Units	Unit Rate	Cost
1.0	Preliminary Landfarm Design and Operations Manual					
	Horne	E5	25	HRS	\$195.00	\$4,875
	Ziervogel	E4	70	HRS	\$167.00	\$11,690
	Drafting	T4	70	HRS	\$134.00	\$9,380
	WP	WP	12	HRS	\$83.00	\$996
	Support/Supplies/Communications				4% of Fees	\$1,038
					Subtotal	\$27,979
2.0	Site Reconnaissance					
	Ziervogel/Sneddon	E4	84	HRS	\$167.00	\$14,028
	Analytical Testing					\$7,500
	PID Rental		2	Weeks		\$1,000
	Shipping					\$800
	Miscellaneous					\$500
	Travel - Flights, Taxis		1	Each	\$3,900.00	\$3,900
	Travel Accommodation and Meals		2		\$580.00	\$1,160
	Support/Supplies/Communications				4% of Fees	\$561
					Subtotal	\$29,449
3.0	Civil Works Plan					
	Horne	E5	12	HRS	\$195.00	\$2,340
	Drafting	T4	12	HRS	\$134.00	\$1,608
	Support/Supplies/Communications				4% of Fees	\$158
					Subtotal	\$4,106
4.0	Finalize Landfarm Design and Operations Manual					
	Horne	E5	8	HRS	\$195.00	\$1,560
	Ziervogel	E4	30	HRS	\$167.00	\$5,010
	Drafting	T4	8	HRS	\$134.00	\$1,072
	WP	WP	5	HRS	\$83.00	\$415
	Support/Supplies/Communications				4% of Fees	\$322
					Subtotal	\$8,379
Estimated Project Costs*						\$69,913

Notes: *GST not included in costs