

Sierra Club - John Muir Chapter 754 Williamson St., Madison, Wisconsin 53703-3546

Telephone: (608) 256-0565

 $E-mail: john.muir.chapter@sierraclub.org \\ Website: sierraclub.org/Wisconsin \\$

Top 13 Falsehoods Used To Justify SB 395/AB 499

The environmental and conservation community has rarely faced proposed legislation supported by so many falsehoods, misleading statements, and flawed logic as SB 395/AB 499. This is particularly egregious considering this bill is about metallic mining which according to EPA accounts for over 37% of all toxic emissions reported to it¹. Mining is the most destructive industrial activity proposed for the state and generates toxic wastes that must be managed safely forever to avoid poisoning air and water resources. The metals in Wisconsin are found in metallic sulfides that can cause acid mine drainage (AMD). AMD is sulfuric acid and metal pollution produced when sulfide minerals in mines and mining wastes are exposed to air and water. AMD is toxic to fish and wildlife due to dissolved metals and contaminants such as mercury, lead, arsenic, cadmium, zinc, copper and many others that damage surface water and groundwater resources. This is why Wisconsin protected itself twenty years ago by passing, with bi-partisan support, our "Prove it First" law for metallic sulfide mining.

Below is a list of some of the most misleading claims in use so far contrasted with the truth.

MYTH #1: Mining technology is better than in the past so the Prove It First law is unnecessary.

Proponents offer no examples of pollution control technology that has made metallic sulfide safer. This assertion is no substitute for actual examples of successful operations elsewhere using modern technology – examples that could be used to satisfy the law if there were any available.

Modern mining technology is not successfully controlling pollution. An independent study in 2012 reviewed 14 out of the 16 operating copper sulfide mines in the U.S. responsible for 89% of U.S. copper production and found that 92% failed to control mine waste seepage and 100% experienced spills through 2012. These are some of the largest mining companies in the world, with the most resources available for pollution control and they all have pollution issues (mines chosen had to have been operating 5 or more years)².

Modern mining technology is also failing to predict and mitigate pollution. A two-year research study found that 100% of mines are predicted to meet relevant water quality standards as they must to receive permits³. But predictions didn't match reality as 76% of those studied exceeded water quality standards and mitigation measures predicted to prevent water quality exceedances failed in 64% of those studied.

Quality at Hardrock Mines: The reliability of predictions in Environmental Impact Statement

¹ U.S. EPA, 2015 Toxic Release Inventory, April 2017

² Gestring, Bonnie, EARTHWORKS, U.S. COPPER PORPHYRY MINES: The track record of water quality impacts resulting from pipeline spills, tailings failures and water collection and treatment failures., November 2012 ³ Kuipers, J.R., Maest, A.S., MacHardy, K.A., and Lawson, G. 2006. Comparison of Predicted and Actual Water

Moreover, a subset of the studied mines were determined to have a high risk of developing acid mine drainage – the mining industry's most difficult management challenge. The study found:

- 85% of the mines with elevated potential for acid drainage or contamination of nearby surface water exceeded water quality standards.
- 93% of the mines near groundwater with elevated potential for acid drainage or leak pollution exceeded water quality standards.
- And of the sites that did develop acid drainage, 89% had originally predicted that they would not
 do so.

The results are clear that predictions made to satisfy permit requirements do not match reality and these results are the norm for modern mining and demonstrate that the Prove It First law remains necessary.

The reality is that technological changes in mining are designed to maximize efficiency and profits. Innovations in mechanization and remote operations of equipment have reduced the number of people needed to work a mine and the related costs. Most easily-accessed, high-grade ores have been mined out. Instead of making mining safer, modern technology is facilitating the mining of lower grade ores using more toxic processing toxics like cyanide, creating larger volumes of waste, stored behind taller and taller tailings dams; which is creating greater risk of failure of spills of toxics and tailings dam failures⁴.

MYTH #2 SB 395 maintains environmental protections because no "numeric" changes are made. This is dangerously misleading for two reasons: SB 395 makes it less likely a mining operation will meet our numeric standards and there are important environmental and health protections that are not numeric standards.

Meeting numeric standards is the end goal for any operation that discharges pollution. Think of it this way, meeting numeric standards is the equivalent of the last step in a process. For example, think of Aaron Rogers completing a pass. Meeting standards is the same as the receiver actually catching the ball; but think of everything else that has to go right for that to happen. The offensive line has to block, Aaron has to find a passing lane, and the receiver has to get open. Now imagine the chance of success if Aaron is wearing a blindfold and has a 40-foot wall in front of him. **SB 395 is the blindfold and the wall.**

There are many environmental protections that are far more than numeric standards. They include policy guidance, rules for public involvement and details on how, when, and where standards are enforced. SB 395 guts existing mining law in all these ways. For example, it reduces protections for wetlands by removing the more protective comprehensive standards for mining and replacing them for the current minimums in state law – minimums that were designed for parking lots and strip malls, not mining that has more extensive and significant wetlands impacts⁵. It severely restricts the public's voice

⁴ Newland Bowker, Lindsay & Chambers, David M., The RISK, PUBLIC LIABILITY, & ECONOMICS of TAILINGS STORAGE FACILITY FAILURES, July 21, 2015

⁵ Wisconsin Wetlands Association, Testimony on Senate Bill 395, September 7, 2017

in the process by removing the required contested case hearing *before* permit decisions are made and forces the public to incur the costs of challenging permits in court, and prohibits the hearing examiner from stopping any mining activity while challenges are underway.

SB 395 reduces protections in other ways: it eliminates the prohibition on groundwater pumping over 100,000 gallons per day for mining even if the pumping affects drinking water supplies or public waters like rivers, lakes, and streams. It allows destructive "bulk sampling" of up to 10,000 tons of ore without requiring an Environmental Analysis or Environmental Impact Statement. It repeals the Irrevocable Trust rule that requires funding for all long-term contingencies after mining is finished.

MYTH #3: Current mining law is a ban or moratorium. The Prove It First law — often called the mining moratorium — is only a permit requirement that an applicant mining company demonstrate successful examples of sulfide mining elsewhere in North America. By letting the mining industry off the hook, SB 395 proves the industry either can't find an example to meet the standards or are they are unwilling to defend the poor track record for their operations.

The language of the law was a compromise meant to give the industry a real chance of meeting the requirements. It allows an applicant to use examples from anywhere in the US and Canada, meaning a huge number of potential examples from two countries that should be using the best technology and practices. A single mine meeting the law (i.e. the same mine both operating for 10 years and being closed for 10 years without polluting) would be a true test of whether or not the industry can safely mine in sulfide ores but the law allows the use of two mines to meet the standards.

MYTH #4: The example mines submitted by Nicolet Minerals in 1999 could have met the law. The research done by both the DNR and independently demonstrated that the mines would not qualify. After review, the DNR formally rejected the Sacaton Mine on May 30, 2002.⁶ Independent review also found significant groundwater pollution from the mine.⁷ A review of the permitting record of the Cullaton Lake Mine found in 2003 that the mine was a documented source of significant pollution.⁸ The McLaughlin Mine is not yet closed and is not anticipated to be fully reclaimed until 2021.⁹ It has documented instances of large exceedances of surface water quality standards for arsenic, chromium, copper, lead, manganese mercury, lead, iron and zinc. It also has chronically degraded groundwater beneath the tailings and waste rock dumps.¹⁰

MYTH #5: Mining companies are unable to conduct exploration here due to the law. As recently as 2012-13, Aquila Resources was conducting exploration drilling at two deposits it either owns or controls in Wisconsin. Aquila is the company behind the controversial Back Forty sulfide mine proposal on the Menominee River. In fact, Aquila – which helped draft SB 395 – is also a direct beneficiary of the bill

⁶ DNR communication, Larry Lynch to Gordon Reid, Nicolet Minerals, May 30, 2002

⁷ Evaluation Of Application To Use The Sacaton Mine In Arizona To Meet Wisconsin Mining Law – WIS. STATS. § 293.50 – By Nicolet Minerals Company, Southwest Research and Information Center, May 2004

Arthur Harrington & John Clancy, Godfrey and Kahn, SC letter to DNR Secretary Scott Hassett, April 24, 2003

⁹ Waste Discharge Requirements for McLaughlin Mine, California Regional Water Quality Board, Feb. 2, 2012

¹⁰ Kuipers, J.R., Maest, A.S., MacHardy, K.A., and Lawson, G. 2006. *Comparison of Predicted and Actual Water Quality at Hardrock Mines: The reliability of predictions in Environmental Impact Statements*

since it is the only company with known interests in Wisconsin and it has stated that the ore from one of its deposits could be processed at the Back Forty facility.

MYTH #6: The Flambeau mine was successful so the law should be repealed and "The DNR gave the mine a clean bill of health.¹¹" The Flambeau mine fails the requirements of the law for several reasons. A DNR assessment of the mine led to the determination that Stream C, a tributary of the Flambeau River was polluted by the mine¹². The assessment revealed the mine was a chronic pollution source: "monitoring done at the site between 2002 and 2011 showed that Stream C and its contributing drainageways contained copper and zinc concentrations that frequently exceeded acute toxicity criteria (ATC). On average, copper exceeded ATC's in 92% of samples." That stream is now designated as impaired by the EPA¹³.

The mine is still not fully reclaimed today - 20 years after it closed and does not have a final Certificate of Reclamation from the DNR. This fact alone means the mine does not have a "clean bill of health." Water treatment to mitigate pollution to Stream C continues to date and sampling in 2017 showed that the copper levels continue to exceed the acute toxicity criteria for the stream.

Even if one believes, despite these facts, that the Flambeau mine was "successfully reclaimed," it was a unique mine that tells us little about how to safely mine in sulfides. It was very small and short-lived (3 operating years) compared to most sulfide mines and there was no ore processing at the site. In fact, the company called it the "world's smallest and newest copper mine" when it opened in 1993. The company avoided the most difficult management issue for metallic sulfide mining: safely storing mine wastes and tailings that cause acid mine drainage. It exported the ore to Canada for processing. Waste rock from the mine produced acid shortly after being exposed to air and water during mining and was later dumped into the mine pit and covered. Independent research has found that groundwater quality data shows contaminants that greatly exceed baseline data and water quality and aquatic life criteria¹⁴.

MYTH #7: Wisconsin has "world-class" potential for mining. This statement is highly speculative and not supported by facts including any known economic or viable deposits waiting for a company to exploit them. Mining proponents have been making this statement about Wisconsin's potential since the 1970's to justify investments in their efforts and to gut environmental protections. While exploration for metallic deposits in Wisconsin has identified a number of small deposits, it is well known that they are low grade and uneconomic. Many deposits are found in lands too wet or near sensitive resources to be developed. Still, there is nothing in state law to bar additional exploration and public policy would be better served if we left existing protections in place given there have been no new deposits discovered, let alone proposed for mining.

¹¹ Senator Tom Tiffany, SB 395 Hearing testimony, 9/7/17.

¹² Surface Water Quality Assessment of the Flambeau Mine Site, Wisconsin Department of Natural Resources, April 2012.

¹³ Decision Document for the Approval of Wisconsin's 2012 list of impaired waters with respect to Section 303(d) of the Clean Water Act, United States Environmental Protection Agency, June 25, 2014.

¹⁴ Moran PhD., Robert E., Flambeau Mine: Water Contamination and Selective "Alternative Facts" Summary, 2017

MYTH #8: Mining in Wisconsin could be a billion-dollar industry. The only support for this statement is the speculation that there <u>might</u> be economic ore deposits that have yet to be discovered (see above discussion of "world class" potential). But there has been recent exploration and still no significant new deposit has been identified in the state for decades. The support for an estimate of a "billion-dollar industry" appears to come from applying economic estimates from mining in other states. There is no real economic or geologic analysis or studies that support the wild numbers being thrown in support of SB 395. Passing SB 395 using this logic would be the public policy equivalent of stating that your team will win the Super Bowl this year before you've even drafted any players.

MYTH #9: Tourism is "not a bread and butter industry". Senator Tiffany made this comment in support of SB 395 and potential mining jobs. The truth is that the sustainable tourism economy here supports thousands of jobs and reached \$20 billion in 2016, up \$700 million from 2015 as reported by the State Dept. of Tourism. One in twelve jobs in the state is sustained by tourism. Mining threatens the natural resources that support and sustain our tourism economy for a handful of potential jobs, boom and bust economies, permanent land destruction, and mining wastes that can require perpetual treatment and care to contain pollution. These impacts threaten the quality of life in Wisconsin that will attract needed workers to the state.

MYTH #10: The Flambeau mine was an economic success: There is no evidence that the mine created any lasting positive economic impact in Rusk County. It operated for 3 years and common sense tells us that a mine (any business, really) that employed less than 70 people for such a short time is incapable of generating any lasting or significant economic development. Nothing changes the fact that all mines are ultimately boom and bust and do not create long-term economic development.

The fact is that Rusk County before, during, and after the mining years ranked at the bottom or near the bottom of all 72 WI counties for several key economic standards: overall unemployment rate, individual poverty level, children living in poverty, and per capita income¹⁶. There is no question that the mine had a short-term positive economic impact but there's no objective statistical evidence showing the mine had any lasting economic impact beyond the short operating time frame.

MYTH #11: We should mine in Wisconsin with its great environmental laws instead of other countries with less regulations. Beyond the sheer irony of the statement when used to justify weakening our protections, this slogan simply defies logic. Mining companies in other parts of the world don't halt production just because an operation opens in WI or anywhere else in the US where environmental protections are stronger. The only factors driving mining production are market forces such as demand, prices, forecasts, and profit expectations by shareholders.

MYTH #12: Modern society relies on metals so we must mine in WI. This slogan is a transparent attempt to gain public acceptance for a controversial and destructive industrial activity for profit. No one is disputing the fact that modern society is dependent on abundant metals but there is no shortage of base metals.

¹⁵ In Wisconsin, GOP pushes to end sulfide mining moratorium, Todd Richmond, AP, Sept. 24, 2017

¹⁶ Data sources: US Census Bureau, Wisconsin Departments. of Workforce Development, and Revenue.

For example, annual US copper production is enough to cover around 70% of our needs. We import the rest but we also export approximately half as much as we import¹⁷. There is no shortage of copper and world-wide reserves are estimated at around 3.5 billion tons while annual usage is around 19 million tons meaning more than 180 years of reserves at current usage rates. Copper is also an easily recycled metal. Precious metals such as silver and gold are most commonly used for jewelry; a consumer preference but not a societal requirement. Senator Tiffany eludes to the need to mine so we have sufficient strategic minerals for our economy, however, none of the deposits in Wisconsin contain strategic Rare Earth metals or even base metals in short supply or with limited reserves.

MYTH #13: Mining in Wisconsin will supply companies like Foxconn. This is another highly misleading slogan that ignores the reality that the global economy and markets control the flow of minerals from mining to manufacturing. Manufacturers purchase metals via contracts on the open market where they can get the best price, not because of some loyalty to a specific manufacturer or consumer.

The opposition to SB 395 is growing. The long list of opposition consists of over 50 statewide and regional environmental and conservation organizations, mayors, tribes, and more, including:

- Wausau Mayor Robert Mielke,
- Stevens Point Mayor Mike Wiza,
- Wisconsin Rapids Mayor Zachary Vruwink,
- Trout Unlimited,
- River Alliance of Wisconsin,
- The Nature Conservancy,
- The Great Lakes Inter-Tribal Council,
- The Menominee Nation,
- The Mole Lake Sokaogon Chippewa,
- Oneida Nation,
- Wisconsin League of Conservation Voters,
- Wisconsin Association of Lakes,
- Natural Resources Defense Council

SB 395 as amended remains poor public policy designed to benefit an industry with a failed track record. It specifically appears to benefit a single company, Aquila Resources, which collaborated on the development of the bill. **The Sierra Club urges legislators to reject this special interest giveaway bill** that is unlikely to create economic development while endangering our sustainable and thriving tourism and agriculture economies.

¹⁷ U.S. Geological Survey, Mineral Commodity Summaries, January 2017