

# Flin Flon Area Soils Study: Human Health Risk Assessment

## Technical Advisory Committee Terms of Reference

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### 1.0 Background

HBMS, at the recommendation of the Manitoba and Saskatchewan governments, is undertaking the Flin Flon Soils Study, a scientific investigation to better understand the nature of soil conditions in the area, and determine if exposure to these soils may present unacceptable, long-term health risks to residents and/or visitors to this area. A Technical Advisory Committee (TAC) has been established to provide technical guidance to HBMS in its work to complete the Human Health Risk Assessment (HHRA) and any associated studies.

Manitoba Conservation conducted sampling in August 2006 to determine the concentration and potential distribution of metals and other elements in the surface soils of Flin Flon, Manitoba (includes Channing) and neighbouring Creighton, Saskatchewan.

Sample sites included publicly accessible lands such as boulevards, parks/playgrounds, schoolyards, vacant lots and undeveloped parcels of land in each community. A total of 108 sites were sampled, including 93 sites in Flin Flon, 13 sites in Creighton, a site at Bakers Narrows Provincial Park and a site in Cranberry Portage. The survey was designed and funded by Manitoba Conservation, with assistance from the Saskatchewan government.

Results of this preliminary assessment of soil conditions identified elevated concentrations of some elements, including arsenic, cadmium, lead and mercury in some areas sampled. At some sites across the study area, the detected levels of one or more elements do not meet the recommended soil quality guidelines for human health, as defined by the *Canadian Council of Ministers of the Environment (CCME)*. Past and present atmospheric emissions from the Hudson Bay Mining and Smelting Co., Limited (HBMS) smelter complex are a potential source of these elevated levels.

A preliminary health risk assessment has estimated that the risk to human health is likely low, but that a more comprehensive assessment is necessary to more fully understand the risk.

The HHRA is a follow-up study to a report by Manitoba Conservation (*Concentrations of Metals and Other Elements in Surface Soils of Flin Flon, Manitoba, 2006*; published July 2007).

## **2.0 Purpose**

The TAC will provide technical guidance to HBMS in its work to complete the HHRA and any associated studies. The Committee will also review and consider input from the Community Advisory Committee, and/or other sources, to better guide the studies to their final conclusions and recommendations.

- 2.1 Study activities upon which the TAC might offer commentary would include:
  - a) the sampling and reporting of community soil metal levels;
  - b) the development and implementation of HHRA studies;
  - c) risk management options which may be required;
  - d) the initiation of any remedial work arising from the conclusions of the HHRA studies;
  - e) all associated public communication and consultation activities.
- 2.2 The TAC will be maintained until such time as the HHRA is completed and distributed to the public, or as long as HBMS and the TAC members deem the work of the TAC to have value.
- 2.3 In addition, the TAC may provide comment and input on public consultation and communication activities in relation to the HHRA.

## **3.0 Membership**

- 3.1 The TAC will be comprised of representatives from:
  - 3.1.1 HBMS
  - 3.1.2 Manitoba Conservation
  - 3.1.3 Manitoba Health and Healthy Living
  - 3.1.4 Manitoba Water Stewardship
  - 3.1.5 Manitoba Science, Technology, Energy and Mines
  - 3.1.6 Saskatchewan Environment
  - 3.1.7 Saskatchewan Health
  - 3.1.8 Health Canada (advisory to the provincial governments)
- 3.2 Membership on the TAC does not constitute support or endorsement of HBMS.
- 3.3 A recording secretary and a Facilitator shall be provided by HBMS. The recording secretary and Facilitator are not members of the TAC.
- 3.4 Membership shall normally be for the duration of the HHRA. Government agencies may replace members or provide substitute members by notifying the recording secretary.
- 3.5 Member agencies are expected to provide participants who will engage consistently in the work of the TAC. Should the TAC observe that this is not happening with appropriate consistency, the facilitator will raise the issue either with the specific representative and or with the agency with the intent of achieving the necessary improvement in engagement.

3.6 Resignations are to be provided to the TAC Facilitator.

3.7 The facilitator shall notify HBMS of any changes in membership and shall announce any changes at the next TAC meeting.

3.8 The TAC will accommodate identified regular observers from the Community Advisory Committee. It is understood that one role of these observers is to report to the CAC on the TAC proceedings. In some cases, the TAC may be reviewing information which is confidential. In such cases, the CAC observers would be requested to relay the nature of the discussion without revealing the confidential elements of the information.

#### **4.0 Officers**

4.1 HBMS will provide an external Facilitator who will plan meeting agendas, convene participants, preside over the meetings, and coordinate activities of the TAC. The Facilitator is not a member of the TAC. The Facilitator will have demonstrated skills in facilitating similar advisory bodies or groups, and a familiarity with the HHRA process.

#### **5.0 Meeting Procedures**

5.1 The Committee shall meet approximately six times per year, with meetings based on milestones in the risk assessment process. Meetings may be cancelled at the discretion of the Facilitator. The Facilitator may call additional meetings as needed.

5.2 As a forum for discussion and comment on the HHRA, the TAC will confine its decision-making to TAC procedural matters and approval of minutes. The following order shall be observed in the transaction of business, but such order may be varied by unanimous consent of all Committee members present.

- a) Call to Order and Roll Call.
- b) Approval and/or correction of minutes.
- c) Discussion of Agenda matters.
- d) Correspondence/comments received including comments or perspectives from the CAC.
- e) Other business.
- f) Adjournment.

5.3 The TAC may choose to open meetings or portions of meetings to members of the public. Public attendees at such meetings would be invited to observe proceedings but would not normally have speaking privileges.

5.4 The Community Advisory Committee (CAC) is expected to provide opportunities for public input. The broader community may also elect to provide the TAC with written comments directly at any time.

5.5 A Quorum shall consist of fifty percent of the membership (measured by member agency, not by number of individuals), plus one.

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- 5.6 Decisions are to be made by consensus. Opinions and dissenting opinions will be recorded, although there will be an effort made to reach consensus.
- 5.7 In the absence of a quorum, meetings may be held and provisional decisions may be made for the record. However, all provisional decisions must be fully discussed by a quorum of the committee at a subsequent meeting in order to be accepted as official and acted on by the committee.
- 5.8 All agendas, minutes and letters from the committee, and all public communications on behalf of the committee, must be approved by the committee.
- 5.9 All documentation received or produced by the committee shall be made accessible to the public. Those individuals or organizations who submit documentation to the TAC, assume all responsibility for the accuracy of the data and information and assume all responsibility for all privacy or confidentiality requirements.
- 5.10 The Terms of Reference of the TAC will be reviewed on an ongoing basis.

**Minutes and Secretariat**

All administrative services associated with this committee will be the responsibility of HBMS. Minutes will be distributed electronically and archived on a publicly accessible website. All minutes will be forwarded to HBMS.