

Submitted on behalf of Aroostook Resources, Inc.

**Talking Points for Aroostook Resources' Presentation
Before LUPC on Proposed Certification of Advanced Exploration and Mining
Permitted by DEP
November 13, 2013**

- My name is Tom Doyle. I am a lawyer at Pierce Atwood in Portland, speaking on behalf of Aroostook Resources, Inc. Also here today on behalf of Aroostook Resources is Anthony Hourihan.
- As you probably know, Aroostook Resources has an interest in mining at the Bald Mountain site in Aroostook County. We have been involved from the beginning in the legislative effort to revise the Metallic Mineral Mining Act to allow for the possibility of metallic mine development in Maine.
- The new Mining Act creates a statutory framework for the permitting and regulation of all metallic mineral mining by one agency, the DEP. The new Act was intended to improve the *existing* statute and rules which require multiple permits, under many separate statutes from at least two agencies with standards that are complex, confusing and difficult, if not impossible, to satisfy. It is noteworthy that under the existing laws and rules, no new mine has been developed in Maine since they were adopted over 20 years ago. They have been described as a *de facto* ban on mining development. The new Act is intended to modernize, consolidate and streamline permitting for metallic mineral mining, while, importantly, protecting the environment.
- The Commission, of course, has a role in the area of rezoning to a D-PD for mining; as you will recall, the Commission adopted a rule on this topic earlier this year. The Commission also has a role in certifying to the DEP that the proposed mine is (a) an allowed use in the subdistrict(s) proposed and (b) “that the propose mine project meets any land use standards established by the commission and applicable to the project that are not considered in the department's review.” 12 MRS §685-B. sub-§1-A(B-1) and 38 MRS §490-NN(2) (emphasis added). In is this latter topic, the certification rules, of course, that brings us here today.
- With that backdrop, Aroostook Resources appreciates the time and effort the Commission's Staff have expended in preparing these draft rules to implement

the certification process contemplated under the new Mining Act. Overall, we are generally supportive of the proposed certification rules. We do have a few concerns, though, that we would like to highlight in our oral comments this afternoon.

- The first is on: Page 6, Section 3.14. H (Dimensional Requirements). This section incorporates by reference Sections 10.26 (A)–(G). Most of these do not appear to be concerning. However, Section 10.26. D. 2 (a) and (b)—minimum setbacks from flowing water, standing water and wetlands designated P-WL1 are concerning and delve directly into an area considered by DEP’s review of any mining project. Thus, this is not an area that should be part of the Commission’s certification authority.

The Mining Act makes clear that an applicant to the DEP for a mining permit must make “adequate provision for fitting the mining operation harmoniously into the existing environment and [that] the development will not unreasonably adversely affect existing uses, scenic character, air quality, water quality, or other natural resources.” 38 MRS §490-OO 4.(B) The Mining Act also makes clear that any mining activity in, or in the vicinity of, a “protected natural resource,” which includes all surface waters (e.g., rivers, streams, brooks, and great ponds) and all freshwater wetlands must obtain a Natural Resources Protection Act (NRPA) permit from DEP and the DEP will consolidate its review with the Mining Act application review and issue a joint order. 38 MRS §§ 490-NN(1) (A), 490-OO 4.(B) (1) and (5). The Mining Act also requires that in reviewing mining projects under the “no unreasonable adverse effect standard” that involve natural resources regulated under the NRPA , the DEP must apply the NRPA standards. § 490-OO 4.(B)(1). The NRPA does not have set setback standards per se, so these Section 10.26. D. 2 (a) and (b) setbacks could easily be directly inconsistent with an activity or structure that DEP would permit, provided its stringent NRPA standards are met. For example, what if the mining activity has to occupy or fill wetlands because the ore deposit to be mined is underneath them? What if a surface water has to be diverted due to mine deposit or structure? Provided NRPA and Army Corps standards are satisfied, a permit could be obtained, but these proposed minimum setback standards would not allow this.

If protection of water quality is the concern, this is an area the Mining Act regulates extensively. A mining operation must not cause a direct or indirect discharge of pollutants into surface waters and must not discharge groundwater containing pollutants into surface waters that results in nonattainment of water

quality standards. § 490-OO.4(E). A mining operation must not violate applicable water quality standards. § 490-OO.4(D).

Because protection of these natural resources is an area clearly considered during the DEP's review of a mining project under the Act and NRPA, we recommend that either the references to Section 10.26. D. 2 (a) and (b) be specifically excluded from subsection H or that the following language be added to subsection H:

“except in areas that are regulated as jurisdictional resources under the Natural Resources Protection Act or are within the limits of excavation permitted by the Department.”

There is identical language is in Section 3.14(I).

- The Second concern--Sections 3.4, 3.6 and 3.7's (on page 3) reference to the possibility of a public hearing on a certification request. Recall at the outset that I noted that the new Mining Act is intended to modernize, consolidate and streamline permitting for metallic mineral mining, while, at the same time, protecting the environment. To develop a mine in an area subject to the Commission's jurisdiction, an applicant will first be required to have a public hearing as part of its rezoning process to D-PD zone. LUPC Ch. 12.4.A . It also will be required to provide multiple public notices and public comment periods and have a mandatory public hearing before the DEP as part of its review of the mining project and any other DEP permits required in that consolidated process. 38 MRS §§ 490-OO.6.C; Proposed DEP Ch, 200.10. The prospect of requiring an applicant to undergo a third public hearing for the Commission "certification" is excessive and would be inconsistent with the clear intent of the Mining Act to consolidate and streamline the permitting process for a mining project. After two mandatory public hearings on the same mining project the public will have ample opportunity to voice their concerns and be heard. Surely a public notice and a public written comment period should be sufficient during the process of a certification request.
- Third, page 3, Section 3.6.C's reference to a "renewal" of certification. There should be no renewal process for a certification; it is a one-time event. The new Mining Act removed the need for mining permit renewals and there also should be no need to renew a Commission certification.
- Fourth concern, page 2, Section 3.2 A.3 states:

“Upon receipt of a request for certification, the Commission shall determine whether to accept the request for certification as complete for processing based upon whether the request:

...

(3) contains sufficient information for the Commission to begin its review.”

We understand 1 and 2. But #3 is too vague and subjective. An applicant doesn't know what information is sufficient unless you identify the information you want to receive.

- Finally, I anticipate that there will be some who speak after me today that will say these draft certification rules are not nearly strict or expansive enough. Understand that their goal is to establish such stringent and expansive standards, and create so many obstacles to metallic mining in Maine, that no project will ever move forward at Bald Mountain or anywhere else. In effect, we will be back to the 1991 standards, a *de facto* ban on mining in Maine. This rulemaking hearing, however, is not about any specific mine proposal. It is about adopting reasonable Commission certification rules for metallic mining that are consistent with the new Mining Act. Any specific mining project will have to meet all applicable statutory and regulatory standards once they are in place. If it can't, it won't be approved. But at least give those interested in pursuing a mining project the opportunity to demonstrate that they can meet reasonable standards.
- Thank you for the opportunity to comment on these draft rules. We will be supplementing these oral comments with written comments on the rules before the end of the comment period.



**AROOSTOOK
RESOURCES**

November 25, 2013

Samantha Horn Olsen, Planning Manager
Marcia Spencer-Famous, Senior Planner
Land Use Planning Commission
22 State House Station
Augusta, ME 04333-0022

Re: Proposed Rule Amendment to the Commission's Chapter 13 "Metallic Mineral Exploration, Advanced Exploration and Mining" for Certification of Advanced Exploration and Mining Permitted by DEP

Dear Samantha and Marcia:

Following up on the testimony Thomas Doyle provided on November 13, Aroostook Resources, Inc. submits the following written comments on the Commission's draft certification rules. These comments constitute the combined thoughts of Aroostook Resources and Pierce Atwood.

We appreciate the time and effort that the Commission staff have expended in preparing these draft rules to implement the certification process contemplated under the new Mining Act. Although we are generally supportive of the proposed certification rules, we do have a few overriding comments to draw to the Commission's attention. We also are attaching to this letter a redlined version of the draft proposal with our suggested changes highlighted.

Our overarching comments are as follows:

1. Page 6, Section 3.14.H (Dimensional Requirements). This section incorporates by reference Sections 10.26 (A)–(G). Most of these do not appear to be concerning. However, Section 10.26. D.2 (a) and (b)—minimum setbacks from shoreline of flowing water, standing water and wetlands designated P-WL1 are concerning and delve directly into an area considered by DEP's review of any mining project. Thus, this is not an area that should be part of the Commission's certification authority. 12 MRS § 685-B, sub-§1-A(B-1) and 38 MRS § 490-NN(2) (certification only applies to "land use standards established by the Commission and applicable to the project that are not considered in the [DEP's] review"). (Emphasis added.)

The Mining Act makes clear that an applicant to the DEP for a mining permit must make "adequate provision for fitting the mining operation harmoniously into the existing environment and [that] the development will not unreasonably adversely affect existing uses, scenic character, air quality, water quality, or other natural resources." 38 MRS §490-OO. 4(B)(emphasis added). The Mining Act also makes clear that any mining activity in, or in the vicinity of, a "protected natural resource," a term which includes all surface waters (e.g.,

rivers, streams, brooks, and great ponds) and all freshwater wetlands, must obtain a Natural Resources Protection Act (NRPA) permit from DEP and the DEP will consolidate its review with the Mining Act application review and issue a joint order. 38 MRS §§ 480-B.8, 480-C, 490-NN.1(A), 490-OO. 4(B)(1), and 490-OO.5. The Mining Act also requires that in reviewing mining projects under the “no unreasonable adverse effect standard” that involve natural resources regulated under the NRPA, the DEP must apply the NRPA standards. § 490-OO. 4(B)(1). The NRPA does not have rigid setback standards per se, so these Section 10.26. D.2 (a) and (b) setbacks could easily be directly inconsistent with an activity or structure that DEP would permit, provided its stringent NRPA standards are met. For example, what if the mining activity has to occupy or fill wetlands because the ore deposit to be mined is underneath them? What if a surface water has to be diverted due to mine deposit or structure? Provided NRPA and Army Corps standards are satisfied, a permit could be obtained, but these proposed Commission minimum setback standards would not allow this.

If protection of water quality is the concern, this is an area the Mining Act regulates extensively. A mining operation must not cause a direct or indirect discharge of pollutants into surface waters and must not discharge groundwater containing pollutants into surface waters that results in nonattainment of water quality standards. § 490-OO.4(E). A mining operation must not violate applicable water quality standards. § 490-OO.4(D). And an applicant for a mine must fit the mining operation “harmoniously into the existing natural environment” and “not unreasonably adversely affect existing uses, scenic character, air quality, water quality or other natural resources.” § 490-OO.4.B (emphases added).

Because protection of these natural resources is an area clearly considered during the DEP’s review of a mining project under the Act and NRPA, we recommend that either the references to Section 10.26. D.2 (a) and (b) be specifically excluded from subsection H or that the following language be added to subsection H at the end:

“except in areas that are regulated as jurisdictional resources under the Natural Resources Protection Act or are within the limits of excavation permitted by the Department.”

There is identical language is in Section 3.14(I).

2. Page 3, Sections 3.4, 3.6 and 3.7’s reference to the possibility of a public hearing on a certification request. To develop a mine in an area subject to the Commission’s jurisdiction, an applicant will first be required to have a public hearing as part of its rezoning process to D-PD zone. LUPC Ch. 12.4.A. It also will be required to provide multiple public notices and public comment periods and have a mandatory public hearing before the DEP as part of its review of the mining project and any other DEP permits required in that consolidated permitting process. 38 MRS §§ 490-OO.6.C; Proposed DEP Ch. 200.10. The prospect of requiring an applicant to undergo a third public hearing for the Commission “certification” is excessive and would be inconsistent with the clear intent of the Mining Act to consolidate and streamline the permitting process for a mining project. After two mandatory public hearings on the same mining project, the public will have ample opportunity to voice their

concerns and be heard. Surely a public notice and a public written comment period should be sufficient during the process of a certification request.

3. Page 3, Section 3.6.C's reference to a "renewal" of certification. There should be no renewal process for a certification; it is a one-time event. The new Mining Act removed the need for mining permit renewals and there also should be no need to renew a Commission certification.

4. Page 2, Section 3.2 A(3) (Acceptance of Requests for Certification). This section provides:

"Upon receipt of a request for certification, the Commission shall determine whether to accept the request for certification as complete for processing based upon whether the request:

- (1) contains a notice of an intent to develop and a map indicating the location of the proposed development;
- (2) is accompanied by the proper fee; and
- (3) contains sufficient information for the Commission to begin its review."

We understand items (1) and (2). But #3 is vague and subjective, and could lead to excessive requests for more information. An applicant doesn't know what information is sufficient, unless LUPC identifies the information in the rule it wants to receive. Additionally, the Commission should establish now, by rule, the proper fee for a certification request.

5. Page 3, Section 3.4 (Notice of Intent to File a Request for Certification). The start of this subsection begins with the phrase, "[a]t least 30 days prior to filing" a request for certification, a person must provide public Notice of Intent to File such a request. For all other LUPC certification requests and in all other DEP permitting proceedings, a Notice of Intent to File must be published "within 30 days prior to filing" the request or application. LUPC Section 4.11(4) and DEP Ch. 2.14 (A). Because needing to file public notice "at least 30 days prior" to filing a request is a trap for the unwary and easily missed, we request that the same language used elsewhere by LUPC and DEP-- "within 30 days prior to filing..."-- be incorporated in LUPC's proposed certification rules for mining.

6. Page 1, Section 3.1(C) (Certification of Metallic Mineral Mining). We recommend that the following words be added at the end of the first sentence of this subsection: "provided they are not considered in the Department's review of the project." This is consistent with the Mining Act, and underscores the fact that the certification process should not duplicate the review of any matters or topics covered by the DEP under its review of the project.

Please see the attached redline of the rule with our suggested changes incorporated.

* * * * *

Samantha Horn Olsen
Marcia Spencer-Famous
November 25, 2013
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Again, thank you for the opportunity to comment on these draft certification rules and we look forward to working with the Commission to finalize them.

Very truly yours,

A handwritten signature in black ink, appearing to read "A. Hourihan". The signature is fluid and cursive, with a large initial "A" and a long, sweeping underline.

Anthony Hourihan

cc: Nicholas D. Livesay, Esq., Executive Director, LUPC
Thomas R. Doyle, Esq.

Proposed Rule Amendment
to the Commission's Chapter 13,
“Metallic Mineral Exploration, Advanced Exploration and Mining”
for Certification of Advanced Exploration and Mining
Permitted by the Department of Environmental Protection,
as Required by §29, sub-§3 of Public Law 2011, Chapter 653 (LD 1853)

- DRAFT -
October 9, 2013

The following amendment proposes to amend the title of Chapter 13 to *“Metallic Mineral Exploration, and Certification of Advanced Exploration and Mining,”* repeal the contents of Chapter 13, and replace certain portions of the Chapter.

CHAPTER 13
METALLIC MINERAL EXPLORATION, AND CERTIFICATION OF
ADVANCED EXPLORATION AND MINING

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CHAPTER 13

METALLIC MINERAL EXPLORATION, AND CERTIFICATION OF ADVANCED EXPLORATION AND MINING

SUMMARY: This rule establishes requirements for exploration, and for certification to the Department of Environmental Protection (the Department) of projects involving advanced exploration and mining of metallic minerals. The rule contains requirements for application, environmental review and siting of exploration projects; and for requests to the Land Use Planning Commission (the Commission) for certification of advanced exploration and mining activities being conducted in the unorganized and deorganized areas of the State and reviewed by the Department under Title 38.

Sub-Chapter 3: REQUESTS FOR CERTIFICATION OF ADVANCED EXPLORATION AND MINING

3.1 Certification of Metallic Mineral Mining.

Pursuant to 12 M.R.S.A. § 685-B(1-A)(B-2) and 38 M.R.S.A. § 490-NN(2), the Commission certifies metallic mineral mining and advanced exploration permitted by the Department. For the purposes of this subchapter, the term mining permit shall be considered to include both permits to mine and permits for advanced exploration, unless expressly indicated otherwise. All Commission certification determinations will conform with the following:

- A. The Commission will consider receipt, by the Commission, of a notice of intent to mine and develop and map indicating the location of the proposed mining and development, required by 12 M.R.S.A. § 685-B(1-A)(B-2), as a request for certification. The notice and map may be provided by the person proposing mining and development directly to the Commission or to the Department for the Department to provide to the Commission.¹
- B. A Commission certification determination will be issued solely to the Department for inclusion in the Department's mining permitting decision.
- C. A Commission determination to approve a request for certification may include reasonable terms and conditions that the Commission determines appropriate in order to fulfill the requirements and intent of the Commission's statute, rules, and plans, provided they are not considered in the DEP's review of the project. After the inclusion of the certification determination in the Department's mining permitting decision, the Commission retains, pursuant to 12 M.R.S.A. § 685-B(1-A)(B-2), the authority to enforce the land use standards certified to the Department, including through the enforcement of terms and conditions that are a part of a certification determination.
- D. The Commission may conduct its certification review and issue its determination as a single certification determination or in two parts. If provided in two parts, the first part will include a

¹ The Commission encourages persons requesting a certification to involve Commission staff in pre-application meetings either together with the Department or separately.

determination of whether to certify that the proposed mining and development is an allowed use within the subdistrict or subdistricts for which it is proposed. The second part will include a determination of whether to certify that the proposed mining and development meets the land use standards established by the Commission that are not considered in the Department’s review.

- E. The Commission will not independently evaluate title, right, or interest and shall condition any certification on the Department finding, in its permit review, that the person requesting certification has the necessary title, right or interest.
- F. A Commission determination to approve a request for certification, or to deny a request for certification when the request is associated with a proposal being reviewed by the Department as part of a mining permit application that is pending at the time of the determination, is not final agency action. Pursuant to 5 M.R.S.A. §§ 11001 et seq., a person aggrieved by a Department mining permit decision containing a certification determination may appeal the Department’s final agency action to state court in accordance with applicable state laws and court rules. As part of such an appeal, a person aggrieved may seek judicial review of any of the components of the Department’s final agency action, including the Commission’s certification determination that is incorporated into the Department’s permitting decision.
- G. A Commission determination to deny a request for certification, when the request is not associated with a proposal being reviewed by the Department as part of a mine permit application that is pending at the time of the determination, is final agency action subject to judicial review in state court by a person aggrieved in accordance with applicable state laws and court rules.
- H. If a mine permittee submits a request to amend or revise its mining permit to the Department, the permittee shall provide the Commission a copy of the permit amendment or minor revision documentation provided to the Department. Within 15 days of receiving a copy of these materials, the Commission shall determine whether a certification amendment is required or request additional information needed to make this determination. Modifications proposed by the permittee that the Commission determines would alter any finding or the basis for any finding in the existing certification will trigger the need for an amended certification. The Commission will process a request for a certification amendment in the same manner as a request for certification.

3.2 Acceptance of Requests for Certification.

- A. **Request for Certification Accepted as Complete for Processing.** Upon receipt of a request for certification, the Commission shall determine whether to accept the request for certification as complete for processing based upon whether the request:
 - (1) contains a notice of an intent to develop and a map indicating the location of the proposed development;
 - (2) is accompanied by the proper fee; and
 - (3) contains sufficient information for the Commission to begin its review.

The Commission shall make such determination prior to initiating substantive review. The Commission shall notify the person requesting certification of any deficiency in the request for certification within a reasonable time after it becomes aware of the deficiency. The Commission shall determine whether to accept a request for certification as complete for processing within 15 working days of receipt of the request.

- B. **Additional Information May Be Required.** A determination that a request for certification is accepted as complete for processing is based upon satisfying the factors in Section 3.2(A) above, but does not preclude the Commission from requesting additional information during its review.

Comment [A1]: What is the fee?

Comment [A2]: This is subjective and extremely vague. Define what information is sufficient.

Even if a request for certification is accepted as complete for processing, the Commission may deny the certification for failure to provide information necessary to enable the Commission to make necessary findings under applicable review criteria.

3.3 Request for Certification Content.

A person requesting certification shall use the appropriate forms, as coordinated with the Department, but need not complete any portions of a form determined by the Commission to be unnecessary for a specific request for certification.

Comment [A3]: Where can these be found?

3.4 Notice of Intent to File a Request for Certification.

At least 30 days prior to filing a request for certification either directly with the Commission, or with the Department for the Department to provide to the Commission, a person requesting certification must provide public notice of the intent to file such a request. The public notice must be provided in the same manner as the Department requires for a mining permit application. The content of the notice shall be same as required by the Department, except that the Commission must be substituted for the Department and the public notice must state the manner in which a person may request that the Commission hold a public hearing. Provided the requirements of this Section are satisfied, with Department approval a person’s notice of intent to file a request for certification may be incorporated into its public notice associated with its Department mining permit application.

Comment [A4]: To be consistent with other public notice requirements, this should be “within 30 days of filing,” not “at least 30 days prior.”

Separate from the notice provided by the person requesting certification, the Commission may, at its expense, provide additional notice in any other manner it deems appropriate.

Comment [A5]: Public hearings, at this stage of the process, should not be allowed. There will already have been a public hearing for (1) the LUPC rezoning process, and (2) the DEP mining permit application. The Mining Act contemplates a consolidated and streamlined mining permit process, not one with at least 3 public hearings. Opponents will have multiple opportunities in the two earlier processes to voice their concerns.

3.5 Notice of Filing of a Request for Certification.

Following receipt of a request for certification, the Commission shall generate a list of all requests for certification received on a periodic basis indicating the name of the person making the request and the location and nature of the proposed activity. This list must be made available to the public upon request.

3.6 When to Hold a Public Hearing.

- A. As provided by these rules, interested persons may prepare and submit evidence and argument to the Commission and request a hearing on a request for certification.
- B. The Commission shall consider all requests for a hearing submitted in a timely manner. Hearings on a request for certification are at the discretion of the Commission. In determining whether a hearing is advisable, the Commission shall consider the degree of public interest, the number of public hearings previously held or required to be held on the mining proposal, and the likelihood that information presented at the hearing will be of assistance to the Commission in making its certification determination.
- C. The Commission shall not amend or modify any certification, or refuse to renew a certification, unless it has afforded the person who requested certification, or its successor with regard to the certification, an opportunity for hearing.

Comment [A6]: See comment above on lack of need for a public hearing.

Comment [A7]: There should be no need for “renewal” of a certification. It should be a one-time event.

3.7 Notice of Hearings on Requests for Certification.

Notice of all public hearings in regard to requests for certification must be given by the Commission or, at the discretion of the Commission, by the person requesting certification, as follows:

- A. By regular mail, or electronic mail with the agreement of the person receiving notice, at least 30 days prior to the initial scheduled hearing, to:

Comment [A8]: See earlier comments on lack of need for public hearings at this point in process.

- (1) The person requesting certification;
 - (2) All persons owning or leasing land within 1,000 feet of the proposed project according to the records of Maine Revenue Services or the applicable plantation or municipality;
 - (3) The municipality or plantation where the project is proposed;
 - (4) The county, if the proposed project site is in an unorganized township;
 - (5) The legislators whose districts encompass the project;
 - (6) Intervenors;
 - (7) Persons who have made a timely request to be notified of a specific hearing;
 - (8) Persons who have filed a written request, within the calendar year, to be notified of hearings;
 - (9) Appropriate State and federal agencies, as determined by the Commission; and
 - (10) In any proceeding involving a proposed modification or amendment of a certification that was the subject of an earlier hearing, all persons admitted to formal party status at the earlier hearing.
- B. By publication twice in a newspaper of general circulation in the area affected by the certification request as determined by the Commission.
- (1) Notice must be published in the legal notices section of the newspaper.
 - (2) The date of the initial publication must be at least 30 days before the hearing. The date of the second publication shall be at least 7 days and no more than 13 days before the date of the hearing.
- C. In any other manner the Commission deems appropriate.

3.8 **Contents of Notice of Hearings.**

Notice of all public hearings must contain the following:

- A. The name and address of the person requesting certification;
- B. The legal authority and jurisdiction under which the proceeding is being conducted;
- C. A reference to statutory and rule provisions involved;
- D. In a short and plain statement, the nature and purpose of the proceeding;
- E. The location and nature of the proposed development and mine;
- F. The location where further information, including a copy of the certification request, may be inspected;
- G. The manner and time period within which evidence and argument may be submitted to the Commission for consideration;
- H. The time and place of the public hearing;
- I. The manner and time within which petitions for intervention under the Commission's Chapter 5 rules may be filed; and
- J. Such other information as the Commission deems appropriate.

Comment [A9]: See earlier comments on lack of need for a public hearing at this stage of the mine permit process.

Comment [A10]: See earlier comments re lack of need for a public hearing.

3.9 Cancellation or Change of Hearing.

If a scheduled hearing is canceled or postponed to a later date, the Commission shall provide timely notice to the persons described in Section 3.7(A) above. When hearings are continued, the Commission shall provide such additional notice as it deems appropriate to inform the parties and interested persons, but the Commission may continue a hearing to a later date and place as is announced at the hearing.

3.10 Comment Period Without Hearing.

The Commission shall allow a period of not less than 20 days after accepting a request for certification as complete for processing, during which time any interested persons may submit written comments to the Commission. This 20-day period shall not apply to the Commission's determination of whether to certify that the proposed development is an allowed use within the subdistrict or subdistricts for which it is proposed. Additionally, exceptions to this time period may be made in cases involving emergencies, as determined by the Commission, and requests for certifications determined by the Commission to be routine in nature.

3.11 Procedures and Time Limits for Issuing a Certification.

- A. Except where otherwise directed by the Commission or determined by the Director, the staff shall prepare a recommendation for each request for certification brought to the Commission for a determination. Copies of the staff recommendation must be made available to the person requesting certification, intervenors and all other persons requesting to be so notified at least 7 days prior to the date of the expected determination.
- B. Notice of the certification determination shall be sent to the person requesting certification and to any other person having requested such information.
- C. Notice of a certification determination of the staff must indicate that any person aggrieved by the staff determination has the right to a review of the staff determination by the Commission. The request for such review must be made in writing within 30 days of the staff determination.
- D. A copy of each request for certification determination, marked approved or disapproved, shall be retained in the Commission files and shall be available to the public during normal business hours.
- E. The Commission will maintain at its principal office a written record, available for inspection by the public, of the vote of each Commission member on a request for certification it has considered.

3.12 Appeals.

- A. A person aggrieved may request Commission review of a staff certification determination. Such a request must be made within 30 days of the determination. If the determination is made in two parts as provided for in Section 3.1(D) above, the request for review must be made within 30 days of the part of the determination of which review is sought.
- B. A Commission determination to approve a request for certification, or to deny a request for certification when the request is associated with a proposal being reviewed by the Department as part of a mining permit application that is pending at the time of the determination, is not final agency action and is not appealable except as part of the Department permit decision. In the event a person aggrieved appeals a Department permit decision that includes a certification

determination to state court, the Commission certification determination record shall be considered part of the Department permit record for the purpose of the appeal. A Commission determination to deny a request for certification, when the request is not associated with a proposal being reviewed by the Department as part of a mining permit application that is pending at the time of the determination, is final agency action subject to judicial review in state court by a person aggrieved in accordance with governing laws and court rules.

3.13 Effective Date of Certification Determination.

- A. **Staff Decisions.** Any person aggrieved by a certification determination of the staff has a right to a review of that determination by the Commission. A request for such a review must be made in writing in accordance with Section 3.12(A), above. The staff decision is effective on the date it is rendered, unless a request for Commission review is made.
- B. **Commission Decisions.** A certification determination of the Commission is effective beginning on the date the determination is rendered by the Commission.

3.14 Criteria for Approval of Certification of a Mining Permit.

Pursuant to 12 M.R.S.A. §685-B(1-A)(B-2) and 38 M.R.S.A. §490-NN(2), the Commission must review whether the proposed mining and development meets any land use standard established by the Commission and applicable to the project that is not considered in the Department's review. A person requesting certification must demonstrate to the Commission that the proposed projects satisfy the following land use standards.

- A. Sections 10.11 Nonconforming uses and structures;
- B. Section 10.25(A)(7) as it regards apportionment of development rights through the Commission's subdistrict regulations;
- C. Sections 10.25(B)(1) and (3) regarding dimensional standards and building layout in prospectively zoned areas;
- D. Sections 10.24(B) and 10.25(D) regarding transportation loading, parking, circulation, congestion or unsafe conditions, except that the Commission will not apply Section 10.25(D)(3)(b) because stormwater runoff will be reviewed by the Department;
- E. Section 10.25(F)(2) Lighting;
- F. Section 10.25(Q) Subdivision and Lot Creation;
- G. Section 10.25(T) Activities in Flood Prone Areas to the degree necessary to comply with the Commission's land use standards adopted in accordance with the National Flood Insurance Program;
- H. Sections 10.26(A)-(G) Dimensional Requirements, except in areas that are regulated as jurisdictional resources under the Natural Resources Protection Act or are within the limits of excavation permitted by the Department;
- I. Section 10.27(B) Vegetation Clearing except in areas that are regulated as jurisdictional resources under the Natural Resources Protection Act or are within the limits of excavation permitted by the Department;

Comment [A11]: As noted in our overarching comments, there is clearly potential duplication with DEP NRPA mining standards for setbacks from surface waters and wetlands, and thus this additional language should be added.

- J. Section 10.27(E) Timber Harvesting; and
- K. Section 10.27(J) Signs.

STATUTORY AUTHORITY: 38 M.R.S.A. § 349-A

EFFECTIVE DATE: August 26, 1991

EFFECTIVE DATE (ELECTRONIC CONVERSION): May 4, 1996

NON-SUBSTANTIVE CHANGES: September 2, 1997 - minor spelling, formatting and layout.

EFFECTIVE DATE: June 1, 2014



Appalachian Mountain Club

Maine Land Use Planning Commission
Department of Agriculture, Conservation and Forestry
22 State House Station
Augusta, ME 04333

November 25, 2013

Written Comment on Amendments to Chapter 13, “*Metallic Mineral Exploration and Certification of Advanced Exploration and Mining*” by the Appalachian Mountain Club

Chair Hilton and Commissioners of the Maine Land Use Planning Commission:

On behalf of the Appalachian Mountain Club and our 5,200 members in Maine, I am writing to offer our concerns and comments on the changes to the Chapter 13 rules regulating certification of advanced exploration and mining. The AMC is primarily concerned with ensuring appropriate opportunities for public involvement in the certification process, and feel that the rules as amended do not adequately provide opportunities for meaningful public comment. Please consider our specific concerns below.

3.10 Comment Period Without Hearing

Under the proposed amended rules, the Commission does not have to provide a 20-day comment period for the determination of whether the proposed development is a certified and allowed use. Exempting this subjective decision from the opportunity for public comment limits opportunities for participation and information sharing between the public and the Commission. The Commission should allow a 20-day public comment period for the decision to certify a mining development.

3.11 Procedures and Time Limits for Issuing Certification

The rules should require the staff recommendation be released to the public during the entire public comment period. As written, the rules only require copies of the staff recommendation be available at least 7 days prior to the date of the expected determination. The LUPC staff recommendation is important in informing public comment and should be available for the entire comment period, or 20 days, before the expected date of determination.

Greenville, ME office • 15 Moosehead Lake Road, Greenville, ME 04441 207-695-2690

Portland, ME office • 30 Exchange St., Portland, ME 04101 207-899-0150

Main office • Five Joy Street, Boston, MA 02108-1490 617-523-0655

Pinkham Notch Visitor Center • Route 16, Box 298, Gorham, NH 03581-0298 603-466-2721

www.outdoors.org



Appalachian Mountain Club

Additionally, AMC is concerned about the clause in section 3.11 that seems to allow LUPC staff to make determination decisions. It is our understanding that all certification decisions must be made by the LUPC Commissioners, not the staff. This is a substantial deviation from the legislative directive and precedent.

3.12 Appeals

A substantial section of 3.12 has been removed from the amended rules, eliminating the opportunity for a post-determination hearing if no hearing was held during the determination process. Eliminating this opportunity for appeal limits the public's ability to contest the Commission's decision after a determination has been made. Maintaining the opportunity for a post-determination hearing is important to the process and is consistent with the Site Law certification process.

3.14 Criteria for Approval of Certification of a Mining Permit

The AMC believes that Section 10.24(E) should be included in the applicable land use standards listed in this section. Adding this standard to the rules would give the Commission adequate opportunity to evaluate whether the proposed mining development adheres to LUPC's rules. This opportunity for evaluation is especially important given the potential time lapse between the initial rezoning decision, the DEP application processing, and the final opportunity for LUPC certification. Adding in this standard allows the LUPC to consider any changes that may have occurred during this potentially lengthy process.

Thank you for the opportunity to submit comments and participate in this process.

Sincerely,

Kaitlyn Bernard
Maine Program Associate

Comments – Proposed Rule Amendment to Chapter 13
“Metallic Mineral Exploration, Advanced Exploration and Mining”
By Natural Resources Staff, Houlton Band of Maliseet Indians
November 21, 2013

Mining and mining exploration presents substantial potential to disturb or destroy invaluable, even sacred, Wabanaki historic and cultural resources; yet there is no requirement to notify Wabanaki Tribes of proposed mining activity.

(p. 7) **3.4. Notice of Intent to File a Request for Certification.** Please ensure federally recognized Indian Tribes are also provided with this notice to ensure historic and cultural resources of importance to Tribes are identified and any potential negative impacts prevented.

(p. 8) **3.7. Notice of Hearings on Requests for Certification.** Please add federally recognized Indian Tribes to the list of entities receiving notice to ensure historic and cultural resources of importance to Tribes are identified and any potential negative impacts prevented.



20 Gilsland Farm Road
Falmouth, Maine 04105
207-781-2330
www.maineaudubon.org

NOVEMBER 25, 2013

Marcia Spencer Famous
Maine Land Use Planning Commission
Department of Agriculture, Forestry and Conservation
22 State House Station
Augusta, ME 04333-0022

RE: Proposed Changes to Chapter 13, Metallic Mineral Exploration, Advanced Exploration and Mining

Dear Marcia:

On behalf of Maine Audubon's 15,000 members and supporters, I write to express some suggested changes regarding the proposed changes to Chapter 13, Metallic Mineral Exploration, Advanced Exploration and Mining.

3.7 Notice of Hearings on Requests for Certification

We encourage the Commission to add a requirement to section 3.7 that the notice also be posted on the Commission's website in order to increase the transparency of the process and increase the ability of the public to provide input. Increased input will improve the Commission's ability to make an informed decision.

3.10 Comment Period Without Hearing

The language indicating that there is not an opportunity to comment on whether the proposed development is an allowed use should be stricken. The public should have the opportunity to comment on this important issue.

3.11 Procedures and Time Limits for Issuing a Certification

The 7 day notification found in paragraph A seems too short to us.

It's our understanding that the Commission, not the staff, are charged with making a certification determination.

3.12 Appeals

We strongly encourage the Commission to not remove paragraphs C through E that provide an opportunity for a person aggrieved by a Commission determination to request a hearing if none has been held. Although opportunities for public hearings are provided at the rezoning and the permitting stages, the certification determination is also a very important step. The issues raised in the

certification determination cannot be raised elsewhere. It's important to the decision-making process and to the transparency of the process that an opportunity for a hearing be held. We also note that a person aggrieved could be the applicant or an interested party – this section applies to both.

3.14 Criteria for Approval of Certification of a Mining Permit

Section 10.24E is noticeably absent from the list of standards that must be met even though this section is included in a site law certification. We urge the Commission to amend this section and include Section 10.24E which says, "Conformance with statute, regulations, standards and plans." We note that the rezoning approval could have occurred ten years prior to the certification application and things may have changed during that time. Given the significant potential impacts of a mining operation, it's imperative that the Commission conduct a thorough evaluation of any certification application including considering whether the proposal is in conformance with statute, regulations, standards and plans.

Thank you for considering our comments. Please feel free to contact me with questions.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer Burns Gray". The signature is written in a cursive, flowing style.

Jennifer Burns Gray
Staff Attorney and Advocate



Maine Forest Products Council

The voice of Maine's forest economy

November 25, 2013

Marcia Spencer Famous
Land Use Planning Commission
22 State House Station
Augusta, ME 04333-0022

RE: Testimony by the Maine Forest Products Council on the proposed certification of advanced exploration and mining permitted by DEP

Dear Marcia:

The Maine Forest Products Council (MFPC) submits this testimony for your consideration. The MFPC is a trade association formed in 1961. We have about 300 member companies, which represent all segments of the forest industry in Maine. We speak for logging contractors, sawmills, paper mills, biomass energy facilities, pellet manufacturers, furniture manufacturers, and on behalf of more than nine million acres of commercial forestland in Maine.

The MFPC landowners are supportive of the revisions to the mining laws that will enable mining activities to be seriously evaluated and implemented in Maine. MFPC landowners have varied interests in mining, but they believe it is important to construct regulations that are practical and balanced. All of the landowners in the jurisdiction represented by the MFPC are extremely committed to protecting water quality and fisheries health, and to their continued commitment to environmental stewardship. If done the right way, mining will provide an additional diversification of landowner income that would strengthen forestland investments and support the working forest model in Maine.

Overall, we are supportive of the proposed rules for certification. The certification of DEP projects in the LUPC jurisdiction should be continuously evaluated to ensure a streamlined process and no duplicative authority with DEP regulations. There are several concerns that we would like to highlight in our review of the draft rules:

1. **Section 3.2 A.3, contains sufficient information for the Commission to begin its review.** This provision is unclear and remains too subjective. Applicants want to understand what is needed for processing up front, and not experience request for information that become a moving target.

2. **Sections 3.4, 3.6 and 3.7, references to a public hearing on a certification request.** Requiring an applicant to undergo a third public hearing for the Commission certification is inconsistent with the intent of the Mining Act. All residents and interested parties within the jurisdiction would have access to a public hearing process during the zoning and DEP permitting process. The public hearing process is important, but we believe the intent of LUPC reform is to build an efficient permitting process that allows for public input but does not create unreasonable obstacles for an applicant. Reliance on the DEP site location permitting process establishes a uniform treatment for permitting throughout the state.
3. **Section 3.6.C, certification renewal.** The new Mining Act removed the need for mining permit renewals and subsequently there should be no need to renew a Commission certification.
4. **Section 3.14. H (Dimensional Requirements)Sections 10.26 (A)–(G):.** Section 10.26. D. 2 (a) and (b) minimum setbacks from flowing water, standing water and wetlands designated P-WL1 is problematic because they are duplicative of DEP's review responsibilities under the Mining Act and NRPA. These references should be deleted in the LUPC rules.

Thank you for the opportunity to comment on this draft certification rules and we would be glad to answer any additional questions you may have.

Sincerely yours,



Patrick J. Strauch
Executive Director

Cc: MFPC Executive Committee



Natural Resources Council of Maine
3 Wade Street • Augusta, Maine • 04330

**Comments of the Natural Resources Council of Maine
on the proposed Rule Amendment to the LUPC's Chapter 13,
"Metallic Mineral Exploration, Advanced Exploration and Mining" for
Certification of Advanced Exploration and Mining Permitted by the
Department of Environmental Protection**

November 21, 2013

Thank you for the opportunity to comment on the proposed changes to Chapter 13 of the Land Use Planning Commission's (LUPC) rules regarding certification of advanced exploration and mining permitted by the Department of Environmental Protection (DEP). The Natural Resources Council of Maine (NRCM) has several comments on the proposed rule amendments. These comments are in addition to oral comments given at the hearing held November 13, 2013 on the same proposed rule amendments. In addition to these comments, we are submitting two documents: an NRCM investigative report on mining Bald Mountain in Aroostook county and NRCM's position paper on open-pit mining. Thank you for your consideration.

(1) **Retain crossed out language in subchapter 3, section 1.** The crossed out language clarifies what certification is and how it relates to the DEP's permitting process. This language contextualizes the certification process. It should be retained so that those less familiar with the mining permitting process may better understand the rules.

(2) **Post notice of public hearings on the LUPC's website.** Posting notice of public hearings on the LUPC's website in addition to the publications listed in subchapter 3, section 7(B) assures that the general public outside of the area affected by the certification request can be made aware of public hearings. Many individuals monitor the LUPC's work by visiting the LUPC website and posting information there ensures wide distribution.

(3) **The 20-day comment period should also apply to the Commission's determination of whether to certify that the proposed development is an allowed use.** Under subchapter 3, section 10 of the proposed rules, the 20-day comment period provided when a hearing has not been scheduled does not apply to the Commission's determination of whether to certify that the proposed development is an allowed use. This assumes that the determination of whether an activity is among the allowed uses in a subdistrict is an objective decision. NRCM disagrees. For example, this Commission has debated over whether a road is a land management or a Level C road. This debate is understandable, as those allowed uses are far from cut and dry. The determination of other allowed uses is also often far from crystal clear. NRCM believes that the public should be able to comment on this determination because they might be able to share with the Commission information that could guide this often subjective decision.

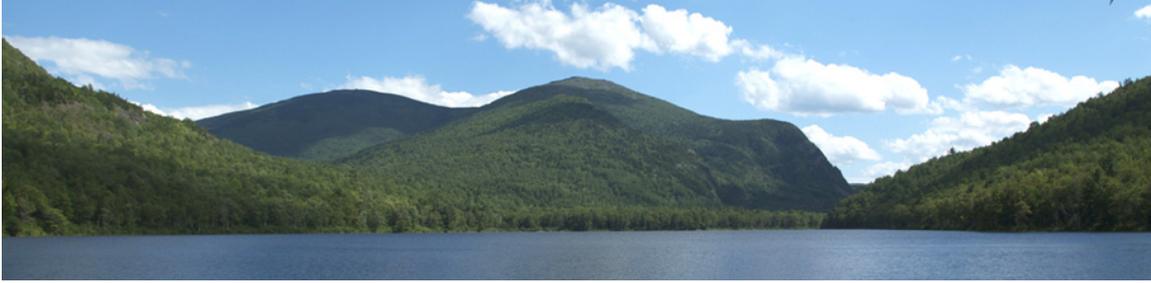
(4) **Copies of staff recommendations should be made available 20 days prior to the date of the expected determination.** Under subchapter 3, section 11(A) of the proposed

rules, the staff recommendation is made available only 7 days prior to the date of the expected determination. An increase from 7 to 20 days would make the staff recommendation available to the public during the entirety of the comment period. It is important to have the staff recommendation available during the entirety of the comment period because it can significantly inform public comment.

(5) **Only Commissioners should be allowed to make certification determinations.** Under subchapter 3, section 11(C), the LUPC staff may make certification determinations. NRCM is under the impression that only Commissioners may make certification determinations. The Mining Act states, “The commission must certify to the [DEP]...” (12 M.R.S.A. §685-B(A-1)(B-1)). In that chapter of statute, “the commission” refers to the Land Use Planning Commission (see 12 M.R.S.A. §683-A). NRCM believes that the proposed rule amendment is contrary to the Mining Act and should be changed accordingly.

(6) **Allow for post-determination hearings.** The proposed rule does not allow for a post-determination hearing if no hearing was held in the course of determination (see subchapter 3, section 12). This is logically inconsistent with site law certification, which does allow for such a hearing. An October 8, 2013 Commissioner memo states that allowing such a hearing would “delay the effective date of the certification and extend the appeal window, with limited benefit.” NRCM strongly disagrees. Certification of mining proposals is an important determination with significant ramifications and the public has every right to have a hearing after a determination is made. The LUPC should not feel compelled to rush a proposal along to the DEP; their careful review is essential and should be well informed.

(7) **Include Section 10.24(E) of the LUPC’s rules in the list of land use standards.** Section 10.24(E) says: “The proposal is otherwise in conformance with this chapter and regulations, standards and plans adopted pursuant thereto....” This standard is among the standards reviewed in site law certification. Its inclusion in mining certification is important because it accounts for the fact that rezoning could have occurred as long as 10 years prior to the request for certification and conditions in, around, and affecting the proposed site could have changed within that time. For instance, water supply, precipitation patterns, and surrounding uses all could change within the span of 10 years. Each of these conditions considerably effects mining. Section 10.24(E) gives the Commission an opportunity to review the certification within the context of the LUPC’s rules generally and to consider changes that have occurred since rezoning. The standards that are listed in the proposed rule amendment do not allow for such review.



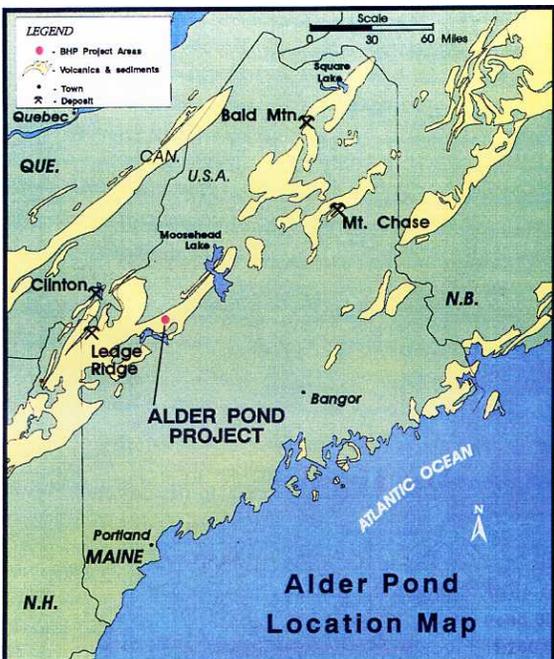
Open-Pit Mines in Maine: Serious Risks to Our Environment

For the first time in decades, out-of-state mining companies are seriously considering mining copper, zinc, and other metals in Maine, posing serious risks to our waters, forests, and wildlife in some of Maine's most treasured areas.

Background: In 2012, the Maine Legislature passed a bill to weaken Maine's mining regulations, at the request of J.D. Irving Limited, a huge Canadian conglomerate and the largest landowner in Maine. Open-pit mining refers to a type of mining where metals and other substances are removed from the earth from an open pit, as opposed to tunneling through the earth. Most of the discussion during the legislative session focused on J.D. Irving's Bald Mountain site in central Aroostook County, but there are many other places in Maine where open-pit mining could occur.



Acid mine drainage in western Pennsylvania



The Maine Geological Survey map (left) of volcanic and sedimentary rock deposits shows that very large deposits (shown in yellow) are spread throughout the state, including near some of Maine's most precious natural areas. There are deposits on both sides of Moosehead Lake, throughout the North Woods, and next to Cobscook Bay. Volcanic and sedimentary rock often hold massive sulfide deposits, which in turn can contain metals such as copper and zinc. Massive sulfide deposits are what open-pit mining companies will be looking for in Maine.

Problems with Sulfide Mining: Problems with mining massive sulfide deposits occur when waste rock (rock that contains no valuable ore) and the tailings (materials left over after ore has been removed from ore-bearing rock) react with air and water to form sulfuric acid. This acid then gets into ground and surface waters, where it can cause terrible damage to water quality and aquatic creatures. This is called Acid Mine Drainage (AMD), and it can have devastating consequences (see image above).



At the Iron Mountain Mine near Redding, California, AMD has caused extensive fish kills in the nearby rivers and streams. The Environmental Protection Agency (EPA) described AMD impacts at this site: “Prior to EPA’s cleanup of the site, most of the acidic effluent from Iron Mountain flowed or seeped out of the mines into adjacent streams and eventually into Keswick Reservoir, a run-of-river reservoir on the Sacramento River. Consequently, the creeks draining Iron Mountain are essentially devoid of aquatic life downstream (though not upstream) of the mines...State records document more than 20 fish-kill events in the Sacramento River downstream of IMM since 1963. Acid mine drainage from Iron Mountain killed 100,000 or more fish on separate occasions in 1955, 1963, and 1964; and at least 47,000 trout died during a one-week period in 1967.”

Cleanup costs at the Iron Mountain site are more than \$200 million to date. EPA constructed elaborate treatment (above, left) and sludge disposal (above right) systems to neutralize AMD. Although this has been effective so far, EPA notes, “Unless researchers eventually figure out an effective and reliable way to prevent the formation of acid mine drainage at Iron Mountain, the lime-neutralization/HDS water treatment plant will have to continue operating for a *very* long time. USGS scientists estimate that at current erosion rates, Iron Mountain will continue to produce acid mine drainage for 2,500 to 3,000 years, until the estimated 12 million tons of sulfide deposits remaining within the mountain have weathered away...despite years of investigation and consideration of many possible alternatives (e.g., strip mining Iron Mountain in its entirety, mining out the remaining sulfide ore, or sealing the mine portals and flooding Iron Mountain with water or an inert gas), it remains unclear whether there is a good, permanent solution to the problem.”

During the 2012 legislative session debate, Irving’s lobbyists promised the company would treat the contaminated water from an open-pit mine at Bald Mountain, *but will they treat it for hundreds, even thousands of years?* That’s how long sulfide deposits can continue to produce AMD. Do Maine people want large treatment plants in the North Woods for the next thousand years? Will mining companies pay to operate such treatment plants for *centuries*?



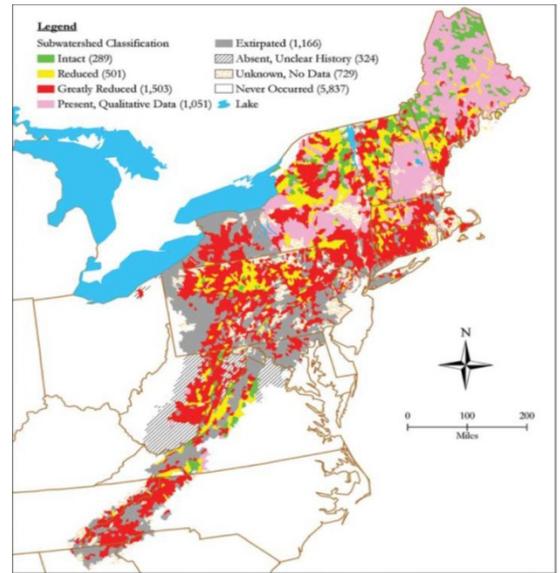
Eastern brook trout (USFWS)

Impacts Near Bald Mountain: A lot is at stake if Aroostook County’s Bald Mountain becomes an open-pit mine. Pollution there would likely drain into the Fish River and Fish River Chain of Lakes, which provide some of the best brook trout fishing in the country. Aroostook County Tourism describe this area this way: “Shady brooks, spring-fed ponds, and crystal clear streams are the perfect home for brook trout. And there’s nothing like the feeling of gently laying out 30 feet of line right on the edge of the deep pool where you know they’re waiting. Aroostook is one of the last strongholds in the northeastern United States for the native brook trout, and the Fish River Chain of Lakes is the last remaining cold water fishery in the State of Maine free of any invasive warm water or exotic species of fish.”

As Jeff Reardon, New England conservation director for Trout Unlimited, put it, “If you look at Bald Mountain through brook-trout-colored glasses, [the deposits] could not be in a worse place.”

Maine is one of the last strongholds of the eastern brook trout. The map (right) shows eastern brook trout populations throughout their historic range. Almost all of the remaining healthy populations are in Maine—one of the largest areas where brook trout have healthy populations is central Aroostook County, not far from Bald Mountain. Many people in this area make their living by guiding fishermen or from revenue generated by stays at local inns and camps.

According to the U.S. Fish and Wildlife Service, fishing brought \$257 million to the Maine economy in 2006, the latest year for which data were available. A massive open-pit mine could devastate one of the best places to fish for the state's most prized game fish is very shortsighted. Mining jobs will come and go quickly, but Maine's fishing-related economy is sustainable and can contribute to the economy indefinitely, if we are wise stewards of the resource.



Mining Companies Often Cut and Run: Mining companies have a track record of shutting down their operations and leaving taxpayers with cleanup costs. This is what happened with the two largest sulfide mines in Maine.



The Callahan mine in Brooksville (left) operated for only four years, closing in 1972. The company left taxpayers with an estimated clean-up bill of \$23 million, and the largest parts of the clean-up have not even occurred yet— 40 years later. Contaminated soil and sediment remain and are a risk for people and harmful to fish and wildlife. Recent Navy studies in nearby Goose Pond found sediments that were 100 percent lethal to sand-dwelling worms and sea urchins. PCBs are spread widely throughout the site. EPA has asked that people stay away to avoid exposure to these cancer-causing chemicals.

The Kerramerican mine in Blue Hill (right) also left a mess. The original owners of the site did an inadequate job of cleaning up when they ceased operations in 1977. In the mid-1990s, investigations showed that the site was leaking 10–12,000 pounds of zinc per year. Zinc is very toxic to fish and aquatic life. They also found that portions of the soil cap on the tailings impoundment were not properly vegetated. It took until 2006 for the owners and DEP to reach agreement on cleaning up the site, and another two years of work to recap the area. Currently, the site is being monitored to make sure the cap is working properly, *35 years after mining operations ended at the site!*



Ralph Chapman, State Representative for the Blue Hill area, said this about the Kerramerican mine, which operated from 1972 to 1977: “In 1964, with great fanfare, the Black Hawk mining operation was estimated to be able to run for ten to twenty years, employ 200 to 300 workers, and produce many millions of tons of ore. After exploratory work was completed, the estimate was 4.5 million tons...the mine produced only one million tons using 100 employees for five years.”

The story of mining companies damaging the environment, cutting jobs, and leaving town has played out many times in many places. At the Summitville Mine in Colorado in 1992, the owner declared bankruptcy and left U.S. taxpayers to pay for most of the cleanup—about \$200 million. The Canadian owner, Galactic Resources, succeeded in mining only \$130 million worth of metals from the site, which was not even enough to pay the cleanup cost. The Pegasus Gold Corporation,

another Canadian company, behaved similarly at the Beal Mountain and Zortman-Landusky mines in Montana. At Beal Mountain, a mine located mostly on U.S. Forest Service land, the company had posted a \$6 million bond for cleanup and reclamation, yet taxpayers have spent at least \$14 million so far, and clean-up continues. At the Zortman-Landusky mine, Pegasus left an even more expensive mess. There, \$40 million in reclamation bonds has already been spent by Pegasus, and state and federal taxpayers have spent \$12 million. Wastewater treatment costs \$1.5 million annually—twice the money available from the company’s wastewater bond. Federal taxpayers have had to pay most of the rest. The Montana Department of Environmental Quality has stated that water treatment will have to continue into “the distant future” and that even then, water quality standards will likely not be met in the 12 streams this mine site has contaminated.

Economic Benefits of Mining Often Overstated: Although mining jobs may pay well for a finite period, the business is risky and highly cyclical. Sometimes mines never pay. A New Mexico economic study has shown that “In New Mexico in 2000, mineral extraction jobs paid \$50,000 per year whereas the average wage and salary job paid \$28,000. Given these high wages, one would expect communities that rely heavily on mineral extraction to be unusually prosperous. That, in general, is not the case. Across the United States, mining communities, instead, are noted for high levels of unemployment, slow rates of growth of income and employment, high poverty rates, and stagnant or declining populations. In fact, our historic mining regions have become synonymous with persistent poverty, not prosperity.”

Maine is not alone: Mining companies have shown renewed interest in mining sulfide ores in Alaska, Minnesota, Michigan, and Wisconsin, in addition to Maine. Fundamentally, this is due to world demand for metal. American mines produced 1.4 billion metric tons of crude ore in 2010—about 4 metric tons of ore per year for every American or 24 pounds of new metal ore per person per day. With this comes waste—1.1 billion metric tons in 2010. In contrast, the total amount of municipal solid waste generated in the U.S. was only about 225 million metric tons in 2010.

Thomas Michael Power, economics research professor and professor emeritus at the University of Montana, wrote, “During metal mining boom times such as the present... new deposits look attractive. We should be cautious, however, about the environmental and social cost we are willing to pay to accommodate the new mining because, as has always been true in the past, this mining boom will lead to a bust and we will again face cleaning up the near permanent toxic mess that metal mining has always left in its wake. This is not a new day for metal mining. It is just the most recent disruptive and potentially destructive phase of an ongoing cycle of boom and bust.”

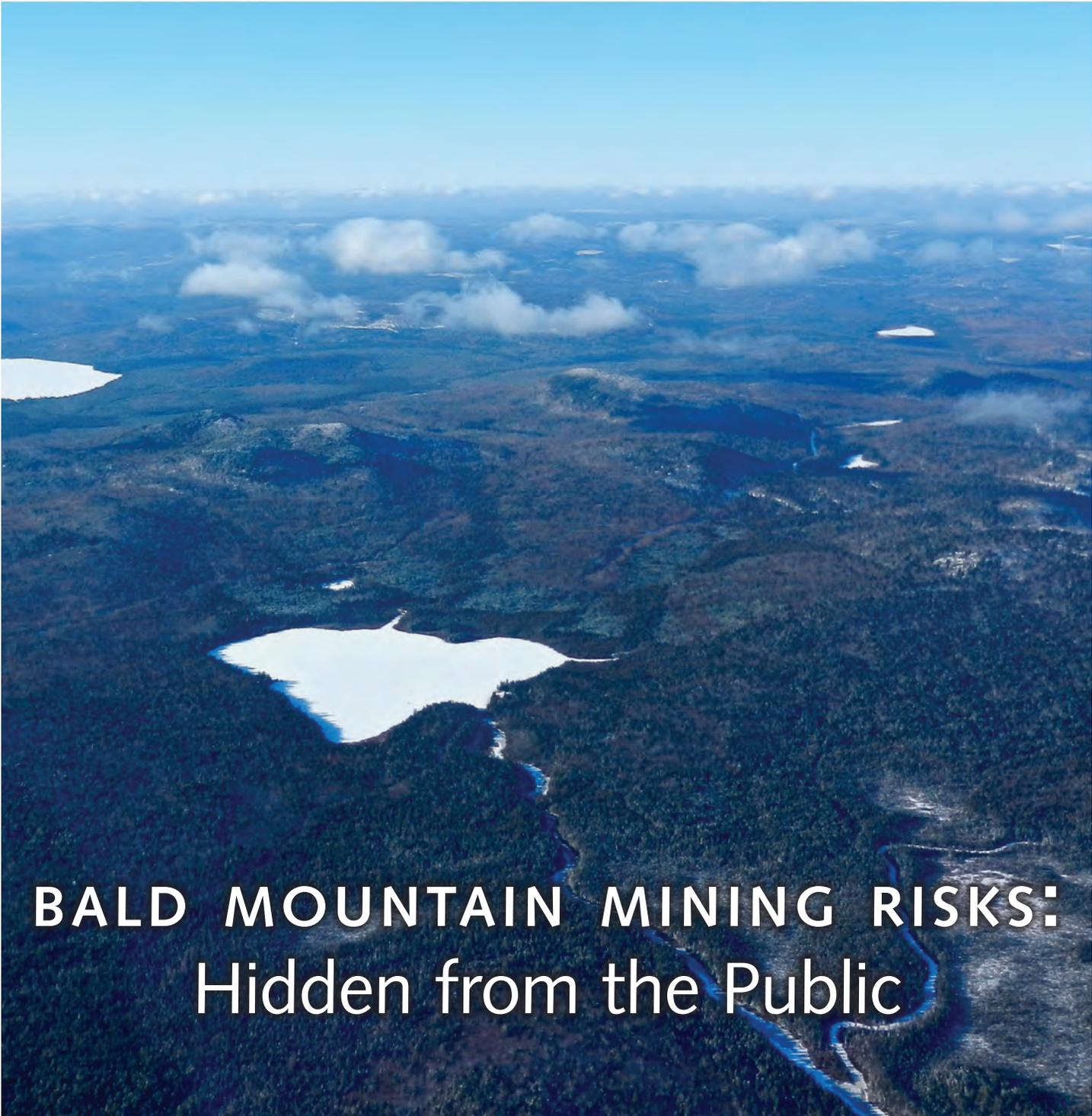
Maine would be wise to heed this warning. When Maine faced strong interest in mining in the late 1980s and early 1990s, the state wisely took its time developing protective regulations. The Department of Environmental Protection (DEP) drafted regulations over the course of 18 months, and staff visited mining sites in the western U.S. to view the environmental consequences of open-pit mines. Unfortunately, the current DEP does not seem likely to do the same.

What Lies Ahead: Maine’s new state mining law directs DEP to rewrite and weaken the existing protective rules for metal mining. DEP is “outsourcing” development of the draft rules to a contractor, and it is not clear whether Maine people will have an opportunity to provide comments until they have been largely completed. According to DEP’s rulemaking timeline, a public hearing would not be held until July 2013 at the earliest. Final rules would go to the Legislature for adoption in January 2014.

This is not the sort of public process that will ensure that out-of-state mining companies do not trample Maine’s interests. We urge you to contact your elected officials, the governor’s office, and the DEP commissioner and let them know that you want them to protect Maine’s environment from the potentially devastating impacts of open-pit mining. For more information, contact Nick Bennett at nbennett@nrcm.org or visit www.nrcm.org/issue_mining.asp, where you can find our complete Position Paper with references for quotes and figures. Thank you for staying involved!



Natural Resources Council of Maine
3 Wade Street • Augusta, Maine • 04330 • www.nrcm.org



**BALD MOUNTAIN MINING RISKS:
Hidden from the Public**



Natural Resources
Council of Maine

NRCM gathered the information in this investigative report from documents secured through Freedom of Access Act (FOAA) requests to the Department of Environmental Protection.

Authors: Nick Bennett, NRCM Staff Scientist; Pete Didisheim, Advocacy Director

Cover Photo: Bald Mountain, Aroostook County by Judy Berk; LightHawk Overflight



3 Wade Street
Augusta, Maine 04330
800-287-2345
www.nrcm.org

October 2013

BALD MOUNTAIN MINING RISKS:

Hidden from the Public

EXECUTIVE SUMMARY

In 2012, the Maine Legislature enacted a law to weaken Maine’s mining regulations. The bill was passed at the request of Canada-based J.D. Irving, Ltd., which wants to pursue an open-pit mine at Bald Mountain in Aroostook County. This is not the first time that a mining company has been interested in extracting metals from an ore deposit at Bald Mountain. In the 1990s, two mining companies—Boliden Resources and Black Hawk Mining Inc.—owned the mineral rights and began the DEP permitting process for possible mining operations. For this investigative report, NRCM reviewed Boliden and Black Hawk reports that were secured through a Freedom of Access Act (FOAA) request.

As described below, technical experts have concluded that the ore body and surrounding rock at Bald Mountain have high acid-generating potential and that some of the rock would start releasing acid very quickly upon exposure to air and water. According to consultants for Boliden, an open-pit mine at Bald Mountain would likely never be able to meet water quality standards in the area. DEP believed that even a much smaller open-pit mine proposed by Black Hawk would cause unacceptable risks to groundwater because of high arsenic levels. The geologist who discovered the Bald Mountain ore deposit also has repeatedly stated that an open-pit mine at Bald Mountain would cause major environmental problems.

DEP understands the significance of the information in this report but has not shared it with Maine lawmakers or the public. As a result, Maine’s decision makers have been making critical decisions about the future of mining in Maine and its potential impacts on the environment while lacking fundamental information about the threats of a mine at Bald Mountain—the ore deposit driving Irving’s (and some lawmakers’) push to weaken Maine’s mining regulations.

For Maine people and lawmakers to develop a fair assessment of the consequences of any proposed change in Maine’s mining regulations, they must have complete and accurate information. DEP should be sharing all information about the risks of a Bald Mountain mine.



The Bald Mountain ore deposit in Aroostook County has very high concentrations of sulfur and arsenic, raising major risks of acid mine drainage (AMD) pollution to rivers and streams, as seen in this image of AMD from western Pennsylvania.

FINDINGS

- **Bald Mountain is an unusually dangerous site for a mining operation for the following reasons:**
 - **High likelihood of Acid Mine Drainage pollution.** Consultants concluded that the ore and surrounding rock have particularly high acid-generating potential, and some of the rock would start releasing acid very quickly on exposure to air and water.
 - **Difficulty meeting water quality standards.** An open-pit mine at Bald Mountain would likely never be able to meet water quality standards in the area, according to consultants for the mining company Boliden.

- o **Extremely high arsenic concentrations.** J.S. Cummings, the geologist who discovered the Bald Mountain site, has stated in correspondence with Maine legislators that an open-pit mine at Bald Mountain would cause major environmental problems due to high arsenic levels (1,258 ppm to 29,155 ppm). In 1998, DEP believed that even a small mining operation at Bald Mountain, proposed by Black Hawk, would cause unacceptable risks to groundwater because of high levels of arsenic.
- **DEP failed to share information with lawmakers about risks at Bald Mountain.** Information about the inherent dangers of the Bald Mountain ore deposit is sitting in DEP files, but DEP never shared it with Maine decision makers while they were considering J.D. Irving’s proposal to weaken Maine’s mining regulations.¹
- **DEP technical staff have had little opportunity to speak publicly.** DEP leadership failed to allow its technical experts to share information with lawmakers that would have helped them understand why companies abandoned their pursuit of open-pit mines at Bald Mountain in the 1990s. Staff who were involved in those permit applications are still working at the DEP.
- **Irving job estimates are likely inflated.** J.D. Irving’s claim that a mine at Bald Mountain would generate 700 “direct or indirect” jobs greatly exceeds any previous job estimates.
 - o Boliden estimated only 80-130 jobs for a full-scale open-pit mine.²
 - o Black Hawk estimated only 75 jobs for its reduced proposal to mine the gossan cap.³

The discrepancies with J.D. Irving’s claims about jobs are striking, and DEP should have shared this information with legislators. An open-pit mine at Bald Mountain would have much higher environmental risks and much lower employment prospects than Irving is claiming. This is consistent with what communities nationwide have experienced. Mining companies are notorious for overpromising on jobs and underestimating environmental risks.

1 The committee file for L.D. 1853 includes more than 700 pages of materials, yet DEP did not provide for the record any of the Boliden or Black Hawk assessments that document the risks of the Bald Mountain deposit.

2 Mark Stebbins, Maine DEP. 1990. Inter-Departmental Memorandum re: Bald Mountain Tour and Presentation/August 30, 1990. September 13, 1990. P. 3.

3 NMM Resources, Inc., Bald Mountain Project, Volume 3, Environmental Impact Report, p. 58.

OVERVIEW

In 2012, at the request of Canada-based J.D. Irving, Ltd, the Maine Legislature passed a law directing the Department of Environmental Protection (DEP) to draft new, less stringent rules for metallic mineral mining in Maine.⁴ Company President James Irving pushed for the new law because he wants to operate an open-pit mine at Bald Mountain in Aroostook County.⁵ Although Maine lawmakers spent many hours dealing with the complex issues raised by Irving's bill (L.D. 1853), DEP leadership failed to inform legislators about the very high environmental risks of mining at Bald Mountain.

DEP archives include many detailed assessments for companies that were actively pursuing a mine at Bald Mountain in the 1980s and 1990s. These studies reveal that the ore body at Bald Mountain is particularly dangerous and would require extraordinary steps to prevent severe environmental damage. The ore at Bald Mountain is so reactive when exposed to water and air—rapidly creating sulfuric acid—that a mine operator would need to pursue complex and expensive techniques to limit harmful levels of acid mine drainage.⁶ (See sidebar.)

Consultants advised one previous owner of the Bald Mountain mineral rights that it would be impossible to avoid contaminating groundwater and surface water in the area, and that this “inevitable” water pollution could be a “fatal flaw” for an open-pit mine at Bald Mountain. These consultants suggested that the only path forward for an open-pit mine would be to lower water quality standards for nearby streams. Irving has taken a similar path by pushing for weaker mining regulations.

J.S. Cummings, the geologist who discovered Bald Mountain's deposit, has warned that an open-pit mine there could be “a debacle” because of very high arsenic levels.⁷ Cummings also expressed concern that nobody had informed the public or the Legislature of the extremely high arsenic levels at Bald Mountain.⁸ DEP Commissioner Patricia Aho and DEP Policy Director Heather Parent have provided essentially all of DEP's testimony and commentary to the Legislature on the mining issue. Technical staffers, including staff members deeply familiar with the high risks posed by the Bald Mountain ore body, were not invited by DEP leadership to speak with lawmakers about any of these issues.

In this paper, NRCM provides information about the high risks of an open-pit mine at Bald Mountain. Much of this information comes from documents that were made available by a Freedom of Access Act (FOAA) request submitted by Lindsey Newland Bowker, of Stonington, Maine.⁹ NRCM believes that the DEP had a responsibility to share information in their records about the risks of any open-pit

Understanding Acid Mine Drainage

Acid mine drainage is a major problem with hardrock mines. It occurs when mining companies excavate sulfur-containing rock buried deep beneath the earth's surface. The rock reacts with the air and water to form sulfuric acid, which can kill aquatic creatures if it spreads into surface waters and lowers the pH sufficiently. The acid also leaches out heavy metals naturally present in the rock, many of which are extremely toxic to fish and other aquatic organisms. These metals can include lead, arsenic, cadmium, mercury, copper, and zinc.

Acid mine drainage is a worldwide problem, causing ecological destruction and contamination of drinking water. Once acid mine drainage starts, it is very difficult to contain or stop. It can continue for hundreds or even thousands of years until the available sulfur-containing minerals are exhausted.

4 “Last month Gov. Paul LePage signed into law LD 1853 which streamlined Maine's mining permitting and regulatory process... The legislation was drafted at Irving's request.” *Bangor Daily News*, May 3, 2012. <http://bangordailynews.com/2012/05/03/business/james-irving-addresses-maine-mining-interests-at-umfk-forum/>

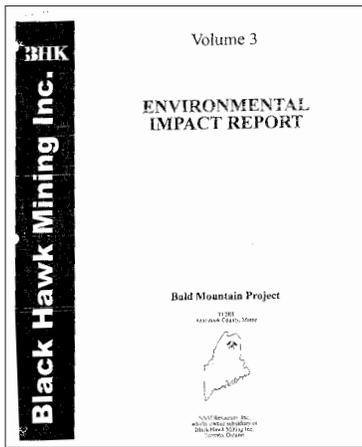
5 “The entire operation, Irving said, will have a 500-acre footprint with the mine's pit covering 100 acres.” *Ibid.*, May 3, 2012.

6 Acid mine drainage occurs when sulfur compounds in ore react to form sulfuric acid when exposed to air and water. This reaction does not occur rapidly or on a large scale when ore is buried deep underground and kept away from air. However, mining exposes ore to air and water, allowing ideal conditions for acid formation. The sulfuric acid that comes from ore can kill fish and aquatic life and also leaches toxic metals from the ore. These metals can also enter waterbodies and kill the creatures that live there.

7 J.S. Cummings letter to Representative John Martin. September 7, 2012. P. 5.

8 J.S. Cummings letter to Representative Jeff McCabe. May 10, 2013. P. 1.

9 Lindsey Newland Bowker is a former environmental risk manager for New York City.



mining operation at Bald Mountain. Had they done so, the Legislature might not have passed L.D. 1853—a bill that could change and weaken mining rules statewide, driven by Irving’s interest in mining a site abandoned by others, in part, because the environmental risks were so high.

Boliden’s Exploration of Bald Mountain (Early 1990s)

In the early 1990s, the large Swedish mining firm Boliden Resources owned the mineral rights at Bald Mountain. The company conducted environmental studies at the site, and its consultants analyzed these data as well as those from previous site owners. In 1990, the Canadian consulting firm Steffan, Robertson, and Kirsten (SRK) prepared an evaluation of environmental risks and management options for the site entitled “Opinion of Technical and Economic Aspects of Waste Management, Bald Mountain Project.” The study describes the serious risks associated with Boliden’s plan to build a large open-pit mine at Bald Mountain—which is what Irving wants to do.

Here are some of the key conclusions of the SRK report:

1. The Bald Mountain ore deposit likely would generate large amounts of acid very rapidly.

The report states that:

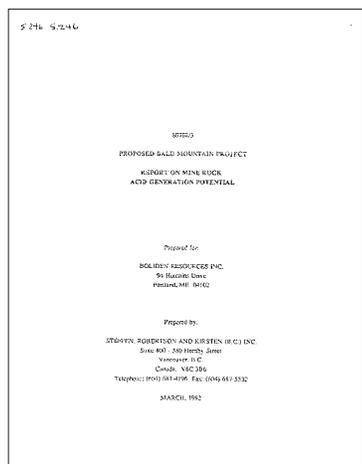
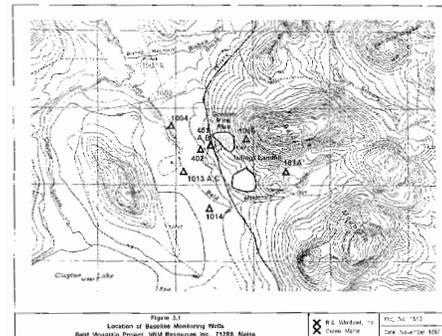
“Acid-base accounting tests performed on the mine rocks as part of this study have demonstrated that the 13 million tons of foot wall mine rock and 12 million tons of massive sulfide mine rock would be potentially highly acid generating.”¹⁰; and

“The massive sulfide rock contains up to 50% sulfur and exhibits a very high net acid generation potential. It would be necessary to place this material below water soon after the rock has been mined...”¹¹

Even rock with much lower sulfur content can form sulfuric acid and cause acid mine drainage. Fifty percent sulfur content is very high, and this greatly increases the risk of acid mine drainage polluting surrounding waters. Placing waste rock below water soon after mining is also not typical mining practice. Waste rock is typically stored in piles and eventually capped. However, the waste rock from the ore body at Bald Mountain is so reactive that it would start forming acid very quickly, according to Boliden’s consultants, so immediate underwater storage would be required to prevent large scale acid mine drainage. The SRK report also states:

The massive sulfide mine rock is expected to be potentially highly acid generating and will oxidize and release poor quality drainage within a period of months of mining if the oxidation process is allowed to proceed. The rate of acid generation would be minimized by placing the mine rock directly into the tailings impoundment so that it is submerged below water as soon as possible after it is mined. Careful preparation of a pad on the liner and controlled dump construction would be required to avoid damage to the liner.¹²

Again, this is an uncommon procedure that could add significant costs to the project.



Examples of documents in DEP’s files that it has not discussed publicly: Environmental Impact Report, Bald Mountain Project, Black Hawk Mining, Inc. (top); map of Black Hawk’s proposed “gossen cap” mine and associated monitoring wells (middle); proposed Bald Mountain Project, Report on Mine Rock Acid Generation Potential, Prepared for Boliden (bottom).

10 Steffan Robertson, and Kirsten (B.C.) Inc. 1990. Opinion of Technical and Economic Aspects of Waste Management, Bald Mountain Project. P. 5-7. Foot wall rock is rock from underneath the ore body.

11 Ibid., P. 5-8

12 Ibid., P. 6-14

Concerning the estimated 13-17 million tons of waste foot wall rock an open-pit mine would generate, SRK states the following:

Long term storage of this mine rock under water is essential in order to inhibit the acid generation process. The conceptual waste management plan incorporates stock piling of this mine rock during mining and then backfilling this to the open pit at mine closure...If no measures to control acid generation are implemented, it is anticipated that drainage emerging from the stockpile would develop high acidity and metal contents, based on the laboratory tests carried out to date and equivalent conditions at other mines. Temporary measures to inhibit the development of acid generation in the stockpile and/or to prevent or mitigate impact on receiving waters would be required during the period of mine operation.¹³

SRK goes on to recommend capping a large portion of the footwall waste rock pile during mining operations and possibly mixing it with lime while it is stockpiled. Again, this indicates the high reactivity of the Bald Mountain ore body and surrounding rock and the high risk of extensive acid mine drainage at this site. The fact that a mining consultant recommended back filling a substantial portion of the waste rock into the pit also reveals the risks inherent at Bald Mountain, as, typically, mining companies strongly oppose backfilling the pit because of the high cost.

2. The water quality impacts of an open-pit mine at Bald Mountain likely would be severe.

J.D. Irving, Ltd. President James Irving has expressed great confidence that his company can construct a large open-pit mine without harming the excellent water quality of the streams and ponds in the Bald Mountain area. He even said, "If I can't go and drink the water at the end of the pipe coming from the mine, we shouldn't be doing it."¹⁴ However, SRK's report states that damage to water quality from a pit mine at Bald Mountain is inevitable and a possible "fatal flaw" to such a mine:

The maintenance of water quality in the downstream surface waters of Bald Mountain Brook and Clayton Stream is a possible fatal flaw. During operations the quantity and quality of treated water discharge is sufficiently large that it will be difficult, with the dilution flows available, to prevent degradation of these streams to levels where their ecosystems are not deleteriously effected [sic]. Following decommissioning the release of untreated seepage from the tailings and (particularly) the pit will also result in reduced water quality...¹⁵

Based on a review of the available documents, there are several areas related to the mine water management and treatment systems which may result in a fatal flaw. It is not probable, based upon the current conditions, that either the surface water discharge or land application option are viable based upon the expected treatment cost and efficiency needed to achieve either background surface water quality or aquatic life criteria. In the case of a surface water discharge the available dilution is minimal, while in the case of land application the required surface area and storage volume



EASTERN BROOK TROUT (USFWS)

***What's at Stake:** Brook trout are very sensitive to acid and heavy metal pollution that open-pit mines cause. Aroostook County and the Bald Mountain area specifically are famous for their brook trout fishing, as described by Aroostook County Tourism: "Shady brooks, spring-fed ponds, and crystal clear streams are the perfect home for brook trout. And there's nothing like the feeling of gently laying out 30 feet of line right on the edge of the deep pool where you know they're waiting. Aroostook is one of the last strongholds in the northeastern United States for the native brook trout..."¹ Many people in the Bald Mountain area make their living by guiding fishermen or from revenue generated by stays at local inns and camps.*

1 Accessed at http://www.visitaroostook.com/things_to_do/outdoor_recreation_sports_adventure/fishing/brook_trout/

13 Ibid., P. 6-15

14 *Bangor Daily News*. May 3, 2012 <http://bangordailynews.com/2012/05/03/business/james-irving-addresses-maine-mining-interests-at-umfk-forum/>

15 Steffen Robertson, and Kirsten (B.C.) Inc. 1990. Opinion of Technical and Economic Aspects of Waste Management, Bald Mountain Project. Executive Summary PP. x-xi

are excessive. It is not probable that any conventional or advanced treatment process can achieve background water quality.¹⁶ [Emphasis added]

The last sentence of this excerpt is worthy of focused attention. Boliden's consultant is warning the company that neither conventional nor advanced treatment processes could restore polluted water from a Bald Mountain open-pit mine to pre-mining conditions.

3. The types of "advanced" water treatment technologies that Irving has said it would use are unlikely to work well at Bald Mountain.

Irving has touted the benefits of "new" technologies that will lessen the impact of mining pollution on water quality. In particular, Irving has mentioned reverse osmosis, a method of removing metals from water. SRK stated the following about reverse osmosis and ion exchange, another "advanced" method of metals removal:

These latter processes are not preferred due to expense, complexity, and the problems associated with brine or regeneration solutions. The side streams produced from these processes contain very high concentrations of dissolved constituents which can not [sic] be continuously disposed of in the tailings impoundment. A mine water treatment system based on the advanced processes is not practical or justifiable.¹⁷

Instead, SRK recommended that Boliden seek lower water quality standards for potential receiving waters around Bald Mountain so that they can discharge more heavily polluted wastewater.¹⁸ Lowering the water quality standards for high quality, Class A streams would be highly unusual in Maine, yet SRK warned Boliden that it would likely be impossible to get a permit for an open-pit mine without doing so. SRK's recommendation to seek lower water quality standards also foreshadowed Irving's push for L.D. 1853, which directed DEP to weaken environmental standards.

Black Hawk's Pursuit of a Smaller Open-Pit Mine (Late 1990s)

Boliden never went forward with an application to mine at Bald Mountain. In 1995, Black Hawk Mining purchased Boliden's mineral rights at Bald Mountain. In 1997, the company applied for a permit for a much smaller mining operation that would have targeted only the "gossan cap," which overlies the much larger massive sulfide ore body at Bald Mountain.¹⁹ Black Hawk estimated that the gossan cap contains only 1.2 million tons of ore, whereas the full sulfide ore body at Bald Mountain contains about 35 million tons of ore.²⁰ However, DEP staff that reviewed Black Hawk's permit application at the time believed that even this scaled-back proposal would cause unacceptable environmental risks.

In particular, DEP was concerned about arsenic levels in the gossan cap ore.²¹ DEP believed that disposal of the tailings, even from this much smaller proposed mine, would result in further degradation of groundwater quality in the vicinity of the site, which already has elevated arsenic levels. Specifically, DEP called attention to the following statement from Black Hawk:

Vat leach tailings, when deposited in the landfill, are predicted to release elevated arsenic levels during periods of active infiltration and seepage. Similarly, elevated concentrations of cyanide, copper, mercury, and silver are also expected during the initial flushing of residual metal-cyanide in interstitial waters. Overtime [sic], flushing and aeration through the pile is expected to result in reduced cyanide, copper, mercury and silver concentrations emanating in the seepage. Comparative reductions in arsenic concentrations overtime [sic] has [sic] not been observed."²²

In other words, test results showed that arsenic from even the greatly reduced volume of tailings in the scaled back Black Hawk proposal would significantly degrade water quality in the Bald Mountain area beyond the elevated levels of arsenic naturally occurring there.

¹⁶ Ibid., P. 8-6.

¹⁷ Ibid., P. 8-5

¹⁸ Ibid., P. 9-1

¹⁹ A gossan cap is weathered or oxidized rock overlying an ore body.

²⁰ NMM, Resources, Inc. 1997. Application for Mining. P. ii

²¹ Maine DEP. 1998. Letter from Mark Stebbins to James Hendry, Vice President, Black Hawk Mining, Inc. June 23.

²² NMM, Resources, Inc. 1997. Application for Mining. P. 84.

Geologist Who Discovered Bald Mountain Ore Deposit Warns Against Open-Pit Mine

The Boliden and Black Hawk assessments provided clear warnings about the risks and costs of either a large or small open-pit mine at Bald Mountain. DEP has these assessments in its files, but discussed none of them during deliberations on Irving's mining bill. However, J.S. Cummings, the geologist who discovered the Bald Mountain deposit, communicated similar concerns in letters to legislators during the past two legislative sessions. In a letter to Representative Jeff McCabe (D-Skowhegan), for example, J.S. Cummings stated:

Simply from the standpoint of extractable tonnage, an open pit mine at Bald Mountain presents potentially greater risks to the environment than the Callahan deposit. However, as noted in my letter to [Representative John] Martin, such risks are compounded by the fact that approximately 94% of the high-sulfide tonnage (i.e. 32 to 36,000,000 tons) would be relegated to the tailing pond as high-sulfide slurry.

As if the foregoing were not enough to cause concern as to an open-pit at Bald Mountain, there is the arsenic problem [emphasis in original]. Some articles in the press have mentioned high levels of arsenic in some waters at the Bald Mountain site. However, to my knowledge no one has informed the public or the legislature that the arsenic content of the sulphide mass is extremely anomalous [emphasis in original]. . . . *Assay data on a suite of ten massive sulfide intercepts showed arsenic (As) varying from 1258 ppm to 29,155 ppm (2.91%)* [italics in original]. Thus, the tens of millions of tons of high-sulphide slurry relegated to the tailings-pond would contain very high levels of arsenic. These extremely high arsenic contents are representative of the Bald Mountain mass and are far higher than massive sulphides in general. . . .²³

Mr. Cummings was even more emphatic about the dangers of an open-pit mine at Bald Mountain in a letter he wrote to Representative John Martin (D-Eagle Lake) in 2012:

It appears that if the Irving group proceeds and acquires the necessary permits, they intend to mine the hard-rock copper-zinc concentrations at Bald Mountain by means of a large open-pit. This scenario is a prescription for a debacle [emphasis in original], meaning either that the permits may never be granted, or if such are granted then undoubtedly there will be unwarranted environmental problems down the road.²⁴

During the 2012 and 2013 legislative deliberations on the mining issue, Senator Tom Saviello (R-Franklin) requested that State Geologist Robert Marvinney provide presentations about Maine's metallic mineral deposits to the Environment and Natural Resources Committee. Despite what J.S. Cummings said to lawmakers about the high arsenic content in the sulfide ore at Bald Mountain, Marvinney never raised this same concern. Rather, he focused simply on elevated arsenic concentrations in the baseline ground water and surface water data gathered for Boliden and Black Hawk. Unfortunately, this focus on arsenic in the water (and not the much bigger problem of extremely high arsenic concentrations in the ore) misled some lawmakers to believe that a mine at Bald Mountain might be fine since the water already has elevated arsenic levels. Such a conclusion invites much higher arsenic pollution if the ore body is explored and arsenic is released in acid mine drainage.

Based on what is known about Bald Mountain, the state geologist should have been telling lawmakers that the ore body is dangerous and that an open-pit mine there would likely cause enduring pollution to rivers, streams, and lakes throughout the area. That is what SRK concluded in its assessment to Boliden; it is what the DEP concluded in reviewing Black Hawk's application; and it is what J.S. Cummings felt compelled to say in correspondence to Maine lawmakers. The DEP and Maine Geological Survey have failed in not raising similar concerns.

23 J.S. Cummings letter to Representative Jeff McCabe. May 10, 2013. P. 1.

24 J.S. Cummings letter to Representative John Martin. September 7, 2012. P. 5.

CONCLUSIONS



Example of Acid Mine Drainage Costs and Impacts: *Acid mine drainage (AMD) at the Iron Mountain Mine near Redding, California, has caused extensive fish kills in the nearby rivers and streams¹. Cleanup costs at the Iron Mountain site are more than \$200 million to date². Scientists with the U.S. Geological Survey estimate that the Iron Mountain site will continue to produce AMD for 2,500 to 3,000 years³.*

Despite all of this evidence about the dangers of mining at Bald Mountain, DEP failed to present this information to lawmakers as they considered J.D. Irving's proposal to weaken Maine's mining rules. DEP leadership failed to allow its own technical experts to share information with lawmakers that would have helped them understand why Boliden abandoned its proposed Bald Mountain mine in the early 1990s. DEP also failed to explain to legislators how the inherent risks of the Bald Mountain ore body made even Black Hawk's proposal for a much smaller mine very risky.

DEP must also be aware, because it has the relevant documents, that J.D. Irving's claim that a mine at Bald Mountain would generate 700 "direct or indirect" jobs greatly exceeds the job estimates of either Boliden or Black Hawk. Boliden estimated only 80-130 jobs for a full-scale open-pit mine and Black Hawk estimated 75 jobs for its reduced proposal to mine the gossan cap. The discrepancies with J.D. Irving's claim are striking, and DEP should have shared this information with legislators.

Over the past two years, NRCM has urged Maine lawmakers to be aware that mining companies are notorious for glossing over the environmental impacts of their proposed mines and overpromising economic benefits.²⁵ Maine people and decision makers need accurate information to assess changes to Maine's mining regulations. DEP has information it should have brought forward, but didn't. As a result, Maine's decision makers are making critical decisions about the future of mining in Maine, and its potential impacts on the environment, without important information about the inherent dangers of the Bald Mountain ore deposit.

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- 1 USEPA. 2006. Abandoned Mine Lands Case Study: Iron Mountain Mine. Pp. 5-6. Accessed at <http://www.epa.gov/aml/tech/imm.pdf>. Pp. 5-6
 - 2 ITRC Mining Waste Team. Iron Mountain Mine Case Study. Accessed at http://www.itrcweb.org/miningwasteguidance/cs19_iron_mine.htm
 - 3 USEPA. 2006. Abandoned Mine Lands Case Study: Iron Mountain Mine. Pp. 5-6. Accessed at <http://www.epa.gov/aml/tech/imm.pdf>. Pp. 8-10.

²⁵ See "Predicting Water Quality Problems at Hardrock Mines: A Failure of Science, Oversight, and Good Practice," Maest and Kuipers; <http://www.earthworksaction.org/files/publications/PredictionsComparisonsWhitePaperFINAL.pdf>; and "A Mining Truth Report," Conservation Minnesota, Friends of the Boundary Waters Wilderness, and Minnesota Center for Environmental Advocacy; <http://miningtruth.org/faq-sulfide-mining-minnesota-truth-report.pdf>

APPENDIX: Arsenic Health Risks

Arsenic occurs naturally in the environment in both both organic (typically non-toxic) and inorganic forms. Inorganic arsenic is toxic and carcinogenic (cancer-causing). The high levels of arsenic in the Bald Mountain ore deposit are serious cause for concern, because arsenic extracted during the mining process could enter the environment and pose risks to public health and wildlife. Below are some excerpts about the risks from arsenic as described by the Agency for Toxic Substances and Disease Registry:

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs.

Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of “pins and needles” in hands and feet...

Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services (DHHS) and the EPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic arsenic is carcinogenic to humans...

There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores. There is also some evidence that exposure to arsenic in the womb and early childhood may increase mortality in young adults. There is some evidence that inhaled or ingested arsenic can injure pregnant women or their unborn babies, although the studies are not definitive. Studies in animals show that large doses of arsenic that cause illness in pregnant females, can also cause low birth weight, fetal malformations, and even fetal death. Arsenic can cross the placenta and has been found in fetal tissues. Arsenic is found at low levels in breast milk.

Source: Agency for Toxic Substances and Disease Registry; <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=19&tid=3>



**AROOSTOOK
RESOURCES**

December 2, 2013

Samantha Horn Olsen, Planning Manager
Marcia Spencer-Famous, Senior Planner
Land Use Planning Commission
22 State House Station
Augusta, ME 04333-0022

Re: Rebuttal Comments; Proposed Rule Amendment to the Commission's Chapter 13 for Certification of Advanced Exploration and Mining Permitted by DEP

Dear Samantha and Marcia:

Aroostook Resources, Inc. submits the following rebuttal comments to comments filed by the Appalachian Mountain Club (AMC), Maine Audubon (MA), Natural Resources Council of Maine (NRCM), and the Houlton Band of Maliseet Indians (HBMI). Because the comments of AMC, MA and NRCM are remarkably similar, we will address several of their comments jointly.

- Section 3.1 (Preamble). NRCM's first comment refers to "crossed-out language" that it claims clarifies what certification is and how it relates to the DEP's permitting process. Because the version of the proposed rule that is posted on the LUPC's website and that we reviewed has no "crossed-out language," it is difficult to know the language NRCM is referring to. We believe the preamble language of Section 3.1 of the proposed rule is consistent with the new Mining Act.
- Sections 3.4 and 3.7 (Notice of Intent to File and Hearings on Requests for Certification). The HBMI appear to be seeking notice to ensure historic and cultural resources of importance to the Tribe are identified and potential adverse impacts prevented. Aroostook Resources has no difficulty with the Tribe being noticed, consistent with the standard provisions of the Commission's rules, which are set forth in Section 4.04 and in the proposed Section 3 provisions, and the DEP's public notice requirements, which will be set forth in proposed Chapter 200.10. General public notice is required as is notice to abutters and others identified in the Commission's rules (when a hearing is to be held), but there is no specified special notice required for Maine's Indian Tribes. We also note that potential impacts on historic and cultural resources are the subject of DEP's review, and not the LUPC's. 38 MRS § 490-OO.4.B; proposed DEP Chapter 200. 11.A (approval criteria includes potential impact on existing uses, natural environment and natural resources) and 20. B (siting standards specifically consider historic sites).
- Section 3.10 (Comment Period Without Hearing). AMC, MA and NRCM all comment that the proposal to not have a 20-day comment period apply to the Commission's determination of whether to certify that the proposed mine is an "allowed use" in the subdistrict(s) for which it is proposed is somehow misguided. But this should be a completely objective

decision and one that should not involve opportunity for comment. Bear in mind that rezoning of a mine project to a D-PD will have already occurred after a public hearing process, long before the certification request is made. It should be very easy to determine whether the mine development is inside the D-PD zone or not and, thus, an allowed use. We also note that the proposed language in section 3.10 is consistent with how the Commission handles certifications of Site Law projects under Chapter 4.11(10), which provides, “This 20-day period shall not apply to the Commission’s determination of whether to certify that the proposed development is an allowed use within the subdistrict or subdistricts for which it is proposed.”

- Section 3.11 (Procedures and Time Limits for Issuing a Certification). AMC, MA and NRCM all comment that the requirement that copies of the staff recommendation be made available “at least 7 days” prior to the expected determination is not nearly enough. We disagree and note that the proposed provision in Section 3.11(A) is consistent with the Commission’s standard practice for other draft staff decisions. See, for example, Chapter 4.04(10)(E) (Time Limits for Issuing a Permit Decision) and Chapter 4.11(11)(D) (Time Limits for Issuing a Certification for a Site Law Project). We also note that a minimum of 5 working days is allowed for review of a DEP Staff (Commissioner) decision. 38 MRS § 344.4-A (A); DEP Chapter 2.18.
- Section 3.12 (Appeals). AMC, MA and NRCM protest the lack of a possibility of a public hearing on appeal, if no hearing were held during the course of the certification determination. Section 3.12 makes clear that an appeal of a certification determination is allowed in accordance with the provisions of Section 3.12(A) or (B). A public hearing is not required for an appeal of a certification decision and is rarely allowed in any appeal case. In the case of a mining project, any mining project in unorganized territory will have already been the subject of two mandatory public hearings before (i) the Land Use Planning Commission for rezoning and (ii) the DEP for the mining permit review process. The requirement for the possibility of a third public hearing on appeal of a certification decision would be excessive and contrary the intent of the new Mining Act, which is to modernize, consolidate and streamline the permitting process. The opportunity to appeal, submit written argument and offer oral argument in support of the appeal should be more than sufficient at this stage of the process. Note, however, that Section 3.12(B) should provide for the possibility of an appeal of a DEP mining permit decision (including the LUPC certification decision) to the Board of Environmental Protection, rather than directly to Superior Court, as allowed in 38 MRS § 341-D.4 and in DEP Chapter 2.24.
- Section 3.14 (Criteria for Approval of Certification of a Mining Permit). AMC, MA and NRCM all seek to have the Commission add Section 10.24(E) to the list of land use standards that a proposed mine project must meet for certification under Section 3.14. This suggestion, however, is contrary to the new Mining Act. Section 10.24(E) provides that, “The proposal is otherwise in conformance with this chapter and regulations, standards and plans adopted pursuant thereto.” In other words, with this suggestion, AMC, MA and NRCM would have the Commission reviewing all of the standards, regulations and plans on environmental and land use topics that the new Mining Act makes clear only DEP is authorized to review. PL 2011, c. 653, sec. 29.1 (“the Maine Land Use Regulation

Commission shall amend its rules relating to procedures and requirements for changes to land use subdistrict boundaries for metallic mineral mining activities to remove any provisions related to the permitting of metallic mineral mining activities regulated under the Maine Metallic Mineral Mining Act...the commission may only apply procedures and requirements necessary to review the rezoning and may not apply procedures and requirements related to environmental permitting regulated by the [DEP] under the Maine Metallic Mineral Mining Act”). (Emphasis added.) Moreover, revisions to LUPC’s statute made by PL 2011, c. 653 (the Mining Act) make clear that the Commission is only to certify “land use standards established by the Commission and applicable to the project that are not considered in the department’s review.” 12 MRS § 685-B(1-A), B-1 (emphasis added). As explained in our oral and written comments on these proposed rules, the DEP’s review is expansive and includes all areas and issues potentially impacting the natural environment. 38 MRS §§ 490-LL through 490-TT and proposed DEP Chapter 200. We also note that the certification process will be taking place simultaneously with, and will be incorporated into, the DEP mine application review process. All of the issues identified by NRCM, for example, will be addressed by the DEP during its review process. See 38 MRS § 490-OO.4.B (impact on natural environment, existing uses, scenic character, air quality, water quality and other natural resources), D (meet water quality standards), E (protection of surface waters) and G (adequate provision for utilities, including specifically water supplies). In sum, the Commission should reject the suggestion to add catchall Section 10.24(E) to the list of land use standards to be certified.

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With its comments, NRCM also submitted an “investigative report” and a “position paper” on open pit mining. NRCM has circulated these documents in other forums, especially to the press and legislators. These documents are not relevant to the LUPC certification rulemaking and we won’t take the time and effort to respond to them in this forum. Suffice it to say that Aroostook Resources is interested in having fair and balanced rules adopted that are consistent with the framework and provisions of the Maine Metallic Mineral Act enacted in 2012. Once those rules are in place, Aroostook Resources will decide, based on the rules and other relevant factors, whether to proceed with a mining project and what type of project it will be. It will not proceed unless it can do so in a way that is protective of Maine’s environment.

Thank you for this additional opportunity to comment on the proposed changes to Chapter 13.

Very truly yours,



Anthony Hourihan

cc: Nicholas D. Livesay, Esq., Executive Director, LUPC
Thomas R. Doyle, Esq.



Natural Resources Council of Maine
3 Wade Street • Augusta, Maine • 04330 • www.nrcm.org

Marcia Spencer-Famous
Land Use Planning Commission
22 State House Station
Augusta, ME 04333

December 2, 2013

Dear Marcia:

Thank you for the opportunity to respond to comments received on the proposed changes to Chapter 13 of the Land Use Planning Commission's (LUPC) rules regarding certification of advanced exploration and mining permitted by the Department of Environmental Protection (DEP). The Natural Resources Council of Maine has one rebuttal comment.

Aroostook Resources and their representative Tom Doyle of Pierce Atwood recommend either removing the references to Section 10.26(D)(2) (a) and (b), found in proposed subchapter 3, section 14, or replacing it with other language. Section 10.26(D)(2) (a) and (b) provide minimum setback standards for, among things, commercial and industrial structures from various surface waters. NRCM disagrees with Aroostook Resource, et al.'s assertion that the inclusion of these standards is duplicative of DEP's permit review. As Aroostook Resource points out in their comments, the Natural Resources Protection Act (NRPA, which governs surface water protection during DEP permit review) does not have setback standards. Furthermore, removing these standards could result in setbacks that are inconsistent with other structures in LUPC jurisdiction. NRCM recommends retaining these standards in the rule.

Sincerely,

Eliza Donoghue, Esq.
North Woods Policy Advocate & Outreach Coordinator.