

WORKING GROUP Proceedings
PNWER Annual Summit – Big Sky, Montana
July 14th 2015

Co-chair: Senator John Coghill, Alaska State Legislature

Co-chair: Tammy Johnson, Executive Director, Montana Mining Association

Speakers:

Ed Fogels, Deputy Commissioner, Alaska Department of Natural Resources

Karina Briño, President & CEO, Mining Association of British Columbia

Daniel Morel, Assistant Deputy Minister, Mines and Mineral Resources Division,
Ministry of Energy and Mines, British Columbia

Barry Penner, Senior Counsel / Strategic Advisor, Penner Pacific

Glen Wonders, Vice President - Technical & Government Affairs at AME BC -
Association for Mineral Exploration BC

Discussion Topics

Introductions and Panel Overview

Senator Coghill opened with introductions, detailing the session speakers' professional experience in the mining industry. Senator Coghill explained his past time with the mining working group and placed great emphasis on the importance of mining to the regional economy. From there he passed the microphone over to Tammy Johnson who laid out the structure for the working group session.

Ms. Johnson detailed the panelists would be providing introductions addressing the best practices of responsible mining. She would then go on to explain that the mining industry operates on social license and proceeded to detail her own experience with laws in the State of Montana addressing responsible mining.

Mining Safeguards and Senate Bill 409

Johnson explained that following the August, 2014 breach of the Mount Polley TSF (Tailings Storage Facility) in central British Columbia, the industry began taking it upon themselves to self-regulate in ways that protect the environment sustainably. Mount Polley was an environmental disaster resulting from the breach of a copper and gold mine tailings pond, releasing its water and slurry into Polley Lake. The accident at Mt. Polley led to industry in Montana working towards legislation that codified regulations that were developed through trust and understanding. In Montana, this legislation took the form of Senate Bill 409 which passed with resounding bi-partisan support and was signed into law in 2015 by Governor Bullock. Senate Bill 409, which became effective immediately, introduced regular inspections, TSF construction of quality control, fees and authority for environmental authorities to examine and close down sites should they violate any of the new standards within the passed legislation. Beyond this, pre-legislation sites had 180 days to implement a number of reforms, which consisted of over 30 requirements.

Positive steps British Columbia has undertaken for mine safety

Leading off of Tammy's presentation of Montana Law, David Morel began to break down what courses of action British Columbia had begun to address the Mount Polley tailing pond breach. Thus far, he mentioned that remediation of the disaster has cost 70 million dollars to fix. In the immediate aftermath of the breach, three investigations were launched immediately to determine the cause as well as emergency inspections of the 120 tailings ponds in the province.

Simultaneously there has been an aggressive campaign to keep the public up to date with the efforts being made to remedy the disaster. From the investigation it was deduced that there was a relatively complicated reason for the cause of the breach which could be best summed up as a lack of understanding by the TSF engineers of

the clays on which the pond was constructed. From the investigation there were seven recommendations for the prevention of another Mt. Polley. These recommendations are as follows.

- Implement best available tech
- Improve corporate governance
- Expand corporate design commitments
- Enhance validation of safety and regulations
- Strengthen current regulatory operations
- Improve professional practice.
- Improve dam safety guidelines.

AUDIENCE Q & A - Morel

Q. How have those affected by Mount Polley been compensated?

Morel - There have not been full resolutions as of yet. It is still a legal challenge

Areas of Regional Cooperation for Mine Safety

Ed Fogels used the bulk of his presentation to detail what resources exist and are currently being utilized within Alaska. As it stands currently there are six major operating mines, five of which are metal. The Red Dog mine is zinc and lead while the Fort Knox is gold. The Pogo and Kensington are gold as well with the Greens Creek mine supplying silver, zinc, lead and gold. Mr. Fogels continued into the specific processes that go into applying for and opening a mine. Within Alaska, there exists a multi-agency team approach to mine permits. The team is made up of state agencies like the department of natural resources, the department of environmental conservation etc. There are a number of goals for this team, principle among them are the protection of the environment, the long term stability of the site, as well as insurance of the both the mining areas and for the local communities. Regarding the

current status of tailing ponds, Mr. Fogels explained that there are five tailing ponds in operation with others in line as metal prices go up. Mr. Fogels ended with suggestions regarding potential collaboration between British Columbia and Alaska in terms of their respective watersheds in order to better prepare for and handle' Mount Polley disaster. It was important for the State to work with British Columbia directly because if the federal government is involved the State could be excluded from the decision making process.

HOW TO IMPROVE COLLABORATION

- We need a better understanding of our rural watersheds to get a baseline data program going since these areas are so rural.
- The formalization of environmental assessing and permitting processes
- Transparency and public communication
- Funding - How will we get funding for these new mediums of communication between BC and Alaska.

AUDIENCE Q & A - Fogels

Q. How does Alaska avoid conflict of interest with funding of permit process when the funding for the process is provided by the one asking for it?

Fogels - The funding of the permitting process is by the ones asking for the permit, but it does not guarantee anything. They send their money to the state's general fund and it is then re-appropriated by the appropriations committee back to the permit committee. No special favors.

Q. Is baseline data on water quality for all tributaries and watersheds collected?

Fogels - Yes it is before any major project, the hope now is to share this information with our Canadian partners as well as the public, first nations etc.

Industry Experience: Towards Sustainable Mining

The final speaker, Karina Briño began her presentation detailing how her

constituency, the Mining Association of British Columbia, in 2004 put forth an award winning performance system that helps mining firms evaluate and manage both social and environmental responsibilities. This new system, titled Towards Sustainable Mining (TSM) has become all the more important in light of the Mount Polley mining disaster which served as a watershed moment for the entire mining industry. Ms. Briño explains that TSM focuses on Environmental stewardship, communities and people and lastly energy efficiency. Beyond these four focus points TSM has protocols and indicators of which there are 21. Ms. Briño states The reports are currently on the internet. Conveniently, mining companies are in constant competition so this new program has garnered a healthy amount of attention, even though the program is not an easy program to implement.

<http://mining.ca/towards-sustainable-mining>

Mining Roundtable:

Penner – Highlighted the issues raised by the speakers, the principle one being tailing pond management. Briño spoke about how to manage mines and Fogel covered what is going on in the mining industry in Alaska. Penner led the roundtable discussion on the topic of how a mine approved for operations.

Penner - In BC there are 16.6 million hectares of land where mining is forbidden with another 30.7 million where there is conditional access. 50,000 hectares are disturbed by mining annually but generate 8 billion in revenue.

So, how do you start a mine?

Glen Wonders - Process is daunting. With regulatory hurdles, it usually takes about 20 years from discovery to commencement of mining operation to get things going. 1 in 10,000 mineral finds has potential to be mine. Not every project gets approved, and even if they get approved the economics may inhibit their execution. Issues like commodity prices can delay or stop work.

Penner – Ended the roundtable with a discussion on involving the U.S. Federal Government in the mining approval process in the region. Penner asked if federal participation would be helpful or would more direct communication between Alaska and BC be the best option?

Fogel – Federal involvement is not the direction the State of Alaska wants to go. If the federal is involved the state could be potentially excluded from what happens. It is best if the State and Province can work out their issues. Briño, Morel and Wonders agreed with this statement. We should keep it in house. This is a jurisdictional priority.

Both Senator Coghill and Tammy Johnson closed out the session with a discussion of action items and

Action Items

1. Compare the federal, and jurisdictional mining standards across the region...Take into account the costs associated with a review and explore what has been done to date. Review must include water quality assessment process and communities of interest
2. Recommend that the PNWER board support cross jurisdiction transboundary issues be handled at the state and provincial level and not raised to the federal level, encourage BC and Alaska to continue their discussions towards this objective.