

**Date:** December 10, 2016

**To:** Maine Board of Environmental Protection

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**Subject:** Comments and Related Documentation on 11/16/16 DRAFT Chapter 200

This submission has two parts. The first part contains numbered recommendations to the Board. The second part constitutes the underpinning documentation for the recommendations and indicates where to find regulations requiring adjustment.

### **1. Wet Mine Waste Units (WMWU) Should Be Entirely Prohibited**

Despite the many rounds of discussion and review since the mining statute was so precipitously passed the regulations and supportive materials remain ambiguous on this point.

Some regulatory language says WMWU are prohibited. Some language says they are prohibited after closure. Residual language supports both interpretations. The “Overview” (Section 1 Definitions) asserts “the definition of wet mine waste unit has been revised to allow the use of water covers after closure . . . .”

Mainers require BEP to take an unequivocal stand -- that WMWU are prohibited at any time. Then, standard by standard, definition by definition, line by line the regulations in their entirety need to be conformed to that stance. We do not need, now or ever, to experience our own Mt. Polley debacle.

### **2. Mining Should Be Prohibited *Under* Water Bodies As Well**

Nothing is of greater environmental and economic importance to Maine than its waters in all their many forms – e.g., lakes, ponds, rivers, streams, aquifers, and seas. While the current draft (11/16/16) makes progress in their protection by prohibiting metallic mining in and on them, the deletion of the word “under” from language protecting Maine waters and other natural sites must be reversed.

### **3. The Full Risks of Metallic Mining Should Be Identified and Addressed**

Environmental protection in the context of metallic mining boils down to protecting all waters threatened by mining's constituent elements, short-term and very long, from small spills and accidents, to disasters on the scale of British Columbia's Mt. Polley and Colorado's Animus River. Processing metallic ores involves the use of powerful leaching agents applied to powdered sulfide ores which, when exposed to air and water, turns into acid. Such mining transforms million of tons of ore into a substance that must be protected in perpetuity, i.e., forever.

'Forever' would be challenge enough. The advent of climate change – not just an abstract concept but a present-day reality as we see in our encounter with sea rise, last summer's rain deluge in Penobscot and Orland stranding motorists for hours, and, in the Smokies, the burning of Gatlinburg – adds a whole

new dimension of unpredictability.

Prohibiting outright WMWU would be one important step, but factoring in new measures and variables of weather and ground instability will be a tricky proposition at best, and the regs are not yet there.

The addition of the “force majeure” concept is both a good and a bad. Recognizing that they're a factor tied to the risk of mining is a good. Allowing it to absolve a permittee of responsibility for remediating a contamination would be bad. Given the risks brought about by newly emerging climate and ground instability the regulations must do a better job of anticipating and encompassing them than they currently do or accept the consequence of giving up metallic mining in Maine altogether.

#### **4. The Regulatory Impact of Diminished Public Trust – Minimize Discretionary Authority**

Several aspects of the present mining initiative and regulatory review process as it has unfolded over the years have given pause. As a minimum consider:

1. The extreme haste with which the bill was brought before the Legislature and pressed through without opportunity for careful review and consideration by experts.
2. After the regulations were defeated the first time they were brought back a second time untouched, a procedural violation. Nonetheless, the second review was intense, stretched out over the full legislative session. (It was also the first experience of the pagination shortcomings which had the unfortunate effect of complicating and impeding public analysis.)
3. The second review got the attention that should have been afforded the *legislation*, and the outcome was 3 to 1 bipartisan rejections by each branch of the Legislature.
4. In 2016 BEP went back to drafting addressing some (but not all) of the many points raised in the 2015 legislative review.
5. Direct observation of BEP proceedings this year suggested less systematic or comprehensive consideration of remaining issues than might have been given.
6. Pagination flaws in the Table of Contents in the Comparison Draft in Fall, 2016, again made meticulous review of the 11/16/16 draft -- a difficult task under any circumstances -- even more cumbersome and time-consuming.
7. The BEP was advised repeatedly at its September 15, 2016 public hearing that its proper course of action was to submit recommendations to the Legislature to correct flaws in the statute. It chose not to do so.
8. Instead, it approved regulations which violate one of the most sacred principles of administrative law, namely, that statute trumps regulation. The 11/16/16 draft includes regulatory language in direct conflict with the statute at '3. Prohibitions D.' (p.11).
9. Publication of undated Chapter 200 drafts during the course of their development and placing unclear instructions on the department website regarding which documents were which created troublesome and unnecessary confusions in undertaking the purposes of public review.
10. The persistence this whole mining initiative has displayed, especially given that any employment gain would be small and very temporary, both of which have to be carefully weighed in terms of the huge environmental risks to the state, only invites speculation as to the underlying motivation.
11. Apparent flaws in the integrity of the management processes including its command and control procedures and performance of the BEP and DEP as revealed by several of the above points have unfortunately raised trust issues between the executive branch and the larger public.

The net effect is to raise doubts about both the guidance and the oversight of this entire process. Confidence that DEP should be allowed expansive discretion in the exercise of the authority proposed to be granted them, other than 'presence' or 'absence' judgments, is correspondingly lessened, and, therefore, discretionary authority should be minimized by deleting SC 5. 21. B. Alternative Design Process.

## DOCUMENTATION ON ISSUES RAISED BY THE 11/16/16 DRAFT

### Wet Mine Waste Units (WMWU)

That part of the definition (p. 10) of WMWU that was in the “Comparison” (undated) draft and prohibited their use “for storage or treatment of mine waste after closure” has been deleted from the 11/16/16 document.

The same deletion was accomplished at 9.D.(12) on p. 25 and 19 G (2) on p. 64 of the 11/16/16 draft.

'Prohibition 4.F.' (p. 11), however, is quite explicit: “Tailings impoundments that use water as a cover to minimize oxygen advection and diffusion to Group A waste are prohibited under this Chapter.”

Yet, on p. 51 at '17. Financial Assurance and Insurance, B. Coverage of Financial Assurance, (5) Tailings impoundments' where applicants are asked to assess the potential for risks of failure and the costs of responding to same and on p. 64 'H. Containment Structures (1)' “tailings impoundments” are again mentioned.

The 2-page overview for the 11/16/16 draft only confuses what might otherwise be clear. In its second paragraph it refers, rather vaguely, to “provisions related to mine waste (including tailings impoundments) but then it *directly contradicts* the 4.F. language above by saying that the “definition of wet mine waste unit has been revised to allow the use of water covers after closure. . .” Confusing matters further, in italics the Overview notes that “*restrictions against the use of wet mine waste units have also been deleted in other sections of the proposal*” followed by the claim that “Tailings ponds have been prohibited for Group A wastes . . .”

So which is it? Are WMWU allowed or not? The answer is fundamental to public approval and is not at all clear at this point.

As a point of reference on p. 85 immediately after '(3) Closure Design Requirements (c) (v) and before (d)' were deleted seven lines of material from the “Comparison” draft pertaining to 'Final closure requirements for wet mine waste units.’ Line by line review plus an Adobe text search of the entire 11/16/16 draft showed they were not placed elsewhere in the text.

Finally, on p. 88 at '(5) Length of the Post-Closure Care Period' there is the explicit “Wet mine waste units may not be used for storage or treatment of mine waste after closure.” Doesn't this imply they are to be permitted *during* the operation of a mine? If so, why are there no provisions applying to such a shift from wet to dry storage? Conversely, if water covers of Type A waste really are entirely prohibited, why are there no regulatory stipulations pertaining to dry storage?

The issue noted here is further complicated by the inclusion of provisions at '21. Waste Unit Design Standards, B. Alternative Design Process' p. 73 where “blank check” authority is proposed be given to the DEP to entertain proposed alternative technology for waste storage. Maine is being asked to trust the Department to have the expertise and the judgment to consider technologies and practices beyond those encompassed in the current draft regulations. In its totality the regulatory development process does not lend confidence in that regard.

### **Discharges to the Ground Within a Mining Area**

M.R.S. 38, Section 490-OO, 4., D reads that “discharges to groundwater from activities permitted under this article may occur within a mining area, but such discharges may not result in contamination of groundwater beyond each mining area.”

Given the great attention paid to that fundamental defect in the authorizing statute at the time of the last review and subsequent overwhelming defeat of the draft regulations, close attention has been paid to how and where that would be addressed in the 11/16/16 re-draft. As best as could be determined, the matter has been *ignored, finessed* with silence, approached only through the consideration of the specifications for and operations of *impact monitoring activities*, (e.g.: 'SC 3: Permits, 9 Application Process Requirements I Mine Plan (5, ii, p. 29); J Monitoring Plan' (p. 30); 'SC 3: Permits, 11 Criteria for Mining Permit Approval, A Permit Approval (2) (d)' (p. 37); or 'SC 5: Mining Standards, 19 General Provisions, A Compliance' (p. 58), I Additional Information (p. 59), or *directly contradicted* ('3. Prohibitions, D.' (p. 11): “No chemical or oil, products or waste, shall be discharged, mixed, or released onto, into, or under the ground or waters of the State.”

Lawyers, operating as they are wont to do, might also have a field day with an argument that the provision in (p. 37) 11. Criteria for Mining Permit Approval, A. Permit Approval (2) (d) operationally nullifies the permission expressly authorized in 490-OO 4., D cited above.

As a further 'however' on p. 58 at '19. General Provisions A. Compliance' and again on p. 59 at 'I. Additional Information' there is language that obliges permittees and applicants to “comply with all applicable standards and requirements under the Act, the provisions of the mining permit and this Chapter.” Given the problematics of the statute noted at the beginning of this section and, despite clearly having the authority to address the matter, the absence of BEP initiative to correct this flaw in the law could result in a situation where legal attacks based on the permissive language could end up compromising the public interest rather than protecting it.

On p. 81 in (15) and (16) are additional authorities given to the Department to address discharges and corrective actions.

### **Event of Force Majeure**

This is a new term defined on page 5. It means “an event beyond the control of the Department and the Permittee, including but limited to:

- 1) An act of God (such as, but not limited to, fires, explosions, earthquakes, drought, tidal waves, and floods:

- (2) War, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition, or embargo;
- (3) Rebellion, revolution, insurrection, or military or usurped power, or civil war;
- (4) Riot, commotion, strikes, go slows, lock outs, or disorder; or
- (5) Acts or threats of terrorism.”

Fine, except there are all sorts of measures, general and specific, that responsible authorities, public and private, are expected to take as a matter of routine due diligence to mitigate various aspects of these kinds of risks.

Its next appearance is p. 43 at '12. Permit Condition A. Standard Conditions (26) Event of Force Majeure” where it serves as a kind of “get out of jail free” for all conceivable obligations and costs of the Act, Chapter 200, or the permit. (Saying nothing of the irony of placing this provision among “Standard Conditions” when the very next piece of Chapter 200 text is labeled “Special Conditions.”)

The next link in this thread is on p. 51 at '17. Financial Assurance and Insurance, B. Coverage of Financial Assurance, (5) Tailings impoundments' where applicants are asked to assess the potential for risks of failure and the costs of responding to same. It is at this point that the 'force majeure' variables will be confronted head-on.

At '20. Performance Standards, B. Siting (1)' p. 60 the Applicant “must demonstrate that all development in these areas is secure from flooding and erosion under flood height and velocity conditions equal to or greater than the 500-year flood.” How does this relate to 'Event of Force Majeure' p. 5? How is this to be understood in the context of the storm uncertainties associated with climate change, for example, already affecting road and highway drainage and culvert specifications throughout Maine?

At '20. Performance Standards, H. Containment Structures 4. (4) (b) (i) and (ii)' p. 65 references are made to return periods of 475-year and 2475-year return periods. How does this relate to 'Event of Force Majeure' p. 5? How is this to be understood in the context of the storm uncertainties associated with climate change, for example, already affecting road and highway drainage and culvert specifications throughout Maine?

At '20. Performance Standards, J. Water Management Systems (7) (a), (b), and (c)' p. 66 are referenced “24-hour, 500 year storm” three times. How does this relate to 'Event of Force Majeure' p. 5? How is this to be understood in the context of the storm uncertainties associated with climate change, for example, already affecting road and highway drainage and culvert specifications throughout Maine?

### **Mining Under Great Ponds, Rivers, Brooks and Streams, and Coastal Wetlands**

On p. 60 at '20. Performance Standards, B. Siting, (3) Mining Prohibited' the words 'or under' are explicitly stricken. This appears to allow mining under these bodies of water.

On p. 61 this new concern is compounded by the parallel removal of the word 'under' (except no notice is given of same [by crossing out]) from the language at '20. Performance Standards, B. Siting, (4)' except that this paragraph refers to many other natural set asides and additionally cedes final authority to unspecified 'other' state or federal agencies with management authority to determine that mining is

permissible.

### **Apparent Typos or Possible Other Errors**

For the “Comparison” (undated) draft of the proposed regulations the pagination in the Table of Contents was 70% inaccurate. For the 11/16/16 draft the pagination inaccuracy percentage improved quite dramatically to 2%. (These same kind of serious documentation flaws appeared at earlier points in Chapter 200 regulation review the last time they were brought before the Legislature.)

#### Table of Contents 3. Prohibitions

p. 23 In the columns of reasons for testing, the left column should close up the space following 'dissolve oxygen,' 'hydrocarbons' (in the right column) should be placed below 'hardness' in the left column, and the resulting space after 'total petroleum' in the right column closed up.

p. 30 In 'K. Contingency Plan (2)' 'the Applicant' is underlined as an 11/16/16 addition when it was not.

p. 32 In '10. Public and Local Participation, A. Notification and Participation Requirements,' the last line is portrayed as a new strike when it was actually struck in the preceding draft.

p.55 At '17. Financial Assurance and Insurance, E. Release of Financial Assurance, (1) (c)' seeks to know “a detailed cost breakdown of the funds needed to complete the actions in (E) (1) (a) above,” but that citation on p. 53 establishes that “any interest paid on a cash account must be retained in the account and applied to the account . . .”

p. 64 at 'H. (2)' line 4 “section”

p. 76 at 'B (1) (a) (i)' last line last word should be “point”

p. 78 '(2) (c) (ii)' the sub-paragraph should be aligned with '(2) (c) (i)' and in the fourth line the word 'tom,' should be, possibly, 'to:' ?

### **Additional Miscellaneous Questions/Observations**

p. 29 What is the explanation for the apparent vacillation (ranging over time from 15, to 20, to 33%) for contingency pertaining to cost estimates required in 'I. Mine Plan, (5) (ii)'?

p. 38 in '11. Criteria for Mining Permit Approval, A. Permit Approval (2) (j)' why were in situ leaching and block caving not cited here as well?

p. 42 at '(c) (ii)' contains an apparent syntactical defect: “...will monitor activities *called required* [**emphasis added**] by the permit...”

p. 65 in 'H. Containment Structures (7)' there is equivocal language which says Permittees “must . . . segregat(e)” various diverse waste materials “unless they are placed together for a beneficial purpose . . .” Why? And wouldn't the combined waste need to be treated in terms of the standards promulgated for the most demanding category of waste included?

On p. 77 third line from the bottom and p. 78 second line from the bottom the concept of “lagoon underdrains” is introduced but not defined there or in 'Subchapter 1, 1. Definitions.' What is a lagoon? What is the relationship, if any, with Wet Mine Waste Units?

On p. 79 it is not particularly clear, given the potential for environmental damage caused by (1) exposure of powdered sulfite ore to air and water and (2) uncertainties associated with swiftly changing climate conditions what kind of evidence would lead to the “reasonable assurance” referenced in '(7) (d) and (e)'.

On p. 83 in '23. Reclamation, K' is a sentence which reads in part “that the goals of this Chapter, the Act, and the mining permit are maintained or enhanced until there is no *unreasonable* **[emphasis added]** threat to public health and safety or the environment.” Surely that is not what is intended??? Strike the “un”?