

# Human Health Risk Assessment (HHRA) - Flin Flon / Creighton Community Advisory Committee (CAC)

December 1, 2009 – Creighton Community Hall  
Meeting #13

## Attendance

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

Guests / Other		
Sheldon McLeod (Facilitator) S.L. McLeod Consulting	Shirley Neault (Recorder) HBMS	Elliot Sigal (via telephone) Intrinsic Environmental
TAC Member (Observer) George Bihun (via telephone) SK Environment	Dr. Susan Roberecki (via telephone) MB Health & Healthy Living	Blair Jackson Goss Gilroy Inc.
TAC Member (Observer) Dave Bezak (via telephone) MB Conservation	Dr. James Irvine Churchill River Health Region	Celine Pinsent (via telephone) Goss Gilroy Inc.
Dr. Lawrence Elliott NOR-MAN Health Region	David Sampson Churchill River Health Region	Dr. Murray Lee (via telephone) Habitat Health Impact Consulting
2 Public Observers		

## Introduction

- Facilitator Sheldon McLeod called the meeting to order and reviewed the agenda.
- A review of the draft notes of the previous meeting was conducted. The notes were approved.
- Action Items from the previous meeting were reviewed. The status of these action items is summarized in the tables at the end of these notes.

## Member's Commentary – Community Feedback

- Each CAC member was given the opportunity to share what they are hearing in the community regarding the HHRA.
  - Members continue to be questioned about testing adults / long-term residents. Most community members understand the rationale once the CAC member explains it.
  - A community resident who expressed concern about the soil in their yard was advised by a CAC member to encourage that their grandchildren be tested.
  - There has been more conversation lately; mostly related to residents who had their children tested.
  - Some people are asking what happens next.
  - Some parents are glad that they had their children tested.

- A parent of children tested indicated that the experience was handled professionally and the study team was quite personable.

### **Status of HHRA**

Reference Documentation – December 1\_2009 update to CAC-HHRA

- Elliot Sigal from Intrinsic provided a brief update on the overall HHRA. Highlights included:
  - The draft responses to the IERP as well as the revised HHRA report are almost complete.
  - The Technical Advisory Committee will then review the documents and the report will be finalized (including information that will be available from the Evaluation of Exposure Study).
  - A plain language report called “Flin Flon Soils Study – Summary Report” will also be prepared. This report will also include a conceptual risk management plan (if necessary) which will be the end of a long road to get to the final risk and what, if anything, needs to be done to address the risk.
  - The reports are anticipated to be ready for public release by spring 2010.
  - Plans to communicate the final report will also need to be made. The Communications Working Group will determine the details for communication but will likely include an open house and media releases.

### **Evaluation of Environmental Exposure Update**

Reference Documentation – December\_1\_2009 EE update to CAC

- Blair Jackson from Goss Gilroy presented an update on the environmental exposure study. Highlights included:
  - Approximately 275 households representing approximately 475 children participated in the evaluation of exposure study.
  - Approximately 375 urine samples were collected and analyzed for arsenic and inorganic mercury. Approximately 200 blood samples were collected and analyzed for lead.
  - Notification letters to parents / guardians of children tested will be mailed next week. These letters will give the parents their child’s individual result. If consent was originally granted, the child’s physician will also receive a letter with the results of the analysis.
  - Additional follow-up with the child’s physician is being recommended for 3% of the participants for arsenic and 15% for lead. No follow-up is required for inorganic mercury. A cautious approach is being used for follow-up. The levels for follow-up are lower than those used in other studies.
  - Members of the Study Team met with the local physicians last night and they are all prepared to address the follow-up recommendation.
  - Work is ongoing to analyze all of the results to determine the overall community picture. These aggregated results will be included in the overall HHRA report described earlier by Elliot.
  - The Public Health officials are interested in both the community result as well as the individual ones.
    - The families will get the results, advice and follow-up (including the cause of elevated levels, if possible) with their physicians.
    - If metal levels are persistently elevated, Public Health (if approved by the parent / guardian) will get involved with further follow-up:
      - Assess where the exposure is coming from;
      - Educate on reducing risks of exposure;
      - Determine if other factors may be increasing exposure;
      - Visit home to inspect and investigate the yard, hobbies, etc.; and/or
      - Recommend other family members be tested.
    - Two fact sheets are being prepared (one for lead and one for arsenic) that will outline common exposures, potential sources, etc. and will be included with the letters to parents of participants.

Question: Could the recommended follow-up testing be impacted by the time of year that retesting may occur?  
Response: If retesting results in lower levels now than when the child was originally tested, that is a good thing. It is also possible that another round of retesting will be done late next summer or early next fall to ensure that the seasonal issue is covered.

Question: Could the yards of persons with elevated levels be tested next spring?  
Response: That will depend on several things (e.g. overall community results, individual retest results, etc.).

Question: Are these results what was expected?  
Response: The results are in line with expectations.

Question: Was snow tested?  
Response: Yes. It was a struggle to determine how to use the information because there is nothing to compare to. The IERP agreed with the methods employed to use the information.

Question: Why weren't the participants tested for cadmium?  
Response: The HHRA did not indicate that follow-up was needed for cadmium. It is only carcinogenic from inhalation. Elevated levels of cadmium in soil were not significant. There is less severe health risk associated with ingested versus inhaled cadmium.

Question: How is cadmium tested for biologically?  
Response: Exposures can be measured through either urine or blood.

Question: When the community picture is presented, will it include results from other communities to compare to?  
Response: Yes.

Question: Because the value of 5 was chosen as the follow-up level for lead instead of 10 used in other studies, will we be able to compare "apples to apples"?  
Response: Averages and means as well as proportions are used so we will be able to compare "action levels" with other community results.

Question: What is the treatment for elevated levels?  
Response: There is no recommended medical treatment for these levels; none of them are high enough to require such treatment. Therefore exposure reduction will be looked at.

Question: Do metals not accumulate in adults?  
Response: It is easier to get a clear picture from children regarding environmental exposures, whereas adults could have occupational exposures, etc. This is not a screening study but is being used to inform the HHRA. However, arsenic typically remains in urine for 3-5 days while lead stays in blood for approximately 50 days. We did look at the possibility of doing a lead in bone test but could not get the equipment to Flin Flon.

#	Action	Responsibility	Target Date	Status
032	Offer suggestions for engaging the public when the final report is ready	CAC Members	2010-02-28	2008-06-17, new 2009-09-02, ongoing 2009-12-01, ongoing
043	Prepare a list of CAC members and affiliations / have copies made for inclusion with the invitation letters	Ian Cooper	2009-09-03	2009-09-02, new 2009-12-01, <b>Complete</b>
044	Supply city and town offices with exposure study information packages	Ian Cooper	2009-09-04	2009-09-02, new 2009-12-01, <b>Complete</b>

**NEXT MEETING:      To be determined**