



## Comments submitted to the Board of Environmental Protection

By Rob Wood, Policy Associate for The Nature Conservancy

December 16, 2016

**Re: Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining – opportunity for additional public comment, November 16, 2016**

Chairman Parker and members of the Board, my name is Rob Wood and I am the Policy Associate for The Nature Conservancy in Maine. I appreciate this opportunity to provide comments on the proposed changes to the Department of Environmental Protection's Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining draft rules.

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. Working in more than 65 countries, we use a collaborative approach that engages local communities, governments, the private sector, and other partners. The Nature Conservancy has been working in Maine for 58 years and is the 12th largest landowner in the state, owning and managing roughly 300,000 acres. We also work across the state to restore rivers and streams to support healthy fish populations and with commercial fishermen in the Gulf of Maine to rebuild groundfish populations.

The Nature Conservancy appreciates the thoughtful and thorough deliberative process undertaken by the Board and Department staff. This dialogue brought about several positive changes to the draft rules. These positive changes include:

1. **Advanced exploration permitting requirements (Section 8):** Under the proposed revisions, Tier One advanced exploration activities would be required to meet the performance standards in Section 20, the reclamation standards in Section 23 and the financial assurance requirements in Section 17, and Tier Two advanced exploration activities would be required to meet those standards/requirements in addition to the criteria in Section 11. These changes would help strengthen environmental safeguards for advanced exploration, which is especially important given the doubled tonnage of mine waste allowed during advanced exploration in the 2016 draft rules relative the 2014 draft rules.

The Nature Conservancy recommends one point of clarification in this proposed revision: The Department should specify that advanced exploration activities must meet "all performance standards relevant to advanced exploration activities" listed in Section 20, rather than the

“general performance standards” in Section 20. This change would not substantively alter the overall requirements captured by “general performance standards,” but would provide clarity to both the exploration operator and to the Department as to specific requirements.

2. **Third-party inspectors (Section 12.A.20):** Requiring qualified, independent third-party inspectors to monitor for permit compliance would give mine operators an additional incentive to abide by their permitting terms. If implemented faithfully, this provision would likely lower the probability of unreported noncompliance and subsequent environmental degradation.

This provision can be further strengthened in two ways:

- The rules should set parameters that govern when (and if) a permittee may fire an inspector. Under the current proposed Section 12.A.20, there are no parameters governing this process, which leaves the door open to a permittee firing an inspector for any reason, including reporting of noncompliance. The rules should make clear that dismissal of an inspector for properly monitoring and reporting noncompliance is not allowed.
  - Similarly, the rules should set parameters on how quickly a permittee must hire a new inspector should its existing inspector be fired or leave his or her job voluntarily.
3. **Preservation of unusual natural areas and protection of wildlife and fisheries (Sections 20.O and 20.Q):** These sections would prohibit mining that the Department finds will have an adverse impact on the preservation of unusual natural areas or that has not made adequate provisions for the protection of wildlife and fisheries. The Nature Conservancy appreciates the intent of these provisions. If implemented carefully by the Department, these provisions may result in better outcomes for ecologically sensitive areas. However, other provisions that remain in the draft rules and its authorizing statute, such as mining under great ponds and coastal wetlands and on public lands, would work counter to the intent of this new provision (more below).

The proposed changes listed above represent real improvements to the draft rules. The Nature Conservancy continues to have concerns, however, about two issues in particular:

1. **Tailings impoundments and wet mine waste units:** The newly proposed draft rules state, “Tailings impoundments that use water as a cover to minimize oxygen advection and diffusion to Group A waste are prohibited under this Chapter” (Section 3.F). The Nature Conservancy supports this prohibition. It would prevent the worst-case scenario for people and ecosystems in the mine’s vicinity: a tailings dam failure that releases acid-generating material in its flood path.

However, the proposed rules still allow for wet mine waste units, both during and after the life of the mine. The Department defines a wet mine waste unit as, “(1) A mine waste unit that uses water as a cover to minimize oxygen advection and diffusion to Group A waste in a manner that effectively inhibits the formation of acid rock drainage” (Section 2). According to this definition, wet mine waste units are functionally equivalent to tailings impoundments that contain Group A waste, which are prohibited in the newly proposed draft rules.

If the Department believes that tailings impoundments containing Group A waste are too risky and should be prohibited, this logic must extend to wet mine waste units as defined in definition (1). A wet mine waste unit is simply Group A waste placed under water, while the prohibited tailings impoundment in section 3.F is Group A waste mixed with water and other chemicals. If

one of these structures is too dangerous, by extension the other must be too dangerous. For this reason, The Nature Conservancy recommends a prohibition on wet mine waste units under definition (1).

To be clear, The Nature Conservancy is not stating opposition to wet mine waste units under definition (2): “Mine workings that are either partly, or wholly flooded after closure.” The issue the Department is trying to address with definition (2) – the filling of mine workings with rainwater after closure – is qualitatively different than the issue of storing acid-generating waste produced during mining operations. The mine operator should backfill the mine pit or shaft to prevent rainwater accumulation (and to avoid producing waste rock piles that require cover), but if that is credibly demonstrated to the Department as not feasible, rainwater accumulation in mine workings must be governed properly, which this language seeks to accomplish. In any event, the Department must ensure that management of the accumulated rainwater or resultant runoff will not result in a violation of groundwater or surface water standards.

Lastly, The Nature Conservancy would like to note that the prohibition on tailings impoundments containing Group A waste raises concerns as to the safeguards necessary for tailings impoundments more generally. The draft rules make reference to the integrity of waste management/containment structures, but there are few specific requirements to ensure proper structural integrity. As the Department considers the role of wet waste management in the final rules, we recommend revisiting and potentially strengthening tailings impoundment safeguards.

- Mine siting:** In the newly proposed draft rules, Section 20.B has been revised to allow mining under great ponds, rivers, brooks and streams, and coastal wetlands. The Nature Conservancy urges the Department to rescind this provision. Maine’s waterbodies provide critical wildlife habitat and are essential to the state’s recreational and commercial fishing economies. They provide pristine drinking water used by residents and business across the state, including restaurants, commercial water bottlers and breweries who identify their product with the Maine brand that centers on high-quality water. Our coastal wetlands provide aquaculture opportunities unparalleled on the east coast. Even if mine operators can carry out most mining activities under waterbodies successfully, just one accident involving the collapse of a mine and a pond or wetland draining into the mine shaft would tarnish Maine’s reputation and discourage investment in our water-based economy. The marginal returns to mining under a waterbody, especially when mining is allowed in so many other places in Maine, cannot justify the elevated risk to Maine’s citizens, wildlife and economy.

Finally, as stated in our previous comments, The Nature Conservancy urges the Department to recommend to the Legislature a prohibition on mining on public lands and in floodplains. We understand that both of these issues are beyond Department jurisdiction, but we encourage the Department to use its position to suggest what we believe are reasonable alterations to existing statute.

As noted above, many of the proposed changes to the draft rules are positive. We thank the Board and the Department for the time and hard work dedicated to this process. However, The Nature Conservancy urges the Department to make the changes listed above before considering adoption of the Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining draft rules. Thank you again for this opportunity to participate in the commenting process.