



## HUDSON BAY MINING AND SMELTING CO., LIMITED

### Flin Flon Soils Study Preliminary Exposure Reduction Strategy and Actions

#### Background

This Exposure Reduction Strategy Report was prepared by Hudson Bay Mining and Smelting Co., Limited (HBMS) as a follow-up to the Flin Flon Soils Study Human Health Risk Assessment (HHRA) and Exposure Evaluation Study.

The risk assessment and subsequent exposure study were commissioned and fully funded by HBMS. The study process was performed by internationally recognized consultants in this field, Intrinsic Environmental Services Inc. (Intrinsic) based out of Mississauga, Ontario, who also utilized the services of numerous other technical consulting firms as required.

The study process took place within a governance structure facilitated by HBMS that included

- a Technical Advisory Committee (TAC) consisting of appropriate government and scientific representatives,
- a Community Advisory Committee (CAC) consisting of a broad cross-section of local stakeholders and, where appropriate,
- independent third party technical expert peer review and ethics review.

Intrinsic combined the results of both the HHRA and Exposure Evaluation study into a "Summary Documents and Integration Results" report, all of which are available on-line at [www.flinflonsoilsstudy.com](http://www.flinflonsoilsstudy.com) and can be found in the City of Flin Flon Council Chambers, The Town of Creighton office and the Flin Flon Public Library.

This integration report made three general recommendations where further investigation, continued monitoring efforts and/or risk management actions may be warranted and outlined a two-tiered conceptual risk management plan.

HBMS intends to facilitate the implementation of these recommendations as detailed in the preliminary exposure reduction strategy and actions that follow.

#### Exposure Reduction Strategy and Actions

##### 1) Reduction in Emissions from Industrial Sources

- HBMS finally completed the previously announced closure of its Flin Flon Copper Smelter on June 11<sup>th</sup>, 2010. It is anticipated that the closure of the smelter will result in a significant improvement in ambient air quality within the Flin Flon and Creighton area.
- It should be noted that the Flin Flon Zinc Plant already utilizes world class technologies that have effectively eliminated atmospheric emissions from this process.

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- In addition, HBMS will continue with a program of progressive remediation and re-vegetation of the area in and around the Flin Flon metallurgical complex. This program should result in a further improvement in ambient air quality.
- HBMS is also committed to its continuing support of the "Green Project". This project has been active for a number of years in re-greening areas within the community. This has resulted in significant aesthetic improvements and the added benefit of reducing dusting within the community.
- HBMS will continue with operating practices and procedures aimed at minimizing any dust emissions from the Flin Flon Metallurgical Complex in areas such as the metallurgical operations, tailings facility, etc.
- HBMS will also continue with other environmental improvements within its operations such as the paving of in-plant roads and material handling upgrades that will help improve ambient air quality further.

### 2) Monitoring Community Ambient Air Quality

- HBMS is committed to the continuation of its ambient air quality monitoring program to confirm that the anticipated ambient air quality improvements have been achieved.
- HBMS, in conjunction with the Manitoba Government, will also ensure that such information continues to be both publicly available and that the annual Air Quality Update presentation will continue to be made at the Healthy Flin Flon meetings for as long as is required.

### 3) Public Outreach and Education

- Lead exposure is a general community concern throughout the country, even in non-mining areas. Sources in older communities also include the historical use of lead paint, leaded gasoline and lead components in plumbing systems.

In line with its other community outreach initiatives, HBMS will work with the appropriate stakeholders to facilitate the development of educational programs and related strategies to assist in reducing child exposure to lead hazards arising from all potential sources of lead.

### 4) Further Exposure Evaluation for Lead in Children

- HBMS is also committed to performing an additional lead exposure evaluation study, tentatively scheduled for the Fall of 2011, to establish whether the various actions taken as a result of the study recommendations have brought about a further reduction in the average lead in blood levels of children within the community.

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### 5) Public Consultation & Communication

- HBMS will continue to facilitate the continuation of the study governance structure through a period of appropriate public consultation and follow-up in 2010 and beyond.
- HBMS will continue to maintain the Flin Flon Soils Study website ([www.flinflonsoilsstudy.com](http://www.flinflonsoilsstudy.com)) and telephone helpline (204-687-2020) to ensure that the study results, and potential future developments, remain fully accessible to the public and that queries can be addressed, for as long as is required.

### 6) Current and Evolving Science & Regulatory Policy

- HBMS recognizes that accepted standards or guidelines for human health exposure can continue to develop and change over time and remains committed to ensuring that it maintains its role in protecting the local community from any impact from its operations.
- The exposure reduction strategy should be re-evaluated in 2012 following the exposure evaluation study that is tentatively scheduled for the fall of 2011 and with the availability of post-smelter closure ambient air quality data. This re-evaluation will then determine if the strategy is delivering the anticipated reductions or whether further actions will be required.

HBMS welcomes comments on its preliminary exposure reduction strategy. This can be done by sending an email to [info@flinflonsoilsstudy.com](mailto:info@flinflonsoilsstudy.com) or by calling the helpline at (204) 687-2020. Comments and/or inquiries will be directed to the appropriate people and feedback will be provided. The exposure reduction strategy will be reviewed following the public comment period that is scheduled to end on October 15, 2010.

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