

Mining Information Sheet

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Addressing Public Concerns with Wisconsin's Laws Governing Metallic Mining

Introduction

The Department of Natural Resources is the primary agency responsible for regulating metallic mineral mining in Wisconsin. The Nicolet Minerals Company proposed Crandon Mine project is now being analyzed by the Department, and as the environmental and permit reviews proceed, groups and individuals have expressed concerns about some of the laws applicable to mining projects. Many of the concerns are based on an incomplete understanding of these laws and rules. The purpose of this mining information sheet is to address some of those concerns voiced by the public. This information sheet is not intended to justify or defend the laws governing mining, but to explain how they are understood and interpreted by the Department in view of specific public comments.

The Mining Laws, Rules and Resources

The Department of Natural Resources regulates many of the activities of a mining operator. However, in many instances, this regulatory authority originates not in the mining laws, but in different environmental protection statutes. For example, primary authority for the regulation of disposing of mine tailings, discharging treated wastewater, releasing pollutants to the air, storm water runoff and impacts to navigable waterways (lakes and streams) rests in laws other than the mining statutes. Similarly, high capacity well and wastewater treatment plan approvals are distinct from the mining laws. In addition, the statutes concerning these general areas of environmental protection pertain to all municipal and industrial facilities, including mining projects.

In addition there is a provision in the mining law that states that if there is a standard in some other statute that regulates an activity also covered in the mining law, the standard in the other law or rule shall be the controlling standard. ``

A basic familiarity with the laws and the applicable administrative codes (rules) that govern mining is necessary for understanding how the Department of Natural Resources reviews a mining proposal and ultimately regulates a mining company if a mining proposal were approved. The mining law and the two most important rules are:

- Wisconsin's mining law is contained in sections 293.01 - 293.95, Wisconsin Statutes, (formerly ss. 144.80 - 144.94, Wis. Stats.), and is officially known as the Metallic Mining

Reclamation Act.

- Chapter NR 132, Wisconsin Administrative Code, "Metallic Mineral Mining", is the primary rule guiding Department review of mining proposals and regulation of permitted operations. This chapter was adopted by the Department under authority granted to it by the Metallic Mining Reclamation Act.

- Chapter NR 182, Wisconsin Administrative Code, "Regulation of Metallic Mining Wastes", establishes how mining wastes must be disposed. This chapter was adopted by the Department under authority granted to it by the Solid Waste Facilities Law.

The most comprehensive reference to the mining laws is contained in "**An Overview of Metallic Mineral Regulation in Wisconsin**" by Thomas Evans. It was published by the Wisconsin Geological and Natural History Survey in 1991 (revised in 1996) as Special Report 13. Copies are sold by that agency in Madison (phone (608) 262-1705).

Public Comments on the Legislative Statutes and Department Rules that Control Mining

The following statements have been made in pointing out what were described as deficiencies in the Wisconsin mining law. We have reiterated each statement in full followed by our response from our standpoint as regulators of metallic mining projects.

1. *NR 182.02(10) & (11) create an exemption for any backfilled mine from virtually all siting criteria, inspection and monitoring requirements, certified lab testing, record keeping and minimum design and operation standards.*

This particular mining rule was changed and the above exemptions added, as described, but the change did not relieve a mining company from any regulatory requirement. Rather, the change was made to clarify which rule would apply to certain aspects of the mining facility, thereby avoiding duplication and conflicting regulation.

The mining rules, as originally developed, encouraged backfilling of underground mines to reduce the potential for subsidence and potential environmental problems attendant with surface disposal. Subsequently, during the Department's review of the Flambeau mining proposal, which was for an open pit mine, backfilling of the surface mine was proposed. At the time, this activity would have been regulated by the rules controlling solid waste disposal, not the mining waste rules. To correct this problem, the administrative rule pertaining to mining was amended so that it addressed backfilling a surface mine. Then, because Chapter NR 132 already covered many aspects of backfilling, it was necessary to add the exemptions in Chapter NR 182 to avoid duplication. The above exemptions in Chapter NR 182 are all covered in Chapter NR 132. For example, for locational criteria, see section 132.18; for inspection requirements, see section 132.14; for monitoring, see section 132.11; for certified lab testing, see section 132.11[5]; for record keeping, there are numerous requirements in NR 132; and for minimum design and operation standards, see

section 132.17. Thus, mining companies were not relieved of any regulation as a result of the above exemptions.

2. *In 1977, legislation was passed requiring local municipalities to supply water to an owner of a well that has dried-up or been polluted by mining, until the mining company is proven guilty.*

Response: As far as this comment goes, it is true. This hypothetical situation is addressed in s. 144.855 (4), Wisconsin Statutes. The purpose of this statute is to provide a mechanism to discover the cause of an alleged problem to a private water supply near a mine, provide a source of good water to the household during the water quality investigation and hearing, and find out who is responsible for the problem and, thus, who should pay for remedial action. Because considerable time can elapse between when a water quality problem is first noticed and when an investigation and hearing are completed, the local municipality (town, city or county) is required to provide potable water during the process. After the hearing, if it is found that the mining company is responsible for the water quantity or quality problem, the company must reimburse the municipality and correct the problem. If the mining company was found not to be responsible for the groundwater problem, the land owner who filed the complaint must reimburse the municipality.

The legislature found this be a reasonable means to protect property owners with private water supplies close to mining projects. At the end of the process, the municipality gets reimbursed for its actions, the household obtains potable water and the responsible party pays for the costs.

In reality, this process might seldom be used for two reasons. First, during the environmental review and permitting processes, potential impacts to water wells from the groundwater drawdown would be evaluated and described. Permit conditions in the high capacity well plan approval would require the company to take the necessary actions to all affected water wells so that those wells would provide acceptable amounts of potable water during the project.

Secondly, because water well protection is a very important concern to local mining impact committees, the citizens living close to mining projects and mining companies, steps likely would be taken to prevent or mitigate the problem in the first place. In addition, if a local agreement is developed between the municipality and mining company, it almost certainly would provide a mechanism for addressing a water well problem in the vicinity of the project.

Groundwater monitoring at a mining site would begin before there would be any disposal of mining wastes on site, and groundwater monitoring would continue throughout operations and long after closure. The groundwater drawdown that would be expressed at the Crandon project, should it be approved and constructed, would develop gradually, and would not be fully expressed until five or six years into the project. Thus, there would be ample time to plan for potential impacts to water wells should the drawdown be greater than anticipated.

3. *In 1983, limits on foreign ownership of Wisconsin land for mineral/oil exploration and development were removed. (In contrast, a foreign entity can own only 640 acres for farming.)*

Response: This comment refers to Act 335, Laws of 1983, s. 710.02, Wisconsin Statutes, which

was not a mining-specific law, but resulted from a total rewriting of the law dealing with land ownership by foreign corporations. Mining was one of the activities included in the new law.

It is not clear how this change in the law could be interpreted as reducing our ability to regulate a mining company. Mining companies typically do not purchase lands for exploration purposes, but lease them for some limited duration. If a mining company decided it needed to purchase land, it could do so without the exemption in the law by incorporating in Wisconsin or another state and holding title in that corporate name.

4. In 1977, the state established "Local Impact Committees." These committees can negotiate contracts with mining companies for local approval and local benefits, overriding town concerns.

Response: This comment involves two different sections of the mining law. In addition, it is incorrect in concluding that a local committee can make a decision and thus override town concerns. Section 144.838, Wisconsin Statutes, provides for the creation of local impact committees and identifies their responsibilities, while section 144.839, Wisconsin Statutes, provides a means to develop local agreements between municipalities and a mining operator. Such agreements are optional for both the municipality or the mining company; there is no requirement to develop such an agreement.

A local impact committee (or some other committee) may be authorized to negotiate a draft local agreement between the mining operator and the municipality. In the case of the Flambeau Mine, the Town, City and County were signatories to the local agreement with Flambeau Mining Company. A mining impact committee is not an autonomous committee and does not have authority to finalize a local agreement. The law clearly states that each governing body that is a party to the agreement must hold a public hearing on the draft agreement, and final approval of the agreement must take place in a public meeting of that body. The municipality would have to publicly vote to adopt the agreement. Thus, a mining impact committee, whose members are appointed by the municipality, has no authority to "override" local concerns even if it wanted to, because it has no decision-making authority.

5. In 1982, the net proceeds mining tax law was amended, increasing deductions and setting lower rates. Money from this tax goes to offset adverse local mining impacts, although there is no guarantee the tax will generate any money.

Response: This statement about changes in the law is true, but the conclusion about generation of funds needs further discussion. In 1982 the legislature reviewed the tax on metallic mining operations and changed the tax brackets, tax rates, and clarified allowable deductions applicable to all potential metallic mining operations. The effect of these changes, had the original Exxon project been pursued at Crandon in the mid-1980s, would have been to decrease the projected net proceeds tax liability of the mining company by about 50%. Under the current law, the Flambeau Mining Company paid \$6.1 million in net proceeds taxes, in addition to its corporate income taxes, for the first full year of operations. It is estimated that the company will pay approximately \$20-25 million in net proceed taxes over the life of the operations from mid-1993 through 1998. The expected net

proceeds tax applicable to the Nicolet Minerals Company's proposal depends almost entirely on metals prices set in worldwide markets, but has been estimated by the Nicolet Minerals Company to be \$119 million over the life of the proposed mine.

6. In 1978, the state consolidated the hearings regarding the Environmental Impact Statement and the Permit Applications into one contested hearing. Public testimony was ruled to have no bearing on the decision, which was formerly the case when there were separate hearings on the EIS and the Permit Application.

Response: This interpretation of the impacts of consolidating the processes is incorrect. In the late 1970's, when the mining law was significantly revised, the two hearings were combined into one hearing to streamline the process. This did not, however, change the legal weight of public comments or how the Department uses public comments.

There are two types of public input at the final hearing, called the master hearing, on a mining proposal. During the public comment portion, anyone may give oral comments on the completeness of the EIS or on the mining project. These statements are not given under oath, there is no cross-examination, and most of the testimony is not given by experts.

In contrast, the contested portion of the hearing receives sworn testimony by citizens and experts on precise questions required by law to be provided in order for permits to be issued. Testimony is usually in writing, accompanied by many types of exhibits. Each witness may be cross-examined by any of the parties involved. The contested case portion of the hearing serves the function of providing a focused discussion of complex technical and legal issues for the benefit of the hearing examiner.

In the end, it is up to the decision-maker to decide how much legal weight to afford any of the testimony. The mining law does nothing to restrict the decision-maker's judgements in these decisions. In fact, the decision-maker must make a finding (issue a legal ruling) on whether or not the environmental impact statement is adequate separate from any findings or decisions reached on the mining permit itself or other required permits.

7. In 1988, legislation was adopted that exempts mining companies from local zoning ordinances and resolutions, should they obtain agreement from the local impact committee. (The Kennecott mine could not have been built because of protective town zoning ordinances.)

Response: Mining companies are not exempt from local zoning. This confusion may arise from an incorrect interpretation of Section 144.839, Wisconsin Statutes, which gives municipalities (not local impact committees or mining companies), the option of entering into a local agreement, if they choose, with a mining company. The local agreement must address the extent to which local ordinances will apply to the mining project. If a local agreement is developed, it must contain essentially the same major provisions as the zoning or land use permit, including the items listed in s. 144.839 (2). A municipality may choose to apply both the local agreement and require the application of local zoning for mining projects within its jurisdiction.

The Flambeau Mine probably could not have been permitted under Rusk County's zoning authority because it was very restrictive. Instead, the Town of Grant, City of Ladysmith and Rusk County officials approved a local agreement and a comprehensive conditional use permit because the governing bodies of all three of these municipalities wanted to permit the project.

8. *The DNR cannot examine the full foreign and domestic environmental track record of a mining company when licensing a mining operation.*

Response: Mining laws do delegate to the Department a limited authority to review a mining company's environmental record. Existing legislation requires the Department to deny a mining permit based on certain conditions and specific, mining-related environmental problems of the parent company and subsidiaries in the United States over the past ten years. This authority granted by the legislature to the Department, while limited, is greater than is available to the Department in its regulation of any other activity.

9. *The DNR cannot consider the need for a metal or alternatives (such as recycling) to meeting that need.*

Response: Recycling as many materials as possible is a good idea for many reasons, and our Department supports and promotes recycling of many products. However, as the statement indicates, we have no authority under the mining law to deny a mining permit to promote recycling or even consider recycling in our decision-making process. Chapter NR 182, however, does require that an analysis be made of alternative methods of disposal of waste materials, including the practicability of the reuse, sale, recovery or processing of the wastes for other purposes.

Other than for landfill and power plant proposals, no other kinds of private development proposals require an evaluation of "need" in the regulatory review. The Department has no authority to factor in the question of need into its mining permit decision. The market system determines whether or not a company will decide to prepare a mining proposal, not the Department or state. If a mining company can meet all of the environmental protection requirements in the law and obtain the needed local approvals, the Department must approve the permits for a mining proposal, just as it must for a paper mill, waste water facility or any other industrial facility.

10. *In 1982, the DNR approved new groundwater quality standards eliminating their policy of non-degradation. Mining pollutants may now exceed drinking water standards. Other concerns about groundwater quality state that mining companies are unregulated within their boundaries.*

Response: In 1982 the first groundwater quality standards for mining waste disposal facilities were finalized in Chapter NR 182, Wisconsin Administrative Code. These standards were developed not by the Department but were a result of a consensus group consisting of environmentalists, Town representatives, the Public Intervenor, and mining interests. The administrative code was subject to legislative review and approval. In 1984 the legislature adopted a statewide groundwater protection policy (Chapter 160, Wisconsin Statutes), which was very similar to that developed two years earlier for mining facilities. The protection strategy under the statewide policy is consistent with that under the mining rules.

The previous state policy on groundwater protection was not a non-degradation policy; it can be best described as a no significant deterioration policy, which was a qualitative approach. The current policy uses a quantitative approach, using well-defined standards to be met at a specific place, and affords a higher level of protection than the previous one.

Groundwater quality standards at a mining project are applied at a compliance boundary set 1,200 feet from a mining and waste disposal facility. Groundwater quality at the compliance boundary cannot exceed the standards. Groundwater quality within the compliance boundary could exceed the drinking water standards. All other regulatory activities have similar authorities to exceed drinking water standards within a set number of feet from the regulated facility.

Before a mining project can begin, the groundwater quality in the area must be sampled monthly for twelve consecutive months to establish the baseline (background) water quality. During operations, monitoring continues. If the baseline groundwater quality within the compliance boundary ever changes a statistically significant amount, there is a chain of events started to discover why it changed, what the long-term effects would be and if there would be any violation at the compliance boundary. If the groundwater quality were significantly changed, and it was determined that there could be a violation at the compliance boundary, the Department could issue a stop order to the mining company. In summary, the area within the compliance boundary is monitored closely by the Department.

11. *Chapter 160.19(12) exempts mining companies from the law controlling groundwater standards.*

Response: As far as this statement goes, it is true. The mining rules were passed by the legislature before the groundwater law was developed, thus they contain their own groundwater protection requirements. The two approaches use the same standards for protecting groundwater, and the standards are based on protecting health, safety and welfare of the general public. They differ slightly in how they are implemented, but the environmental protection objectives are the same. Section 182.075 contains the groundwater standards applicable to mining waste sites.

12. *Should any remaining state laws prove too restrictive to mining, the DNR can (as it did for Kennecott) waive laws and provide variances to the mining company. Should fish kills or aquatic damage occur during mining, operations may continue while the company and DNR investigate the problem.*

Response: This statement raises two issues: exemptions, and the hypothetical enforcement process if there was a fish kill due to the mining company's discharge. In regard to exemptions, the above characterization is misleading. It is true that many of the statutes and administrative rules that are used in the regulation of municipal and industrial projects, including mining projects, incorporate the power to grant exemptions. Nothing in those laws allowing exemptions is unique to mining projects. Also, the ability to allow exemptions focuses on agency administrative rules. Agencies are generally not authorized to grant exemptions from the requirements of state statutes. The department is not authorized to grant exemptions from the mining law.

If an exemption is proposed and granted it does not mean that the environment has been compromised or that an applicant has gotten something for nothing as is implied by the above statement. The Administrative Code NR 132 provides that "... the Department may grant exemptions from the requirements of this chapter (Metallic Mineral Mining) if such exemptions are consistent with the purposes of this chapter **and will not violate any applicable federal or state environmental law or code**" (emphasis added). In the case of the Flambeau Mine, allowing the company to mine within 140 feet of the Flambeau River, instead of the 300-foot guideline in the code, did not violate any environmental law or code and did not result in any greater environmental impacts to the Flambeau River. The basis for this statement is the testimony provided in the master hearing on the Flambeau Mine.

Requests for exemptions may be made by the applicant not less than 90 days before the master hearing or by other parties not less than 30 days before the hearing. Any party to the hearing may request more stringent standards or requirements for any provisions of the mining code. The burden of proof for seeking the exemption is upon the person seeking it.

The second issue in this statement involves impacts from a surface water discharge. For any industrial or municipal project with a surface water discharge permitted by the Department, if a problem is observed with the discharge, immediate attention would be required. The degree of attention and nature of the response depend on the severity and type of problem. Wastewater treatment plants at mining projects have the ability to temporarily cease discharging until the problem is identified and corrected. With a serious environmental problem at a mining project, where fish are killed or aquatic damage occurs, it is very unlikely that a surface water discharge would continue, but it depends entirely on the case-by-case circumstances. Under the mining law, the Department has the authority to issue a stop order requiring immediate cessation of all or part of the mining operation if continued operation poses an immediate and substantial environmental threat. This is an additional regulatory control which is not available to the Department in regulating other industries.

13. *NR 103.06(3) exempts mining companies from wetlands alteration standards, pursuant to NR 131 & 132 (rules for prospecting and mining).*

Response: This is correct. The exemption was granted because the mining rules, which were developed earlier than the wetland protection rule, contain their own wetland protection provisions. While the mining law and rules recognize the diverse values that wetlands provide (see 132.06(4)), the presence of wetlands would not necessarily preclude the development of an ore body. The rationale is primarily based on the fact that orebodies cannot be relocated, and if mining is to occur, there may have to be wetland impacts. As a result, impacts to wetlands in mining projects must be minimized. However, the broad goal for siting facilities for a mining project is placement of facilities to result in the least overall environmental impact.

14. *NR 132.06(4)(d) allows use of wetlands for disposal and storage of mining waste, if a mine is shown to be viable. As used in this section, "viable" is defined as technically and economically*

feasible.

Response: A mining waste disposal site would be located based on many criteria, including the presence and quality of wetlands. Since there are a large number of potential alternative sites where any mining waste disposal facility could be located, the proposed alternative must satisfy the requirements that wetland impacts are minimized and the site causes the least overall environmental impact. Obviously, this would discourage mining companies selecting wetlands for mining waste disposal. However, some acreage of wetlands may be destroyed by the development of any particular waste facility, which could be as large as several hundred acres.

15. Mining companies won a court case which allows them to keep secret the results of drilling programs, and the Department can not get access to the information.

Response: During exploratory drilling, mining companies are not required to divulge the mineral content or other characteristics of the cores recovered. The Department does not need that information during exploration. Department staff does know where the exploration holes are drilled and the drill hole size and direction, and inspects each site prior to drilling. In addition Department staff observes the hole abandonment (filling) process and certifies reclamation of each drill site according to the requirements.

If a company ultimately discovers an ore body and wants to apply for a mining permit, it must supply detailed information and samples of the ore body to the Department for independent analysis. Numerous tests are conducted on the ore and waste rock to determine its chemical composition and characteristics, whether it is an acid forming material or not, what type of leachate is formed and other tests. During the permit and environmental review processes, Department staff does have access to the drill cores and any other information it needs in order to evaluate the proposal. Department staff also observe and verify the tests and gather samples for tests in independent laboratories.

Recently Proposed Changes to the Mining Law

Several changes to the mining law have been proposed during the past several legislative sessions. However none of the following proposed changes have been approved by the legislature.

1. Groundwater Protection: This proposal would mean that mining projects would be regulated under the same groundwater law which applies to all other industries. The chief advantage of this proposal would be uniformity of regulation. The Department of Natural Resources testified in favor of this proposal at a legislative hearing.
2. Bad Actor Provisions: This proposal would expand the existing statutory provisions dealing with evaluation of the track record of mining permit applicants. One amendment would require the Department to deny a mining permit to an applicant that had previously been subject to certain civil penalties or subject to criminal penalties in Canada in excess of \$10,000. The Department supported this proposal.

3. Ban on Mining on State Lands: This proposal would have clarified that mining on state lands managed by the Department was banned. Currently there is not a comprehensive ban on mining on state lands. The Department supported this amendment.

For More Information

If you would like additional information or want to discuss any mining-related issues, please contact:

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This mining information sheet is one in a series prepared by the Department of Natural Resources to explain how metallic mining in Wisconsin is regulated and to explore other aspects of mining. Copies of the following mining information sheets are available from Department offices in Madison and Rhineland, and the Internet:

- *The Permitting Process for a Metallic Mineral Mine*
- *How the Department of Natural Resources Regulates Metallic Mining*
- *Protecting Groundwater at Metallic Mining Sites*
- *Reclamation and Long-Term Care Requirements for Metallic Mining Sites in Wisconsin*
- *Local Decisions in Metallic Mining Projects*
- *Addressing Public Concerns With Wisconsin's Laws Governing Metallic Mining*
- *Wisconsin's Net Proceeds Tax on Metallic Mining and Distribution of Funds to Municipalities*
- *Cumulative Impacts of Metallic Mining Development in Northern Wisconsin*
- *Potential Metallic Mining Development in Northern Wisconsin*

The Mining Regulations (Administrative Code) can be viewed at the Department's Mining Web site:
<http://www.dnr.state.wi.us/org/aw/wm/mining/metallc/index.htm>