

# Human Health Risk Assessment - Flin Flon / Creighton Community Advisory Committee

October 15, 2007 - Victoria Inn  
Meeting #1

## Attendance

Community Advisory Committee (CAC) Membership					
Don Aasen Town of Creighton	X	Shelly Jones General Public		Deb Odegaard FF&D Env't Council	X
Rob Bratvold Creighton School Board	X	Tom Lindsey Steelworkers Union	X	Bill Pauley Flin Flon School Division	X
Ian Cooper HBMS	X	Charlene Logan MCRRHA		Dave Price Green Project	X
Cheryl Hordal General Public	X	Barb Lyons General Public	X	Tom Therien City of Flin Flon	X
Bev Hill NorMan Regional Health	X	Christa McIntyre Healthy Flin Flon			

Guests / Other		
Heather Acres (Guest) Green Project	Geoff Jones (Speaker) Manitoba Conservation	
George Bihun (Guest) Saskatchewan Environment	Sheldon McLeod (Facilitator) S.L. McLeod Consulting	
Greg East (Guest) FF&D Env't Council	Joel Nilsen (Secretary) HBMS	
Alan Hair (Speaker) HBMS	Audrey Romanchuk (Guest) Manitoba Conservation	
Jim Hicks (Speaker) Jacques Whitford AXYS	Elliot Sigal (Speaker) Intrinsic Environmental	

## Introduction

- A brief review of the agenda was conducted. The sole change was that Alan Hair was present to do the Background Presentation.
- The CAC Membership was requested to consider whether all key interest groups were represented on the committee.
- The CAC Membership was informed that the first draft of the group's Terms of Reference allows them to close portions of the meetings (i.e. ask guests and other attendees to leave the room) if it was felt that doing so would be conducive to more open discussion.

## Presentation – Background to the Human Health Risk Assessment (HHRA) – Alan Hair, HBMS

Reference Documentation - CAC Role Membership (PowerPoint Presentation)

- The CAC Membership was provided with an opportunity to introduce themselves and outline their interests in the HHRA process.
- The facilitator, guests, and speakers were introduced.
- The HHRA process is not unique, with Flin Flon / Creighton being one of the last communities in Canada with a smelter to undertake this process. The HHRA is being modelled on the experiences of Sudbury and will be conducted by Intrinsic Environmental.
- The role of the CAC is to ensure the credibility of the HHRA process, allow for community input, and to act as the liaison between the community and HBMS / Government.
- There is also a Technical Advisory Committee (TAC) which consists of members of the various government departments (Manitoba, Saskatchewan, and federal) with an interest in the HHRA

process. The role of the TAC is to ensure that proper scientific processes are followed and to provide guidance, input, and oversight to the HHRA process.

- Yet to be formed is a Communications Working Group, which will ensure the accuracy and consistency of information as well as be responsible for distributing information to interested parties.

Question: How do we know that the HHRA will provide us with the correct information versus other possible health studies?

Response: Further discussions at subsequent meetings regarding other health studies will continue.

### **CAC Terms of Reference / Procedures**

Reference Documentation - Flin Flon Soils Study DRAFT Community Advisory Committee Terms of Reference (Handout)

- The CAC Membership should be limited to roughly 15 people. Although this is not an absolute cap, too many participants can lead to issues of time management and committee efficiency.
- With the exception of Ian Cooper, HBMS and Government are not voting members of the CAC.
- Constant review of the CAC Membership is necessary to ensure that appropriate input is provided to the process.
- Participation in the CAC is **not** to be considered an endorsement of HBMS activities.
- Respecting interaction with the media, CAC Members are free to discuss their personal views with the media but are asked **not** to represent the CAC **as a whole** unless formally asked to do so by the CAC Membership.
- A detailed review of the Terms of Reference was conducted. The facilitator asked the group for permission to follow the draft Terms of Reference for each meeting on the understanding that it would be reviewed and improved or adjusted at the end of each meeting.

Question: How is the CAC to provide guidance on the HHRA process if they aren't involved in the technical process?

Response: Results of the technical work will be provided to the CAC, but the committee isn't "designed" to provide technical input. However, input of the HHRA Terms of Reference is requested from the CAC.

Question: When will meeting notes be available?

Response: Notes will be made available within 7 days. The CAC Terms of Reference will be updated to reflect this deadline.

Question: Will documentation be made available to members who miss a meeting?

Response: Yes. The facilitator will ensure that documentation from a meeting is distributed to any members who are not present.

Question: Will the media and general public be invited to attend meetings?

Response: Yes.

Note: No formal process for inviting the media and public was determined.

Question: Will the CAC issue formal communications / advice to Government?

Response: Communication with Government should be considered on a topic-specific basis. More discussion around this issue should take place at the next meeting.

### **Presentation – Manitoba Conservation Soil Quality Study – Geoff Jones, Manitoba Conservation**

Reference Documentation - Flin Flon Survey CAC Meeting (PowerPoint Presentation)  
- Manitoba Report No. 2007-01 "Concentrations of Metals and Other Elements in Surface Soils of Flin Flon, Manitoba and Creighton, Saskatchewan, 2006" (Handout)

- A presentation outlining the methodology and results of the 2006 soil quality survey was provided.

- It was noted that in considering immediate actions following release of the study results, HBMS and Intrinsic undertook comparisons to alternate guidelines to see what actionable levels are in other jurisdictions. The specific example of lead in soil was discussed, in which it was noted that the “actionable” levels used by the USEPA were substantially higher than the CCME guideline.
- It was noted that Saskatchewan has undertaken some “preliminary” health studies for the Creighton area. This work was initiated by Dr. Irvine of Saskatchewan Health following the 2002 tailings pond dusting events.

Question: Are there guidelines other than those provided by the CCME?

Response: Yes. Other provinces / countries have their own guidelines.

Question: Should the CCME “environmental” guidelines be considered in addition to the “human health” guidelines?

Response: Since the Flin Flon / Creighton area is primarily urban, the focus of the study is on the effects to human health.

Question: Three samples per site were collected during the study. What was the distance between samples?

Response: Samples were taken at intervals of up to 10 metres.

Question: When reviewing actionable level guidelines, were there any guidelines lower than the CCME that were considered?

Response: To be discussed with the Intrinsic presentation.

Question: Is there any obligation to do anything when CCME guidelines are exceeded?

Response: Exceeding CCME guidelines should lead to an investigation of the total exposure to the substance(s) of concern, which is the purpose of the HHRA.

Question: What is the availability of the preliminary health studies conducted by Saskatchewan?

Response: As far as was known, they should be publicly available. The CAC was asked to make a request to Saskatchewan Health for this information.

Note: Responsibility for making a request for this information was not assigned.

### **Presentation – Risk Assessment – Elliot Sigal, Intrinsic Environmental**

Reference Documentation - Intrinsic – RA Overview (PowerPoint Presentation)  
- Intrinsic HHRA Terms of Reference (Handout)

- A presentation on the process of conducting Human Health Risk Assessments was provided.
- It was noted that the Terms of Reference for the Intrinsic HHRA had just been released (copies provided). The CAC and TAC were both being asked to review and comment on the document.
- A host of exposure pathways were reviewed as part of the presentation including air.

Question: Would garden produce be included in the HHRA?

Response: Yes, although commercially available produce would not be included.

Question: Will the HHRA make considerations for testing **inside** the local schools?

Response: Yes. Both homes and schools will be considered in the indoor exposure sampling.

Question: Will Seniors’ Homes and Hospitals also be included?

Response: There was no original intent to include these facilities, but the sampling program could be expanded to include them.

Question: Will Daycare Centres be included?

Response: Yes.

Question: Will dermal exposure to soil be looked at in addition to ingestion?

Response: Yes, although previous experience in HHRAs has proven soil ingestion to be a much more critical exposure pathway.

Question: Are there any synergies between workplace exposures combined with exposures at home?

Response: No response available at this meeting.

- The CAC membership was then asked for input into exposure pathways that Intrinsic was unsure about the significance of:
  - Groundwater: It was noted that there are cottage owners who use groundwater wells and that there is significant use of a freshwater spring at Big Island.
  - Fish: While Ross Lake isn't a source of local fish, other local lakes such as Phantom, Schist, Athapap, and Kissinew should be considered.
- It was suggested that the CAC develop a questionnaire to circulate to the local residents on these and other exposure pathways.
- It was noted that the most time sensitive area requiring additional sampling was soil at private residences.

### **Presentation – Immediate Sampling Campaign – Jim Hicks, Jacques Whitford AXYS**

Reference Documentation - Presentation Flin Flon Soil sampling\_15oct07 (PowerPoint Presentation)  
- Soil / Dust Sampling Sign-up Sheet (Handout)

- A presentation outlining the immediate sampling requirements was provided.
- The sampling campaign will involve residential soil sampling beginning October 17 and indoor dust sampling beginning October 29.
- Soil sampling will involve 12 cores in the front and back yards of each residence.
- The sampling campaign is targeting 80 yards in the Uptown area, 60 yards east of Ross Lake, 10 yards in Channing, and 30 yards in Creighton.

Question: In acidic soils, are metals more mobile?

Response: Yes.

Question: How will the sampling program deal with cases where yards selected for depth profiles don't have the recommended depth of soil cover?

Response: Whatever depth is available will be sufficient.

- A discussion was held on the best ways to identify residents willing to participate in the soil / indoor dust sampling campaign. It was decided that the following approaches would be used:
  - CAC Members to canvass local residents for volunteers.
  - School Board representative to send notes home to parents.
  - Announcement to be put on the local radio.
- It was recommended that the request to the public include the phrasing that volunteers "may or may not be chosen" in the event more volunteers come forward than are required.
- As a last resort, Jacques Whitford AXYS personnel would go door-to-door looking for volunteers.

**ACTION:** Jim Hicks to meet with HBMS personnel on October 16 to finalize the wording of the request to the public. This would then be immediately distributed to CAC Members and the local radio station.

Question: Many homes have imported sod and soil from outside the local area. How will the study accommodate this?

Response: A questionnaire for participating residents will ask for this and other information.

### **Review / Next Meeting**

- A polling of CAC members indicated that the preference for future meetings was in the evenings and that a lighter buffet-style dinner be provided in order to speed up the proceedings.
- It was agreed that the TAC and CAC should exchange meeting notes.

**ACTION:** Sheldon McLeod to draft the agenda for the next meeting and distribute to the CAC.

**ACTION:** HBMS was asked to arrange for Elliot Sigal to be available for the next meeting, either in person or via teleconference.

**ACTION:** Sheldon McLeod to distribute a notice of the meeting / participants to the local media.

**NEXT MEETING:** **Thursday, November 1<sup>st</sup>, 6:30 pm – 9:00 pm**