

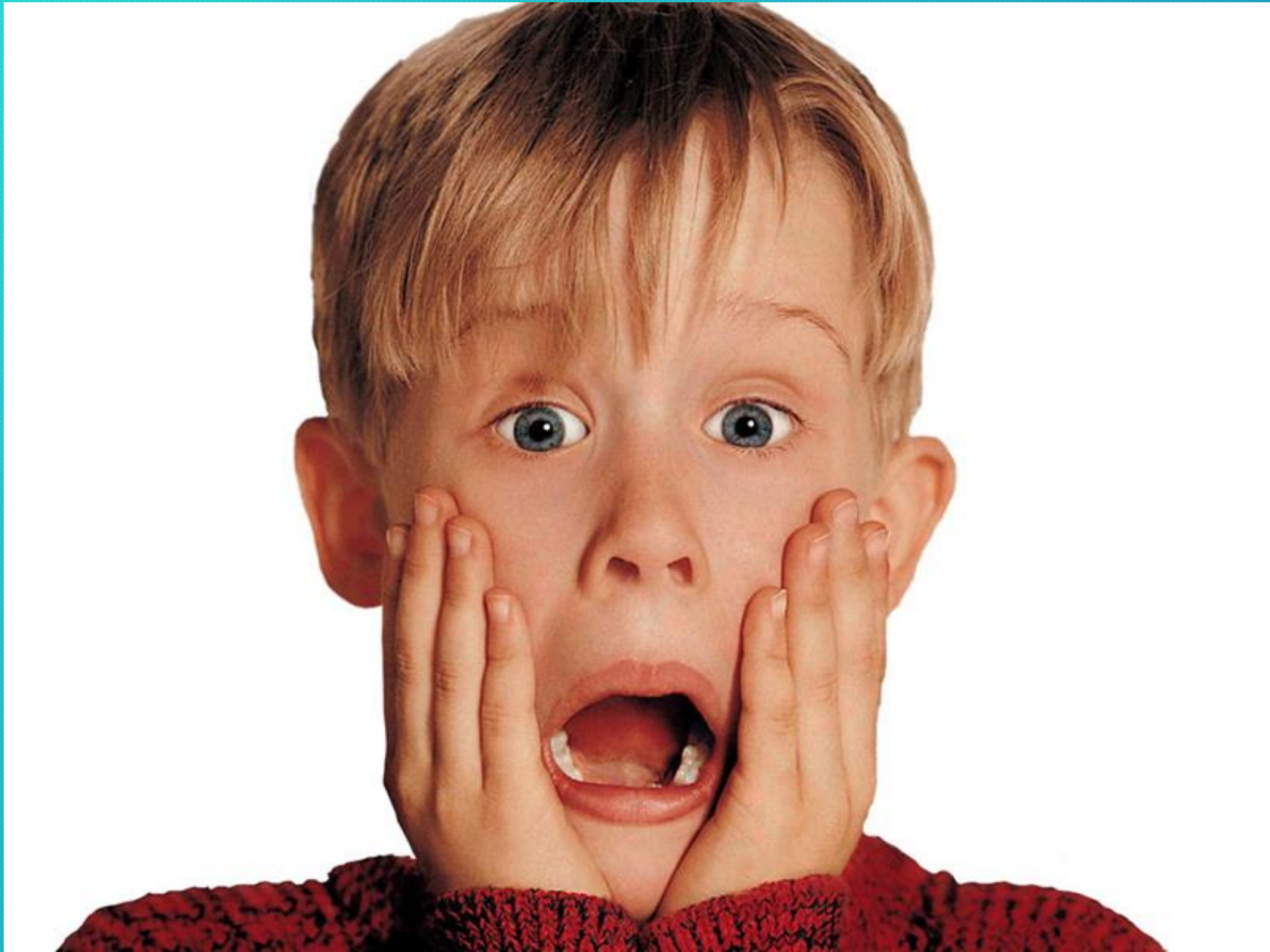
A Montana Solution

SB 409



Montana Mining Association

Presentation for Pacific NorthWest Economic Region, 25th Annual Summit, July 14, 2015



Research and Expert Advice

- Research
 - What was the cause(s) of the Mount Polley TSF failure?
 - Was Montana statute and rule adequate?
 - How did Montana compare to elsewhere?
- Expert Advice
 - Montana DEQ
 - Montana DNRC's Dam Safety Division
 - World renowned experts in the design of tailings impoundments
 - Highly experienced engineers
- Mount Polley Investigation
 - Report issued end of January

Senate Bill 409

- An act revising metal mine reclamation laws; establishing standards for tailings storage facilities; establishing a fee; defining terms; creating independent review panels; providing for reviews and inspections; providing enforcement
- SB 409 was signed into law by Governor Bullock on Monday, May 4, 2015. The law became effective immediately.



SB 409 - Legislative Intent

- Tailings storage facilities are designed, operated, monitored, and closed in a manner that:
 - meets state-of-practice engineering design standards;
 - uses applicable, appropriate, and current technologies and techniques as are practicable given site-specific conditions and concerns; and
 - provides protection of human health and the environment; and
 - the regulation of tailings storage facilities is not prescriptive in detail but allows for adaptive management using evolving best engineering practices based on the recommendations of qualified, experienced engineers.

SB 409 Provisions - Existing Facilities

- Action #1
 - Within 180 days, an operator would have to designate an Engineer of Record (EOR)
 - An EOR is defined as a professional engineer with 10-years of experience with TSF;
 - An EOR cannot be an employee of the operator;
 - Failure to designate an EOR within 180-days or failure to replace an EOR within 90-days requires the department to suspend operations of the TSF.

SB 409 Provisions - Existing Facilities

- Action #2
 - Within 180 days, an operator must develop a Tailings, Operations, Maintenance and Surveillance Manual (TOMS)
 - The TOMS and any changes to the TOMS must be certified by the EOR
 - Some of the issues that the TOMS must address are:
 - Operator roles and responsibilities, maintenance requirements, training, inspections, monitoring, water balance updates, quantitative performance parameters, emergency plan, and emergency trigger levels;
 - Commitments made in the TOMS are enforceable by the department TOMS reviewed and updated annually.

SB 409 Provisions - Existing Facilities

- Action #3
 - Initiate annual TSF inspections by EOR;
 - Annual EOR inspection report is submitted to the operator and the department;
 - Operator must prepare corrective actions and a schedule to address any recommendations by the EOR;
 - Implementation of the corrective actions is enforceable by the department.

Expansion of Existing Facilities Construction of New Facilities

- Design Document
 - Requirements include over 30 detailed items that are site specific to each applicant. Included are the following requirements:
 - Analysis showing that the TSF will withstand a 1 in 10,000 year earthquake event or maximum credible earthquake, whichever is larger;
 - Design criteria to manage the probable maximum flood event;
 - Detailed risk analysis and a plan for addressing those risks;
 - Quantitative performance parameters for construction, operation and closure;
 - Description of how the design will integrate into the final closing plans and requirements for post closure monitoring, inspection and review.

Expansion of Existing Facilities Construction of New Facilities

- Independent Review Panel (IRP) Report
 - Consists of three Independent Review Engineers;
 - Licensed engineer and recognized expert in TSF;
 - Panelist nominated by applicant and approved by the department;
 - The department, applicant and EOR may participate during the panel review but are not members of the panel;
 - Panel paid for by applicant;
 - Panel's recommendations must be addressed in the final design document;
 - Final IRP report must be signed by all three panel members.

Expansion of Existing Facilities Construction of New Facilities

- Tailings operation, maintenance, and surveillance manual (TOMS)
 - Clearly identifies the responsibilities of the operator, necessary maintenance, training and operational aspects;
 - Requires monitoring, data collection, and describes how issues identified will be resolved;
 - An emergency response plan will be included as well as identification of trigger levels or events that will require immediate notification of the Engineer of Record and the DEQ.

SB 409 - Other Provisions

- Construction Quality Assurance
 - This requires an independent engineer to monitor the construction and gives the DEQ authority, following consultation and investigation, to take enforcement action if the TSF is not being constructed as specified in the approved design document.
- Periodic Independent Review Panel (IRP) reviews
 - A periodic review, conducted by the Independent Review Panel, will be required at least once every 5 years. The panel will inspect the tailings facility, review the maintenance and operation records and the engineer of record's inspection reports. After the panel has prepared its final report, the operator is required to prepare and submit to the DEQ an action plan to effectively implement any recommendations.

SB 409 - Exemptions

- A facility that stores 50 acre-feet or less of water or process solution;
- A facility wholly contained below surrounding grade;
- Dry stacked or filtered tailings;
- A facility not in operation;
- A facility that does not have a mine operating permit;

SB 409 Can Be Found At: <http://leg.mt.gov>

The screenshot shows the homepage of the Montana Legislature website. The background is a photograph of a field with several large hay bales under a warm, golden light. In the top right corner, the text "the Montana Legislature" is written in a cursive font. Below it is a search bar with the text "Search this site" and a "Search" button. In the center, the word "MONTANA" is written in large, white, outlined letters, with "64th Session" to its right. Below this is a dark navigation bar with the Montana state logo on the left and links for "House", "Senate", "Audit", "Fiscal", "Services", and "Consumer Counsel" in the center. On the right side of the navigation bar are social media icons for Twitter and Facebook. Below the navigation bar, there are links for "Home >" and "Print Version". The main content area features a sidebar on the left with links for "Home", "Bills", "2015 LAWS", "Past LAWS", "Finding Bills", and "Watch & Listen". To the right of the sidebar are three image tiles: the first is titled "Legislative Automated Workflow System" and "LAWS committees schedules"; the second shows the interior of the Montana State Capitol; the third shows a close-up of the legislative chamber.



Thank you for your time and attention!

Montana Mining Association - Tammy Johnson, Executive Director

(406) 287-3012 - tjohnson@montanamining.org