

Environment

Assessing the impact of a century of mining

■ \$5-million study examines the potential risks to human health and the environment from smelter emissions

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The Sudbury Soils Study is one of the most comprehensive assessments of its kind across Canada. The study will provide valuable conclusions on the potential health risks associated with a century of mining in the City of Greater Sudbury.

It will also provide scientists, regulators, industry and health officials across Canada with a new framework for developing the collaborative and transparent processes and community partnerships needed to effectively address environmental and health concerns.

"What you are doing in Sudbury is very unique, very impressive, and we are intrigued by the process," said Jacqueline Patterson of Toxicology Excellence in Risk Assessment (TERA), an independent U.S.-based group of scientists that will be coordinating a peer review of the study. "We are heartened by the agency and community involvement – that's how you get things done. And we are impressed by the checks and balances in the process."

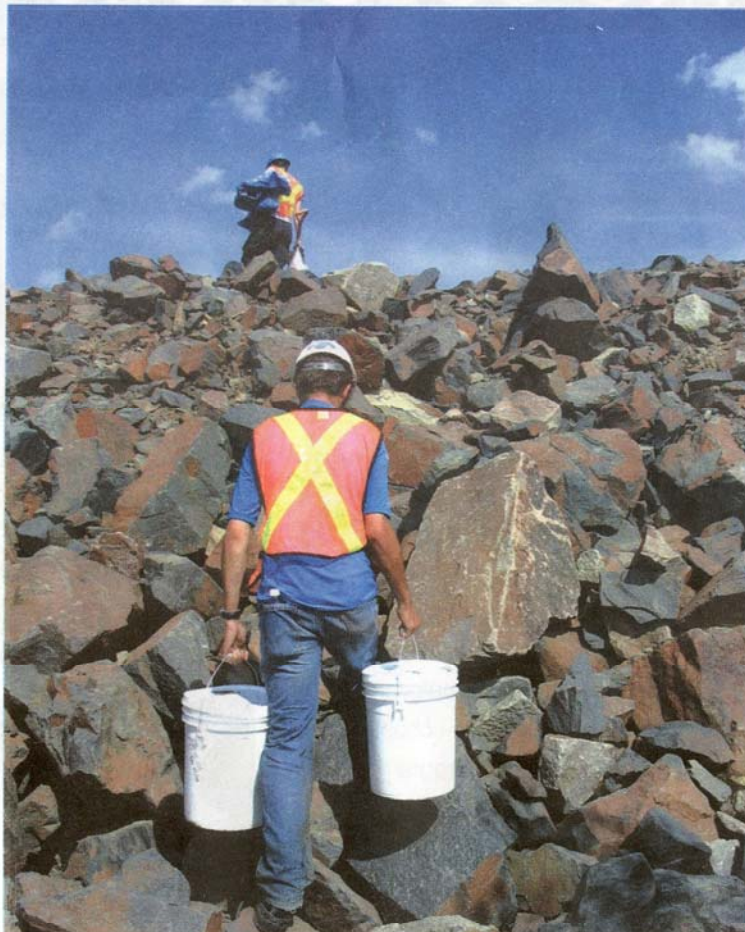
The three-year, \$5-million study is examining the potential risks to human health and the environment from metals in soils from smelter emissions, focusing on arsenic, cobalt, copper, nickel, lead and selenium. The study is unique in that no other program has been as comprehensive or as groundbreaking in the field of risk assessment. We hope that it will become a model for similar studies in other jurisdictions that face similar challenges.

Partnership

The Sudbury Soils Study is spearheaded by a community partnership. The scientists conducting the studies and gathering the scientific data are members of the Sudbury Area Risk Assessment (SARA) Group, and are leading experts in risk assessment. The study is being managed and overseen by a technical committee made up of representatives from the mining companies that are sponsoring the study, Inco Ltd. and Falconbridge Ltd., as well as the Ontario Ministry of the Environment, the Sudbury & District Health Unit, the City of Greater Sudbury, and the First Nations & Inuit Health Branch of Health Canada.

The technical committee makes all decisions by consensus and presents all study decisions and results to the Public Advisory Committee (PAC), a volunteer committee of representative citizens from the Sudbury community and an independent process observer. The process observer attends PAC meetings and provides quarterly reports on the progress of the technical committee and the SARA Group to the community through the study's website.

Once the risk assessment results have been peer reviewed and released to the community in mid-2006, the study team will evolve to accommodate



Thousands of soil samples were collected to assess potential risks to human health

the next phase of the study. The risk assessments conducted during the Sudbury Soils Study will be used as the basis for risk management or additional studies, if required. Inco Ltd. and Falconbridge Ltd. are committed to taking any necessary action to protect human health and the environment.



Christopher Wren: a model for similar studies in other jurisdictions

An additional legacy of the Sudbury Soils Study is the wealth of scientific information it will contribute to international knowledge about how metals interact with the environment. In addition to the thousands of soil samples collected during the

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study, scientists also conducted a vegetable garden survey, an air monitoring program, a drinking water survey, a food consumption survey, livestock and fish tissue surveys, an indoor dust survey, detailed ecological surveys and soil toxicity tests.

Data repository

All of the scientific information gathered during the study will be made available to the academic community, particularly researchers at Sudbury post-secondary institutions: Laurentian University, Collège Boréal and Cambrian College. It will be housed in a central data repository and will assist researchers with future risk management and remediation programs.

The information gained from these samples can be also used in other

Sudbury environmental programs, such as Clean Air Sudbury (CAS) and the Vegetation Enhancement Technical Advisory Committee (VETAC), to name but two of many local initiatives. Several faculty members and students at Laurentian University have also participated in various aspects of the Sudbury Soils Study. The human health risk assessment (HHRA) should also provide very valuable information to one of the latest Sudbury programs, the City of Greater Sudbury Healthy Community program which focuses on a healthy community in terms of the connections between economy, environment and social development.

The study team's long-term goal is to understand the impacts of a century of mining, and develop the means to continue to make Sudbury a great place to live, now and into the future. As the Sudbury Soil Study continues, the study team remains committed to an open, transparent process and will continue to provide information to the community and on-going opportunities for public input and participation.

For more information on the Sudbury Soils Study, visit the website at www.sudburysoilsstudy.com or call the project information line at 1-866-315-0228.

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