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February 28, 2003
P13808.03

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0E 1J0

Attention: Ms. Dionne Filiatrault, P.Eng.,
Senior Technical Advisor

Dear Dionne:

Nanisivik Mine Proposal for Review of Phase II ESA and HHERA Reports

Further to my e-mail and subsequent discussion with you over the telephone on February 25, 2003, our proposed approach for the review of the above noted documents is as follows.

1. Review of Phase II of the Environmental Site Assessment (ESA) report.
We estimated that we will need approximately 45 hours for the review of this report, including:
   - Background review of previously submitted reports including 2001 ESA and Proposal for Phase II ESA submitted by Gartner Lee, ESA I report by Nanisivik Mine, and EBA report on soil sampling program at the town of Nanisivik (estimated time of 15 hours).
   - Prepare questions and comments on the report for the technical meeting to be held at the end of March 2003 in Iqaluit (estimated time of 30 hours).

   The review will be carried out by Dr. Priscu and myself, and will be billed as per our contract agreement with Nunavut Water Board (NWB).

2. Review of Human Health and Ecological Risk Assessment (HHERA) report.
The HHERA report addresses two main subjects: the Human Health Risk Assessment, and the Ecological Risk Assessment. The report deals with the effects of the abandoned mine on the human population, and with the effects on the environment, particularly on the flora and fauna of the area. Due to its content, the HHERA report will be a major focus of the discussion within the local community. It will be scrutinized by both the local community and all parties involved in the closure plan of the Nanisivik Mine.

It is therefore critical that this report be reviewed by specialists who have the knowledge about the effects of the potential contaminants to both human and the environment. Unfortunately, Acres do not have specialists who have principal interests in the field of toxicology, human health risk assessment, and ecological risk assessment. Consequently, we are proposing to obtain outside specialists for this review. We recommend the peer review be performed by Dr. Bryan Leece and Dr. Ulysses Klee of Dillon Consulting Limited (Dillon). Dr. Leece is a Senior Toxicologist and Risk Assessment specialist, and Dr. Klee is a Senior Aquatic Toxicologist. We have been working together with Dillon on mining projects in Northern Manitoba, including a recent HHERA project for Manitoba Conservation. CVs of Dr. Leece and Dr. Klee are attached for your review.

We estimate that the review for the HHERA report by Dillon will cost approximately $4,000 excluding GST and will be billed as a disbursement fee. The estimated cost represents approximately 5 days work by Dillon. The work will consist of the following:

- review of the HHERA report
- prepare a brief report containing evaluation of the HHERA report, comments and questions which will be included/submitted to NWB for the technical meeting. The review and brief report will be available to NWB prior to the technical meeting.

If required after the submission of the report and after the technical meeting, and upon your prior approval, additional time for Dr. Leece and Dr. Klee will be charged at an hourly rate of $ 145 and $125, respectively.

All estimated cost and hourly rates are based on straight cost (no mark up) and submitted as disbursement. The estimated cost assumes that neither Dr. Leece nor Dr. Klee be required to attend the technical meeting.

3. Follow up work after the Technical Meeting and liaison/administrative work between Acres, NWB and Dillon.
We estimated that this would be in the order of 25 hours, and cover the following:

- Provide a final review of the reports, incorporating new data and information from the technical meeting. This will include a brief report which summarizes our review for both the ESA II and HHERA reports (estimated time of 15 hours).
- Liaison with NWB for both the ESA and HHERA reports, and with Dillon for the review of HHERA report (estimated time of 10 hours).

This portion of the work will be carried out by Dr. Priscu and myself, and will be billed as per our contract agreement with NWB.

The estimated number of hours and costs do not include my time and disbursements for the trip to Iqaluit, tentatively scheduled for March 28, 2003. We will inform you ahead of time, should additional time beyond the above estimated hours be required as a result of extra work or as a result of findings in the reports which will require further work or review. We will also be required to formally notify Nanisivik Mine, Gartner Lee, and Jacques Whitford Environmental about our intention to review the above documents.

I hope that the above proposal is suitable for your purpose. Should you have any questions, please contact me at our toll free number 1-888-824-0441. I will contact you in the next few days to discuss this matter, and after you have a chance to talk to Mr. Philippe DiPizzo.

Yours very truly,

RAH:sep

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R. Halim , P.Eng
Senior Geotechnical Engineer

Professional Record

Bryan Leece is a Senior Toxicologist and Risk Assessment Specialist with over fourteen (14) years of experience in toxicology and contaminated site risk management. Sample projects demonstrating relevant experience are described below.

Risk Assessment

- Chief toxicologist for the risk assessments in residential communities surrounding the coke oven and tar ponds sites in Sydney Nova Scotia. The project assessed individual risks for over 100 residential properties residents located in the immediate vicinity of the coke oven operation of Sysco Steel in Sydney Nova Scotia.
- Risk Assessment Specialist providing guidance to the Ontario Ministry of the Environment on the completion of a community based human health risk assessment. This project involved detailed guidance and assistance to the Ontario Ministry of the Environment on the development and completion of a community based human health risk assessment that was used to set soil remediation objectives in the town of Port Colborne.
- Risk Assessment Specialist for a Site-Specific Risk Assessment for the Kanmet Foundry. This project involved the evaluation of human health and ecological risks associated with the re-development of an abandoned foundry site for use as a mixed commercial/parkland in Cambridge, Ontario. Risks associated with exposures to various heavy metals, volatile organic compounds were assessed and risk management plan was provided to the client.
- Risk Assessment Specialist for a Site-Specific Risk Assessment for Industrial Site. (Confidential Client). This on-going project involves the risk assessment associated with off-site contamination to aid in the development of clean-up objectives for on and off-site contaminants.
- Risk Assessment Specialist for a Site-Specific Risk Assessment for a Canadian Forces Base Site. This project involved the assessment of potential human health and ecological risks associated with soil and ground water contaminants to determine if immediate remedial action was required. The assessment was also used to set remediation goals for the redevelopment of the site as a residential area.
- Toxicologist/Risk Assessment Specialist providing toxicology and risk assessment guidance and advise to the Ontario Ministry of the Environment on an on-going basis. This project involves the provision of expert advice on the development of risk assessment policy and procedures for the MOE.

Risk Communication and Guideline Development

- Responsible for the development of ambient air quality criteria for uranium and uranium compounds at the request of the Eastern Region of the Ministry of the Environment to address community concerns over emissions of uranium from the Cameco nuclear refining operations in Port Hope.
- Involved in the development of the scientific rationale for establishing human health based on exposure limits for polycyclic aromatic hydrocarbons.
- Prepared and provided complex scientific and technical advice documents on human health and environmental effects to senior management, Approvals Branch, Regional and District Offices for the Ontario Ministry of Environment.
- Provided project co-ordination and technical guidance as Ministry of the Environment liaison to the Port Hope Community Health Concerns Committee on the development and implementation of a community health study.

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BRYAN LEECE, Ph.D

Senior Toxicologist/Risk Assessment Specialist

Education:

Ph.D. (Biochemistry), University of Guelph, 1986
Thesis: Biological Activity of Polychlorinated Biphenyls and Selected Organochlorine Pesticides
B.Sc. (Honours Biochemistry), University of Guelph, 1981

Affiliations:

American Chemical Society,
Member Since 1978

Employment History:

1999 to date - Dillon Consulting Limited
1988 to 1999 - Ministry of Environment
1986 to 1987 - Brock University

Principal Areas of Expertise:

- Toxicology
- Human Health Risk Assessment
- Ecological Risk Assessment

Professional Record

Other Project-Related Experience

- Risk Assessment Specialist providing technical assistance to the Smithville Phase IV Bedrock Remediation Program. This project involves the ongoing provision of risk assessment expertise in the development and implementation of a comparative risk assess that forces on the associated with PCB in ground water in fractured bedrock in Smithville, Ontario. The risk assessment is being used to set risk-based remediation targets that will be used to aid in the selection of the final remediation plan.

- Risk Assessment of PCB Oil mists (Confidential Client). This project involved the assessment of human health risks for residents living near a facility that releases oil mists which contain PCB. The project considered the direct inhalation exposures to PCB as well as ingestion and dermal contact exposures resulting from PCB accumulation in soil.

- Risk Assessment Specialist for a Retrospective Community Health Risk Assessment in Pukatawagan, Manitoba. This project involved the evaluation of human health associated with current and past buildings in Pukatawagan, Manitoba. The results of the assessment are being used to develop a final soil remediation plan from the community.

- Risk Assessment Specialist for an Industrial Tank Farm in St. John's, Newfoundland. The project involved the assessment of on and off-site human health risks associated with the petroleum hydrocarbon, lead, and arsenic contaminants in the soil and ground water.

- Detailed human health risk assessment for PCB-contaminated soil, sediment, groundwater and surface water at numerous sites in Ontario.

- Detailed review of third party site-specific risk assessments for numerous sites throughout Ontario.

- Coordinated a Ministry of Environment staff review of site-specific risk assessments to ensure that Ministry responses were consistent with the Ministry's Decommissioning Guidelines, that all sites were treated in a consistent and defensible manner, and that delivery time tables satisfactory to all parties were met.

- Detailed technical review of the human health risk assessments from the environmental assessments for the Interim Waste Authority Metro Toronto landfill selection process and the Laidlaw Hazardous Waste Landfill Extension and PCB Rotary Kiln Environmental Assessments.

- Risk Assessment/Human Health Specialist for the Port Hope Community Health Concerns Committee. This work involves the provision of risk assessment and human health expertise to the Port Hope Community Health Concerns Committee (PHCHCC). The PHCHCC is striving to develop and implement a community health study to address concerns over community exposure to nuclear processing waste as a result of historic and ongoing nuclear fuel processing in the community.

Professional Record

Ulysses Klee is a Senior Aquatic Toxicologist having 15 years of experience in ecological and human health risk assessments. Sample projects demonstrating relevant experience are described below.

Ecological Risk Assessments

- Human Health and Ecological Risk Assessment of 7 Abandoned Military Stations in the Canadian Eastern Arctic (1998)
- Environmental Risk Assessment of a Mine Tailings Pond in order to assess the potential risks associated with the development of a biological cover to support site closure.
- Environmental Risk Assessment for cyanide discharge from a holding pond receiving process water from gold mining operations in Argentina
- Human Health and Ecological Risk Assessment of 3 Former Railyard Sites in British Columbia
- Ecological Risk Assessment of Metals in Soil and Ground Water at a Former Industrial Site in Vancouver, BC (1998)
- Human Health and Ecological Risk Assessment of a Former Wood Preserving Facility in British Columbia (1997)
- Preliminary Ecological Risk Assessment For The Banff Springs Golf Course (1997)
- Human Health and Ecological Risk Assessment of the Former U.S. Naval Air Base at Argentia, Newfoundland (1995)
- Human Health and Geological Risk Assessment of Air Emissions from Proposed Mildred Lake Syncrude Canada Ltd., Oilsands Upgrade (1998)
- Ecological Site-Specific Risk Assessment for the Former Coal Gasification Plant Site, London, Ontario (1993)

Petroleum-Related Projects

- Human Health and Ecological Risk Assessment of 3 Former DEW Line Sites in the Canadian Eastern Arctic (1998)
- Human Health Risk Assessment of a Former Sour Gas Plant Site in Alberta (1998)
- Public Health Risk Assessment of the Irving Oil Refinery Ltd. Upgrade in Saint John, New Brunswick (1999)
- Human Health Risk Assessment of Air Emissions from the Holyrood Thermal Generating Station in Newfoundland (1999)
- Environmental and Human Health Risk Assessment for the Proposed VBNC Smelter/Refinery and Power Plant Facilities at Argentia, Newfoundland (1997)

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ULYSSES KLEE, Ph.D.

Senior Toxicologist and Risk Assessment Specialist

Education:

Ph.D., Aquatic Toxicology, Department of Biology, University of Waterloo, Waterloo, Ontario. Thesis title: Predicting the Toxicity of Chemical Mixtures Using a Body-Residue Approach, 1991-1998

M.Sc., Biochemistry, University of Waterloo, Waterloo, Ontario., 1988-1990

B.Sc., Honours, Biology/Chemistry Co-op, University of Waterloo, Waterloo, Ontario, 1983-1988

Employment History:

2000 to date - Dillon Consulting Limited

2000 to 2001 - BEAK International Inc.

1998 to 2000 - CanTox Environmental Inc.

1995 to 1998 - CanTox Inc.

Professional Record

Other Project Related Experience

- Environmental Assessment for the use of Blast Furnace Slag as Landfill Following Excavation Remediation on the Lake Superior Shoreline (1998)
- Qualitative Assessment of Potential Health Implications Associated with the Accidental Release of Catalytic Cracking Dust from an Oil Refinery (1999)
- Assessed the potential impact of a proposed open-pit coal mine in Northern Alberta on the surrounding aquatic and terrestrial ecosystem. Primary issues included aluminum and selenium levels in surface water and physical deterioration of aquatic habitats (stream and lake) and the potential impacts on Jasper National Park. Attended the public hearings as an expert witness. (1997)
- Biological Hazards Associated with Accident Scenarios at a Biomedical Waste Disposal Facility (1998)
- Quantitative Assessment of Exposure Potential Related to the ICI Canada Inc. Controlled Discharge. Witness Submission prepared for presentation before the Joint Board
- Health Hazard Evaluation of Emissions Resulting from the Destruction of PCB by Incineration, Smithville, Ontario
- Provision of Regulatory Information, Supporting Documentation and Literature Survey for Development of Ambient Air Quality Standards (1998)
- Derived a site specific remediation objective for sediments contaminated with PCBs
- Potential health effects of arsenic in liquid aluminum sulfate used in water treatment(1996)
- Preparation of regulatory submissions for a sulfonylurea pesticide. Critically reviewed supporting documentation, preparation of comprehensive summaries and study waivers
- Designed, supervised and managed a field study to determine the impact of a sea-lice control agent on non-target marine organisms living in the area surrounding Atlantic salmon fish farms (1996).
- Designed and managed field and laboratory studies to determine the potential impact of logdeck leachate on the receiving aquatic environment. Prepared final reports including recommendations for water treatment of site discharge. (1996)
- Conducted an in depth review of the scientific information for Persistent Organic Pollutants including the topics of environmental fate and behaviour, human and ecological toxicology in order to establish the current state of knowledge in this area and subsequently identify data gaps which would be used to direct funding towards appropriate research projects.