Communicating with Future Generations

A Workshop Primer on Communicating the Arsenic Hazard Giant Mine to the Future

WHO ARE WE?

The Toxic Legacies Project is a SSHRC-funded research initiative that examines the history and legacy of arsenic contamination at Giant Mine. The project is a partnership among researchers at Memorial and Lakehead Universities, the Goyatiko Language Society (a Yellowknives Dene First Nation non-profit organization dedicated to the preservation of the Weledeh language), and Alternatives North (a Yellowknife environmental and social justice coalition that conducts public interest research).

THE CFG WORKING

- Yellowknives Dene First Nation
- North Slave Métis Alliance
- Giant Mine Remediation
 Team (GNWT, INAC)
- Giant Mine Advisory
 Committee (GMAC) NWT
- Alternatives North
- NWT Mining Heritage Society
- Memorial University of Newfoundland

Giant Mine and Remediation

This remediation project proposes to freeze 237,000 tons of toxic arsenic trioxide dust where it is currently stored underground. It is likely that water pumping, monitoring, and maintenance at the site will be necessary for a very long time to prevent the arsenic from seeping into the local environment. The recent environmental assessment of the project requires ongoing research into a permanent solution to the arsenic problem at Giant Mine within a 100 year time frame. Despite this, a century is a very long time (people have forgotten about toxic sites over shorter periods), and there is no guarantee that technology can be developed to safely remove all arsenic from the site.



Thermosyphon test plot, Giant Mine – A type of monument? (Photo: J. Sandlos)

The CFG Working Group

The Communicating with Future Generations Working Group (CFG) was formed in November 2014 as an information-sharing mechanism for interested parties and stakeholders in the Giant Mine remediation process. It has focused on building strategies for communicating with future generations about the management needs of the site.

The CFG Group also hopes to mobilize and help develop ideas from interested residents of Yellow-knife, and the Yellowknives Dene First Nation, on how to communicate about the toxic hazards at Yellow-knife with future generations.

We will be holding a public workshops and information sessions in the latter half of September 2016, where we will be screening our film, <u>Guardians of Eternity</u>. You can find more information on our website, <u>www.toxiclegacies.com</u>. You can also post your ideas on our <u>public Facebook page</u>.

Key Questions at Giant Mine

If somebody were to stumble across the Giant Mine site in 1000 years, would he or she know that the site was contaminated with arsenic? Would this person know how to maintain the site so that arsenic would not leak into the surrounding watershed?

In the United States teams of experts have designed (but not yet built) elaborate systems of signs, symbols, monuments and text to warn the future about the dangers of a nuclear repository in Carsbad, New Mexico.

Could a similar warning system work at Giant, or should the focus be on relaying information on care of the site to successive generations? What role might Dene oral traditions play in passing information about Giant from generation to generation?

How Might it Work at Giant Mine?



Final Concept Textual Sign, <u>Waste Isolation</u> <u>Pilot Plant website</u>. Used with permission.

At Giant Mine, a messaging system might involve simple warning signs and text messages imploring people not to damage the thermosyphons, with more detailed technical information on how to replace this equipment when necessary and maintain other facilities such as the water treatment plant. Unlike nuclear waste, it is possible that the arsenic threat might be removed within a relatively short period of time (a matter of decades rather than the centuries it takes for nuclear waste to decay), so the emphasis might be on "relaying" information on how to maintain the site to people roughly a century from now.

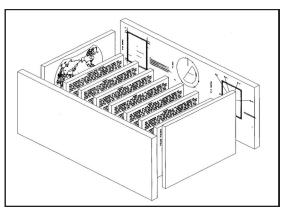
Much of the work on communicating with future generations in the field of nuclear waste was completed by experts, but we have started community process would provide a crucial forum for input on the issue from residents of Yellowknife, Ndilo, and Dettah.

PROJECT PARTNERS

- Mary Rose Sundberg, Goyatiko Language Society
- Erica Janes, Alternatives
 North
- John Sandlos, Memorial University
- Arn Keeling, Memorial University
- Ron Harpelle, Lakehead
 University
- Kelly Saxberg, Sheba Films
- France Benoit, Independent Filmmaker

Some early Suggestions from the CFG Committee

- ⇒ Information should be provided on key site features such as the thermosyphons
- ⇒ Rather than indicating "danger," signs should say "maintenance required"
- Messages should maintain the relationship between the people and the place, so that care requirements are not forgotten
- ⇒ Messages are needed to prevent vandalism
- ⇒ There should be warning messages underground in the mine workings
- ⇒ The NWT Archives can play a role preserving information about the site
- ⇒ A story or legend could be developed to warn of the "monster" underground
- ⇒ An annual gathering could be held at the site to ensure that it is remembered
- ⇒ People could be given a formal role as "Stewards of Giant Mine" to ensure continuity of knowledge



Concept for Underground Information Room, <u>Waste</u> <u>Isolation Pilot Plant website</u>. Used with permission.

CONTACT US

John Sandlos
Department of History
Memorial University of
Newfoundland

Phone: 709-864-2429 Fax: 709-864-2164

E-mail: jsandlos@mun.ca

Website: www.toxiclegacies.com Film: www.guardiansofeternity.ca

To comment on our Facebook

page click <u>here</u>