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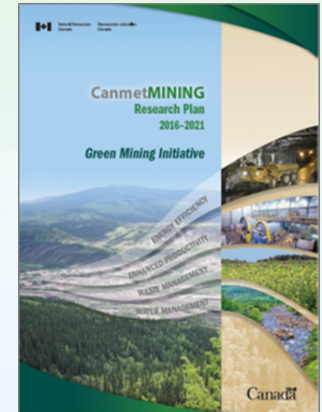
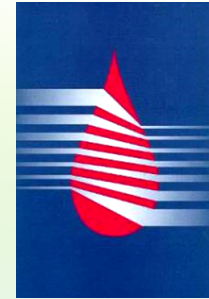
Partnerships and Collaboration: MEND, NOAMI, INAP and NRCan

Patrick Chevalier and Charlene Hogan
CanmetMINING - MEND/NOAMI Secretariat
24th BC-MEND ML/ARD Workshop
30 November, 2017



Overview

- Updates on:
 - MEND
 - NOAMI
 - INAP
- Highlights of research at CanmetMINING



Mine Environment Neutral Drainage

- Established in 1989
- National multi-stakeholder network
- ~\$21 million
- Annual research budget:
 - \$60 to 100K/year
- CanmetMINING provides Secretariat



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MEND - Current Projects



- Literature Review of Studies Relevant to the Biological and Ecological Effects of Subaqueous Mine Tailings
- Contractor: Dr. Peter Campbell, Institut national de la recherche scientifique
- Focus of the review:
 - Potential biogeochemical interactions between submerged tailings and overlying aquatic communities, and
 - based on the information from part (i) to provide guidance regarding recommended tools and methodologies to be used to predict and/or monitor the biological and ecological effects of submerged tailings.

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MEND – Completed Projects



- Report 2.50.1 Study of Tailings Management
- Released: October 2017

- Contractor: Klohn Crippen Berger
- Detailed examination of alternatives to conventional slurry for the management of tailings (i.e. thickened, paste and filtered tailings)
- Compare strengths, limitations, and physical and chemical risks of these alternative technologies to conventional slurry
- Case studies integral part of project
- Identification of knowledge gaps and recommendations

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MEND – Future Work



- Develop further work based on gaps/needs identified in the Tailing Management Study
- Field Study: Ecology of Subaqueous Disposal (building on literature review)
- Climate Change Adaptation



For more Information



- To download reports, newsletters, or workshop proceedings please visit:

Mine Environment Neutral Drainage (MEND)

www.mend-nedem.org



National Orphaned / Abandoned Mines Initiative

- Established in 2002
- Unique multi-stakeholder partnership
- Jointly funded by government & industry
- Information sharing/best practice
- Does not have a mandate to provide funding or to remediate sites
- CanmetMINING provides Secretariat



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NOAMI – Action Plan



- Task groups created to address key issues:
 - Web-based Inventory of sites
 - Community Engagement
 - Legislative and Institutional Barriers to Collaboration
 - Funding Approaches
 - Jurisdictional Legislative Review
 - Mine Closure and Return of Mining Lands to the Crown
 - Communication – Overarching

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NOAMI Inventory Project



- Inventory based on compatible inventories from participating Canadian jurisdictions
- Provides a single-window access to information
- Interactive website
- Level of detail in the database varies according to jurisdiction
- Feature-based classification of sites
- Portal links to most jurisdictional databases
- Bilingual
- Launched in May 2017

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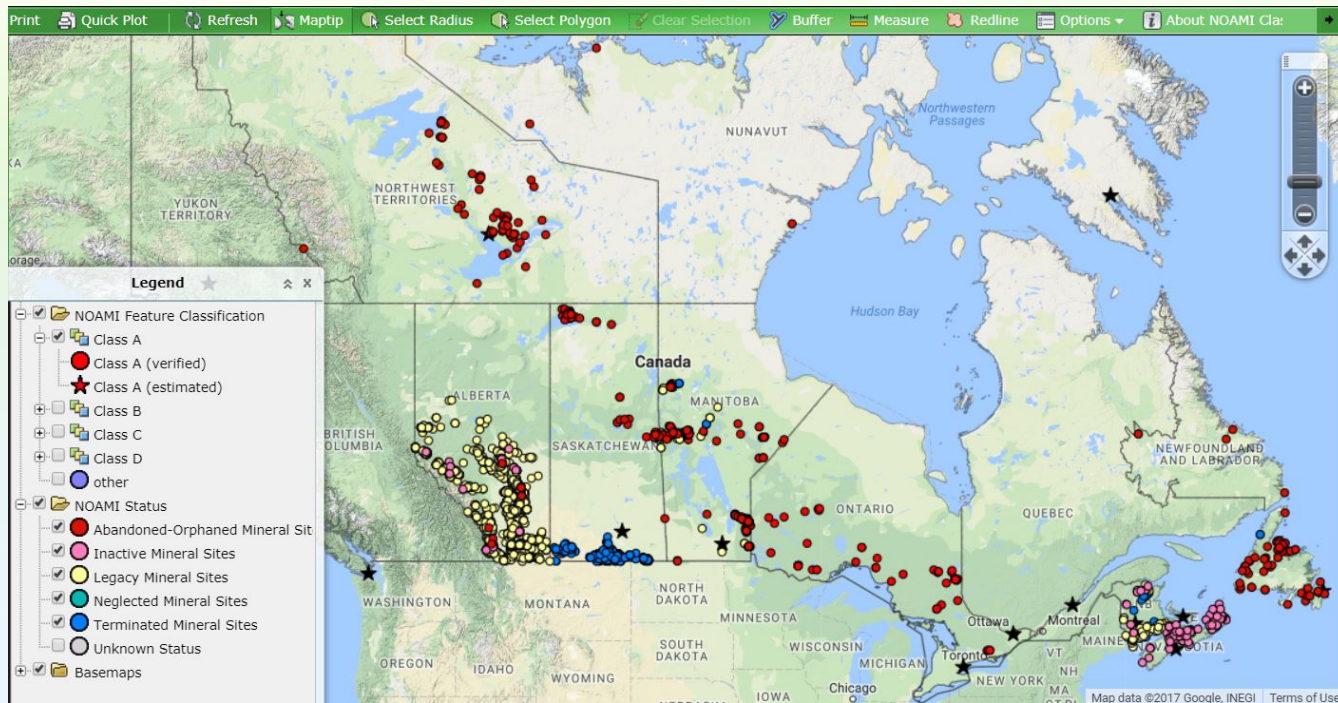


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NOAMI Inventory



- Feature-based web site
- Interactive map
- Searchable database

www.noami.org

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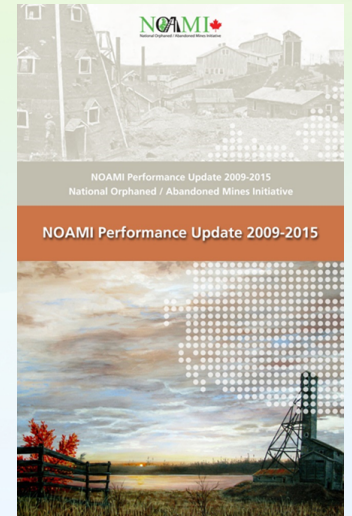


For More Information



- To download reports, newsletters, or workshop proceedings please visit:

www.abandoned-mines.org



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International Network for Acid Prevention

- Industry-led group founded in 1998
- Works to mobilize ARD information and experience at the international level
- Objectives are to reduce the liability associated with sulphide mine materials through:
 - Networking and Information Sharing
 - Technology Transfer
 - Gap-driven research
- Partnered with 8 others regional networks, including MEND through the Global Alliance
- Global Acid Rock Drainage Guide (GARD) sponsored by INAP with the support of the Global Alliance to address prediction, prevention and management of ARD. Also addresses metal leaching.
- INAP Technical Manager – Gilles Tremblay



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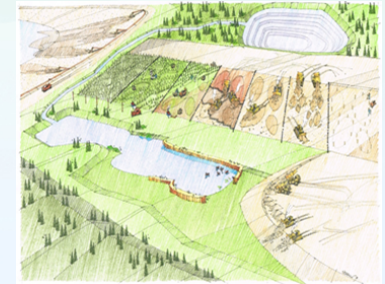
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INAP – Work Plan



- ARD Best Practice Award
 - Two applicants and evaluation by Selection Committee
 - To be awarded at 11th ICARD in South Africa
- Global Cover System Design
 - Released in 2017
 - Best practice summary for mine planners, operators and closure teams – decision tool approach
 - Logical framework to cover system design with performance expectation for alternative assessments based on site-specific climates.



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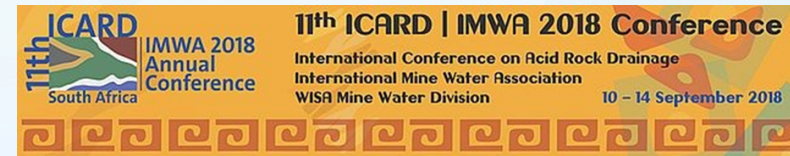
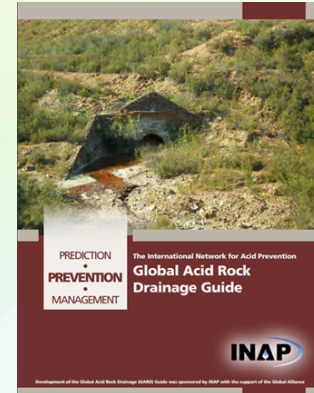
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INAP – Plans for 2018



- GARD update
- Pit Lake Database update
- INAP Webinar Series:
 - Introduction and Soil Covers Project
 - GARD Guide Chapter modules
- Technology Transfer:
 - 11th ICARD – IMWA 2018 (South Africa – www.icard2018.org)
 - INAP webpage
 - Newsletters



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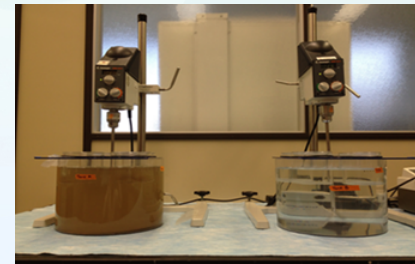
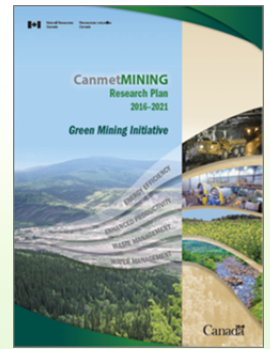
For More Information

- To obtain more information about INAP activities and research please visit:

<http://www.inap.com.au/>

CanmetMINING - NRCCan

- Year 2 of 5-year research plan
 - Assessment of organic covers
 - Fate and effects of metals in aquatic environments in the context of climate change
 - Water management
- Completed a successful pilot project testing vacuum membrane technologies for AMD treatment – SDTC proposal



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CanmetMINING - NRCCan

- Clean Growth Program launch
- Collaboration Strategy – pilot project on recovery of value from mine waste
- Launch of Assistant to Mining Innovation platform
 - www.ami-aim.ca



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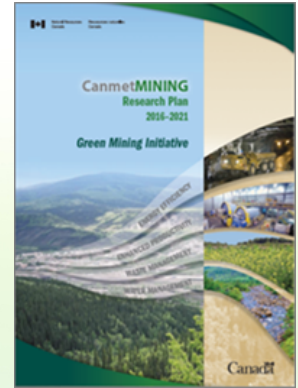
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For More Information

- For more information about our research plan & Green Mining Innovation, please visit:

<http://www.nrcan.gc.ca/mining-materials/green-mining/8178>



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