



ANALYSIS

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Senate Bill 591 (as passed by the Senate)

Sponsor: Senator Tom Casperson Committee: Natural Resources

Date Completed: 1-19-16

RATIONALE

The mining industry has a long history in Michigan and represents a significant component of the State's heritage and economy, although the industry had declined over the years. In the early 2000s, however, mining companies began to show a strong interest in mining certain nonferrous metallic minerals (i.e., those that do not contain iron) in the Upper Peninsula. As these opportunities were explored, concerns arose that the proposed operations posed a greater risk of impact on the environment and nearby communities than previous mines did, and that the existing mining provisions of State law were insufficient to regulate them. In response, Public Act 449 of 2004 added Part 632 to the Natural Resources and Environmental Protection Act (NREPA) to regulate the mining of all nonferrous metallic minerals separately from the regulations that apply generally to mining.

Now that Part 632 has been in effect for a number of years, some people believe that its scope might be overly broad, specifically with regard to small operations to mine copper in its elemental form, i.e., "native" copper. Evidently, native copper does not have the same potential to harm the environment as many other nonferrous metallic minerals do, and the native copper deposits present in the Upper Peninsula are too small to be of much interest to the large mining operations that prompted the crafting of Part 632. Thus, it has been suggested that a separate regulatory scheme for smaller-scale native copper mining operations should be created.

CONTENT

The bill would add Part 634 (Small Native Copper Mines) to the Natural Resources and Environmental Protection Act to establish regulations specific to elemental copper mining operations involving the generation of 10,000 to 75,000 tons of waste rock or the disturbance of one to 10 acres of land per year. Specifically, the bill would do the following:

- -- Require the Department of Environmental Quality (DEQ) to administer and enforce Part 634.
- -- Prohibit a local unit of government from regulating or controlling mining activities subject to Part 634.
- -- Allow a local unit to enact ordinances affecting mining that reasonably accommodated customary mining activities and did not conflict with Part 634.
- -- Prohibit a person from engaging in mining operations except as authorized by a permit issued by the DEQ.
- -- Require an application for a mining permit to include an application fee of \$5,000, provisions for a conformance bond, and a mining and reclamation plan.
- -- Prescribe a time frame for the DEQ to grant or deny a mining permit.
- -- Provide that a mining permit would be valid for the life of the mine.
- -- Authorize the DEQ to revoke a permit if the permittee did not commence mining activities within three years after the permit was issued.

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- -- Require an operator to pay the DEQ an annual operating fee of \$5,000 per mine, and prescribe a 2% penalty for past-due fees.
- -- Require a mine operator to maintain a \$25,000 conformance bond for each mine during mining activities and until all reclamation was completed.
- -- Authorize the DEQ to order the suspension of mining activities if an operator did not comply with the conformance bond requirement.
- -- Require an operator to conduct mining activities in conformance with the approved mining and reclamation plan.
- -- Require an operator to begin final reclamation within three years after ceasing mine activities, in accordance with the approved plan.
- -- Create the "Small Native Copper Mine Surveillance Fund", and allocate to it all permit application fees, annual operating fees, and penalties.
- -- Require the DEQ to spend Fund money, upon appropriation, for surveillance, monitoring, administration, and enforcement under Part 634.
- -- Authorize the DEQ to enter a mining area and conduct any necessary reclamation if an operator failed to perform reclamation in conformance with Part 634; and provide that the operator and the surety executing the conformance bond would be liable for expenses incurred by the Department.
- -- Allow the DEQ to bring suit against the operator or surety for collection of a claim that was not paid within 30 days.
- -- Authorize the DEQ to order suspension of mining activities in the case of an emergency endangering public health and safety or an imminent threat to natural resources.
- -- Upon the DEQ's request, allow the Attorney General to institute an action to prevent or preclude a violation of Part 634.

The bill also would amend Part 632 (Nonferrous Metallic Mineral Mining) of the Act to provide that a mining operation that was subject to proposed Part 634 would not be subject to regulation under Part 632.

The bill would take effect 90 days after it was enacted.

Part 632: Nonferrous Metallic Mineral Mining

Under Part 632, "mining" means the excavation or removal of more than 10,000 tons of earth material in a calendar year or disturbing more than one acre of land in a calendar year in the regular operation of a business for the purpose of extracting a nonferrous metallic mineral by one or both of the following:

- -- Removing the overburden lying above natural deposits of a mineral and excavating directly from those deposits or by excavating directly from deposits lying exposed in their natural state
- -- Excavating from below the surface of the ground by means of shafts, tunnels, or other subsurface openings.

Under the bill, "mining" under Part 632 would not include an operation that was subject to proposed Part 634.

Part 634: Small Native Copper Mines

<u>General Provisions</u>. The bill would require the DEQ to administer and enforce Part 634. In addition to other powers granted to it, the DEQ could promulgate rules it considered necessary to carry out its duties under Part 634.

The DEQ could enter at any reasonable time in or upon a mining area for the purpose of inspecting and investigating conditions relating to mining activities.

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As used in Part 634, "mine" or "mining" would mean an operation to excavate or remove earth material that generates at least 10,000 tons and not more than 75,000 tons of waste rock in a calendar year or that disturbs at least one acre and not more than 10 acres of land in a calendar year in the regular operation of a business for the primary purpose of extracting native copper for one or both of the following:

- -- Removing the overburden lying above the natural deposits of native copper and excavating directly from the natural deposits thus exposed or by excavating directly from deposits lying exposed in their natural state.
- -- Excavating from below the surface of the ground by means of shafts, tunnels, or other subsurface openings.

"Native copper" would mean copper in its elemental form.

"Mining area" would mean all of the following:

- -- Land from which material is removed by surface or open pit mining methods.
- -- Land on which adits, shafts, or other openings between the land surface and underground mine workings are located.
- -- Land on which material from mining is deposited.
- -- Land on which crushing, grinding, or separation facilities are located.
- -- Land on which water reservoirs used in connection with mining are located.

"Mining activity" would mean any of the following activities within a mining area for the purpose of, or associated with, mining:

- -- Clearing and grading of land.
- -- Drilling and blasting.
- -- Excavation of earth materials to gain access to or remove ore.
- -- Crushing, grinding, or separation activities.
- -- Reclamation.
- -- Transportation of overburden, waste rock, ore, and tailings within the mining area.
- -- Storage, relocation, and disposal of overburden, waste rock, ore, and tailings within a mining area, including backfilling of mined areas.
- -- Construction of water impoundment and drainage features, haul roads, and utilities, or extension of existing utilities.
- -- Withdrawal, transportation, and discharge of water in connection with mining.

<u>Local Regulation</u>. The bill would prohibit a local unit of government from regulating or controlling mining activities that were subject to Part 634. A local unit would not have jurisdiction concerning the issuance of permits for those activities. A local unit could enact, maintain, and enforce ordinances or regulations affecting mining if they did not duplicate, contradict, or conflict with Part 634. The ordinances or regulations, however, would have to be reasonable in accommodating customary mining activities.

<u>Mining Permit</u>. The bill would prohibit a person from engaging in mining activities except as authorized by a mining permit issued by the DEQ. A separate permit would be required for each mine. An operator would have to submit to the DEQ a permit application on a form prescribed by the Department. ("Operator" would mean a person who is engaged in or preparing to engage in mining activities, whether individually or jointly, or through agents, employees, or contractors, and who has overall responsibility for the activities.) The application would have to include all of the following:

- -- A permit application fee of \$5,000, which the DEQ would have to forward to the State Treasurer for deposit in the proposed Small Native Copper Mine Surveillance Fund.
- -- Provisions for a conformance bond (i.e., a surety bond that was executed by a surety company authorized to do business in Michigan, cash, a certificate of deposit, a letter of credit, or other

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security filed by a person and accepted by the DEQ to ensure compliance with Part 634 or rules promulgated under it).

-- A mining and reclamation plan.

The mining and reclamation plan would have to include all of the following:

- -- A map or maps showing the locations and dimensions of proposed adits, shafts, underground mine workings, and surface pits; proposed overburden, waste rock, and ore stockpiles; and any crushing, grinding, or separating equipment that would be used.
- -- A description of the mining methods that would be used.
- -- Plans and descriptions of measures that would minimize soil erosion and sedimentation during mining activities.
- -- A map and description of fencing or other techniques to minimize public safety hazards.
- -- Plans and schedules for reclamation of the mining area following cessation of mining activities.

The reclamation plans and schedules would have to provide for grading, revegetation, and stabilization that would do all of the following:

- -- Minimize soil erosion and sedimentation.
- -- Protect public safety.
- -- Establish conditions that promoted future beneficial use and would not require perpetual care.

Within 14 days after receiving a mining permit application, the DEQ would have to publish notice of it in a newspaper of local distribution in the area of the proposed mine and post a copy of it on the Department's website. Effective 14 days after the DEQ received an application, it would be considered to be administratively complete unless the Department notified the applicant that it was not and specified the information or fee necessary to make it so. In that case, the running of the 14-day period would be tolled until the applicant submitted to the Department the specified information or fee. ("Administratively complete" would refer to an application for a mining permit that included the fee and all of the documents and other information required under Part 634 and any rules promulgated under it.)

The DEQ would have to grant or deny a mining permit within 45 days after an application was considered or determined to be administratively complete. If a permit were denied, the reasons would have to be stated in a written report to the applicant. If the DEQ determined that information in the application was insufficient to determine whether a permit could be granted, the Department could request additional information or clarification from the applicant. The 45-day period would be tolled until the applicant submitted the requested information.

A mining permit would be valid for the life of the mine, which the bill would define as the period from initiation of mining activities through the completion of reclamation. The DEQ, however, could revoke a permit if the permittee did not commence mining activities covered by the permit within three years after it was issued. The DEQ could terminate a permit upon the permittee's request if the Department determined that the permittee had complied with all applicable provisions of Part 634.

<u>Permit Transfer or Amendment</u>. A mining permit could be transferred with the DEQ's approval. The person seeking to acquire the permit would have to submit a request for transfer to the DEQ on forms provided by the Department. The person acquiring the permit would have to accept the conditions of the existing permit and adhere to the requirements set forth in the approved mining and reclamation plan, and provide a conformance bond as prescribed in Part 634. Pending the transfer, the person seeking to acquire the permit could not operate the mine.

A mining permit could not be transferred to a person whom the DEQ had determined to be in violation of Part 634, rules promulgated under it, or a condition of a permit issued under Part 634, until the person corrected the violation or the Department accepted a compliance schedule and a written agreement was reached to correct the violations.

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If the DEQ notified a permittee of a violation of Part 634, related rules, or a permit condition at the mining area involved in the transfer, the permit could not be transferred until the permittee completed the necessary corrective actions or the person acquiring the permit entered into a written consent agreement to correct the violation.

A mining permit could be amended upon a permittee's request to the DEQ. The Department would have to determine whether the requested amendment constituted a significant change to the mining and reclamation plan. If it determined that the amendment constituted a significant change, the Department would have to submit the request to the same review processes as provided for a new permit application. If the DEQ determined that the requested amendment did not constitute a significant change, the Department would have to approve the request within 14 days after receiving it.

<u>Operator Responsibilities</u>. For each mine, an operator would have to maintain a conformance bond in the amount of \$25,000 during mining activities and until the DEQ determined that all reclamation was completed in compliance with the mining permit. If an operator violated this requirement, the DEQ could order immediate suspension of mining activities, including the removal of native copper from the site.

An operator would have to comply with all other applicable requirements of the Natural Resources and Environmental Protection Act, and would have to conduct mining activities at a mining area in conformance with the approved mining and reclamation plan.

If mining activities were suspended for a continuous period of more than 240 days, the operator would have to maintain, monitor, and secure the mining area and conduct any interim sloping or stabilizing of surfaces necessary to protect the environment, natural resources, or public health and safety in accordance with the mining permit.

An operator would have to begin final reclamation of the mining area within three years after the date of cessation of other mining activities, and complete reclamation within the time set forth in the approved mining and reclamation plan. Upon the operator's written request, the DEQ could approve an extension of time to begin or complete final reclamation.

Compliance with proposed Part 634 would not relieve a person of the responsibility to comply with all other applicable State or Federal statutes or regulations.

Operating Fee. For purposes of surveillance, monitoring, administration, and enforcement of proposed Part 634, an operator would have to pay the DEQ, by February 15 each year, an operating fee of \$5,000 for each mine where mining activities were ongoing as of December 31 of the previous year. The fee would be due each year until the mining activities ceased and the DEQ released the conformance bond. A penalty equal to 2% of the amount due would have to be assessed against the operator for each month or part of a month during which an operating fee was not paid after the due date. The DEQ would have to forward all annual operating fees and penalties to the State Treasurer for deposit in the proposed Small Native Copper Mine Surveillance Fund.

<u>Small Native Copper Mine Surveillance Fund</u>. The bill would create the Fund within the State Treasury. The State Treasurer could receive money or other assets from any source for deposit into the Fund. The State Treasurer would have to direct the investment of the Fund, and credit to it any interest and earnings from investments. Money in the Fund at the close of the fiscal year would remain in the Fund and would not lapse to the General Fund. The DEQ could spend Fund money, upon appropriation, only for surveillance, monitoring, administration, and enforcement under Part 634.

<u>Failure to Perform Reclamation</u>. If the DEQ determined that an operator had failed or neglected to perform reclamation in conformance with Part 634 or rules promulgated under it, the Department would have to give written notice to the operator and the surety executing the conformance bond. If the operator or surety failed or neglected to properly commence the required reclamation within

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90 days after the date the notice was personally served or sent by registered mail, or failed to proceed with reclamation at a rate that would conclude the reclamation within the period specified in the mining and reclamation plan, the DEQ could enter into and upon any private or public property on which the mining area was located or that was necessary to reach the mining area and conduct necessary reclamation.

The operator and surety would be jointly and severally liable for all expenses incurred by the Department. The Department would have to certify to the operator and surety the State's claim in writing, listing the items of expense incurred in reclamation. The operator or surety would have to pay the claim within 30 days. If the claim were not paid within that time period, the DEQ could bring suit against the operator or surety, jointly or severally, for the collection of the claim in any court of competent jurisdiction in Ingham County.

<u>Emergency Suspension of Mining Activities</u>. The DEQ could order immediate suspension of any mining activities if it found that there existed an emergency endangering the public health and safety or an imminent threat to the State's natural resources. A suspension order would be in effect until the endangerment or threat was eliminated, but not more than 10 days. To extend the suspension beyond 10 days, the DEQ would have to issue an emergency order to continue it and schedule a hearing as provided by the Administrative Procedures Act. The total duration of the suspension could not be more than 30 days.

<u>Attorney General Action</u>. At the DEQ's request, the Attorney General could institute an action in a circuit court of the county in which the mining area was located for a restraining order or injunction or other appropriate remedy to prevent or preclude a violation of Part 634 or a rule promulgated under it.

MCL 324.63201 et al.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Part 632 of NREPA was enacted in response to strong interest in copper sulfide mining in the Upper Peninsula. Chemical reactions associated with this type of mining can result in the degradation of water quality; thus, even though some other minerals such as native copper do not present the same risks, Part 632 includes strict environmental protection and financial assurance requirements applicable to all nonferrous metallic mineral operations. Although the last native copper mine in the Upper Peninsula closed in the 1960s, numerous small deposits that could be worthwhile to small operators still exist. The requirements of Part 632, however, could be unnecessarily burdensome to operators of this size. New and proposed large mining operations in the Upper Peninsula have the potential to create hundreds of jobs and contribute billions of dollars to the State and local economies. To leverage the benefits of the renewed interest in nonferrous metallic minerals, a separate regulatory scheme that reflects the decreased environmental and geographic impact of small native copper mining operations should be established.

Opposing Argument

The requirements that would apply to small native copper mines under proposed Part 634 would provide inadequate environmental protection compared to the requirements of Part 632, which applies currently to all nonferrous metallic mineral mines. For example, Part 632 requires an applicant for a mining permit to submit a comprehensive environmental impact assessment (EIA) describing the potential impact of the proposed operation on baseline conditions and natural and human-made features, including flora, fauna, hydrology, geology, and geochemistry. Also, the EIA must consider feasible and prudent alternatives to the proposed plan. Proposed Part 634, however, would not require an applicant to submit an EIA.

Additionally, the mining and reclamation plan required under the bill would be inadequate compared to the mining, reclamation, and environmental protection plan currently required for

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these operations under Part 632. The plan under Part 632 must reasonably minimize the actual and potential adverse impacts on natural resources, the environment, and public health and safety. Specifically, the plan must address the risk of acid rock drainage, which refers to the formation of sulfuric acid that can occur when the sulfide-bearing rock often associated with nonferrous minerals such as copper comes into contact with air and water. The acid can affect the quality of groundwater and surface water by lowering the pH and increasing the dissolved metal content, which can be toxic to fish, plants, and other organisms. Part 632 requires the mine's plan to include provisions for the prevention, control, and monitoring of acid-forming waste products, as well as other mine waste, to prevent leaching into the water. Part 632 also requires a contingency plan that includes an assessment of the risk to the environment or public health or safety associated with potential incidents or failures. Small native copper mines should not be exempt from these requirements.

In another matter, the financial assurance requirements under proposed Part 634 are less stringent than the existing requirements under Part 632. Currently, a mine operator must maintain financial assurance sufficient to cover the cost to administer, and hire a third party to implement, reclamation as well as necessary environmental protection measures, including remediation of any contamination. At least 75% of the total amount must be covered by a bond or other equivalent security. Proposed Part 634, however, merely would require a conformance bond of \$25,000. That amount could be inadequate if problems arose during the reclamation process, potentially leaving the State responsible for significant cleanup costs.

With regard to small native copper mines, the bill also would diminish the opportunity for public input and local control. Part 632 requires the DEQ to hold a public meeting on a permit application and to accept public comment on the application for 28 days following the meeting. Additionally, once the DEQ has reached a proposed decision to grant or deny a permit, the Department must hold another public hearing and accept comment for 28 days. Under proposed Part 634, however, the DEQ would have to publish notice of an application but would not have to hold public hearings or comment periods. Also, unlike Part 632, proposed Part 634 does not specify that a local unit could conduct water quality monitoring and would not authorize a local unit to regulate the hours during which mining operations may take place and routes used by mining industry vehicles. The bill should recognize explicitly the authority of a local unit of government to adopt reasonable measures to prevent heavy traffic in neighborhoods and otherwise protect residents' safety and quality of life.

Part 632 was developed through an in-depth process involving a wide array of stakeholders, and was enacted with broad-based support. Absent an indication that this regulatory scheme poses challenges specific to the operation of small native copper mines, it is not necessary to establish regulations for them separate from those that apply to nonferrous metallic mineral mines generally.

Response: The robust environmental protections of Part 632 were enacted in response to the risks presented by copper sulfides. Native copper, however, is surrounded by inert host rock and does not present the same risk of acid rock drainage. Additionally, native copper previously was mined in Michigan without causing appreciable harm to the environment. Thus, the bill's relaxed mining and reclamation plan standards and less costly financial assurance requirements would be adequate for small native copper operations. Similarly, the differences between the type of mining covered by the bill and the type of mining of most concern under Part 632 lessen the need for public input on permits for small native copper mines. Given their reduced environmental risk and smaller footprint, a high level of public involvement is not necessary for the DEQ's scientific experts to make these permit decisions.

Legislative Analyst: Julie Cassidy

FISCAL IMPACT

The bill would have a likely neutral fiscal impact on the Department of Environmental Quality, and no fiscal impact on local units of government. According to the DEQ, the \$5,000 application fee for

a small native copper mine permit, and the \$5,000 annual permit fee would be sufficient to cover the cost of the Department's responsibilities under the bill.		
	Fiscal Analyst:	Josh Sefton

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