

Environmental Stewardship 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: 5652.00

March 6, 2014

Graham Phipps Groundwater Management Section MB Conservation and Water Stewardship 200 Saulteaux Crescent, Box 18 Winnipeg, MB R3J 3W3

Dear Mr. Phipps:

Re: Hudson Bay Mining and Smelting Co. Limited (Hudbay) – Lalor Concentrator - Environment Act Proposal

The responses from the Technical Advisory Committee (TAC) that requested additional information regarding Hudbay's Environment Act Proposal for the Lalor Concentrator were forwarded to the proponent for response.

Please find attached Hudbay's February 6, 2014 letter responding to the comments and requests for additional information presented by the TAC. Please review the information provided to determine if your comments or concerns have been satisfactorily addressed.

Your comments, if any, are required to be submitted to the Environmental Approvals Branch by April 4, 2014. No response on your part will be assumed to indicate no concern.

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

Yours truly,

"Originally signed by"

Jennifer Winsor, P.Eng. Environmental Engineer

Enclosure

c. Don Labossiere, Director – Environmental Compliance and Enforcement Branch, Manitoba Conservation and Water Stewardship
Chris Beaumont-Smith, A/Director – Mines Branch – Manitoba Mineral Resources
Public Registries



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March 6, 2014

James Stibbard
Office of Drinking Water
MB Conservation and Water Stewardship
1007 Century Street
Winnipeg, MB R3H 0W5

Dear Mr. Stibbard:

Re: Hudson Bay Mining and Smelting Co. Limited (Hudbay) – Lalor Concentrator - Environment Act Proposal

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March 6, 2014

Kevin Jacobs Water Quality Management Section MB Conservation and Water Stewardship 123 Main Street, Suite 160 Winnipeg, MB R3C 1A5

Dear Mr. Jacobs:

Re: Hudson Bay Mining and Smelting Co. Limited (Hudbay) – Lalor Concentrator - Environment Act Proposal

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March 6, 2014

Cheryl Kubish Office of Fire Commissioner 508-401 York Ave. Winnipeg, MB R3C 0P8

Dear Ms. Kubish:

Re: Hudson Bay Mining and Smelting Co. Limited (Hudbay) – Lalor Concentrator - Environment Act Proposal

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Enclosure

 c. Don Labossiere, Director – Environmental Compliance and Enforcement Branch, Manitoba Conservation and Water Stewardship
 Chris Beaumont-Smith, A/Director – Mines Branch – Manitoba Mineral Resources Public Registries



February 06, 2014

Ms. Jennifer Winsor, P.Eng. Environmental Approvals Branch Manitoba Conservation and Water Stewardship 123 Main Street, Suite 160, Union Station Winnipeg, Manitoba R3C 1A5

Dear Ms.Winsor.

Re: Hudson Bay Mining and Smelting Co., Limited – Lalor Concentrator *Environment*

Act Proposal

Manitoba Conservation and Water Stewardship File Number: 5652.00

Thank you for forwarding the comments provided by your Technical Advisory Committee (TAC) concerning our *Environment Act* Proposal (EAP) for the Lalor Concentrator. The following further information is submitted in response to the TAC comments:

<u>Letter from Office of the Fire Commissioner – Cheryl Kubish, June 24, 2013</u>

Permits and Plans – Paragraph 2

The OFC recommends that the licence stipulate that the applicant obtain the required building and occupancy permits from the OFC at 508-401 York Avenue in Winnipeg as the AJH for this building project, and that an Emergency Response and Fire Safety Plan be filed and approved by the Snow Lake Fire Department in accordance with 2.8 of the Manitoba Fire Code.

Hudson Bay Mining and Smelting Co., Limited (HBMS) will obtain the required building and occupancy permits from the Office of the Fire Commissioner (OFC). An Emergency Response Plan and Fire Safety Plan will be filed with the Snow Lake Fire Department in accordance with 2.8 of the Manitoba Fire Code.

Letter from Water Quality Management Section - Kevin Jacobs, July 16, 2013

Spill Response- Paragraph 3

Given that pipelines will traverse several kilometres there is always the risk of accidents or malfunctions resulting from pipeline rupture. It is understood the pipeline will be continuously monitored with pressure sensitive electronic leak detection equipment. A

condition of the licence is recommended in addition to pressure sensitive leak detection is to require the proponent to have a comprehensive spill response plan in place in the event of an accidental spill or malfunction at the site.

As outlined in **Section 2.1.5.3** of the EAP, leak detection will be provided by a flow meter-based system. A rupture in the line would result in a difference between the two flow rates, which will subsequently set off an alarm at the concentrator process control system, following which site personnel will be dispatched to visually inspect the length of the pipeline to determine if there is a problem.

In addition to this project-specific mitigation measure, comprehensive spill response planning is required in all Hudbay operations, pursuant to its existing ISO 14001 Environment Management System. Therefore, in addition to the spill prevention measures provided in section 5.11.2 of the EAP report, HBMS also has in place an Environmental Spill Response Plan (PWP-616) and a Tailings Line Spill procedure (SLI-012) (see **Appendix A**), which will ensure that any accidents that may occur are responded to appropriately.

Anderson Discharge – Paragraph 4

It is noted that Anderson lake has limited discharge to Wekusko Lake during recent environmental effects monitoring studies. How might discharge rates and timing change with operation of the new concentrator at anticipated throughput rates?

Water from the Anderson Tailings Impoundment Area (TIA) discharges to Wekusko Lake via a decant pipe passing through Anderson Dam and into Anderson Creek. A valve is used to control the rate of discharge through the pipe. An overflow spillway also exists to permit the discharge of runoff under high flow conditions. During winter, discharge is typically shut off at Anderson Dam. The discharge remains shut off until spring, when the freshet flows commence and ice break up occurs. Discharge rates, duration, and timing from Anderson TIA are not expected to change with the operation of the Lalor Concentrator.

Pipeline Installation and Maintenance—Paragraph 7

Concerning pipeline installation and maintenance:

- It is recommended any potential license include clauses that require implementation of all necessary measures to prevent the erosion of soil into waterbodies
- In addition: measures to prevent the introduction and spread of foreign aquatic and terrestrial biota along the pipelines are recommended.

The proponent agrees. As outlined in Section 5.7.3 of the *Environment Act* Proposal, construction and maintenance will be carried out in accordance with the DFO Operational Statement on Culvert Maintenance Version 3.0.

Chemical Reagents – Paragraph 8

The concentrator proposes to utilize several chemical agents in the processing of ore, the proponent should provide and retain on site toxicological information on these

reagents. While final discharge would have to pass toxicology tests, such information would be helpful in the event of accidental spill or malfunctions, and interpreting biological data.

As outlined in **Section 2.8** of the EAP, the Lalor Concentrator will utilize reagents that are commonly used throughout the mining industry. HBMS maintains a Materials Safety Data Sheet (MSDS) inventory for all WHMIS controlled products, as required. MSDSs for the reagents will therefore be available on site.

Letter from Groundwater Management Section - Graham Phipps, July 18, 2013

Waste Rock Pad - Paragraph 1

Section 5.3.1 and 5.6 indicates that the waste rock pad will be lined with crushed limestone to neutralize the migration of acidic drainage and refers to section 2.1.1 and 2.1.1.2 for information on the pad. However, section 2.1.1 and 2.1.1.2 do not include information on the limestone pad. This information should be provided.

The references to a waste rock pad in **Sections 5.3.1** and **5.6** of the EAP (which deal with mitigation measures for Acid Rock Drainage) were in error. In fact, no waste rock pad is planned in relation to the Lalor Concentrator. We apologize for the confusion.

No waste rock will be stored at the site of the proposed Lalor Concentrator. Waste rock will be disposed of at the Chisel Open Pit, in accordance with Licenses No. 1919 S2 RR and 1501 RR, issued under *The Environment Act* (Manitoba).

Ore Stockpile – Paragraph 2

In preventing the penetration of leachate from the ore stock pile it is noted the ore stockpile will be lined with a synthetic liner. Its effectiveness on preventing leachate will depend on the liner integrity. How will the liner be protected from damage while handling the ore to maintain it's integrity?

HBMS is currently assessing the viability of installing an Ore Bin System rather than the indoor ore stockpile (as proposed in the EAP). The Ore Bin System would eliminate the need for a liner to prevent leachate migration. However, if the ore stockpile is constructed, the liner system will be designed to be robust enough for both long term storage of ore and movement of heavy equipment traffic over it. A typical design is to use a double-liner separated by a layer of sand complete, and equipped with a leak detection system should the top liner be compromised. The leak detection system ensures continued liner integrity and allows for repairs and maintenance of the top liner, if required.

<u>Letter from Office of Drinking Water – James Stibbard, July 19, 2013</u>

Emergency Response Plan- Paragraph 1

ODW recommends that the contact information for the Town of Snow Lake water system operators be included in the emergency/contingency plans for the concentrator with instructions that, in the event of a major spill into the surface water, the Town water plant operators be contacted.

HBMS has in place an Environmental Spill Response Plan (PWP-616). Under this plan, in the event that a spill occurs, the Environmental Control Department at HBMS is to be notified. The Environmental Control Department must then notify the appropriate government agencies or other external groups, as required.

We would be pleased to provide any other information that you may require. Thank you very much for your kind attention to this application.

Sincerely,

Superintendent, Environmental Control



ENVIRONMENTAL SPILL RESPONSE PLAN

 Document No.:
 PWP-616

 Date of Issue:
 2011-01-05

Printed version not controlled, refer to online document for current information.

PURPOSE AND SCOPE

To ensure that spills to the environment, at any location throughout the operation owned or leased by HBMS, are responded to in a timely fashion to reduce the impact of the spill, report it to government agencies (within 24 hours) and prevent reoccurrence.

RESPONSIBILITIES

The environmental spill response plan must be followed by all HBMS personnel when dealing with any spills (including but not limited to petroleum products, chemicals, or process materials such as ore, concentrate, slurry, etc.), breaks in pipelines, emergency dumping of water, dam breach or for anything that disrupts the normal flow of process effluent on its way to its normal final discharge point.

GENERAL

Spills include any hazardous materials and waste water or effluent discharges at any point other than at the point permitted in Environmental Licenses. Spills may occur as a result of unexpected or unpredicted events such as equipment failure or unusual weather conditions. Effluent releases may be done on purpose, such as to prevent mine flooding. In that case, the Environmental Control Department must be notified prior to the release so that appropriate mitigation actions are taken and necessary approvals are received. Accidental releases of contaminated materials from areas of primary containment into secondary containment also must be reported to the Environmental Control Department.

Provincial regulations require reporting of spills of certain substances in certain quantities. The Environmental Control Department files these reports on behalf of the department responsible for the spill. As such, a member of the Environmental Control Department must be contacted as soon as it is safely possible following a spill to ensure that the reporting requirements are met.

Note: At Snow Lake Operations the provincial spill response unit may be contacted directly rather than through plant protection.

COMMAND STRUCTURE/CONTACTS

In the event of a spill, the person discovering the spill should undertake the actions in the following section, and then immediately inform their Supervisor/Manager. The Supervisor/Manager and/or Plant Protection will inform the Environmental Control Department who will contact the appropriate government agency and advise them of the incident.

A PW0-508 Accident/Incident Report (blue form) must be used for reporting the particulars of any spills. A preliminary report must be filed with the Environmental Control Department, by fax, within 12 hours of the event.



ENVIRONMENTAL SPILL RESPONSE PLAN

Document No.:	PWP-616	
Date of Issue:	2011-01-05	

Printed version not controlled, refer to online document for current information.

Refer to PWC-057 for contact information.

GENERAL SPILL RESPONSE GUIDELINES

In the event that an environmental spill occurs, the following steps must be taken:

- 1) The person discovering the spill must:
 - a) Assess the safety concerns of the situation;
 - b) Immediately contact Plant Protection (ext. 2291) to activate the emergency response plan;
 - c) Stop and/or contain the material being released, if safe to do so;
 - d) Warn others of any possible danger; and
 - e) Report the release to the Area Supervisor.

2) The Area Supervisor must:

- a) Identify the material released and potential source, if it is safe to do so;
- b) Secure the area if not already completed by the person discovering the release;
- c) Ensure that Plant Protection (ext. 2291) has been contacted;
- d) Determine the approximate volume of material released and the size of the area contaminated:
- e) Provide any information about the released material to the Plant Protection and Environmental Control Departments; (Note: DO NOT leave a voice message); and
- f) Initiate a report by completing an PWO-508 Accident/Incident Report (blue form) and include information, such as:
 - location, time, date and duration of the spill;
 - material released (spill, leak, etc.) and estimated quantity;
 - source and cause of spill; and
 - area and environment (air, land, water, etc.) affected.

3) The Plant Protection Officer must:

- a) Activate the appropriate emergency response team (e.g. fire department, HAZMAT team, etc.);
- b) Contact an Environment Department staff member (Note: DO NOT leave a voice message); and
- c) Assist in securing the area (including clean up if required).

4) The Environmental Control Department must:

- Notify the appropriate government agencies or other external groups and record the names, dates and times of individuals contacted;
- b) Collect samples of released material and/or the affected area (i.e. soil, stream, etc.), if necessary;
- c) Notify the appropriate HBMS management personnel and record the names, dates and times of the individuals contacted;
- d) Determine when it is safe to return control of the area of the spill to the operation;



ENVIRONMENTAL SPILL RESPONSE PLAN

 Document No.:
 PWP-616

 Date of Issue:
 2011-01-05

Printed version not controlled, refer to online document for current information.

- e) Conduct any ongoing monitoring that may be required;
- f) Investigate to determine the cause of the emergency in accordance with PWP-809 Continual Improvement, in consultation with the appropriate Department Head and Health and Safety personnel;
- g) Determine how to prevent a reoccurrence; and
- h) Complete any necessary reporting requirements (e.g. accident incident report and/or externally required reports).



Tailings Line Spill at Mill

 Document No.:
 SLI-012

 Date of Issue:
 2012-09-20

Printed Version Not Controlled, Refer to Online Document for Current Information.

Performed By:	Mill Superintendent &/or Mine/Mill Area Manager	
PPE Required:		
Tools, Equipment,	Material Required:	

What To Do	How To Do It	Safety, Health, Environment, Quality Issues		
Additional Information: FREQUENCY: As Required				
All of our tailings discharge system (except ~100' where it crosses the highway), is on H.B. property. Should a spill occur in any of these two areas, a backhoe and transportation vehicle will be mobilized A.S.A.P. to start and complete the spillage cleanup. The Environmental Department in Flin Flon is to be notified whenever a spill occurs. Contact Steve West	Incidents are to be recorded on the ACCIDENT/INCIDENT REPORT Form No. PWO-508.	Not following procedure could result in improper clean up to meet company and/or government requirements with a negative impact to the environment.		
at (204) 687 – 2229. The Mill Superintendent and/or the Mine/Mill Area Manager will administer the initiation of this cleanup and conduct an inspection once the clean-up is complete.				
This procedure must be reviewed for adequacy by the Manager after a Tailings Line Spill. Records of the review must be attached to the incident report and the original procedure.				