

#### Conservation and Water Stewardship

Climate Change and Environmental Protection Division Environmental Approvals Branch 123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5 T 204 945-8321 F 204 945-5229 www.gov.mb.ca/conservation/eal

File: 5583.00 July 19, 2012

Mr. Stephen West, P.Eng. Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, MB R8A 1N9

Dear Mr. West:

Re: Hudson Bay Mining and Smelting Co., Limited – Lalor Mine Environment Act Proposal

The initial review of the Lalor Mine Environment Act Proposal (EAP) has been completed.

The review has generated requests for additional information. Please address and provide detailed responses to the comments and requests for additional information from the Technical Advisory Committee (TAC) that are presented in the attached items. The EAP review process will continue upon receipt of your response.

In their June 22, 2012 and July 5, 2012 letters, the Canadian Environmental Assessment Agency (CEAA) indicated that an environmental assessment under The Canadian Environmental Assessment Act will not be required. Health Canada and Environment Canada have offered to provide specialist advice with respect to the project.

If you have any questions, please contact me at 204-945-7012.

Yours truly,

Jennifer Winsor, P.Eng.

AWinson

Environmental Approvals Branch

Enclosures

c. Ernest Armitt, Director – Manitoba Innovation, Energy and Mines
 Stephen Biswanger - AECOM
 Public Registries





Date: June 25, 2012
To: Jennifer Windsor

Climate Change and Environmental Protection Division Environmental Approvals Branch 123 Main Street, Suite 160 Winnipeg MB R3C 1A5

# Memorandum

From: Kevin Jacobs

Water Quality Management Section Manitoba Conservation and Water

Stewardship

123 Main Street, Suite 160 Winnipeg MB R3C 1A5

http://www.gov.mb.ca

Subject: EAP 5583.00 HUDSON BAY

MINING AND SMELTING CO.,

LIMITED-LALOR MINE

**Telephone:** 204-945-4304 **Facsimile:** 204-948-2357

E-Mail: Kevin.Jacobs@gov.mb.ca

Hello Jennifer

Please find below comments regarding the proposed Lalor Mine:

It is understood there are no discharges of wastewater to water bodies in the immediate vicinity of the proposed Lalor Mine, and that ore processing and disposal of tailings would occur at the Chisel North mine and Anderson Lake Tailings disposal facility respectfully.

It is understood the Anderson Lake Tailings facility is nearing capacity and that either a new or expanded tailings facility will be required during the lifetime of the proposed Lalor Mine. It is understood that such an expansion would require a new Environment Act Proposal to be filled and a formal review.

It is also understood a new processing plant is being considered for the site. We would respectfully request that such a proposal also be circulated for review particularly if any discharge to the environment is proposed.

Of principle concern with many mining operations with respect to water quality is the potential for oxidation of potentially acid generating waste rock and off site migration of impacted runoff to surface waters. The proposal of treating all waste rock as potentially acid generating is logical. While the proposal notes waste rock will either be used as backfill or transported to the Chisel North Open Pit for disposal, it is not noted how waste rock is to be stored in the interim. We recommend that if temporary storage is required it occurs in a contained area with a maximum hydraulic conductivity of  $1\times10^{-7}$  cm/s and that all runoff from this area is contained and directed to the Chisel North Waste Water treatment plant.

Concerns with water quality from proposals such as this one also include impacts from accidents or malfunctions at the site including ruptures of waste water lines. Given that mine wastewater will be pumped a considerable distance there is potential for rupture of wastewater lines leading to a release to the environment. The proponent should have a comprehensive spill response plan

in place in the event of an accidental spill or malfunction at the site. Installation of pressure sensing monitoring equipment may be considered as an immediate indicator of potential leakage.

Concerning the polishing ponds, the Environment Act License should require these be constructed with a maximum hydraulic conductivity of  $1X10^{-7}$  cm/s as per the environment Act Proposal.

Although no discharge is proposed to the immediate environment around the proposed mine, the Water Stewardship Division requests an ongoing limnological monitoring program to be established similar to what is required at other HBM&S mines. This would include a requirement for an annual report of water quality results and trends in water bodies surrounding the site.

The following comment concern the proposed sanitary wastewater treatment plant

- The following effluent standards should be in place for the waste water treatment plant as per the *Manitoba Water Quality Standards*, *Objectives and Guidelines Regulation* (196/2011).
  - BOD<sub>5</sub> 25 mg/L
  - TSS 25 mg/L
  - Fecal Coliforms 200 MPN / 100mL
  - TP 1 mg/L or required nutrient reduction strategy (see below)
  - The Manitoba Water Quality Standards, Objectives and Guidelines Regulation requires new or expanding wastewater treatment facilities to meet a 1 mg/L phosphorus limit or implement a nutrient reduction strategy.
- Consistent with the RM of Headingly and East St. Paul treatment plant licenses, it is recommended to include the following text within the monitoring clause 'the monthly geometric mean of 1 grab sample collected at equal intervals on each of a minimum of 3 consecutive days per week'.
- In addition to the above it is recommended that the proponent be required to monitor the following additional parameters on a monthly basis based upon a 24 hour composite sample: total phosphorus, ammonia, nitrate-nitrite, total Kjeldahl nitrogen, biochemical oxygen demand, pH, and total suspended solids.
- The proposal discusses that biosolids will be truck hauled away from the site. Further
  information is required regarding the ultimate use/disposal of sewage sludge from
  the proposed waste water treatment plan.
- The Water Quality Management Section is concerned with any discharges that have
  the potential to impact the aquatic environment and/or restrict present and future
  uses of the water. Therefore it is recommended that the license require the
  proponent to actively participate in any future watershed based management study,
  plan/or nutrient reduction program, approved by the Director.

Should you have any questions, please do not hesitate to contact me at the above telephone number.

Kevin Jacobs Water Quality Management Section Canadia Assessm

Canadian Environmental Assessment Agency

101 - 167 Lombard Avenue Winnipeg, Manitoba R3B 0T6 Agence canadienne d'évaluation environnementale

167, avenue Lombard, bureau 101 Winnipeg (Manitoba) R3B 0T6

July 5, 2012

CEAA File No.: 5284 MC File No.: 5583.00

Ms. Jennifer Winsor Manitoba Conservation Environmental Stewardship Division 123 Main Street, Suite 160 Winnipeg, MB R3C 1A5

Dear Ms. Winsor:

**SUBJECT: Lalor Mine** 

In my June 22 letter, I indicated that I would provide you with information on the types of federal expertise that are available to you which may be of benefit to the provincial review of the project along with federal contact information.

Environment Canada and Health Canada have provided letters that describe the types of expert advice they are prepared to offer that might be useful in the provincial review. Copies of those letters are attached. The contact names and their coordinates are contained in the letters. Please contact those individuals directly if you would like to take advantage of the expertise of those departments.

Thank you for your effort to ensure coordination and close communication between provincial and federal levels of government. If I can be of further assistance, please feel free to contact me at (204) 984-8020 or by e-mail at: <a href="mailto:peter.boothroyd@ceaa-acee.gc.ca">peter.boothroyd@ceaa-acee.gc.ca</a>.

Sincerely.

Peter Boothroyd Project Manager

Attach.

c.c. Stephen West, Hudson Bay Mining and Smelting Co. Limited



ENVIRONMENTAL PROTECTION PRAIRIE & NORTHERN REGION Room 200, 4999-98 Ave. NW Edmonton, Alberta T6B 2X3

Our file #: 4194-10-5/3277 Your file #: 5284

July 4, 2012

Peter Boothroyd
Project Manager
Canadian Environmental Assessment Agency
101-167 Lombard Ave
Winnipeg, MB R3B 0T6

Dear Mr. Boothroyd:

## **RE: LALOR MINE**

Environment Canada (EC) has reviewed the Lalor Mine Environment Act Proposal Report prepared by AECOM (May 2012) for the above proposed project. EC is not a Responsible Authority (RA) under the Canadian Environmental Assessment Act (CEAA) because:

- a) EC is not a proponent of the project and is not conducting any act or thing that commits the department to carrying out the project in whole or in part;
- b) EC is not making or authorizing any form of payment or other financial assistance to the proponent for the purpose of enabling the project to be carried out in whole or in part;
- c) EC does not administer any lands involved in enabling the project to be carried out in whole or in part; and
- d) EC does not issue a permit, license, grant an approval or take any action for the purpose of enabling the project to be carried out in whole or in part.

EC is prepared to provide specialist advice or expert information or knowledge on the proposal as per subsection 12(3) of the *CEAA* with a focus on federal statutes, regulations, policy, and associated program concerns as defined by EC's mandate. Should an RA identify additional specific environmental concerns with respect to the aforementioned project, EC, as a Federal Authority, will provide specialist or expert information or knowledge pursuant to subsection 12(3) of the *CEAA*.

EC has an interest in the environmental assessment of this project and would like to be kept informed and may participate in the environmental assessment process, consistent with the intent of Clause 62 of the new Canada-Manitoba Agreement on Environmental Assessment Co-operation.

At this time EC would like to remind the proponent and potential RA(s) of their responsibilities to the following four areas:

#### (1) Species at Risk

The federal Species at Risk Act is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The Act prohibits the killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat. The prohibitions apply to all Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on federal lands. The prohibitions apply only to Migratory Birds (under the MBCA) and aquatic species (under the Fisheries Act) on lands that are not federal lands, unless an Order is made. If species at risk are likely to occur within the project area, proponents are advised to use experienced personnel to undertake appropriately timed surveys and using widely accepted protocols.

EC is reminding responsible authorities of their responsibilities under section 79(1) and 79(2) of the Species at Risk Act.

"Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat."

"The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and actions plans."

### (2) Migratory Birds

EC's mandate includes the protection of migratory birds and their habitat. Regulations pursuant to the Migratory Birds Convention Act provide for the conservation of migratory birds and the protection of their nests and eggs. Section 5(1) of the Regulations prohibits the hunting of a migratory bird except under authority of a permit. "Hunt" means chase, pursue, worry, follow after or on the trail of, lie in wait for, or attempt in any manner to capture, kill, injure or harass a migratory bird, whether or not the migratory bird is captured, killed or injured. Section 6 of the Regulations prohibits the disturbance, destruction, or taking of a nest, egg or nest shelter of a migratory bird. Possession of a migratory bird, nest or egg without lawful excuse is also prohibited. Section 5.1 of the Act prohibits the deposition of substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

## (3) Wetlands

The Federal Policy on Wetland Conservation (FPWC) promotes the wise use of wetlands and elevates concerns for wetland conservation to a national level. The policy promotes the maintenance of the functions and values derived from wetlands throughout Canada, enhancement and rehabilitation of wetlands in areas where continuing loss or degradation of wetlands have reached critical levels, no net loss of wetland functions for federal lands and waters, recognition of wetland functions in resource planning and economic decisions, and utilization of wetlands in a manner that enhances prospects for their sustained and productive use by future generations. Environment Canada recommends that proponents comply with the provisions of the FPWC. Wetlands should be avoided irrespective of whether they are wet or dry and buffers or setbacks should originate from the high water mark. 100m setbacks should be utilized where feasible. Where wetlands will be lost, consideration should be given for compensation that is consistent with the Policy.

#### (4) Water Quality

With respect to construction activities and sedimentation, the proponent is reminded of Subsection 36(3) of the *Fisheries Act* that states:

"Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in place under conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter such water."

EC looks forward to continued dialogue and co-operation with respect to this Project. If you have any questions, please contact me at (780) 951-8946.

(original signed by)

## Krista Flood

Environmental Assessment Coordinator Telephone (780) 951-8946 Facsimilie (780) 495-2444 Krista.Flood@ec.gc.ca

# Hopith Spath Canada Canada

Environmental Health Program Regions and Programs Bureau 510 Lagimodiere Blvd Winnipeg, MB R2J3YI

June 19, 2012

Your file No. 5284
Our file MB/SK-2012/13-011

Canadian Environmental Assessment Agency Suite 101 - 167 Lombard Avenue Winnipeg, MB R3B 0T6

Subject: Health Canada's Response for the Lalor Metals Mine Project FCR Survey

Dear Mr Boothroyd,

Thank you for your email of June 12, 2012 inquiring about Health Canada's role in the environmental assessment of the aforementioned project under the Federal Coordination Regulations.

Based on the information provided, Health Canada has determined that it is not a Responsible Authority (RA) under Section 5 of the Canadian Environmental Assessment Act (the Act) with regards to the present scope of the project.

In the context of subsection 12(3) of the Act, Health Canada currently has expertise in the following biophysical areas related to human health that may apply to the project:

- Air quality effects
- Contamination of country foods (e.g. fish, wild game, garden produce, berries, etc)
- Drinking and recreational water quality
- Radiological effects
- Electric and magnetic fields effects
- Noise effects
- Human health risk assessment (HHRA) and risk management
- Federal air, water, and soil quality guidelines/standards used in HHRAs
- Toxicology (multimedia air, water, soil), and
- First Nations and Inuit Health

Should an RA, or a territorial / provincial authority, identify any specific human health concerns with respect to the aforementioned project, Health Canada would be pleased to provide expertise upon request as a Federal Authority, pursuant to subsection 12(3) of the Act, or under a territorial / provincial EA process.

Health Canada has recently published a document entitled "Useful Information for Environmental Assessments" which describes in greater detail Health Canada's areas of expertise and expectations with respect to human health information to be contained in environmental assessments (as applicable). It can be found at: <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/eval/environ">http://www.hc-sc.gc.ca/ewh-semt/pubs/eval/environ</a> assess-eval/index-eng.php

Note that Health Canada now requires a written request prior to providing any expertise in its possession. The request should be specific on the nature of the expertise requested, preferably outlining targeted questions or concerns, and should include the deadline for Health Canada's response. In order to assist us and avoid unnecessary delays, it is suggested that project information such as the scope of project, the scope of the assessment and the subject areas and/or portions of documents to be reviewed be provided at the time of the request for advice, if you have not already done so.

Your written request for expertise should be forwarded to the attention of the undersigned.

Sincerely,

Rick Grabowecky, MSc.

Regional Environmental Assessment Coordinator

Prairie Region Ph # 204-984-8318

cc:

E-mail: Rick.Grabowecky@hc-sc.gc.ca

Lindsay Smith-Munoz (HC)

From: Janusz, Laureen R (MWS)
Sent: July-10-12 5:15 PM

To: Winsor, Jennifer (CON)

Cc: Long, Jeff (MWS); Macdonald, Don (MWS)

Subject: EAP 5583 Hudson Bay Mining and Smelting Co - Lalor Mine due July 9

Follow Up Flag: Follow up Flag Status: Flagged

Hi Jennifer,

It took a little longer than anticipated to get through the proposal. As submitting comments directly to EAL is a new process for the Branch I just wanted to let you know that typically Fisheries Branch comments start off with a brief overview of the project mainly for our benefit as it provides some background/context should we need to refer back to the development and/or response in the future. Unfortunately it does make for some extra verb age at the beginning that will be repetitive for you.

Fisheries Branch has reviewed the proposal to construct and operate Lalor Mine. Many of the components have been approved and are being constructed as part of the Lalor Advanced Exploration Project and Lalor Ramp projects. The proponents will also be using existing licensed support facilities to minimize adverse environmental effects and maintain the footprint of the development to as small of size as possible.

Under this frame work they are proposing to direct treated sewage from the sewage treatment plant, effluent from surface runoff, process water and groundwater seepage (via a polishing pond) and waste rock (during production all waste rock is to be considered potentially acid generating) to the Chisel Open Pit which discharges to Woosey Creek/Morgan lake. Ore will be directed to the Stall Lake Concentrator with tailing and process water being directed to the Anderson Tailings Impoundment Area and concentrate shipped to Flin Flon. Both the Anderson and Chisel North developments fall under existing licenses/order and in the case of water withdrawals (estimated 14 L/s or 441.5 dam3/year) from Ghost and Chisel Lake for Lalor Mine and Snow Lake for Anderson Mine under existing Water Rights Licences/Environment Act License. Final discharge effluent is also regulated per the requirements of the Federal MMER.

It would seem that at this stage current licensing conditions and the need to meet the requirements of MMER including Environmental Effects Monitoring should address or provide a forum to address any fisheries concerns. It is worth noting that while the proponent has indicated that "EEM data to date for the Anderson TIA has indicated that there is no significant impact to water and sediment quality in the waterbodies associated with the TIA and that the differences in fish and benthic communities between near and far-field exposure sites are considered **negligible**" the periodic monitoring study has confirmed effects for yellow perch, brook stickleback and benthic invertebrates which has led to the need for the company to move into the Investigation of Cause phase of the EEM. There has also been elevated total mercury concentrations observed in the receiving water in the two previous EEM phases (periodic and focussed monitoring). Therefore any changes to the quantity and characteristics of effluent could exacerbate effects currently being reported.

In addition there are future components associated with this mine (a concentrator at Lalor Mine site and construction of new dams for Anderson TIA, or other alternatives, to address capacity shortfall expected by 2017) that the proponent indicates will be forwarded for review as required which overall seems to provide a very disjointed approach to reviewing the overall mining development and potential impacts.

Have a great evening.

From:

Stibbard, James (MWS)

Sent: To: July-05-12 1:44 PM Winsor, Jennifer (CON)

Subject:

Re: 5583.00 HBM&S Lalor Mine EAP, June 2012

## Ms. Winsor,

I reviewed the above noted EAP and related materials on behalf of Office of Drinking Water (ODW) specifically looking for possible threats to public or semi-public drinking water supplies. I noted the following:

- The EAP noted that no anticipated adverse effects upon groundwater are anticipated and no groundwater resources are used for drinking water supplies anywhere in the area of the proposed development.
- The EAP noted that wastewater discharged into surface watercourses would be treated to *Manitoba Conservation and Water Stewardship* standards and discharge licence conditions and no adverse effects on surface waters are anticipated. The EAP did not specifically note that the Town of Snow Lake domestic water supply is located downstream of the proposed mine site. The Town has a water treatment plant, which, under normal operating conditions, should not be adversely effected by the proposed mine. However in the event of a major spill of any materials which could flow into the upper parts of Snow Lake, the Town water treatment plant could possibly be effected. As such, ODW would recommend that contact information for the Town of Snow Lake water treatment plant operator be included in emergency response plans for the proposed development with instructions that the water plant operators be contacted in the event of a major spill of materials from the development into Snow Lake.

Beyond the above noted points, ODW does not see any other cause for concern with the EAP or the proposed development.

I trust this is satisfactory, but if you have any questions, please call. Regards,

## James Stibbard P. Eng.

Approvals Engineer
Office of Drinking Water
1007 Century Street
Winnipeg MB R3H 0W4
phone: (204) 945-5949

fax: (204) 945-1365

email: <u>James.Stibbard@gov.mb.ca</u> website: www.manitoba.ca/drinkingwater

<u>Confidentiality Notice:</u> This message, including any attachments, is confidential and may also be privileged and all rights to privilege are expressly claimed and not waived. Any use, dissemination, distribution, copying or disclosure of this message, or any attachments, in whole or in part, by anyone other than the intended recipient, is strictly prohibited.

From:

Liske, Cal (IEM)

Sent: To: July-05-12 2:22 PM Winsor, Jennifer (CON)

Cc:

Armitt, Ernest (IEM)

Subject:

Lalor Mine EA Proposal Report

**Attachments:** 

DOC.PDF

Hi Jennifer,

I am providing the following comments regarding the Lalor Mine EA proposal.

- 1. Submit an updated closure plan to the Director of Mines for approval by December 31, 2012.
- 2. Consultation is required with Mathias Colomb First Nations.

Regards, Cal.

Cal Liske, P. Eng.
Chief Mining Engineer
Mines Branch
Innovation, Energy, and Mines
360-1395 Ellice Avenue
Winnipeg, MB R3G 3P2
Phone (204) 945-6517
Cell (204) 619-3604
Fax (204) 948-2578

Email: Cal.Liske@gov.mb.ca

From:

Wendie and Clair [wpilgrim@mts.net]

Sent:

July-06-12 8:53 AM

To: Subject: Winsor, Jennifer (CON) Lalor Mine file 5583.00

Hello Jennifer

I do hope that when "further information" is available to other libraries, this info is also sent to the Snow Lake Library for all Applications in 100 km radius, including the Reed lake Project (HB) for example.

Thanks for the Lalor Binders, I gave it a good read and found it interesting and amazing for all the information put together. Binders will be returned to the Library.

For Lalor I only have one question: The sewage sludge from the on-site plant – Where does it go for final disposal? The Process Flow Diagram shows the treated effluent going to the Polishing Pond, then to Chisel Pit – Water treatment Plant – final Underground. But the Sludge is shown going to an Approved Facility –what is the approved facility?

Good Luck and long life for the Lalor Mine.

Clair Pilgrim

From:

Molod, Rommel (CON)

Sent:

July-09-12 3:39 PM Winsor, Jennifer (CON)

To: Subject:

Hudson Bay Mining & Smelting Co., Limited - Lalor Mine (5583.00)

Jennifer, Air Quality comment on the above proposal:

It is expected that the project will have no significant impact on air quality (dust, PM, and noise) provided that the measures stated in the proposal are implemented.

Thank you for the opportunity to review.

Rommel

### **Rommel Molod**

Air Quality Section
Environmental Programs and Strategies Branch
Climate Change and Environmental Protection Division
Manitoba Conservation and Water Stewardship
Suite 160 123 Main Street
Winnipeg MB R3C 1A5
T (204) 945-7047
F (204) 945-1211

From: Kaita, Adara (CON) on behalf of +WPG1212 - Conservation\_Circulars (CON)
Sent: July-06-12 11:46 AM

Sent:
July-06-12 11:46 AM
To:
Winsor, Jennifer (CON)
Cc:
Armstrong, Mike (CON)

Subject: EA Proposal - Hudson Bay Mining & Smelting Co. - Lalor Mine - File No. 5583

The Sustainable Resource and Policy Management Branch and the Lands Branch have no concerns.



#### Infrastructure and Transportation

Highway Planning and Design Branch Environmental Services Section 1420 – 215 Garry St., Winnipeg, Maniloba R3C 3P3 T (204) 945-2369 F (204) 945-0593

July 6, 2012

Tracey Braun, M. Sc.
Director, Environmental Approvals
Manitoba Conservation and Water Stewardship
123 Main St., Suite 160, Winnipeg, MB R3C 1A5

RE: Hudson Bay Mining & Smelting Co. Ltd. - Lalor Mine

Client File No 5583.00

Dear Ms. Braun:

MIT has reviewed The Environment Act Proposal noted above and we do not have any concern with the development as proposed.

Thank you very much for providing us the opportunity to review the proposal.

Sincerely,

Ryan Coulter, M. Sc., P. Eng.

Manager of Environmental Services



From:

Lusk, Jennifer (CON)

Sent:

July-04-12 2:19 PM Winsor, Jennifer (CON)

To: Subject:

Hudson Bay Mining & Smelting Co., Limited - Lalor Mine (Client File: 5583.00)

Parks and Natural Areas Branch has reviewed the proposal filed pursuant to the Environment Act for the Hudson Bay Mining & Smelting Co., Limited - Lalor Mine (Client File: 5583.00). The Branch has no comments to offer.

Jennifer Lusk for Jessica Elliott

#### **Jennifer Lusk**

Manitoba Conservation & Water Stewardship

Tel: 204-945-4391