

Why Wisconsin's Mining Moratorium Law Should Be Maintained

A Briefing Paper on the Mining Moratorium Law produced by the Sierra Club and the Wisconsin Resources Protection Council.

The reason for Wisconsin's landmark "Prove it First" law for mining in metallic sulfides is simple and remains true to this day: there has never been an example of a metallic sulfide mine that has safely operated and closed without polluting the environment. The Flambeau Mine and other examples cited by the mining industry so far do not qualify to meet the Law. Wisconsin should not repeal this important safeguard simply because the mining industry can't or won't meet the law.

Acid Mine Drainage from Mining in Metallic Sulfides

The production of Acid Mine Drainage (AMD) and associated contaminants is widely considered mining's largest environmental problem in the U.S.¹ 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. The U.S. Forest Service considers these contaminants a greater concern than the acidity.²

In Wisconsin, ore deposits such as at Flambeau, Crandon, and in Oneida, Taylor, and Marathon Counties are found as massive sulfide ores. Mining these ores requires separating the metals from the sulfide waste materials, primarily mill tailings and waste rock. Sulfide mine wastes and abandoned mines are the source of AMD. Once the chemical reaction leading to sulfuric acid production in mines and mine wastes begins, it is extremely difficult and costly to halt the resulting degradation from dissolved toxic metals in water.

Wisconsin's "Prove It First" Law

Before the Moratorium Law was approved, the mining industry was challenged to give one example of a mine in metallic sulfides that had been safely operated and closed without polluting the environment. **To this day, the mining industry has not documented a single proven example.** Similarly, state regulators were tasked by the Natural Resources Board to search for examples and were unable to document successful metallic sulfide operations. Wisconsin DNR staff issued a report issued in 1995 that stated: ***"There are no ideal metallic mineral mining sites which can be pointed to as the model approach in preventing acidic drainage industry-wide."***³ This conclusion by the state confirmed the industry's failed environmental track record of mining metallic sulfide ores and informed the legislature.

The law was then approved by the state legislature in 1998 by overwhelming bi-partisan margins (27-6 in the Senate and 91-6 in the Assembly. See the list of current and former legislators which voted for the law on p. 4) and signed by Governor Thompson as 1997 Act 171. It was strongly supported by Wisconsin

¹ US EPA, Acid Mine Drainage Prediction, Technical Document, 1994

² USDA Forest Service 1993. *Acid Mine Drainage From Mines on the National Forests, A Management Challenge*

³ *An Overview of Mining Waste Management Issues in Wisconsin*, Report to the Natural Resources Board by Wisconsin Department of Natural Resources Bureau of Solid and Hazardous Waste Management, July 1995, Updated October, 1997

residents with support from more than sixty organizations statewide along with petitions signed by more than forty thousand citizens.

The fact that the law is a moratorium in name only is well understood by regulators and the public. It is simply a permit condition that must be met before final permits are granted. Note that the law is already a compromise due to the DNR's determination that two different mines could meet each 10-year requirement for operations and closure without causing pollution; this despite the clear intention of the law to require a single mine as an example. Nonetheless, it is a concrete, unambiguous requirement limited to the language specified in state statutes⁴.

There is nothing in the law to stop a company from applying for permits today unless the industry is unable or unwilling to demonstrate an example mine. In fact, a recent survey of metallic sulfide regulation in the Great Lakes region by the National Wildlife Federation called Wisconsin's Mining Moratorium an exemplary law⁵.

Thus, the newest complaint from the mining industry is that the law leads to a "perception" that mining permits can't or won't be granted in Wisconsin is simply without merit. The mining industry wants the legislature to repeal the law based on self-serving hyperbole and to rid it of a permit requirement it appears unable to meet. Tim Sullivan, president of the Wisconsin Mining Association further claims the law can never be met. His claim is dubious but if true, dramatically underscores the need to retain the law since his statement further proves that metallic sulfide mining is unsafe.

Flambeau Mine

Mining proponents are misleading the legislature and the public by citing Kennecott's Flambeau Mine as an example for future mining here. Flambeau Mining Company (FMC) has been far from a model mine operator; it is a proven polluter that has failed multiple attempts at cleanup at the site. Ironically, the fact that the Flambeau Mine received permits to mine under the current state mining regulations proves the industry's claims that mining can't be permitted in Wisconsin are baseless.

The Flambeau Mine operated for four years and closed in 1997 after accelerating its production rates to shave a full year off the already limited benefits to the local and state economy. Reclamation began in 1998 and is still unfinished. In 2007, FMC applied for a Certificate of Completion for reclamation of the mine. Monitoring of the site demonstrated that the reclamation was not only incomplete but that the site had been polluting nearby Stream C, a tributary of the Flambeau River, for many years. A number of state organizations challenged FMC's application. Notably, the organizations worked with FMC and the state to avoid a formal contested case hearing and reach a negotiated agreement which resulted in cleanup and monitoring ordered by the state of Wisconsin⁶.

⁴ See *Legislative Reference Bureau Brief 98-1* for general permit requirements for metallic mining or *Special Report 13, An Overview of Metallic Mineral Regulation*, Wisconsin Geological and Natural History Survey for detailed permit requirements.

⁵ *Sulfide Mining Regulation In The Great Lakes Region, A Comparative Analysis of Sulfide Mining Regulation in Michigan, Minnesota, Wisconsin and Ontario*, March 2012, National Wildlife Federation

⁶ State of Wisconsin Division of Hearings and Appeals, Stipulation and Order, Case IH-07-05, May 31, 2007

Despite the agreement, FMC's efforts failed to address pollution at the site. That failure and the subsequent refusal by the state of Wisconsin to cite the company for violations resulted in the federal lawsuit proving that the mine continued to pollute. Flambeau Mining Company (FMC) was found guilty of multiple counts of violating the Clean Water Act in 2011 by polluting a tributary of the Flambeau River. Note that each Clean Water Act violation reflects a single monitoring or sample event in time, meaning that additional unrecorded violations are likely to have occurred.

Under the rules of the Moratorium Law, the Flambeau Mine is disqualified as an example mine to meet the law. Fifteen years after closing in 1997, FMC is now working on its fourth attempt to remediate contamination at the mine site. FMC is currently creating artificial wetlands and infiltration basins to direct runoff and contaminants to groundwater instead of Stream C, taking full advantage of Wisconsin's less restrictive groundwater laws for mining.

The Wisconsin Department of Natural Resources (DNR) recently completed an investigation of water quality at the Flambeau Mine site and recommended that "Stream C," a tributary of the Flambeau River into which Flambeau Mining Company (FMC) has been discharging polluted runoff from the mine site since 1999, be included on its list of "impaired waters" for 2012 for "acute aquatic toxicity" caused by copper and zinc⁷. Groundwater monitoring wells between the mine pit and the Flambeau River show metals in excess of predictions⁸. These contaminants are either discharging into the Flambeau River, passing underneath it or both.



Flambeau Mine after river flooding showing the pit within 20 feet of the river
Photo Credit: Bob Olsgard

Conclusion

Wisconsin's mining laws are carefully crafted and comprehensive and already contain numerous exemptions and exceptions from law for mining. The Moratorium Law was passed by strong bi-partisan margins and signed into law by GOP Governor Thompson (see list of legislators which voted for the law on p. 4). These exemptions and exceptions in current law came from the mining industry itself and now it is asking the legislature for yet more favors by repealing the landmark Moratorium Law. The fact that the mining industry itself has yet to provide a single example of a successfully operated and closed mine in metallic sulfide ores is extraordinary and the utter lack of success of mining this material gives state lawmakers ample reason to reject efforts to repeal the law.

⁷ See 2012 WDNR Section 303d Impaired Waters database at: <http://dnr.wi.gov/water/impairedDetail.aspx?key=3924686>

⁸ *Report on Groundwater and Surface Water Contamination at the Flambeau Mine*, David M Chambers, Ph.D. and Kendra Zamzow, Ph.D., Center for Science in Public Participation, June 5, 2009

Votes for Senate Bill 3 (Mining Moratorium Law)

1998 Wisconsin State Assembly (Passed 91-6):

| | | | |
|------------------------|------------------------|--------------------|-----------------------|
| Ainsworth (R) | Hebl (D) | Murat (D) | Sykora (R) |
| Albers (R) | Hoven (R) | Musser (R) | Travis (D) |
| Baldwin (D)**** | Huber (D) | Nass (R)* | Turner (D) |
| Baumgart (D) | Hubler (D) | Notestein (D) | Underheim (R) |
| Black (D) | Huebsch (R) | Olsen (R)** | Vander Loop (D) |
| Bock (D) | Hutchinson (R) | Ott (R)* | Vrakas (R) |
| Boyle (D) | Johnsrud (R) | Otte (R) | Walker (R)*** |
| Brandemuehl (R) | Kaufert (R)* | Ourada (R) | Ward (R) |
| Carpenter (D)** | Kedzie (R)** | Owens (R) | Wasserman (D) |
| Coggs (D) | Kelso (R) | Plale (D) | Wieckert (R) |
| Cullen (D) | Klusman (R) | Plouff (D) | Williams (D) |
| Dobyns (R) | Kreibich (R) | Porter (R) | Wood (D) |
| Dueholm (D) | Kreuser (D) | R. Potter (D) | L. Young (D)* |
| Foti (R) | Krusick (D) | Powers (R) | R. Young (D) |
| Freese (R) | Kunicki (D) | Reynolds (D) | Ziegelbauer (D) |
| Gard (R) | La Fave (D) | Riley (D) | Zukoski (R) |
| Goetsch (R) | Ladwig (R) | Robson (D) | |
| Green (R) | F. Lasee (R)** | Ryba (D) | <i>Noes-</i> |
| Gronemus (D) | Lazich (R)** | Schafer (R) | Duff (R) |
| Gunderson (R) | J. Lehman (D)** | Schneider (D) | Grothman (R)** |
| Hahn (R) | M. Lehman (R) | Skindrud (R) | Jeskewitz (R) |
| Handrick (R) | Linton (D) | Spillner (R) | Seratti (R) |
| Hanson (D) | Lorge (R) | Springer (D) | Urban (R) |
| Harsdorf (R)** | Meyer (D) | Staskunas (D) | Jensen (R) |
| Hasenohrl (D) | Morris-Tatum (D) | Steinbrink (D) | |

1998 Wisconsin State Senate (Passed 27-6):

| | | | |
|----------------------|---------------------|----------------------|-------------------------|
| Breske (D) | George (D) | Roessler (R) | <i>Noes-</i> |
| Burke (D) | Grobschmidt (D) | Rosenzweig (R) | Farrow (R) |
| Chvala (D) | Jauch (D)** | Rude (R) | Fitzgerald (R)** |
| Clausing (D) | A. Lasee (R) | Schultz (R)** | Huelsman (R) |
| Cowles (R)** | Moen (D) | Shibilski (D) | Panzer (R) |
| Darling (R)** | Moore (D) | Weeden (R) | Welch (R) |
| Decker (D) | Plache (D) | Wineke (D) | |
| Drzewiecki (R) | C. Potter (D) | Wirch (D)** | |
| Ellis (R)** | Risser (D)** | Zien (R) | |

*currently serving in the 2013-2014 Wisconsin State Assembly

**currently serving in the 2013-2014 Wisconsin State Senate

***currently serving as Governor of Wisconsin

****currently serving in the U.S. Senate