

## NONFERROUS METALLIC MINERAL MINING

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**House Bill 6243 (Substitute H-1)**

**Sponsor: Rep. Tom Casperson**

**Committee: Agriculture and Resource Management**

**First Analysis (11-10-04)**

**BRIEF SUMMARY:** The bill would create a new Part 632 of the Natural Resources and Environmental Protection Act relating to the mining of nonferrous metallic minerals (i.e., where iron is not the predominant metal extracted).

**FISCAL IMPACT:** This bill establishes a surveillance fee paid by non-ferrous metallic mine lease holders. The fee rate would be adjusted annually to assure that only the amount needed to administer the regulatory program is collected (not more than 5 cents per ton). There would be no fiscal impact on local governmental units.

### **THE APPARENT PROBLEM:**

Over the course of the past 150 years, the Western Upper Peninsula has been the home of approximately 800 open pit, iron oxide and copper mines. There are, at present, two such mines remaining, and these mines are regulated under Part 631 of the Natural Resources and Environmental Protection Act, among other parts of the act. However, recent months has seen an increased interest in the possibility of underground nonferrous sulfide mines in the Yellow Dog Plains area of Marquette County and in portions of Menominee County to mine for nickel, copper, and zinc deposits within the area. (It is estimated that mines in the Yellow Dog Plains could yield 405 million pounds of nickel and 335 million pounds of copper.) However, the last of Michigan's underground mines closed in the early 1970's, and there is really no adequate regulatory structure in place to regulate the operation of such mines. Moreover, sulfide mining produces high levels of toxic pollutants, principally sulfuric acid. The widespread development of sulfide mines in the Upper Peninsula, without an adequate regulatory structure, poses a great risk to the environment, natural resources, quality of life, and public health, and has the potential to contaminate the water supply and destroy nearby wildlife.

Earlier this year, the departments of Environmental Quality and Natural Resources convened a work group to study the potential development of sulfide mining in the Upper Peninsula. This work group was composed of representatives from the two departments, environmental groups, local governments, mining companies, tribal governments, and state legislators, as well as other interested individuals. The work group met throughout the summer and, in September, reached an agreement on proposed legislation regulating sulfide mining in the state. Legislation has been introduced following the recommendations of the work group.

## ***THE CONTENT OF THE BILL:***

The bill would create a new Part 632 of the Natural Resources and Environmental Protection Act relating to the mining of nonferrous metallic minerals (i.e., where iron is not the predominant metal extracted).

### **Permit Application**

The bill would prohibit a person from mining nonferrous metallic minerals except as authorized by a permit issued by the Department of Environmental Quality (DEQ). The permit application would have to include the following: (1) a \$5,000 application fee; (2) an environmental impact assessment; (3) a mining, reclamation, and environmental protection plan that seeks to minimize the adverse impacts of the mining operation on natural resources, the environment, and public health; (4) a contingency plan that includes an assessment of the environmental, public health, and safety risks that may result from failures of the mining operation, and the operator's notification and response plans; and (5) financial assurances of the mining operation.

The bill also provides that the applicant would have the burden of establishing that the terms and conditions provided in the application, environmental protection plan, and environmental impact assessment results in a mining operation that reasonably minimizes the actual or potential adverse impacts on air, water, and other natural resources.

### **Permit Review Process**

After receiving an application, the DEQ would have 14 days to determine whether the application is administratively complete – that is, it contains all of the required information and fees. If the application is not complete, the DEQ would have to notify the applicant of the deficiency. If the DEQ does not make a determination as to whether the application is "administratively complete", the application would automatically be considered as such. The DEQ would have to provide a public hearing on an application within 42 days after it is considered to be administratively complete. The DEQ would have to provide appropriate public notice of the hearing, and would accept written public comments on the application for 28 days after the public hearing.

The DEQ would be required to make a preliminary decision to grant or deny the application within 28 days after the close of the public comment period. Once that preliminary decision is made, the DEQ would be required to hold another public hearing (with appropriate notice) on that preliminary decision, and also accept written public comment for 28 days after the public hearing.

### **Permit Approval**

The DEQ would be required to make a decision to approve or deny the application within 28 days after the close of the public comment period on its preliminary decision. The

DEQ could require additional information from the applicant to make its decision. The 28-day period would then be tolled until the DEQ receives the additional information.

The DEQ would be required to approve the application if it determines that the application meets the requirements set forth in Part 632 and the proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources in accordance with Part 17 of the act. The excavation and removal of nonferrous metallic mineral and associated rocks and materials would not, in and of itself, constitute pollution, impairment, or destruction of those natural resources. The DEQ would have to deny the application if the above requirements are not met.

Once the permit is approved, the terms and conditions provided for in the application and the mining, reclamation, and environmental protection plan would become part of the mining permit.

The bill also provides that if a person submits an application for a mining permit and other permits required under the NREPA, that DEQ could process those applications in a coordinated manner (as appropriate) to facilitate the timely review of the applications, including holding one public hearing for multiple permit applications.

### **Permit Effectiveness**

A mining permit issued by the DEQ would remain in effect until it is terminated or revoked by the DEQ. The DEQ could terminate a permit if (1) the permit holder has not begun constructing the plant facilities or has not conducted actual mining activities within two years after the effective date of the permit, or (2) if the permit holder has completed reclamation of the mining area and requests that the permit be terminated, and the natural resources around the mining operation are not polluted, the permit holder has fulfilled the requirements of the DEQ to protect the environment, and the requirements of the post-closure monitor period have been satisfied. The DEQ could revoke a mining permit if the operator has violated Part 632, a related rule, or a provision of the permit.

A permit could be transferred to a new operator with approval of the DEQ and public notice. The person acquiring the permit would have to provide the DEQ with financial assurances and accept the conditions provided in the existing permit. If the current permit holder is in violation of the act, related rules, or the permit, the permit would not be transferred until the permit holder has taken the necessary corrective actions or the person acquiring the permit has entered a written consent agreement with the DEQ to correct the violations.

### **Amendments to the Permit**

The provisions of a permit could be amended to address anticipated changes in the mining operation or if the DEQ determines that the permit does not reasonably protect the environment, natural resources, or public health and safety. If the DEQ determines that

the amendment is significant, the amendment could be subject to the same review process for new permit applications. If the amendment is not significant, the DEQ would have to provide written notice to local municipalities and tribal governments, provide notice in a local newspaper, and approve the amendment 14 days after the public notice.

### **Permit Holder Responsibilities**

If mining operations are suspended for at least 90 days, the permit holder would have to maintain the mining area and conduct any interim sloping or surface stabilization necessary to protect the environment, natural resources, or public health and safety.

Reclamation activities would have to be conducted in accordance with the approved mining, reclamation, and environmental protection plan. Final reclamation would have to begin within three years after the mining operations cease, and would have to be completed by the time provided in the mining, reclamation, and environmental protection plan. However, the required start and completion dates could be extended with the approval of the DEQ.

A permit holder would be required to conduct groundwater and surface water monitoring during the mining operations and the 20-year post-closure monitoring period. The permit holder would have to notify the DEQ at least 18 months prior to the proposed ending date of the post-closure monitoring period, and provide the DEQ with information demonstrating the basis for ending the monitoring period.

The post-closure monitoring period could be lengthened or shortened by the DEQ. The monitoring period would be extended (in increments of up to 20 years) unless the DEQ determines at least one year prior to the end of the monitoring period that there is no significant potential for water contamination resulting from the mining operation. The DEQ could shorten the monitoring period at any time if it determines that there is no significant potential for water contamination resulting from the mining operation. However, the monitoring period would only be lengthened or shortened after a public hearing on the matter.

In addition, both the mining area and the area affected by the mine would have to be reclaimed and remediated to achieve a self-sustaining ecosystem that does not require perpetual care after the mine closes, and with the goal that the ecosystem of the affected area be restored to the conditions that existed prior to mining. However, any portion of the mining area that is owned by the permit holder could be used for any legal purpose.

### **Financial Requirements**

An operator would have to maintain financial assurance for all mining and reclamation operations until the DEQ determines that all reclamation has been completed and through the post-closure monitoring period. The financial assurance would include a conformance bond, escrow, cash, certificate of deposit, irrevocable letter of credit, or equivalent security (or any combination thereof) covering at least three-quarters of the

total amount required. The financial assurance for the remaining balance would consist of a statement of financial responsibility. The statement of financial responsibility and the financial assurance would be adjusted (as necessary) every three years or as often as the DEQ considers necessary. Failure to provide adequate financial assurance would be grounds for the immediate suspension of mining operations.

### **Report to the DEQ**

A permit holder would be required to file a mining and reclamation report to the DEQ on or prior to March 15. The report would include a status of the mining and reclamation operations, an update of the contingency plan, monitoring results, and a description of the material mined from the mining area. In addition, a permit holder would be required to promptly notify the DEQ of any incident, act of nature, or activity that exceeds permit standards that has created or may create a threat to the environment, natural resources, or public health or safety. (Such information would also have to be provided in the annual report.)

### **Nonferrous Metallic Mineral Surveillance Fee**

The bill would assess a permit holder a fee not exceeding five cents per ton of material mined from the mining area, but not less than \$5,000 total, for each calendar year the mine is in operation and during the post-closure monitoring period. The actual rate of the fee would be the ratio (to the nearest 1/100 of one percent) of the amount appropriated in the current fiscal year for surveillance, monitoring, administration, and enforcement of Part 632 to the total tons of material mined. The fee would be due within 30 days after the permit holder receives notice from the DEQ of the amount due. If the fee is not paid on time, a penalty equal to 10 percent of the amount due or \$1,000 (whichever is greater) would be assessed against the permit holder.

### **Nonferrous Metallic Mineral Surveillance Fund**

The fee would be deposited into a newly created nonferrous metallic mineral surveillance fund. Money in the fund would only be expended, upon appropriation, for surveillance, monitoring, administration, and enforcement pursuant to Part 632.

### **Contested Hearings**

A person who is aggrieved by an action of the DEQ could file a petition with the DEQ requesting a contested case hearing under the Administrative Procedures Act. A petition filed more than 60 days after the action could be rejected as being untimely. The DEQ would have to provide notice of the hearing to local municipalities and federally recognized Native-American tribes, and also provide notice in a local newspaper.

## **Violations**

If the DEQ determines that an operator has violated Part 632, related rules, or a provision of the mining permit, the DEQ would require the operator to correct the violation. If the violation results in imminent and substantial danger to the public health or safety, environment, or natural resources, the DEQ could revoke the mining permit, suspend the activities at the mining operation, or order the operator to eliminate the danger. Before the DEQ suspends the activities at the mining operation or revokes the mining permit, the DEQ would have to notify the operator in writing and provide an evidentiary hearing. However, if the DEQ determines that emergency action is necessary, it may issue an emergency order lasting no more than 21 days.

If the operator or surety fails to correct a violation or take corrective action, the DEQ could enter the mining area and take whatever action is necessary to remediate any damage to the environment and public health resulting from the violation. The operator or surety would be jointly and severally liable for any expenses incurred by the DEQ, and would be required to pay such expenses within 30 days. The DEQ could bring a lawsuit for the collection of those expenses.

The bill also specifies that the revocation of a mining permit or the suspension of activities at a mining operation would not relieve the permit holder of its responsibility to complete reclamation, maintain financial assurance, and undertake appropriate measures to protect the environment, natural resources, and public health and safety.

If the DEQ receives an allegation and evidence of a violation of Part 632, related rules, or a provision of the permit, the DEQ would have to record the allegation and conduct an inspection of the mining operation within five business days after receiving the allegation. The DEQ would have to provide a written report to the operator and person making the allegation within 15 days after the investigation has been completed.

## **Civil Action**

The DEQ could request the attorney general to commence a civil action for appropriate relief for a violation of Part 632, related rules, a provision of the permit, or departmental order in the Ingham County Circuit Court, or the circuit court of the county where the defendant is located, resides, or is doing business. The court would have the authority to restrain the violation and require compliance, and could impose a civil fine of at least \$2,500 and award reasonable attorney's fees and costs. However, fine could not exceed \$25,000 per day of violation. If the court finds that the violation substantially endangers the public health, safety, or welfare, the court would impose a fine between \$500,000 and \$5 million.

In addition, the attorney general could file a civil suit to recover the full value of the injuries done to the natural resources of the state and the costs of surveillance and enforcement of Part 632.

A person who makes a false representation in a permit application or report to the DEQ would be guilty of a felony and could be imprisoned for not more than two years and would be fined between \$2,500 and \$25,000 for each violation. Second and subsequent convictions be would subject to a fine between \$25,000 and \$50,000 per day.

In addition, the if the court determines that the criminal defendant posed a substantial threat to the public health, safety, or welfare, the court would impose, in addition to other penalties, a prison sentence of five years and a fine of \$1 million.

A defendant would be criminally or civilly liable if it is determined that he or she knowingly or recklessly acted in such a manner that resulted in a potential for death or serious bodily injury and (1) had awareness that the conduct would cause a substantial danger of death or serious bodily harm, or (2) acted in gross disregard of the standard of care that any reasonable person should observe in a similar situation.

### **Legislative Findings**

The bill also contains the following legislative findings. (1) it is the policy of the state to foster the conservation and development of the state's natural resources; (2) discovery of nonferrous metallic sulfide deposits has led to an increase in exploration and may lead to the development of mines; (3) nonferrous metallic sulfide deposits are different from iron oxide ore deposits currently mined in the state, and the mineral products resulting from nonferrous metallic sulfide mining operations can cause significant damage to the environment, human health, and the environment; (4) the special concerns regarding nonferrous metallic mineral mining warrant additional regulatory mechanisms beyond what is currently applied to iron mining operations; and (5) nonferrous metallic mining operations may be an important contributor to the Michigan economy.

### ***ARGUMENTS:***

#### ***For:***

The bill is necessary to provide oversight over underground sulfide mines in the state. Current mining regulations provided for in Part 631 of the Natural Resources and Environmental Protection Act generally to not provide sufficient assurances that the environment and public health will be protected from sulfide mining activities, as this type of mining has not occurred in the state before. This type of mining often results in high levels of toxic materials, including sulfuric acid, being released into the environment, polluting ground water and destroying the surrounding ecology of the area if unabated. To that end, a regulatory scheme protecting the environment and public health must be developed. The bill accomplishes this by requiring an environmental impact assessment of the mining operation and by requiring a mining, reclamation, and environmental protection plan for the proposed mining operation to minimize the potential adverse impacts on natural resources, the environment, and public health and safety. Among other components, this plan will include provisions for the prevention, control, and monitoring of acid-forming waste products and other waste products from the mining process in order to prevent such products from leaching into groundwater or

runoff into surface water. In addition, the bill requires certain financial requirements to assure the financial viability of the operator to perform all activities related to the mining operation, including remediation and reclamation, and post-closure monitoring of the mining site.

***Response:***

Under the provisions of the bill, the environmental impact assessment would be done by the mining operator. This, in a matter of speaking, is akin to having the "fox watch the hen house". Rather, any environmental impact assessment on the mining operation should be done by the Department of Environmental Quality or another independent consultant. This provides for a more thorough and balanced assessment of the environmental impact of the mining operations, and has the potential to better protect the environment, natural resources, and public health.

***Against:***

There is some concern over the bill's preemption of any local control over mining operations. In some instances, local ordinances may be more stringent and protective of the public health and the environment than state law and regulations. Moreover, these mining operations will have a significant impact on the quality of life and environment of local communities throughout the Upper Peninsula, and it is only appropriate that these communities have a say in how these mines should operate. Lake Township in Menominee County is in the process of developing its own mining ordinance (which would be preempted by the bill), and township officials contend that the ordinance, which was drafted in consultation with experts from the University of Wisconsin-Madison, is more comprehensive and protective of the environment and public health than the bill itself.

***Against:***

There is also some concern regarding the appropriateness of moving forward with the development of sulfide mines. These mines produce highly toxic by-products, including sulfuric acid, which have the potential to adversely impact the environment, natural resources, and public health, and some believe the ability to mitigate these impacts is not sufficient. Given that this type of mining has the potential to cause irrevocable harm to the environment and the public health, perhaps it would be better to prohibit sulfide mining altogether.

***Response:***

Supporters of this type of mining activity note that technology has greatly improved over the past few decades and that underground sulfide mining can be done safely.

***POSITIONS:***

The Department of Environmental Quality supports the bill. (11-9-04)

The Michigan United Conservation Clubs supports the bill. (11-9-04)

The National Wildlife Federation supports the bill. (11-9-04)



The Sierra Club-Mackinac Chapter supports the bill. (11-9-04)

The Michigan Environmental Council supports the bill. (11-9-04)

The Michigan Council of Trout Unlimited supports the bill. (11-9-04)

The Michigan Farm Bureau supports the bill. (11-9-04)

Minerals Processing Corporation supports the bill. (11-9-04)

The Michigan Manufacturers Association supports the bill. (11-9-04)

The Lake Superior Community Partnership supports the bill. (11-9-04)

Kennecott Minerals Company supports the bill. (11-9-04)

The Detroit Salt Company, LLC supports the bill. (11-9-04)

The Front 40 Environmental Group is supports the concept of the bill. (11-9-04)

The Michigan Townships Association opposes the bill. (11-9-04)

Lake Township (Menominee County) opposes the bill. (11-9-04)

The Keweenaw Bay Indian Community opposes the bill. (11-9-04)

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.