

Have your say contact us

Here's how:

- Give us your comments using the form below
- Attend workshops and open houses
- Call our toll free project information number at **1.866.315.0228**
- Send an email with your comments to: **questions@sudburysoilsstudy.com**
- Send written comments by mail or fax to:

The SARA Group
933 Ramsey Lake Road
Sudbury, ON P3E 6B5
Fax: (705) 675-4866

If you would like copies
of previous newsletters,
please contact us or visit
www.sudburysoilsstudy.com

Further information and frequently asked questions can be found at the project website www.sudburysoilsstudy.com.

Get Involved

- Please sign me up to receive Sudbury Soils Study Newsletters and Process Observer Reports.

Please send materials by: Canada Post Email

Name: _____

Organizational Affiliation: _____

Address: _____

City/Prov: _____ Postal Code: _____

Tel: _____ Fax: _____

Email: _____

We welcome your comments. Please feel free to use this form to provide your comments to Sudbury Soils Study partners at the accompanying address. (The SARA Group, 933 Ramsey Lake Road, Sudbury, ON, P3E 6B5, Fax: (705) 675-4866)

Current Study Activities

There are many activities that will take place in the community in the next few months.

Summer and Fall 2004

- Monthly Technical Committee meetings and progress reports (June, July, August, September, October)
- Release of results of metal analysis of individual garden produce and soils for participants in 2003 vegetable garden survey (May)
- Meeting with the Public Advisory Committee (PAC) June 22, 2004 (Gold Room, Science North) and September, 2004 (location to be determined)
- Participation in the City of Greater Sudbury Land Reclamation Tree Giveaway (May 29)
- Publication and Distribution of *Update* newsletter (late May)
- Greenhouse Studies for the Ecological Risk Assessment (July-December)
- Telephone Poll (June)
- Release of Soils Data from Ministry of the Environment and Laurentian University studies conducted in 2001 (June)
- Drinking Water Survey (June-August)
- Food Consumption Survey (July)
- Air Monitoring Survey (October 2003 - October 2004)

We will also hold meetings with interested stakeholders, and communicate our findings with the public through meetings, newspapers, and our web site, as required.

Web Site Updates

We have been working this spring to update our web site, to provide more timely and relevant information about the Sudbury Soils Study. This is part of our commitment to consult the community, and inform residents about our activities and results of studies, as they become available. Recently, we have added a detailed list of most frequently asked questions on the Study, with detailed answers provided by team scientists and members of the Technical Committee. As the study progresses, we will add reports and continue to update meeting information and media coverage on the site. Your feedback on the site, and the information presented, is always welcome www.sudburysoilsstudy.com.



1.866.315.0228
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spring 2004

update

Sudbury Soils Study
metals • health • environment

1.866.315.0228

www.sudburysoilsstudy.com

Vol. 2, No. 1

Study Updates

The Sudbury Soils Study is being conducted to determine whether the contents of the soils in our communities have the potential for possible risks to human health and the environment. It is one of the most comprehensive human health and ecological risk assessments ever undertaken in Canada, involving thousands of samples of soil, air, water, local food, produce, livestock, fish, and plants from the Greater Sudbury area.

Since our start in January 2003, the SARA Group has undertaken a number of studies to paint a picture of the many ways people, plants and animals could potentially be exposed to metals in their environment, and to determine if these metals have any measurable effect on their health. By collecting these samples, we can make our models more Sudbury-specific, to better determine risks, if any.

Vegetable Garden Survey

Part of the Human Health Risk Assessment (HHRA) is to estimate exposure to metals for local residents through the local produce they eat. The first step is to estimate the range of concentrations of metals found in fruit and vegetables that have been grown in Sudbury area soils. Thanks to the participation of so many interested Sudburians last summer, we were able to collect and analyze a wide variety of fruits, vegetables, wild berries and mushrooms from 64 backyard gardens, 15 commercial operations and 10 wild sites in the Greater Sudbury area. Along with the soil

in which they were grown, we analyzed the produce for a number of metals, including the chemicals of concern for the study – arsenic, cobalt, copper, lead, nickel and selenium.

Participating landowners were sent letters in March 2004 informing them of the results of their soil fertility analysis, which included the fertilizer treatment needed in their gardens.



Metal concentrations in fruits and vegetables were released to landowners who participated in the garden survey at the end of May 2004. These results show that levels in Sudbury produce are comparable to those seen in other communities in Ontario, and there is no expected immediate health concern. Gardeners can continue growing and consuming vegetables from their gardens as they have in the past.

This survey was important because it allowed us to better understand what produce is important to Sudburians, and understand the conditions in which this produce is grown. This Sudbury-specific information can then be

HOW YOU CAN CONTINUE TO PARTICIPATE

The Sudbury Soils Study relies heavily on the interest and participation of residents of Sudbury, and we appreciate your contributions to date.

Feedback from the community has helped us:

- Better define what we call Valued Ecosystem Components (VECs) – the study subjects important to you (e.g., plants, animals, activities);
- Understand that we need to provide a clear overview of the study process, and the role of the Technical Committee;
- Increase our awareness of local concerns related to metals in the environment; and,
- Increase accessibility of the Technical Committee and the Public Advisory Committee by opening up time at each meeting to hear questions and concerns from anyone interested in speaking. continued >



Study Updates Continued from page 1

used as part of the HHRA to help us estimate concentrations of metals that the people of Greater Sudbury are exposed to when they eat fruits and vegetables grown in backyard gardens, from local berry and vegetable farms, and wild blueberries and mushrooms that they have picked themselves.

Other HHRA activities that will look at metal exposure to Sudburians from other sources (such as eating local food, exposure from drinking water, contact with soil, etc.) will take place in the coming months.

Air Monitoring

In October of 2003, the SARA Group started a one-year air monitoring program that looks at the levels of metals in the air in various communities in the City of Greater Sudbury. Of the 10 sites selected, nine are located near residential areas, and the tenth site is located at the more remote location of Windy Lake Provincial Park, to examine air quality outside of the influence of smelting activity. The results of the study will be used in the human health risk assessment at the end of the one-year study.

The program has been underway for six months, and data collected during this time shows that relatively low concentrations of metals (well below provincial government standards for air quality) have been measured at all 10 sites. We will continue to collect and analyze data for the next six months, and will report back on the final results this winter.



Food Consumption Survey

We plan to conduct a survey of local food consumption patterns for residents of the Greater Sudbury area, including sources of local food and water, what is eaten (and how much), and how it is prepared. This will help us get a better understanding of where local food comes from, and the potential to contribute to exposure to the Chemicals of Concern for the Sudbury Soils Study.

This study will also provide data for use in the risk calculations for the HHRA, to make them more specific to the residents of Sudbury, and account for residents' particular eating patterns.

Ecological Field Work

Part of the Ecological Risk Assessment (ERA) has been to estimate exposure to metals for local wildlife through the food they eat. The first step was to estimate how much of the metal in the soil is being taken into plants and insects eaten by local wildlife. Last summer, teams from the SARA Group were out collecting grass, grasshoppers and soil from 17 sites, which were analyzed for metal content. These make up the diets of many animals, and collecting them allows us to estimate exposures and risks to local wildlife, through what they are eating every day (similar to the vegetable garden survey for the HHRA).

We have determined the range of soil metal concentrations at these sites, and will compare these numbers to concentrations in grass and grasshoppers from the same location. This information is currently being fed into risk calculations that will help us estimate the amount of metals consumed by animals through dietary items like plants and insects. This will help to estimate the exposure to wildlife from their diet.

The study team has also looked at metal levels in fish such as yellow perch and walleye collected by the local Freshwater Fisheries Co-Op Unit. These were collected from eight local lakes, including Ramsey Lake, and results will be used in the more detailed HHRA.

We are also reviewing ecological studies conducted by various researchers over the years in the Greater Sudbury area, and reviewing published papers on toxicity studies for our Chemicals of Concern.



Release of 2001 Soils Results

In June, the TC will be releasing a report on all 2001 soils data collected by the Ministry of the Environment, Laurentian University, and Golder Associates. The report will include an executive summary that will link data and interpretation for "urban" sampling results prepared by the MOE and "remote" sampling results prepared by Laurentian University.

Much of the information in this report has already been presented to the community through presentations and public meetings. This release will provide access to metal levels in soils in neighbourhood schools, parks and residential areas.

Based on available information, the Medical Officer of Health and the MOE believe that there is no expected immediate health concern related to soil metal levels in Sudbury. To date, there are no restrictions being recommended by the Medical Officer of Health to the use of parks, daycares, school yards, or residential properties.

The report will be made available to the public at local libraries and at the MOE's Sudbury Office. Members of the TC are also scheduling meetings with key groups to share their sampling results. ■

The Role of the Public Advisory Committee

John C. Hogenbirk, PAC Chair
Gary Hrytsak, PAC Vice-Chair

The Public Advisory Committee (PAC) was established to address the concerns of the community at large, by providing input to the Technical Committee (TC) on the HHRA and ERA for the Greater Sudbury area. There is a maximum of twelve volunteers on the committee. They all live in the study area and strive to be representative of the whole community, including the Whitefish Lake and Wahnapeitei First Nation communities.

The PAC meets on the third Tuesday of every other month, with additional meetings called as needed. These meetings provide an opportunity for the PAC to view progress to date, respond to concerns of the TC and the SARA Group, and comment upon how best to communicate the progress, and ultimately the findings, to the public. Communication is a two-way process and so an important role of the PAC is to provide feedback to the TC and the SARA Group about concerns voiced by the public. Meetings are open to the public, and everything presented to the PAC is available upon request. Public interest and participation is continuing to increase and so the PAC provides an opportunity for members of the public to address the PAC, and the members of the TC and SARA Group who regularly attend the PAC meetings.

PAC volunteers are committed to serve as a liaison between the public and the TC and the SARA Group during the Sudbury Soils Study. The PAC is not responsible for the scientific or technical review of the study. The background of the PAC volunteers is diverse, allowing the TC to provide input on these matters, but it is ultimately the TC and the SARA Group who decide these issues. It is encouraging that both groups have expressed their gratitude to the PAC for their feedback and suggestions throughout the process. As residents of Sudbury, the PAC are keen to do their part to ensure that the study is scientifically sound, and that the process and outcomes reflect the concerns and needs of residents of the Greater Sudbury area.

For more information about the PAC, please contact John Hogenbirk (jhogenbirk@nickel.laurentian.ca) or Gary Hrytsak (garyhrytsak841@msn.com).

Members of the Public Advisory Committee for the Sudbury Soils Study are:

- Ersin Abdullah
- Joe Cimino
- John Hogenbirk (Chair)
- Aino Laamanen
- Bob Somek
- Carol Zippel
- Julie Sabourin (Recorder)
- Darrel Alston
- Ivan Filion
- Gary Hrytsak (Vice-Chair)
- Rubina Nebenionquit
- Paul St. Jean
- Franco Mariotti (Process Observer)
- Vacant Position

Technical Committee Members

Ontario Ministry of the Environment

- Brian McMahon, Project Manager, Sudbury District Office
- Dale Henry, Director, Standards Development Branch
- Mary Ellen Starodub, Senior Advisor, Human Toxicology and Air Standards Section

INCO Limited

- Glen Watson, Environmental Biologist
- Dr. Bruce Conard, Vice President, Environmental & Health Sciences
- Dr. R.W. (Bob) Francis, Medical Director

Falconbridge Limited

- Marc Butler, Environmental Coordinator
- Dr. Gord Hall, Director of Occupational Health and Hygiene
- Denis Kemp, Director, Environmental Development

City of Greater Sudbury

- Bill Lautenbach, Director, Planning Services
- Dr. Stephen Monet, Coordinator of Environmental Initiatives

Sudbury & District Health Unit

- Dr. Penny Sutcliffe, Medical Officer of Health
- Bruce Fortin, Director, Health Protection Division
- Ido Vettoretti, Community Environmental Health Specialist

First Nations & Inuit Health Branch, Health Canada

- Ray Alatalo, Environmental Health Officer

Chair, PAC

- John Hogenbirk (or appointed representative from the PAC)

Chair, Communications Sub-committee

Rotating Position shared by communications experts from the MOE, City of Greater Sudbury, SDHU, Inco Limited and Falconbridge Ltd. or appointed representative

- Franco Mariotti, Process Observer
- Dick DeStefano, Technical Committee Facilitator
- Julie Sabourin, Administrative Support

HOW YOU CAN CONTINUE TO PARTICIPATE (continued from page 1)

We would also like to thank all members of the public who have sent us an email or called us with a question, concern or comment. Your input is very valuable to us, and we are listening to you to help make this study better. Please continue to ask questions. We promise to do what we can to help. All comments received will be placed on our web site (www.sudburysoilsstudy.com). If you do not have access to the internet, please give us a call.

If you have any questions or comments about the study, please contact us by email at questions@sudburysoilsstudy.com, or call us, toll-free, at

1-866-315-0228. Our telephone number is voice-mail only, but we do promise to get back to you within 24 hours.

Our next Public Advisory Committee meeting will be held on June 22, with another to follow this September. Technical Committee meetings are held monthly, as well. Details about future opportunities to speak to the study team will be published in local papers, and on our web site, in the near future. ■