August 26, 2020

Sent via Email (.pdf) and First Class Mail

Judy East, Director
Land Use Planning Commission
Department of Agriculture, Conservation and Forestry
22 State House Station
Augusta, Maine 04333-0022
judith.c.east@maine.gov

Re: Wolfden Mt. Chase LLC, Zoning Petition ZP779
Rezone to a Planned Development Subdistrict
T6 R6 WELS, Penobscot County
Pickett Mountain Metallic Mineral Mine

Dear Director East:

On behalf of Wolfden Mt. Chase LLC (“WMC”), this letter follows up on a question that Commissioner Hilton asked during the portion of the August 12, 2020 meeting of the Land Use Planning Commission (“LUPC”) that concerned the above-referenced rezoning petition. The question concerned whether LUPC staff were conducting their substantive review of the petition based materially on considerations that would be evaluated by the Maine Department of Environmental Protection (“MDEP”).

This is a topic that WMC has previously raised with LUPC staff. WMC believes LUPC staff’s response to Commissioner Hilton’s question on August 12 was incomplete and necessitates a holistic answer that should be (1) shared with the Commissioners and (2) addressed in a public meeting that is conducted well in advance of a hearing on the merits of WMC’s petition, as it goes to the procedural precedent that is being set by LUPC’s processing of the petition—to our knowledge, the first petition ever processed under the Commission’s Chapter 12 rules.

WMC also requests an opportunity to meet with you and representatives of the MDEP and Natural Resources Division of the Office of the Attorney General to discuss these issues.
LUPC staff’s ongoing review of WMC’s rezoning petition includes substantive evaluation of land use, resource and related considerations that have little or no actual definition in LUPC’s Chapter 12 rules or applicable Chapter 10 rules or the 2010 Comprehensive Land Use Plan. The same considerations, however, are addressed in exhaustive detail in MDEP’s new Chapter 200 rules. Without going into a discussion of each of these, and for purposes of illustration only, please consider staff’s plan, discussed during the August 12 meeting, to engage third-party contractors to evaluate the potential noise impacts of the proposed Pickett Mountain mine and the “technical feasibility and financial practicability” of the proposed mine:

- **Noise.** LUPC’s Chapter 12 rules do not mention noise. The Chapter 10 rules, at § 10.25(F)(1), include a standard-less provision on noise for Planned Development subdistricts; however, that provision applies to development permit applications, as opposed to Chapter 12 rezoning petitions. 01-672 C.M.R. Ch. 10, § 10.25. In contrast, MDEP’s Chapter 200 rules, at Subchapter 5 § 20(M), require MDEP to ensure that noise levels satisfy Chapter 375, § 10 of MDEP’s rules, which establish substantial and detailed noise standards for developments in relation to all potential receptors. These standards are copied herewith as Attachment 1 so that one can see the degree to which MDEP must ensure applicable noise standards are satisfied and all potential receptors are protected.

- **Technical Feasibility and Financial Practicability.** LUPC staff have suggested to WMC that their consideration of the “technical feasibility and financial practicability” of the proposed Pickett Mountain mine is justified by Chapter 10’s generally stated purpose at § 10.21(H)(1):

  The purpose of the D-PD subdistrict is to allow for large scale, well-planned development (Planned Development). The Commission’s intent is to consider Planned Development proposals . . . provided they can be shown to be of high quality and not detrimental to other values established in the Comprehensive Land Use Plan . . .

According to staff, “[a] project that is not technically feasible and financially practicable is not a well-planned or high-quality development.” ¹ This position was reiterated in staff’s response to Commissioner Hilton’s question on August 12. ²

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¹ LUPC staff’s June 30, 2020 e-mail to WMC.
Staff’s equation of a well-planned and high quality development with one that is “technically feasible and financially practicable” does not have clear foundation in Maine’s statutes, rules or case law. The Chapter 10 rules, where they apply to rezoning petitions, state, at § 10.21(H)(8)(a)(3), that the petition should demonstrate that the petitioner “has financial resources and support to achieve the proposed development.” However, § 10.21 (H)(8)(a)(3) does not apply to rezoning petitions for metallic mineral mining activity. 01-672 C.M.R. Ch. 10, § 10.21(H)(6)(b). In contrast, MDEP’s Chapter 200 rules speak directly, voluminously and with exquisite particularity to the technical feasibility and financial practicability of a proposed mine. In order to receive a mining permit from MDEP, WMC must provide, to MDEP’s satisfaction: (1) a detailed metallic mineral mining feasibility study, including, but not limited to, designs, plans and specifications, analyses, and schedules along with supporting data and information; and (2) evidence of financial capacity, including financial assurance and insurance, that covers all elements of the mine, from construction to operation, closure, post-closure and reclamation. The elements of the required feasibility study are exhaustive and are copied herewith as Attachment 2. The elements of the financial capacity demonstration are likewise exhaustive and are copied herewith as Attachment 3.

The Commission would be correct to conclude that a proposed mine that (1) must meet the standards of the Chapter 200 rules, to MDEP’s satisfaction, before mining can occur, and (2) would meet the standards of LUPC’s Chapter 12 and Chapter 10 rules that govern land use, resource and related considerations not addressed under the Chapter 200 rules, would be a mine that is “well-planned,” “of high quality,” and “not detrimental to other values established in the Comprehensive Land Use Plan.”

For the above reasons, it is questionable why LUPC staff would wish, in the context of WMC’s rezoning petition, to conduct a review (with the assistance of third-party contractors or otherwise) of the same subjects that MDEP would address under its Chapter 200 rules before any mining at Pickett Mountain can occur. WMC respectfully suggests that it would be poor public policy for the Commission to set a precedent of deciding Chapter 12 rezoning petitions based materially on (1) standards that are not applicable to rezoning petitions for metallic mineral mining activity and (2) standards that are not defined

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3 None of the rezoning petition and planned development requirements of § 10.21(H)(8) applies to rezoning petitions for metallic mineral mining activity. 01-672 C.M.R. Ch. 10, § 10.21 (H)(6)(b) (“Commission review of a zoning petition to establish a D-PD subdistrict for the purpose of metallic mineral mining activity is governed by Chapter 12 of the Commission’s rules, and not by Section 10.21,H,8.”).
with specificity in the Chapter 12 and Chapter 10 rules, when the same land use, resource and related considerations would be comprehensively addressed by MDEP under the exacting standards of the Chapter 200 rules. Again, to our knowledge, WMC’s rezoning petition is the first petition ever processed under LUPC’s Chapter 12 rules. The process that the Commission applies to deciding WMC’s rezoning petition will apply in the future to all Chapter 12 petitions.

Better public policy would be formed if the Commission were to defer to MDEP’s greater expertise regarding land use, resource and related considerations that are covered by the Chapter 200 rules, including those rules’ standards on the technical feasibility and financial practicability of the proposed metallic mineral mine, the technical capability and financial capacity of the mine operator, waste disposal at the mine, surface water quality considerations, groundwater quality considerations, and avoidance or mitigation of impacts on natural resources. The Commission could accomplish such deference by either excluding from LUPC’s evaluation the subjects addressed in the Chapter 200 rules or limiting LUPC’s evaluation on those subjects to the degree necessary to verify that relevant values established in the Comprehensive Land Use Plan would be adequately protected by MDEP’s application of the Chapter 200 rules. This approach would thereafter constitute the precedent that guides LUPC’s procedural process for all rezoning petitions that are filed under the Chapter 12 rules.

Animating the above recommendation is WMC’s goal that the Commission’s final decision on WMC’s rezoning petition be defensible on review:

1. Avoiding, in the context of a Chapter 12 petition, substantive evaluation of considerations—such as noise, technical feasibility and financial practicability—that are squarely and exhaustively addressed in the Chapter 200 rules would avoid materially inconsistent decision-making between the Commission and MDEP. It would also avoid a scenario in which the Commission’s decision-making hamstrings MDEP’s ability to enter determinations contrary to those made by LUPC staff concerning the same subjects.

2. Avoiding, in the context of a Chapter 12 petition, substantive evaluation of considerations that are squarely addressed in the Chapter 200 rules would also keep faith with 12 M.R.S. § 685-B(1-A)(B-2). That statute excludes from the scope of LUPC’s

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4 These subjects were addressed on page 2 of LUPC staff’s August 6, 2020 memorandum to the Commissioners and slide 8 of their PowerPoint presentation during the August 12 meeting.
Chapter 13 certifications to MDEP, for metallic mineral mines, subjects that are addressed in MDEP’s Chapter 200 rules. It would seem to make no sense, from the standpoint of statutory construction and honoring the Legislature’s intent, to consider, in the context of a Chapter 12 rezoning petition, subjects that would be statutorily excluded from the scope of the Commission’s Chapter 13 certification for the same project. Whereas, avoiding, in the context of a Chapter 12 rezoning petition, substantive evaluation of considerations addressed in the Chapter 200 rules would ensure that the exclusion in 12 M.R.S. § 685-B (1-A)(B-2) is not rendered effectively meaningless. See Conservation Law Found. v. Dep’t of Envtl. Prot., 2003 ME 62, ¶ 23 (“A particular statute is not reviewed in isolation but in the context of the statutory and regulatory scheme”); Irving Pulp & Paper, Ltd. v. State Tax Assessor, 2005 ME 96, ¶ 8 (“In interpreting the statute, we . . . must consider the language in the context of the whole statutory scheme and construe the statute to avoid absurd, illogical, or inconsistent results.”) (quotations omitted); cf. Sears, Roebuck & Co. v. State Tax Assessor, 2012 ME 110, ¶ 8 (“A statute should be interpreted to avoid surplusage, which occurs when a construction of one provision of a statute renders another provision . . . without meaning or force.”) (quotations omitted).

3. The Chapter 12 rules were adopted in 2013, at a time when the Chapter 200 rules were still four years away from being finalized. The fact that the Legislature rejected the initial drafts of the Chapter 200 rules and, in 2017, explicitly mandated many of the key provisions of the Chapter 200 rules before they were finalized, 2017 Me. SP 265 (Attachment 4), militates in favor of an approach to Chapter 12 petitions that defers to MDEP’s implementation of the Chapter 200 rules for land use, resource and related considerations that are covered by those rules.

WMC believes the above information and recommendation should be shared with the Commissioners and addressed in a public meeting that is conducted well in advance of a hearing on the merits of WMC’s petition. Addressing the issues raised in this letter in a deliberate manner, in a public meeting devoted to them, would result in better procedural policy-making than the current course of conduct on the petition. WMC also believes that it would be helpful to meet with you and representatives of the MDEP and Natural Resources Division of the Office of the Attorney General sometime during September to discuss these issues.

In the meantime, WMC continues to respond to LUPC staff’s questions and requests, as they arise, to assist your substantive review of the petition.
Land Use Planning Commission  
August 26, 2020  
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Sincerely,

George A. Tsiolis  
Attorney at Law  
for Wolfden Mt. Chase LLC

Attachments
1 – MDEP Chapter 375 Rules Governing Noise  
2 – MDEP Chapter 200 Rules Feasibility Study Requirements  
3 – MDEP Chapter 200 Rules Financial Capacity Requirements  
4 – 2017 Me. Laws 142 (June 7, 2017)

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August 26, 2020 Letter to Land Use Planning Commission

ATTACHMENT 1

MDEP Chapter 375 Rules Governing Noise
M. Noise. The Applicant and Permittee shall design, construct, operate and maintain the mining operation so as to prevent an unreasonable noise impact, and must meet the standards established by 06-096 C.M.R. ch. 375, §10.

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CHAPTER 375. NO ADVERSE ENVIRONMENTAL EFFECT STANDARDS

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Section 10. Control of Noise.

A. Preamble. The Department recognizes that the construction, operation and maintenance of developments may cause excessive noise that could degrade the health and welfare of nearby neighbors. It is the intent of the Department to require adequate provision for the control of excessive environmental noise from developments proposed after the effective date of this regulation.

B. Applicability

(1) This regulation applies to proposed developments within municipalities without a local quantifiable noise standard and in unorganized areas of the State. When a proposed development is located in a municipality which has duly enacted by ordinance an applicable quantifiable noise standard, which (1) contains limits that are not higher than the sound level limits contained in this regulation by more than 5 dBA, and (2) limits or addresses the various types of noises contained in this regulation or all the types of noises generated by the development, that local standard, rather than this regulation, shall be applied by the Department within that municipality for each of the types of sounds the ordinance regulates. This regulation applies to developments located within one municipality when the noise produced by the development is received in another municipality and, in these cases, the Department will also take into consideration the municipalities' quantifiable noise standards, if any.

(2) This regulation applies to expansions and modifications of developments when such expansions and modifications are proposed after the effective date of this regulation and subject to site location approval, but only to the noise produced by the proposed expansion or modification of the development, unless (1) the existing development was constructed since 1-1-70 and (2) at the time of construction, the existing development was too small to require site location approval. In situations where conditions (1) and (2) above apply, then this regulation applies to the whole development (both existing facility and proposed expansion or modification). This regulation also
applies to expansions and modifications of existing developments when such expansions and modifications require an amendment to the development's Site Law permit, but only to the noise produced by the expansion or modification.

(3) This regulation does not apply to existing developments or portions of existing developments constructed prior to 1-1-70 or approved under the Site Law prior to the effective date of this regulation. This regulation does not apply to relicensing of existing solid waste facilities previously approved under the Site Law.

(4) The sound level limits contained in this regulation apply only to areas that are defined as protected locations, and to property lines of the proposed development or contiguous property owned by the developer, whichever are farther from the proposed development's regulated sound sources.

(5) The sound level limits contained in this regulation do not apply to noise received within the development boundary.

NOTE: The Department will reconsider the effect and operation of the regulation one year from its effective date.

C. Sound Level Limits

(1) Sound From Routine Operation of Developments

(a) Except as noted in subsections (b) and (c) below, the hourly sound levels resulting from routine operation of the development and measured in accordance with the measurement procedures described in subsection H shall not exceed the following limits:

(i) At any property line of the development or contiguous property owned by the developer, whichever is farther from the proposed development's regulated sound sources: 75 dBA at any time of day.

(ii) At any protected location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is not predominantly commercial, transportation, or industrial:

60 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and

50 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime hourly limit").

(iii) At any protected location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is predominantly commercial, transportation, or industrial:

70 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and

60 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime hourly limit").

(iv) For the purpose of determining whether the use of an unzoned area is predominantly commercial, transportation, or industrial (e.g. non-residential in nature), the Department shall consider the municipality's comprehensive plan, if any. Furthermore, the usage of properties abutting each protected location shall be determined, and the limits applied for that protected location shall be based upon the usage occurring along the greater portion of the perimeter of that parcel; in the event the portions of the perimeter are equal in usage, the limits applied for that protected location shall be those for a protected location in an area for which the use is not predominantly commercial, transportation, or industrial.
When a proposed development is to be located in an area where the daytime pre-development ambient hourly sound level at a protected location is equal to or less than 45 dBA and/or the nighttime pre-development ambient hourly sound level at a protected location is equal to or less than 35 dBA, the hourly sound levels resulting from routine operation of the development and measured in accordance with the measurement procedures described in subsection H shall not exceed the following limits at that protected location:

55 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime hourly limit"), and
45 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime hourly limit").

For the purpose of determining whether a protected location has a daytime or nighttime pre-development ambient hourly sound level equal to or less than 45 dBA or 35 dBA, respectively, the developer may make sound level measurements in accordance with the procedures in subsection H or may estimate the sound-level based upon the population density and proximity to local highways. If the resident population within a circle of 3,000 feet radius around a protected location is greater than 300 persons, or the hourly sound level from highway traffic at a protected location is predicted to be greater than 45 dBA in the daytime or 35 dBA at night (as appropriate for the anticipated operating schedule of the development), then the developer may estimate the daytime or nighttime pre-development ambient hourly sound level to be greater than 45 dBA or 35 dBA, respectively.


Notwithstanding the above, the developer need not measure or estimate the pre-development ambient hourly sound levels at a protected location if he demonstrates, by estimate or example, that the hourly sound levels resulting from routine operation of the development will not exceed 50 dBA in the daytime or 40 dBA at night.

If the developer chooses to demonstrate by measurement that the daytime and/or nighttime pre-development ambient sound environment at any protected location near the development site exceeds the daytime and/or nighttime limits in subsection 1(a)(ii) or 1(a)(iii) by at least 5 dBA, then the daytime and/or nighttime limits shall be 5 dBA less than the measured daytime and/or nighttime pre-development ambient hourly sound level at the location of the measurement for the corresponding time period.

For any protected location near an existing development, the hourly sound level limit for routine operation of the existing development and all future expansions of that development shall be the applicable hourly sound level limit of 1(a) or 1(b) above, or, at the developer's election, the existing hourly sound level from routine operation of the existing development plus 3 dBA.

For the purposes of determining compliance with the above sound level limits, 5 dBA shall be added to the observed levels of any tonal sounds that result from routine operation of the development.

When routine operation of a development produces short duration repetitive sound, the following limits shall apply:

For short duration repetitive sounds, 5 dBA shall be added to the observed levels of the short duration repetitive sounds that result from routine operation of the development for the purposes of determining compliance with the above sound level limits.
(ii) For short duration repetitive sounds resulting from scrap metal, drop forge and metal fabrication operations or developments which the Department determines, due to their character and/or duration, are particularly annoying or pose a threat to the health and welfare of nearby neighbors, 5 dBA shall be added to the observed levels of the short duration repetitive sounds that result from routine operation of the development for the purposes of determining compliance with the above sound level limits, and the maximum sound level of the short duration repetitive sounds shall not exceed the following limits:

(a) At any protected location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is not predominantly commercial, transportation, or industrial:

65 dBA between 7:00 a.m. and 7:00 p.m., and
55 dBA between 7:00 p.m. and 7:00 a.m.

(b) At any protected location in an area for which the zoning, or, if unzoned, the existing use or use contemplated under a comprehensive plan, is predominantly commercial, transportation, or industrial:

75 dBA between 7:00 a.m. and 7:00 p.m., and
65 dBA between 7:00 p.m. and 7:00 a.m.

(c) The methodology described in subsection 1(a)(iv) shall be used to determine whether the use of an unzoned area is predominantly commercial, transportation, or industrial.

(d) If the developer chooses to demonstrate by measurement that the pre-development ambient hourly sound level at any protected location near the development site exceeds 60 dBA between 7:00 a.m. and 7:00 p.m., and/or 50 dBA between 7:00 p.m. and 7:00 a.m., then the maximum sound level limit for short duration repetitive sound shall be 5 dBA greater than the measured pre-development ambient hourly sound level at the location of the measurement for the corresponding time period.

(e) For any protected location near an existing development, the maximum sound level limit for short duration repetitive sound resulting from routine operation of the existing development and all future expansions and modifications of that development shall be the applicable maximum sound level limit of (e)(ii)(a) or (e)(ii)(b) above, or, at the developer's election, the existing maximum sound level of the short duration repetitive sound resulting from routine operation of the existing development plus 3 dBA.

NOTE: The maximum sound level of the short duration repetitive sound shall be measured using the fast response [LAFmax]. See the definition of maximum sound level.

(2) Sound From Construction of Developments

(a) The sound from construction activities between 7:00 p.m. and 7:00 a.m. is subject to the following limits:

(i) Sound from nighttime construction activities shall be subject to the nighttime routine operation sound level limits contained in subsections 1(a) and 1(b).
(ii) If construction activities are conducted concurrently with routine operation, then the combined total of construction and routine operation sound shall be subject to the nighttime routine operation sound level limits contained in subsections 1(a) and 1(b).

(iii) Higher levels of nighttime construction sound are permitted when a duly issued permit authorizing nighttime construction sound in excess of these limits has been granted by:

1. the local municipality when the duration of the nighttime construction activity is less than or equal to 90 days,
2. the local municipality and the Department when the duration of the nighttime construction activity is greater than 90 days.

(b) Sound from construction activities between 7:00 a.m. and 7:00 p.m. shall not exceed the following limits at any protected location: Display Table

(c) All equipment used in construction on development sites shall comply with applicable federal noise regulations and shall include environmental noise control devices in proper working condition, as originally provided with the equipment by its manufacturer.

(3) Sound From Maintenance Activities

(a) Sound from routine, ongoing maintenance activities shall be considered part of the routine operation of the development and the combined total of the routine maintenance and operation sound shall be subject to the routine operation sound level limits contained in subsection 1.

(b) Sound from occasional, major, scheduled overhaul activities shall be subject to the construction sound level limits contained in subsection 2. If overhaul activities are conducted concurrently with routine operation and/or construction activities, the combined total of the overhaul, routine operation and construction sound shall be subject to the construction sound level limits contained in subsection 2.

(4) Sound From Production Blasting

Sound exceeding the limits of subsection 1 and resulting from production blasting at a mine or quarry shall be limited as follows:

(a) Blasting shall not occur in the period between sundown and sunrise the following day or in the period between the hours of 7:00 p.m. and 7:00 a.m., whichever is greater. In addition, no routine production blasting shall be allowed in the daytime on Sundays.

(b) Blasting shall not occur more frequently than four times per day.

(c) Sound from blasting shall not exceed the following limits at any protected location: Display Table

Blast sound shall be measured in peak linear sound level (dBL) with a linear response down to 5 Hz. NOTE: See Bureau of Mines Report of Investigations 8485 for information on airblast sound levels and pertinent scaled distances.

(5) Exemptions

Sound associated with the following shall be exempt from regulation by the Department:
(a) Railroad equipment which is subject to federal noise regulations.
(b) Aircraft operations which are subject to federal noise regulations.
(c) Registered and inspected vehicles:
   (i) while operating on public ways, or
   (ii) which enter the development to make a delivery or pickup and which are moving, starting or stopping, but not when they are parked for over 60 minutes in the development.
(d) Watercraft while underway.
(e) Residential developments, except during construction of such developments.
(f) Bells, chimes and carillons.
(g) occasional sporting, cultural, religious or public events allowed by the local municipality where the only affected protected locations are contained within that municipality.
(h) The unamplified human voice and other sounds of natural origin.
(i) Firming, fishing and aquacultural activity.
(j) Forest management, harvesting and transportation activities.
(k) Making, maintaining and grooming snow where the only affected protected locations are contained within the general boundaries of a ski area development.
(l) Snow removal, landscaping and street sweeping activities.
(m) Emergency maintenance and repairs.
(n) Warning signals and alarms.
(o) Safety and protective devices installed in accordance with code requirements.
(p) Test operations of emergency equipment occurring in the daytime and no more frequently than once per week.
(q) Boiler start-up, testing and maintenance operations occurring no more frequently than once per month.
(r) Major concrete pours that must extend after 7:00 p.m., when started before 3:00 p.m.
(s) Sounds from a regulated development received at a protected location when the generator of the sound has been conveyed a noise easement for that location. This exemption shall only be for the specific noise, land and term covered by the easement.
(t) A force majeure event and other causes not reasonably within the control of the owners or operators of the development.

(6) Noise Abatement Structures

Noise abatement structures of a non-permanent nature in any one location for a duration of less than one year and erected for the sole purpose of noise control shall not be considered structures as defined in 38 M.R.S.A. subsection 482(6).
D. Submissions

(1) Developments with Minor Sound Impact

An applicant for a proposed development with minor sound impact may choose to file as part of the site location application a statement attesting to the minor nature of the anticipated sound impact of their development. An applicant proposing an expansion or modification of an existing development with minor sound impact may follow the same procedure as described above. For the purpose of this regulation, a development or an expansion or modification of an existing development with minor sound impact means a development where the developer demonstrates, by estimate or example, that the regulated sound from routine operation of the development will not exceed 5 dBA less than the applicable limits established under subsection C. It is the intent of this subsection that an applicant need not conduct sound level measurements to demonstrate that the development or an expansion or modification of an existing development will have a minor sound impact.

NOTE: Examples include subdivisions without structures, office buildings, storage buildings which will not normally be accessed at night, and golf courses.

(2) Other Developments

Technical information shall be submitted describing the applicant's plan and intent to make adequate provision for the control of sound. The applicant's plan shall contain information such as the following, when appropriate:

(a) Maps and descriptions of the land uses, local zoning and comprehensive plans for the area potentially affected by sounds from the development.

(b) A description of major sound sources, including tonal sound sources and sources of short duration repetitive sounds, associated with the construction, operation and maintenance of the proposed development, including their locations within the proposed development.

(c) A description of the daytime and nighttime hourly sound levels and, for short duration repetitive sounds, the maximum sound levels expected to be produced by these sound sources at protected locations near the proposed development.

(d) A description of the protected locations near the proposed development.

(e) A description of proposed major sound control measures, including their locations and expected performance.

(f) A comparison of the expected sound levels from the proposed development with the sound level limits of this regulation.

(g) A comparison of the expected sound levels from the proposed development with any quantifiable noise standards of the municipality in which the proposed development will be located and of any municipality which may be affected by the noise.

E. Terms and Conditions

The Department may, as a term or condition of approval, establish any reasonable requirement to ensure that the developer has made adequate provision for the control of noise from the development and to reduce the impact of noise on protected locations. Such conditions may include, but are not limited to, enclosing equipment or operations, imposing limits on hours of operation, or requiring the employment of specific design technologies, site design, modes of operation, or traffic patterns.
The sound level limits prescribed in this regulation shall not preclude the Department under Chapter 375.15 from requiring a developer to demonstrate that sound levels from a development will not unreasonably disturb wildlife or adversely affect wildlife populations. In addition, the sound level limits shall not preclude the Department, as a term or condition of approval, from requiring that lower sound level limits be met to ensure that the developer has made adequate provision for the protection of wildlife.

F. Variance From Sound Level Limits

The Department recognizes that there are certain developments or activities associated with development for which noise control measures are not reasonably available. Therefore, the Department may grant a variance from any of the sound level limits contained in this rule upon (1) a showing by the applicant that he or she has made a comprehensive assessment of the available technologies for the development and that the sound level limits cannot practicably be met with any of these available technologies, and (2) a finding by the Department that the proposed development will not have an unreasonable impact on protected locations. In addition, a variance may be granted by the Department if (1) a development is deemed necessary in the interest of national defense or public safety and the applicant has shown that the sound level limits cannot practicably be met without unduly limiting the development's intended function, and (2) a finding is made by the Department that the proposed development will not have an unreasonable impact on protected locations. The Department shall consider the request for a variance as part of the review of a completed Site Location of Development Law application. In granting a variance, the Department may, as a condition of approval, impose terms and conditions to ensure that no unreasonable sound impacts will occur.

G. Definitions

Terms used herein are defined below for the purpose of this noise regulation.

(1) AMBIENT SOUND: At a specified time, the all-encompassing sound associated with a given environment, being usually a composite of sounds from many sources at many directions, near and far, including the specific development of interest.

(2) CONSTRUCTION: Activity and operations associated with the development or expansion of a project or its site.

(3) EMERGENCY: An unforeseen combination of circumstances which calls for immediate action.

(4) EMERGENCY MAINTENANCE AND REPAIRS: Work done in response to an emergency.

(5) ENERGY SUM OF A SERIES OF LEVELS: Ten times the logarithm of the arithmetic sum of the antilogarithms of one-tenth of the levels. [Note: See Section H(4.2).]

(6) EXISTING DEVELOPMENT: A development constructed before 1-1-70 or a development approved under the Site Law prior to the effective date of this regulation or a proposed development for which the site location application is complete for processing on or before the effective date of this regulation. Any development with a site location approval which has been remanded to the Department by a court of competent jurisdiction for further proceedings relating to noise limits or noise levels prior to the effective date of these regulations shall not be
deemed an existing development and these regulations shall apply to the existing noise sources at that development.

(7) EXISTING HOURLY SOUND LEVEL: The hourly sound level resulting from routine operation of an existing development prior to the first expansion that is subject to this regulation.

(8) EQUIVALENT SOUND LEVEL: The level of the mean-square A-weighted sound pressure during a stated time period, or equivalently the level of the sound exposure during a stated time period divided by the duration of the period.

NOTE: For convenience, a one hour equivalent sound level should begin approximately on the hour.

(9) HISTORIC AREAS: Historic sites administered by the Bureau of Parks and Recreation of the Maine Department of Conservation, with the exception of the Arnold Trail.

(10) HOURLY SOUND LEVEL: The equivalent sound level for one hour measured or computed in accordance with this regulation.

(11) LOCALLY-DESIGNATED PASSIVE RECREATION AREA: Any site or area designated by a municipality for passive recreation that is open and maintained for public use and which:

(a) has fixed boundaries,
(b) is owned in fee simple by a municipality or is accessible by virtue of public easement,
(c) is identified and described in a local comprehensive plan, and
(d) has been identified and designated at least nine months prior to the filing of the applicant's Site Location of Development application.

(12) MAXIMUM SOUND LEVEL: Ten times the common logarithm of the square of the ratio of the maximum sound to the reference sound of 20 micropascals. Symbol: LAFmax.


(14) RESIDENCE: A building or structure, including manufactured housing, maintained for permanent or seasonal residential occupancy providing living, cooking and sleeping facilities and having permanent indoor or outdoor sanitary facilities, excluding recreational vehicles, tents and watercraft.

(15) PRE-DEVELOPMENT AMBIENT: The ambient sound at a specified location in the vicinity of a development site prior to the construction and operation of the proposed development or expansion.

(16) PROTECTED LOCATION: Any location, accessible by foot, on a parcel of land containing a residence or planned residence or approved residential subdivision, house of worship, academic school, college, library, duly licensed hospital or nursing home near the development site at the time a Site Location of Development application is submitted; or any location within a State Park, Baxter State Park, National Park, Historic Area, a nature preserve owned by the Maine or National Audubon Society or the Maine Chapter of the Nature Conservancy, The Appalachian Trail, the Moosehorn National Wildlife Refuge, federally-designated wilderness area, state wilderness area designated by statute (such as the Allagash Wilderness Waterway), or locally-
designated passive recreation area; or any location within consolidated public reserve lands designated by rule by the Bureau of Public Lands as a protected location.

At protected locations more than 500 feet from living and sleeping quarters within the above noted buildings or areas, the daytime hourly sound level limits shall apply regardless of the time of day.

Houses of worship, academic schools, libraries, State and National Parks without camping areas, Historic Areas, nature preserves, the Moosehorn National Wildlife Refuge, federally-designated wilderness areas without camping areas, state wilderness areas designated by statute without camping areas, and locally-designated passive recreation areas without camping areas are considered protected locations only during their regular hours of operation and the daytime hourly sound level limits shall apply regardless of the time of day.

Transient living accommodations are generally not considered protected locations; however, in certain special situations where it is determined by the Department that the health and welfare of the guests and/or the economic viability of the establishment will be unreasonably impacted, the Department may designate certain hotels, motels, campsites and duly licensed campgrounds as protected locations.

This term does not include buildings and structures located on leased camp lots, owned by the applicant, used for seasonal purposes.

For purposes of this definition, (1) a residence is considered planned when the owner of the parcel of land on which the residence is to be located has received all applicable building and land use permits and the time for beginning construction under such permits has not expired, and (2) a residential subdivision is considered approved when the developer has received all applicable land use permits for the subdivision and the time for beginning construction under such permits has not expired.

(17) QUANTIFIABLE NOISE STANDARD: A numerical limit governing noise from developments that has been duly enacted by ordinance by a local municipality.

(18) ROUTINE OPERATION: Regular and recurrent operation of regulated sound sources associated with the purpose of the development and operating on the development site.

(19) SHORT DURATION REPETITIVE SOUNDS: A sequence of repetitive sounds which occur more than once within an hour, each clearly discernible as an event and causing an increase in the sound level of at least 6 dBA on the fast meter response above the sound level observed immediately before and after the event, each typically less than ten seconds in duration, and which are inherent to the process or operation of the development and are foreseeable.

(20) SOUND COMPONENT: The measurable sound from an audibly identifiable source or group of sources.

(21) SOUND LEVEL: Ten times the common logarithm of the square of the ratio of the frequency-weighted and time-exponentially averaged sound pressure to the reference sound of 20 micropascals. For the purpose of this regulation, sound level measurements are obtained using the A-weighted frequency response and fast dynamic response of the measuring system, unless otherwise noted.

(22) SOUND PRESSURE: Root-mean-square of the instantaneous sound pressures in a stated frequency band and during a specified time interval. Unit: pascal (Pa).
(23) SOUND PRESSURE LEVEL: Ten times the common logarithm of the square of the ratio of the sound pressure to the reference sound pressure of 20 micropascals.

(24) TONAL SOUND: for the purpose of this regulation, a tonal sound exists if, at a protected location, the one-third octave band sound pressure level in the band containing the tonal sound exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies at or between 500 Hz and 10,000 Hz, by 8 dB for center frequencies at or between 160 and 400 Hz, and by 15 dB for center frequencies at or between 25 Hz and 125 Hz.

Additional acoustical terms used in work associated with this regulation shall be used in accordance with the following American National Standards Institute (ANSI) standards:


H. Measurement Procedures

(1) Scope. These procedures specify measurement criteria and methodology for use, with applications, compliance testing and enforcement. They provide methods for measuring the ambient sound and the sound from routine operation of the development, and define the information to be reported. The same methods shall be used for measuring the sound of construction, maintenance and production blasting activities. For measurement of the sound of production blasting activities for comparison with the limits of subsection C(4)(c), these same methods shall be used with the substitution of the linear sound level for the A-weighted sound level.

(2) Measurement Criteria

2.1 Measurement Personnel

Measurements shall be supervised by personnel who are well qualified by training and experience in measurement and evaluation of environmental sound, or by personnel trained to operate under a specific measurement plan approved by the Department.

2.2 Measurement Instrumentation

(a) A sound level meter or alternative sound level measurement system used shall meet all of the Type 1 or 2 performance requirements of American National Standard Specifications for Sound Level Meters, ANSI S1.4-1983.

(b) An integrating sound level meter (or measurement system) shall also meet the Type 1 or 2 performance requirements for integrating/averaging in the International Electrotechnical Commission Standard on Integrating-Averaging Sound Level Meters, IEC Publication 804 (1985).

(c) A filter for determining the existence of tonal sounds shall meet all the requirements of American National Standard Specification for Octave-Band and Fractional Octave-Band Analog and Digital Filters, ANSI S1.11-1986 for Order 3, Type 3-D performance.
(d) An acoustical calibrator shall be used of a type recommended by the manufacturer of the sound level meter and that meets the requirements of American National Standard Specification for Acoustical Calibrators, ANSI S1.40-1984.

(e) A microphone windscreen shall be used of a type recommended by the manufacturer of the sound level meter.

2.3 Calibration

(a) The sound level meter shall have been calibrated by a laboratory within 12 months of the measurement, and the microphone's response shall be traceable to the National Bureau of Standards.

(b) Field calibrations shall be recorded before and after each measurement period and at shorter intervals if recommended by the manufacturer.

2.4 Measurement Location, Configuration and Environment

(a) Except as noted in subsection (b) below, measurement locations shall be at nearby protected locations that are most likely affected by the sound from routine operation of the development.

(b) For determining compliance with the 75 dBA property line hourly sound level limit described in subsection C(1)(a)(i), measurement locations shall be selected at the property lines of the proposed development or contiguous property owned by the developer, as appropriate.

(c) The microphone shall be positioned at a height of approximately 4 to 5 feet above the ground, and oriented in accordance with the manufacturer's recommendations.

(d) Measurement locations should be selected so that no vertical reflective surface exceeding the microphone height is located within 30 feet. When this is not possible, the measurement location may be closer than 30 feet to the reflective surface, but under no circumstances shall it be closer than 6 feet.

(e) When possible, measurement locations should be at least 50 feet from any regulated sound source on the development.

(f) Measurement periods shall be avoided when the local wind speed exceeds 12 mph and/or precipitation would affect the measurement results.

2.5 Measurement Plans. Plans for measurement of pre-development ambient sound or post-development sound may be discussed with the Department staff.

(3) Measurement of Ambient Sound

3.1 Pre-Development Ambient Sound

Measurements of the pre-development ambient sound are required only when the developer elects to establish the sound level limit in accordance with subsections C(1)(b) and C(1)(e)(ii)(d) for a development in an area with high ambient sound levels, such as near highways, airports, or pre-existing developments; or when the developer elects to establish that the daytime and nighttime ambient hourly sound levels at representative protected locations exceed 45 dBA and 35 dBA, respectively.
(a) Measurements shall be made at representative protected locations for periods of time sufficient to adequately characterize the ambient sound. At a minimum, measurements shall be made on three different weekdays (Monday through Friday) during all hours that the development will operate. If the proposed development will operate on Saturdays and/or Sundays, measurements shall also be made during all hours that the development will operate.

(b) Measurement periods with particularly high ambient sounds, such as during holiday traffic activity, significant insect activity or high coastline waves, should generally be avoided.

(c) At any measurement location the daytime and nighttime ambient hourly sound level shall be computed by arithmetically averaging the daytime and nighttime values of the measured one hour equivalent sound levels. Multiple values, if they exist, for any specific hour on any specific day shall first be averaged before the computation described above.

3.2 Post-Development Ambient Sound

(a) Measurements of the post-development ambient one hour equivalent sound levels and, if short duration repetitive sounds are produced by the development, the maximum sound levels made at nearby protected locations and during representative routine operation of the development that are not greater than the applicable limits of subsection C clearly indicate compliance with those limits.

(b) Compliance with the limits of subsection C(1)(b) may also be demonstrated by showing that the post-development ambient hourly sound level, measured in accordance with the procedures of subsection 3.1 above during routine operation of the development, does not exceed the pre-development ambient hourly sound level by more than one decibel, and that the sound from routine operation of the development is not characterized by either tonal sounds or short duration repetitive sounds.

(c) Compliance with the limits of subsection C(1)(e)(ii)(d) may also be demonstrated by showing that the post development maximum sound level of any short duration repetitive sound, measured in accordance with the procedures of subsection 3.1 above, during routine operation of the development, does not exceed the pre-development ambient hourly sound level by more than five decibels.

(d) If any of the conditions in (a), (b) or (c) above are not met, compliance with respect to the applicable limits must be determined by measuring the sound from routine operation of the development in accordance with the procedures described in subsection 4.

(4) Measurement of the Sound from Routine Operation of Developments.

4.1 General

(a) Measurements of the sound from routine operation of developments are generally necessary only for specific compliance testing purposes in the event that community complaints result from operation of the development, for validation of an applicant’s calculated sound levels when requested by the Department, for determination of existing hourly sound levels for an existing development or for enforcement by the Department.

(b) Measurements shall be obtained during representative weather conditions when the development sound is most clearly noticeable. Preferable weather conditions for sound
measurements at distances greater than about 500 feet from the sound source include overcast
days when the measurement location is downwind of the development and inversion periods
(which most commonly occur at night).

(c) Measurements of the development sound shall be made so as to exclude the
contribution of sound from development equipment that is exempt from this regulation.

4.2 Measurement of the Sound Levels Resulting from Routine Operation of the
Development

(a) When the ambient sound levels are greater than the sound level limits, additional
measurements can be used to determine the hourly sound level that results from routine operation
of the development. These additional measurements may include diagnostic measurements such
as measurements made close to the development and extrapolated to the protected location,
special checkmark measurement techniques that include the separate identification of audible
sound sources, or the use of sound level meters with pause capabilities that allow the operator to
exclude non-development sounds.

(b) For the purposes of computing the hourly sound level resulting from routine
operation of the development, sample diagnostic measurements may be made to obtain the one
hour equivalent sound levels for each sound component.

(c) Identification of tonal sounds produced by the routine operation of a development
for the purpose of adding the 5 dBA penalty in accordance with subsection C(l)(d) requires aural
perception by the measurer, followed by use of one-third octave band spectrum analysis
instrumentation. If one or more of the sounds of routine operation of the development are found to
be tonal sounds, the hourly sound level component for tonal sounds shall be computed by adding
5 dBA to the one hour equivalent sound level for those sounds.

(d) Identification of short duration repetitive sounds produced by routine operation of
a development requires careful observations. For the sound to be classified as short duration
repetitive sound, the source(s) must be inherent to the process or operation of the development
and not the result of an unforeseeable occurrence. If one or more of the sounds of routine
operation of the development are found to be short duration repetitive sounds, the hourly sound
level component for short duration repetitive sounds shall be computed by adding 5 dBA to the one
hour equivalent sound level for those sounds. If required, the maximum sound levels of short
duration repetitive sounds shall be measured using the fast response [LAFmax]. The duration and
the frequency of occurrence of the events shall also be measured. In some cases, the sound
exposure levels of the events may be measured. The one hour equivalent sound level of a short
duration repetitive sound may be determined from measurements of the maximum sound level
during the events, the duration and frequency of occurrence of the events, and their sound
exposure levels.

(e) The daytime or nighttime hourly sound level resulting from routine operation of a
development is the energy sum of the hourly sound level components from the development,
including appropriate penalties, (see (c) and (d) above). If the energy sum does not exceed the
appropriate daytime or nighttime sound level limit, then the development is in compliance with that
sound level limit at that protected location.
(5) Reporting Sound Measurement Data. The sound measurement data report should include the following:

(a) The dates, days of the week and hours of the day when measurements were made.
(b) The wind direction and speed, temperature, humidity and sky condition.
(c) Identification of all measurement equipment by make, model and serial number.
(d) The most recent dates of laboratory calibration of sound level measuring equipment.
(e) The dates, times and results of all field calibrations during the measurements.
(f) The applicable sound level limits, together with the appropriate hourly sound levels and the measurement data from which they were computed, including data relevant to either tonal or short duration repetitive sounds.
(g) A sketch of the site, not necessarily to scale, orienting the development, the measurement locations, topographic features and relevant distances, and containing sufficient information for another investigator to repeat the measurements under similar conditions.
(h) A description of the sound from the development and the existing environment by character and location.

I. Sound Level Standards for Wind Energy Developments

(1) Applicability
This subsection applies to grid-scale wind energy developments as defined by 35-A M.R.S.A. §3451(6) and small-scale wind energy developments governed by 35-A M.R.S.A. §3456, hereinafter referred to as "wind energy developments." The provisions in Section 10(C)(1), 10(D)(2), 10(F), and 10(H) of this rule do not apply to wind energy developments.

(2) Sound Level Limits for Routine Operation of Wind Energy Developments
The sound levels resulting from routine operation of a wind energy development measured in accordance with the measurement procedures described in subsection I(8) shall not exceed the following limits:

(a) 75 dBA at any time of day at any property line of the wind energy development or contiguous property owned or controlled by the wind energy developer, whichever is farther from the proposed wind energy development's regulated sound sources; and

(b) 55 dBA between 7:00 a.m. and 7:00 p.m. (the "daytime limit"), and 42 dBA between 7:00 p.m. and 7:00 a.m. (the "nighttime limit") at any protected location.

(3) Tonal Sounds
For the purposes of this subsection, a tonal sound exists if, at a protected location, the 10 minute equivalent average one-third octave band sound pressure level in the band containing the tonal sound exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies at or between 500 Hz and 10,000 Hz, by 8 dB for center frequencies at or between 160 and 400 Hz, and by 15 dB for center frequencies at or between
25 Hz and 125 Hz. 5 dBA shall be added to any average 10 minute sound level (Leq A 10-min ) for which a tonal sound occurs that results from routine operation of the wind energy development.

(4) Short Duration Repetitive Sounds ("SDRS")

For the purposes of this subsection SDRS is defined as a sequence of repetitive sounds that occur within a 10-minute measurement interval, each clearly discernible as an event resulting from the development and causing an increase in the sound level of 5 dBA or greater on the fast meter response above the sound level observed immediately before and after the event, each typically 11 second in duration, and which are inherent to the process or operation of the development.

(a) When routine operation of a wind energy development produces short duration repetitive sound, a 5 dBA penalty shall be arithmetically added to each average 10-minute sound level (Leq A 10-min ) measurement interval in which greater than 5 SDRS events are present.

(5) Compliance with the Sound Level Limits

A wind energy development shall determine compliance with the sound level limits as set forth in subsection I(2) of this rule in accordance with the following:

(a) Sound level data shall be aggregated in 10-minute measurement intervals within a given compliance measurement period (daytime: 7:00 am to 7:00 pm or nighttime: 7:00 pm to 7:00 am) under the conditions set forth in subsection I(8) of this rule.

(b) Compliance will be demonstrated when the arithmetic average of the sound level of, at a minimum, twelve, 10-minute measurement intervals in a given compliance measurement period is less than or equal to the sound level limit set forth in subsection I(2).

(c) Alternatively, if a given compliance measurement period does not produce a minimum of twelve, 10-minute measurement intervals under the atmospheric and site conditions set forth in subsection I(8) of this rule, the wind energy development may combine six or more contiguous 10-minute measurement intervals from one 12 hour (7:00 am to 7:00 pm daytime or 7:00 pm to 7:00 am nighttime) compliance measurement period with six or more contiguous 10-minute intervals from another compliance measurement period. Compliance will be demonstrated when the arithmetic average of the combined 10-minute measurement intervals is less than or equal to the sound level limit set forth in subsection I(2).

(6) Variance from Sound Level Limits

A variance may be granted by the Department if: (1) a development is deemed necessary in the interest of national defense or public safety and the applicant has shown that the sound level limits cannot practicably be met without unduly limiting the development's intended function, and (2) a finding is made by the Department that the proposed development will not have an unreasonable impact on protected locations. The Department shall consider the request for a variance as part of the review of a completed Site Location of Development Law application or a request for certification for a small-scale wind energy development. In granting a variance, the Department may, as a condition of approval, impose terms and conditions to ensure that no unreasonable sound impacts will occur.

(7) Submissions

Technical information shall be submitted describing the wind energy developer's plan and intent to make adequate provision for the control of sound. The wind energy developer's plan shall contain the following:
(a) A map depicting the location of all proposed sound sources associated with the wind energy development, property boundaries for the proposed wind energy development, property boundaries of all adjacent properties within one mile of the proposed wind energy development, and the location of all protected locations located within one mile of the proposed wind energy development;

(b) A description of the major sound sources, including tonal sound sources and sources of short duration repetitive sounds, associated with the construction, operation and maintenance of the proposed wind energy development;

(c) A description of the equivalent noise levels expected to be produced by the sound sources at protected locations located within one mile of the proposed wind energy development. The description shall include a full-page isopleths map depicting the modeled decay rate of the predicted sound pressure levels expected to be produced by the wind energy development at each clearly identified protected location within one mile of the proposed wind energy development. The predictive model used to generate the equivalent noise levels expected to be produced by the sound sources shall be designed to represent the "predictable worst case" impact on adjacent properties and shall include, at a minimum, the following:

1. The maximum rated sound power output (IEC 61400-11) of the sound sources operating during nighttime stable atmospheric conditions with high wind shear above the boundary layer and consideration of other conditions that may affect in-flow airstream turbulence;

2. Attenuation due to geometric spreading, assuming that each turbine is modeled as a point source at hub height;

3. Attenuation due to air absorption;

4. Attenuation due to ground absorption/reflection;

5. Attenuation due to three dimensional terrain;

6. Attenuation due to forestation;

7. Attenuation due to meteorological factors such as but not limited to relative wind speed and direction (wind rose data), temperature/vertical profiles and relative humidity, sky conditions, and atmospheric profiles;

8. Inclusion of an "uncertainty factor" adjustment to the maximum rated output of the sound sources based on the manufacturer's recommendation; and

9. Inclusion, at the discretion of the Department, of an addition to the maximum rated output of the sound sources to account for uncertainties in the modeling of sound propagation for wind energy developments. This discretionary uncertainty factor of up to 3 dBA may be required by the Department based on the following conditions: inland or coastal location, the extent and specificity of credible evidence of meteorological operating conditions, and the extent of evaluation and/or prior specific experience for the proposed wind turbines. Subject to the Department's discretion based on the information available, there is a rebuttable presumption of an uncertainty factor of 2 to 3 dBA for coastal developments and of 0 to 2 dBA for inland developments.

(d) A description of the protected locations near the proposed wind energy development.
(e) A description of proposed major sound control measures, including their locations and expected performance.

(f) A comparison of the expected sound levels from the proposed development with the sound level limits of this regulation.

(g) A comparison of the expected sound levels from the proposed development with any quantifiable noise standards of the municipality in which the proposed development will be located and of any municipality which may be affected by the noise.

(h) A description and map identifying one or more compliance testing locations on or near the proposed wind energy development site. The identified compliance testing locations shall be selected to take advantage of prevailing downwind conditions and be able to meet the site selection criteria outlined in subsection I(8)(d)(2).

(i) A description of the compliance measurement protocol as required by subsection 8 below.

(j) A description of the complaint response protocol proposed for the wind energy development. The complaint response protocol shall adequately provide for, at a minimum:

1. A 24-hour contact for complaints;
2. A complaint log accessible by the Department;
3. For those complaints that include sufficient information to warrant an investigation, the protocol must provide for an analysis as set forth in (a) through (c) below. Sufficient information includes, at a minimum: the name and address of the complainant; the date, time and duration of the sound event; a description of the sound event, indoor or outdoor, specific location and a description of any audible sounds from other sources outside or inside the dwelling of the complainant. Analysis of the complaint by the licensee must include:

   (a) documentation of the location of the nearest turbines to the complaint location and ground conditions in the area of the complaint location;
   (b) weather conditions at the time of the complaint and surface and hub height wind speed and direction;
   (c) power output and direction of nearest turbines; and
   (d) notification of complaint findings to the Department and the complainant;

4. A plotting of complaint locations and key information on a project area map to evaluate complaints for a consistent pattern of site, operating and weather conditions; and

5. A comparison of these patterns to the compliance protocol to determine whether testing under additional site and operating conditions is necessary and, if so, a testing plan that addresses the locations and the conditions under which a pattern of complaints had occurred.
(8) Measurement Procedures

These procedures specify measurement criteria and methodology for use with wind energy
development applications, compliance and complaint response. They provide methods for
measuring the sound from operation of the wind energy development and set forth the information
to be reported.

(a) Measurement Criteria

1. Measurement Personnel

Measurements shall be supervised by personnel who are well qualified by training and
experience in measurement and evaluation of environmental sound, or by personnel trained to
operate under a specific measurement plan approved by the Department.

(b) Measurement Instrumentation

1. A sound level meter or alternative sound level measurement system used
shall meet all of the Type 0 or 1 performance requirements of American National Standard
Specifications for Sound Level Meters, ANSI S1.4.

2. An integrating sound level meter (or measurement system) shall also meet
the Type 0 or 1 performance requirements for integrating/averaging in the International
Electrotechnical Commission Standard on Integrating-Averaging Sound Level Meters, IEC
Publication 61672-1 and ANSI 1.43.

3. A filter for determining the existence of tonal sounds shall meet all the
requirements of the American National Standard Specification for Octave-Band and Fractional
Octave-Band Analog and Digital Filters, ANSI S1.11 and IEC 61260, Type 3-D performance.

4. The acoustical calibrator used shall be of a type recommended by the
manufacturer of the sound level meter and one that meets the requirements of American National

5. The microphone windscreen used shall be of a type recommended by the
manufacturer of the sound level meter.

6. Anemometer(s) used for surface (10 meter (m)) (32.8 feet) wind speeds
shall have a minimum manufacturer specified accuracy of 11 mph providing data in one second
integrations and 10 min. average/maximum values for the evaluation of atmospheric stability.

7. Audio recording devices shall be time stamped (hh:mm:ss) and at a
minimum 16 bit digital, recording the sound signal output from the measurement microphone at a
minimum sampling rate of 24 thousand (k) samples per second to be used for identifying events.
Audio recording and compliance data collection shall occur through the same microphone/sound
meter and bear the same time stamp.

(c) Equipment Calibration

1. The sound level meter shall have been calibrated by a laboratory within 12
months of the measurement, and the microphone's response shall be traceable to the National
Institute of Standards and Technology.

2. Field calibrations shall be recorded before and after each measurement
period and at shorter intervals if recommended by the manufacturer.
3. Anemometer(s) and vane(s) shall be calibrated annually by the manufacturer to maintain stated specification.

(d) Compliance Measurement Location, Configuration, and Environment

1. Compliance measurement locations shall be at nearby protected locations that are most likely affected by the sound from routine operation of the wind energy development subject to permission from the respective property owner(s).

2. To the greatest extent possible, compliance measurement locations shall be at the center of unobstructed areas that are maintained free of vegetation and other structures or material that is greater than 2 feet in height for a 75-foot radius around the sound and audio monitoring equipment.

3. To the greatest extent possible, meteorological measurement locations shall be at the center of open flat terrain, inclusive of grass and a few isolated obstacles less than 6 feet in height for a 250-foot radius around the anemometer location. The meteorological data measurement location need not be coincident with the sound and audio measurement location provided there is no greater than a 5 mile separation between the data collection points and the measurement locations have similar characterization, i.e. same side of the mountain ridge, etc.

4. Meteorological measurements of wind speed and direction shall be collected using anemometers at a 10-meter height (32.8 feet) above the ground. Results shall be reported, based on 1-second integration intervals, and shall be reported synchronously with hub level and sound level measurements at 10-minute measurement intervals. The wind speed average and maximum shall be reported.

5. The sound microphone shall be positioned at a height of approximately 4 to 5 feet above the ground, and oriented in accordance with the manufacturer’s recommendations.

6. When possible, measurement locations should be at least 50 feet from any sound source other than the wind energy development's power generating sources.

(e) Compliance Data Collection, Measurement and Retention Procedures

1. Measurements of operational, sound, audio and meteorological data shall occur as set forth in subsection I(8)(e)(7 through 10).

2. All operational, sound and meteorological data collected shall be retained by the wind energy development for a period of 1 year from the date of collection and is subject to inspection by the Department and submission to the Department upon request.

3. All audio data collected shall be retained by the wind energy development for a period of four weeks from the date of collection unless subject to a complaint filed in accordance with the complaint protocol approved by the Department and is subject to inspection by the Department and submission to the Department upon request. Specific audio data collected that coincides with a complaint filed in accordance with the approved complaint protocol shall be retained by the wind energy developer for a period of 1 year from the date of collection and is subject to inspection by the Department and submission to the Department upon request.

4. Written notification of the intent to collect compliance data must be received by the Department prior to the collection of any sound level data for compliance purposes. The notification shall state the date and time of the compliance measurement period.
Note: Notice received via electronic mail is sufficient regardless of whether it is received during business hours.

5. Compliance data from the operation of a wind energy development shall be submitted to the Department, at a minimum:
   (a) Once during the first year of facility operation;
   (b) Once during each successive fifth year thereafter until the facility is decommissioned;
   (c) In response to a complaint regarding operation of the wind energy development as set forth in subsection 1(7)(j) of the rule and any subsequent enforcement by the Department; and
   (d) For validation of an applicant's calculated sound levels when requested by the Department.

6. All sound level, audio and meteorological data collected during a compliance measurement period for which the Department has been notified that meets or exceeds the specified wind speed parameters shall be submitted to the Department for review and approval. All data submittals shall be submitted to the Department within 30 days of notification of intent to collect compliance data.

7. Measurement shall be obtained during weather conditions when the wind turbine sound is most clearly noticeable, generally when the measurement location is downwind of the wind energy development and maximum surface wind speeds < 6 miles per hour (mph) with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the nearest wind turbines to the measurement location. A downwind location is defined as within 45 ° of the direction between a specific measurement location and the acoustic center of the five nearest wind turbines.
   [Note: These conditions typically occur during inversion periods usually between 11 pm and 5 am.]

8. In some circumstances, it may not be feasible to meet the wind speed and operations criteria due to terrain features or limited elevation change between the wind turbines and monitoring locations. In these cases, measurement periods are acceptable if the following conditions are met:
   (a) The difference between the L A90 and L A10 during any 10-minute period is less than 5 dBA; and
   (b) The surface wind speed (10 meter height) (32.8 feet) is 6 mph or less for 80% of the measurement period and does not exceed 10 mph at any time, or the turbines are shut down during the monitoring period and the difference in the observed L A50 after shut down is equal to or greater than 6 dBA; and
   (c) Observer logs or recorded sound files clearly indicate the dominance of wind turbine(s).

9. Measurement intervals affected by increased biological activities, leaf rustling, traffic, high water flow, aircraft flyovers or other extraneous ambient noise sources that affect the ability to demonstrate compliance shall be excluded from all compliance report data. The intent is to obtain 10-minute measurement intervals that entirely meet the specific criteria.
10. Measurements of the wind energy development sound shall be made so as to exclude the contribution of sound from other development equipment that is exempt from this regulation.

(f) Reporting of Compliance Measurement Data

Compliance Reports shall be submitted to the Department within 30 days of notification of intent to collect compliance data or upon request by the Department and shall include, at a minimum, the following:

1. A narrative description of the sound from the wind energy development for the compliance measurement period result;
2. The dates, days of the week and hours of the day when measurements were made;
3. The wind direction and speed, temperature, humidity and sky condition;
4. Identification of all measurement equipment by make, model and serial number;
5. All meteorological, sound, windscreen and audio instrumentation specifications and calibrations;
6. All A-weighted equivalent sound levels for each 10-minute measurement interval;
7. All L A10 and L A90 percentile levels;
8. All 10 minute 1/3 octave band linear equivalent sound levels (dB);
9. All short duration repetitive events characterized by event amplitude. Amplitude is defined as the peak event amplitude minus the average minima sound level immediately before and after the event, as measured at an interval of 50 milliseconds (“ms”) or less, A-weighted and fast time response, i.e. 125 ms. For each 10-minute measurement interval short duration repetitive sound events shall be reported by number for each observed amplitude integer above 5 dBA.
10. Audio recording devices shall be time stamped (hh:mm:ss) and at a minimum 16 bit digital, recording the sound signal output from the measurement microphone at a minimum sampling rate of 24 thousand (k) samples per second to be used for identifying events. Audio recording and compliance data collection shall occur through the same microphone/sound meter and bear the same time stamp. Should any sound data collection be observed by a trained attendant, the attendant's notes and observations may be substituted for the audio files during the compliance measurement period;
11. All concurrent time stamped turbine operational data including the date, time and duration of any noise reduction operation or other interruptions in operations if present; and
12. All other information determined necessary by the Department.

* * * *
August 26, 2020 Letter to Land Use Planning Commission

ATTACHMENT 2

MDEP Chapter 200 Rules Feasibility Study Requirements
D. Mining Operation Plan. A mining operation plan shall be included as part of the application. The mining operation plan shall provide a detailed metallic mineral mining feasibility study including, but not limited to, designs, plans and specifications, analyses, and schedules along with supporting data and information, as applicable, of the following:

(1) Type and method of metallic mineral mining proposed, and the expected operating life of the mine, including a mining and production schedule;

(2) Area, volume, type, and mineralogy of ore to be excavated, and schedule of metallic mineral mining and stockpiling of ore;

(3) Area, volume, and characteristics of topsoil, overburden, lean ore, ore, and waste rock to be excavated, including plans and schedules for excavating, segregating, processing, storing, and stabilizing these materials. All mine waste must be characterized according to their potential to generate acid rock drainage or otherwise discharge contaminants to the environment, and plans for excavation, segregation, processing, storage, and stabilization of each type of material must specifically address the nature of the material identified by this characterization;

(4) Locations, designs, schedules of development, proposed use, and dimensions of stockpiles;

(5) Location, extent, depth, dimensions, and elevation contours of excavations, underground mine openings and workings, shafts, portals, and other openings to the land surface, including a schedule of development;

(6) Locations, dimensions, and proposed use of buildings, facilities, and structures including those used for storage and transfer of chemicals, and location, dimensions, and proposed use of fuel and explosives storage, washdown, and maintenance areas;

(7) Transportation plan, including off-site ore concentrate or metallic product hauling;

(8) Plan for providing necessary general infrastructure requirements to the mining operation including electrical power requirements, water, wastewater, and
general solid waste disposal, and access roads for transportation of equipment, materials, and labor required for the mining and restoration operation. This plan shall include details on the addition of the mining operation to existing civil infrastructures within the metallic mineral mining and affected areas;

(9) Beneficiation plan describing type, methods, extent and sequences, as well as associated materials, reagents, wastes, products, equipment, and processes;

(10) Tailings management plan, including a description of the quantity, method, location, sequence, and schedule;

(11) Water management plan for storm water, surface water, groundwater, potable water, and process water describing:

(a) Withdrawal sources, quantities, rates, and duration of use;

(b) Expected hydrologic impacts on water supply sources, groundwater, wetlands, and other surface water resources;

(c) Purpose, location, size, capacities, design, operating procedures of all ponds, impoundments, dewatering systems, diversions, and other water control structures and treatment facilities;

(d) Location and estimated volumes, rates, quality, and duration of discharges; and

(e) Anticipated wastewater treatment methodology, design, and procedures;

NOTE: For some activities in, on, over or adjacent to a wetland or waterbody, a permit under the Natural Resources Protection Act may be required. See 38 M.R.S. §480-B and the Department’s Wetlands and Waterbodies Protection rule, 06-096 C.M.R. ch. 310. Any discharge to the Waters of the State requires a permit pursuant to 38 M.R.S. §413.

(12) Waste management plan including descriptions by waste stream type, source, anticipated volumes, characteristics, provisions for minimization, treatment, on-site storage, containment, management, transportation, and disposal endpoints. Waste management plans shall not include perpetual treatment methodologies; and

(13) Dust management plan for the control of dust and other fugitive emissions.

*   *   *   *

F. Quality Assurance Plan (QAP). A QAP must be established and included as part of the application to assure that design specifications and performance requirements for all mining operations are met during construction, operation, reclamation, and closure. The QAP must include, but is not limited to, the following:

(1) A description of the Construction Quality Assurance (CQA) measures to be implemented;
(2) A description of the relationship between the QAP, construction quality control, and the construction contract bid documents. The construction contract bid documents must also clearly define this relationship;

(3) A description of the extent and scope of the responsibility and authority of organizations and/or personnel involved in permitting, designing, constructing, and certifying construction, operation, reclamation and closure of the mining operation. This must also include a description of a construction problem resolution process that incorporates the roles and responsibilities of all parties, including the Applicant/Permittee, CQA personnel, contractors, and the Department;

(4) The required qualifications of the CQA personnel and testing laboratories. Personnel qualifications must include recognized industry certifications where available and applicable. Testing laboratories must be certified by the appropriate state and national accreditation programs for the tests to be performed;

(5) The inspections and tests to be performed to ensure that the mining operation conforms to the requirements of the mining permit, this Chapter and the Act;

(6) The sampling activities, sample size, methods for determining sample locations, frequency of sampling, acceptance and rejection criteria, and methods for ensuring that corrective measures are implemented;

(7) Record keeping and reporting requirements for CQA and inspection activities;

(8) A list and description of all items requiring CQA certifications, including identification of the engineer(s) responsible for these certifications; and

(9) A description of the process for evaluating CQA and inspector performance, and for terminating CQA personnel and inspectors, including notification to the Department.

* * * *
August 26, 2020 Letter to Land Use Planning Commission

ATTACHMENT 3

MDEP Chapter 200 Rules Financial Capacity Requirements
Chapter 200. METALLIC MINERAL EXPLORATION, ADVANCED EXPLORATION AND MINING
SUBCHAPTER 4: FINANCIAL ASSURANCE AND INSURANCE
Section 17. Financial Assurance and Insurance Requirements

A. Requirements. Financial assurance and insurance is required for all advanced exploration and mining activities and must be posted and fully funded prior to the issuance of a mining permit.

(1) The Permittee shall continuously maintain financial assurance, as a condition of the mining permit, until the Department determines that all reclamation, closure, post-closure maintenance and monitoring, and corrective actions have been completed.

(2) The Permittee shall be required to maintain financial assurance for as long as the Department determines that the mining operation and any associated waste material could create an unreasonable threat to public health and safety or the environment.

(3) Financial assurance must be available and made payable to the Department when requested by the Department.

(4) Financial assurance may not be canceled by the Permittee unless it is replaced by alternative mechanisms in the appropriate amount and with the express written consent of the Commissioner after 30 days public notice in a paper of statewide coverage.

(5) Financial assurance must be fully valid, binding, and enforceable under state and federal law.

(6) All financial assurances obtained under this Chapter must be in a form such that it would not be subject to discharge under any and all provisions of the Bankruptcy Reform Act of 1978, as amended by the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23, 11 U.S.C. §101 et seq. (as may be further amended from time to time) (the "United States Bankruptcy Code") and must be in a form such that it will not be considered property of the bankruptcy estate under any and all provisions of the United States Bankruptcy Code in the event that a bankruptcy petition is filed by or against the Permittee.

(7) All forms of financial assurance and terms and conditions of financial assurances must be approved by the Department and must be analyzed by individuals with documented experience in material handling and construction, mining costs, and financial analysis. If the Department does not have adequate in-house expertise, the Department shall hire third-parties with documented experience in material handling and
construction, mining costs, risk analysis, and financial analysis to analyze and evaluate the proposed terms and conditions of financial assurance required for the Applicant or Permittee. The individuals and company hired to perform this function shall have no conflict of interest with the applicant, related persons, applicant's consultants, attorneys or any of their employees. All costs of the third-party evaluation must be paid by the Applicant pursuant to 38 M.R.S. §352(4-A).

(8) Failure of financial providers. The financial assurance shall provide a mechanism for a bank or guarantor to give prompt notice by certified mail to the Department and the Permittee of any administrative or judicial action filed or initiated alleging the insolvency or bankruptcy of the bank or the Permittee, or alleging any violations which could result in suspension or revocation of the bank charter or license to do business.

(9) Upon incapacity of a bank or guarantor by reason of bankruptcy, insolvency, suspension or revocation of charter or license for any other reason, the Permittee shall be deemed to be without financial assurance coverage and shall cease mining and immediately begin to conduct reclamation, closure, post-closure maintenance and monitoring, and corrective actions measures in accordance with the mine plan. The Department may, for good cause shown, grant up to two 30-day extensions prior to the initiation of reclamation and closeout measures. Mining operations shall not resume until the Department has determined that an acceptable replacement financial assurance has been provided.

(10) Advance notice

(a) The Permittee shall notify the Department within 30 days thereof if its and/or its parent company's credit rating falls below investment grade as determined by Moody's Investor Services, Standard & Poor, or other comparable ratings service.

(b) If the Permittee's and/or its parent company's credit rating falls below investment grade, within 30 days of such determination the Permittee shall secure an irrevocable standby letter of credit in an amount and form approved by the Commissioner.

(c) The Permittee shall notify the Department of the availability on line of quarterly financial statements (filed by it and/or its parent company) within 30 days of when such statements are filed with the United States Securities and Exchange Commission (SEC). If quarterly financial statements become unavailable on line, the Permittee shall submit these statements in writing to the Department within 30 days of when such statements are filed with the SEC.

B. Coverage of Financial Assurance

(1) Financial assurance under this section applies to mining, including advanced exploration, and reclamation operations that are subject to a mining permit. The amount of financial assurance must be sufficient to cover the cost for the Department to administer, and hire a 3rd-party to implement all necessary investigation, monitoring,
closure, post-closure, treatment, remediation, corrective action, reclamation, operation and maintenance activities under the environmental protection, reclamation and closure plan, including, but not limited to:

(a) The cost to investigate all possible releases of contaminants at the site, monitor all aspects of the mining operation, close the mining operation in accordance with the closure plan, conduct treatment activities of all expected fluids and wastes generated by the mining operation for a minimum of 100 years, implement remedial activities for all possible releases and maintenance of structures and waste units as if these units have released contaminants to the groundwater and surface water, conduct corrective actions for potential environmental impacts to groundwater and surface water resources as identified in the environmental impact assessment and conduct all other necessary activities at the mine site in accordance with the environmental protection, reclamation and closure plan; and

(b) The cost to respond to a worst-case catastrophic mining event or failure, including, but not limited to, the cost of restoring, repairing and remediating any damage to public facilities or services, to private property or to the environment resulting from the event or failure.

(2) An Applicant for a mining permit must include with its application a review of the proposed financial assurance amounts required under 38 M.R.S. §490-RR(2) and this Chapter as performed by a qualified, independent 3rd-party reviewer approved by the Department. The costs of the 3rd-party reviewer must be paid by the Applicant. Estimates of the costs of a worst-case catastrophic mining event or failure under subsection 17(B)(1)(b) provided by the applicant may not include costs to the applicant associated with the loss of use of any mining operation or facility or the costs of repairing any damaged mining operation or facility to restore operations or other functions.

(3) The Applicant or Permittee must provide detailed documentation of the estimated cost to implement the activities in the mine plan and the provisions of subsection 9(I)(5) of this Chapter with the application for permit, in the corrective action plan, and in other submittals as follows:

(a) Cost estimates must be in current United States dollar value;

(b) No salvage value attributed to the sale of products, wastes, facility structures, equipment, land or other assets may be used for estimating purposes; and

(c) Cost estimates must be re-evaluated and updated at any time that the Department requires a corrective action, a change to the mining permit or changes to the cost estimates, and the financial assurance amount must be adjusted accordingly within 30 days of the filing of a new or modified corrective action plan, mine plan or when the permit or cost estimates are changed.

(4) The Applicant or Permittee must provide financial assurance in the amount determined by the 3rd-party reviewer under subsection 17(B)(2) to be sufficient for the
Department to conduct all activities listed under subsection 17(B)(1). Financial assurance estimates provided by the Applicant and reviewed by the 3rd-party reviewer under this section must use the highest cost option for all estimates, include a minimum 20% contingency to account for unexpected expenses, assume that all activities are to be completed concurrently, and base cost estimates on the maximum permitted quantities and volumes.

(5) The financial assurance must be updated annually and adjusted using the implicit price deflator for gross national product as published by the United States Department of Commerce, Survey of Current Business, and must be submitted to the Department on or before March 15 of each year. The financial assurance shall not be adjusted downward in the event of a negative implicit price deflator.

(6) The financial assurance must not include funds from the Maine Mining Oversight Fund as established at 36 M.R.S. §2866.

(7) Without limitation, changes in the financial assurance may be required due to modifications of the permit, changed financial or site conditions, technology changes, inflation, anticipated changes in mining activity and waste unit utilization, or changes in requirements for closure, post-closure maintenance, corrective action or reclamation. The Permittee shall annually report to the Department, subject to the Department's approval, an estimate of cost changes as provided in this Chapter on or before March 15. The permit remains in effect only if all required deposits or increases are made within 30 days of the due date provided in this rule. The obligation to make deposits or increases ceases only upon approval from the Department.

C. Allowable Forms of Financial Assurance. The financial assurance must consist of a trust fund that is secured with any of the following forms of negotiable property, or a combination thereof as approved by the Department:

(1) A cash account in one or more federally insured accounts;

(2) Negotiable bonds issued by the United States, a state or municipality having a Standard and Poor's credit rating of AAA or AA, or an equivalent rating from a national securities rating service; or

(3) Negotiable certificates of deposit in one or more federally insured depositories.

The financial assurance must be in a form that cannot be canceled, withdrawn, revoked, or otherwise reduced without the express written consent of the Department.

D. General Terms and Conditions of Financial Assurance

(1) Trust fund requirements. The Permittee must deposit the required financial assurance in a trust fund prior to the issuance of a mining permit. The trust fund must be fully funded with one or more of the instruments identified in subsection 17(C) above.

(a) The Department shall be a party to the trust agreement as beneficiary and shall have the right to withdraw and use part or all of the funds in the trust fund or to
require the liquidation of the assets of the trust fund, at its sole discretion, to carry out the Act requirements including all associated regulations, permit, and other requirements as the Department determines necessary. The trust agreement must provide that there shall be no withdrawals from the trust fund except as authorized in writing by the Department.

(b) The trust fund must not constitute an asset of the trustee or Permittee, and must be established in such a manner so as to ensure the funds in the account will be available to the Department and not any creditor, including in the event of bankruptcy or reorganization of the trustee or Permittee. The Permittee shall pay all costs of managing the fund and compensating the trustee.

(c) The trustee must not invest assets of the trust fund in any real estate or real estate investment trust, any contract for the future sale or delivery of commodities or foreign currency, any state, municipal or corporate bond, or any other equity instrument or security, except that assets of the trust fund may be invested in securities issued by the United States Treasury.

(d) The trustee shall notify the Department immediately in the event that any payment from the Permittee is not remitted by the due date.

(e) The trustee shall submit to the Department an annual statement of deposits, letters of credit, investments, and any income and principal in the trust fund, and changes in the same over the prior year.

(f) The financial institution serving as a trustee is subject to Department approval and is limited to the following:

(i) A bank or trust company chartered by the State of Maine;

(ii) A national bank chartered by the Office of the Comptroller of Currency; or

(iii) An operating subsidiary of a national bank chartered by the Office of the Comptroller of Currency.


(1) Cash accounts and Certificates of Deposits. When the Department has authorized the Applicant or Permittee to meet its financial assurance obligations through the establishment of a trust fund secured with a cash account or certificate of deposit, the following requirements apply:

(a) Any interest paid on a cash account must be retained in the account and applied to the account; and

(b) The Department shall require that certificates of deposit be made payable to or assigned to the Department, both in writing and upon the records of the bank issuing the certificates. If assigned, the Department shall require the banks issuing
these certificates to waive all rights of setoff or liens against the certificates prior to the Department's acceptance.

(2) Negotiable bonds. The Department may authorize the Applicant or Permittee to meet its financial assurance obligations through the establishment of a trust fund secured with negotiable bonds.

(a) Negotiable bonds shall have a fair market value at the time of permit approval in excess of the financial assurance amount by at least 10%. The amount of such excess shall reflect changes in value anticipated over a period of 5 years, including depreciation, appreciation, marketability, and market fluctuation. In any event, the Department shall require a margin for legal fees and costs of disposition of the bonds in the event of forfeiture.

(b) The financial assurance value of the negotiable bonds used to secure a trust fund may be evaluated at any time by the trustee or the Department. The Permittee shall increase the assets in the trust fund as necessary. In no case shall the value attributed to the negotiable bonds exceed market value.

F. Release of Financial Assurance

(1) When requesting release of financial assurance funds, the Permittee shall submit to the Department:

(a) An environmental evaluation of the mining operation, mining site, affected areas, waste units, reclamation, and any required corrective action to ensure that any remaining problems are identified and corrected before financial assurance funds are released;

(b) A detailed cost breakdown of the expended funds and the amount of money requested by the Permittee to be released from the trust fund; and

(c) A detailed cost breakdown of the funds needed to complete the actions contained in subsection 17(F)(1)(a) above.

(2) At the time the financial assurance release request is filed with the Department, the Permittee shall submit proof that notice of the request has been mailed by certified mail to abutters, as determined by local tax records or other reliable means, to the municipal office of the municipality(ies) where the project is located and, if the project is located in the unorganized or deorganized areas of the State, to the appropriate county commissioners. The notice must also be published once per week for 4 successive weeks in a newspaper with statewide circulation. Copies of the published notice must be submitted with the application. The notice must include the following information:

(a) The Permittee's name;

(b) Permit number and approval date;

(c) The precise location of the real property affected;
(d) The number of acres;

(e) The type and amount of financial assurance;

(f) The type and appropriate dates of reclamation, closure, post-closure maintenance, monitoring, and corrective actions;

(g) A description of compliance with the Permittee's approved permit and mine plan; and

(h) The name and address of the Department contact, to whom written comments, objections, or requests for public hearings on the financial assurance release request may be submitted.

(3) The Department shall provide notice of the receipt of the request for release of financial assurance to the Department of Inland Fisheries and Wildlife, Department of Agriculture, Conservation and Forestry, and other state and federal agencies deemed appropriate.

(4) The Department shall post the public notice on the Department webpage dedicated to this permit.

(5) Release inspection by the Department. Upon receipt of the complete request for release of financial assurance, the Department shall conduct a release inspection and evaluation of the reclamation, closure, post-closure maintenance and monitoring, and corrective actions completed at the mine site. The surface owner or lessor of the real property, other state and federal agencies as listed in this section, and any persons who have requested advance notice of the inspection shall be given notice of the release inspection and may be present at that inspection as may other members of the interested public to the extent reasonably practicable. The Department may arrange with the Permittee to allow access to the permit area, upon request, by any person with an interest in the financial assurance release, for the purpose of gathering information relevant to the proceeding. Nothing in this subsection prevents the Department from making additional inspections of the reclamation, closure, post-closure maintenance and monitoring, and corrective actions completed at the mine site.

(6) Public Hearing

(a) The Department shall hold a public hearing on all requests for release of the financial assurance, and the Department shall inform all persons who have requested notice of hearings and persons who have filed written objections in regard to the request of the time and place of the hearing at least 30 days in advance of the public hearing. The hearing shall be held in the area of the permitted facility.

(b) The date, time, and location of the public hearing shall be advertised by the Department in a newspaper of statewide circulation once a week for two consecutive weeks. All persons who have submitted a written request in advance to the Department to receive notices of hearings shall be provided notice at least 30 days prior to the hearing. The hearing procedures of 06-096 C.M.R. ch. 3 will be followed.
Within 90 days after a public hearing has been held pursuant to this section, the Department shall notify in writing the Permittee, trustee or other persons with an interest in collateral, and the persons who either filed objections in writing or participants in the hearing proceedings who supplied their contact information to the Department, if any, of the decision to release the financial assurance. The Department does not release the Permittee from any mining obligations, reclamation, closure, post-closure, or corrective action requirements or third party liability as a result of releasing any funds.

If the Department denies the release application or portion thereof, the Department shall notify the Permittee and any person with an interest in collateral, in writing, stating the reason for denial.

Forfeiture of Financial Assurance to the Department. If a Permittee refuses or is unable to conduct or complete reclamation, closure, post-closure maintenance and monitoring, and corrective actions of the mining operation, if the terms and conditions of the permit are not met, or if the Permittee fails to comply with the conditions under which the financial assurance was accepted, the Department shall take the following action to require forfeiture of all or part of the financial assurance for the mine or an increment of the mine.

1. Send written notification by certified mail, return receipt requested, to the Permittee and the Trustee informing them of the determination to forfeit all or part of the financial assurance, including the reasons for the forfeiture, and the amount to be forfeited. The amount shall be based on the estimated total costs of completing reclamation, closure, post-closure maintenance and monitoring, and corrective actions.

2. Upon failure to comply with the conditions under which the financial assurance was accepted, the Department may cause the forfeiture of any and all financial assurances to complete reclamation, closure, post-closure maintenance and monitoring, and corrective actions for which the financial assurance was provided. Financial assurance liability shall extend to the entire mining site under conditions of forfeiture.

Insurance Requirement. The Applicant must include, as part of its application, and the Permittee must provide annually thereafter as part of the mining and reclamation report required under subsection 26(B) of this Chapter, proof of comprehensive general liability insurance for the site for sudden and accidental occurrences. Non-sudden occurrence insurance may be required by the Department on a case by case basis and, and shall be required whenever there are land disposal units, land storage units, or mine waste units. The insurance underwriter(s) must be approved by the Department. Requirements include, but are not limited to, the following:

1. Liability insurance coverage must be provided during operation, reclamation, corrective actions, closure, and, where mine wastes will remain on the site after closure, during the post-closure maintenance period;
(2) The level of coverage for sudden and accidental insurance must be at least $10 million per occurrence and $20 million annual aggregate, unless because of a greater risk, a higher minimum is required by the Department for a particular site;

(3) The level of coverage for non-sudden insurance must be at least $6 million per occurrence and $12 million annual aggregate, unless because of a greater risk, a higher minimum is required by the Department for a particular site;

(4) All liability insurance coverage amounts must be exclusive of legal defense costs;

(5) An Applicant/Permittee may not self-insure. If liability insurance is unavailable, an irrevocable letter of credit drawn upon a reputable bank which meets the following criteria may be utilized in lieu of liability insurance for sudden and accidental and non-sudden occurrences:

(a) Letters of credit must meet the terms below, and be unconditional, irrevocable, issued for a period of at least 1 year, and otherwise be in a form satisfactory to the Department.

(i) Any irrevocable letter of credit must be issued by a separate financial institution from the trust fund financial institution.

(ii) A letter of credit must be issued by:

(A) A bank chartered by the State of Maine;

(B) A national bank chartered by the Office of the Comptroller of Currency; or

(C) An operating subsidiary of a national bank chartered by the Office of the Comptroller of Currency; and

(b) When a letter of credit is used as liability insurance, the issuing financial institutions must be acceptable to the Department and the institution must have sufficient resources and assets to demonstrate that there is certainty the money will be available should the Department need to draw the funds;

(c) The Permittee and the letter of credit institution must be independent of one another; and

(d) The letter of credit must be modeled after the respective instrument language in 40 CFR 264.151 as modified to cover mining activities and meet the needs of this Chapter.

(6) The liability insurance policy may not be written as a "claims made" policy unless approved by the Department.
Section 18. Failure to Maintain Financial Assurance.
A failure to provide financial assurance in accordance with this Chapter constitutes grounds for the Commissioner to order the immediate suspension of mining activities including, but not limited to, suspending the extraction of metallic product or removal of metallic product from the site.

* * * *
August 26, 2020 Letter to Land Use Planning Commission

ATTACHMENT 4

2017 Me. Laws 142 (June 7, 2017)
MAINE 128TH LEGISLATURE
FIRST REGULAR SESSION
CHAPTER 142
SENATE PROPOSAL 265

2017 Me. Laws 142; 2017 Me. Ch. 142; 2017 Me. SP 265

Enacted June 7, 2017

An Act to Protect Maine’s Clean Water and Taxpayers from Mining Pollution

Added: Text highlighted in green
Deleted: Red text with a strikethrough

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 12 MRSA §12 M.R.S. § 549-B, sub-§7, ¶C-1 is enacted to read:

C-1. Notwithstanding any other provision of law to the contrary, the director of the agency having jurisdiction over the state lands on which a mining lease is sought may not grant a mining lease under this section that authorizes mining operations proposed to be located wholly or partially in, on or under any of the following state lands:

(1) Designated lands under section 598-A;
(2) Historic sites as defined in section 1801, subsection 5;
(3) Parks as defined in section 1801, subsection 7;
(4) Public reserved lands as defined in section 1801, subsection 8;
(5) Submerged lands as defined in section 1801, subsection 9;
(6) The Allagash Wilderness Waterway as established under chapter 220, subchapter 6; and
(7) State-owned wildlife management areas acquired in accordance with section 10109, subsection 1.

Sec. 2. 38 MRSA §38 M.R.S. § 490-MM, sub-§§5-A, 10-A, 10-B, 10-C and 13-A are enacted to read:

5-A. Dry stack tailings management. “Dry stack tailings management” means the process of disposing of dewatered, compacted mine tailings into a freestanding, stable structure on an area with an impervious liner designed to shed water to a water collection and treatment system.

10-A. Mine shaft. “Mine shaft” means a vertical, inclined or horizontal excavation, including all underground workings, with a surface opening not exceeding 1,000 square feet.

10-B. Mine waste. “Mine waste” means all material, including, but not limited to, overburden, rock, lean ore, leached ore or tailings, that in the process of mining and beneficiation has been exposed or removed from the earth during advanced exploration and mining activities.
10-C. Mine waste unit. “Mine waste unit” means any land area, structure, location, equipment or combination thereof on or in which mine wastes are managed. A structure or area of land does not become a mine waste unit solely because it is used to store nonreactive mine wastes generated on the site, such as soil or overburden, for 90 days or less.

13-A. Open-pit mining. “Open-pit mining” means, for any single mining operation permitted under this article, the process of mining a metallic mineral deposit by use of surface pits or excavations having greater than 3 acres of surface area in aggregate or by means of a surface pit excavated using one or more horizontal benches.

Sec. 3. 38 MRSA §38 M.R.S. § 490-MM, sub-§17, as enacted by PL 2011, c. 653, §23 and affected by §33, is repealed and the following enacted in its place:

17. Tailings impoundment. “Tailings impoundment” means a surface area, contained by dikes or dams, on which is deposited the slurry of material that is separated from a metallic product in the beneficiation or treatment of minerals, including any surrounding dikes constructed to contain such material. “Tailings impoundment” does not include a lined surface area on which dewatered tailings are stacked.

Sec. 4. 38 MRSA §38 M.R.S. § 490-MM, sub-§18 is enacted to read:

18. Wet mine waste unit. “Wet mine waste unit” means a mine waste unit in which mine wastes are placed under water to minimize sulfide oxidation, acid formation or particulate pollution.

Sec. 5. 38 MRSA §38 M.R.S. § 490-NN, sub-§1, ¶B, as enacted by PL 2011, c. 653, §23 and affected by §33, is amended to read:

B. In addition to other powers granted to it, the department shall adopt rules to carry out its duties under this article, including, but not limited to, standards for exploration, advanced exploration, construction, operation, closure, post-closure monitoring, reclamation and remediation. Except as otherwise provided, rules adopted under this article are major substantive rules for purposes of Title 5, chapter 375, subchapter 2-A and are subject to section 341-H. Notwithstanding Title 5, section 8072, subsection 11, or any other provision of law to the contrary, rules provisionally adopted by the department in accordance with this article and submitted for legislative review may not be finally adopted by the department unless legislation authorizing final adoption of those rules is enacted into law.
Sec. 6. 38 MRSA §38 M.R.S. § 490-NN, sub-§2, as enacted by PL 2011, c. 653, §23 and affected by §33 and amended by c. 682, §38, is further amended to read:

2. **Maine Land Use Planning Commission.** The department may not approve a permit under this article in an unorganized territory unless the Maine Land Use Planning Commission certifies to the department that:

A. The proposed mining is an allowed use within the subdistrict or subdistricts in which it is to be located; and

B. The proposed mining meets any land use standard established by the Maine Land Use Planning Commission and applicable to the project that is not considered in the department’s review.

The Maine Land Use Planning Commission shall adopt rules in accordance with this subsection relating to the certification of mining permit applications under this article. Notwithstanding any other provision of law to the contrary, rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 7. 38 MRSA §38 M.R.S. § 490-OO, sub-§4, ¶¶D and H, as enacted by PL 2011, c. 653, §23 and affected by §33, are amended to read:

D. There is reasonable assurance that discharges of pollutants from the mining operation will not violate applicable water quality standards. Notwithstanding sections 465-C and 470, discharges to contamination of groundwater from activities permitted under this article may occur within a mining area, but such discharges contamination must be limited and may not result in contamination of groundwater beyond each mining area. In determining compliance with this standard, the department shall require groundwater monitoring consistent with the standards established pursuant to section 490-QQ, subsection 3.

(1) Contamination of groundwater beyond the mining area;

(2) Contamination of groundwater within the mining area that exceeds applicable water quality criteria for pollutants other than pH or metals;

(3) Contamination of groundwater within the mining area due to pH or metals that exceeds limits set forth in the mining permit by the department based on site-specific geologic and hydrologic characteristics;

(4) Any violation of surface water quality standards under section 413 or article 4-A; or

(5) If groundwater or surface water quality within the mining area prior to the commencement of any mining activity exceeds applicable water quality standards, further degradation of such groundwater or surface water quality.

In determining compliance with this standard, the department shall require groundwater monitoring consistent with the standards established pursuant to section 490-QQ, subsection 3.

Notwithstanding section 490-MM, subsection 12, for the purposes of this paragraph, “mining area” means an area of land, approved by the department and set forth in the mining permit, not to exceed 100 feet in any direction from a mine shaft, surface pit or
surface excavation, and does not include the following lands, regardless of the distance of such land from a mine shaft, surface pit or surface excavation: the land on which material from mining is stored or deposited, the land on which beneficiating or treatment facilities are located, the land on which groundwater and surface water management systems are located or the land on which water reservoirs used in a mining operation are located.

E. The mining operation will not unreasonably cause or increase the flooding of the area that is altered by the mining operation or adjacent properties or create an unreasonable flood hazard to any structure. **Mining Notwithstanding any provision of law to the contrary, mining operations involving the removal of metallic minerals, the storage of metallic minerals or mine waste, the processing of metallic minerals or the treatment of mine waste may not be placed in or on flood plains or flood hazard areas as long as they are designed, constructed, operated and reclaimed in a manner that complies with the approval criteria in this subsection and the Natural Resources Protection Act.**

Sec. 8. 38 M.R.S. § 490-OO, sub-§4, ¶¶K to O are enacted to read:

K. No part of the mining operation will be located wholly or partially in, on or under any state land listed in Title 12, section 549-B, subsection 7, paragraph C-1.

L. The mining operation will not involve the removal of metallic minerals in, on or from a river, stream or brook, as defined in section 480-B, subsection 9; a great pond, as defined in section 480-B, subsection 5; a freshwater wetland, as defined in section 480-B, subsection 4; or a coastal wetland, as defined in section 480-B, subsection 2.

M. The mining operation will not involve placement of a mine shaft in, on or under a significant river segment, as identified in section 437; an outstanding river segment, as identified in section 480-P; an outstanding river, as identified in Title 12, section 403; a high or moderate value waterfowl and wading bird habitat that is a significant wildlife habitat pursuant to section 480-B, subsection 10, paragraph B, subparagraph (2); a great pond, as defined in section 480-B, subsection 5; or a coastal wetland, as defined in section 480-B, subsection 2.

N. The mining operation will use dry stack tailings management and will not use wet mine waste units or tailings impoundments for the management of mine waste and tailings, except that the mining operation may involve the placement into a mine shaft of waste rock that is neutralized or otherwise treated to prevent contamination of groundwater or surface water.

O. The mining operation will not use open-pit mining.
Sec. 9. 38 MRSA §38 M.R.S. § 490-RR, sub-§2, as enacted by PL 2011, c. 653, §23 and affected by §33, is repealed and the following enacted in its place:

2. Coverage and form of financial assurance. The financial assurance required under subsection 1 applies to all mining and reclamation operations that are subject to a mining permit.

A. The amount of the financial assurance must be sufficient to cover the cost for the department to administer, and hire a 3rd party to implement, all necessary investigation, monitoring, closure, post-closure, treatment, remediation, corrective action, reclamation, operation and maintenance activities under the environmental protection, reclamation and closure plan, including, but not limited to:

(1) The cost to investigate all possible releases of contaminants at the site, monitor all aspects of the mining operation, close the mining operation in accordance with the closure plan, conduct treatment activities of all expected fluids and wastes generated by the mining operation for a minimum of 100 years, implement remedial activities for all possible releases and maintenance of structures and waste units as if these units have released contaminants to the groundwater and surface water, conduct corrective actions for potential environmental impacts to groundwater and surface water resources as identified in the environmental impact assessment and conduct all other necessary activities at the mine site in accordance with the environmental protection, reclamation and closure plan; and

(2) The cost to respond to a worst-case catastrophic mining event or failure, including, but not limited to, the cost of restoring, repairing and remediating any damage to public facilities or services, to private property or to the environment resulting from the event or failure.

B. An applicant for a mining permit must include with its application a review of the proposed financial assurance amounts required under this section as performed by a qualified, independent 3rd-party reviewer approved by the department. The costs of the 3rd-party review must be paid by the applicant. Estimates of the costs of a worst-case catastrophic mining event or failure under paragraph A, subparagraph (2) provided by the applicant may not include costs to the applicant associated with loss of use of any mining operation or facility or the costs of repairing any damaged mining operation or facility to restore operations or other functionality.

C. The department shall require the applicant to provide financial assurance in the amount determined by the 3rd-party reviewer under paragraph B to be sufficient for the department to conduct all activities listed under paragraph A. Financial assurance estimates provided by the applicant and reviewed by the 3rd-party reviewer under this section must use the highest cost option for all estimates and include a minimum 20% contingency to account for unexpected expenses.

D. The financial assurance required by department under this subsection must consist of a trust fund that is secured with any of the following forms of negotiable property, or a combination thereof, as approved by the department:

(1) A cash account in one or more federally insured accounts;
(2) Negotiable bonds issued by the United States or by a state or a municipality having a Standard and Poor's credit rating of AAA or AA or an equivalent rating from a national securities credit rating service; or

(3) Negotiable certificates of deposit in one or more federally insured depositories.

E. The financial assurance required by the department under this section must be posted by the applicant before the department issues a permit to mine under this article.

Sec. 10. 38 MRSA §38 M.R.S. § 490-RR, sub-§3, as enacted by PL 2011, c. 653, §23 and affected by §33, is repealed.

Sec. 11. Department of Environmental Protection; approval of final adoption.

Final adoption of Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining, a provisionally adopted major substantive rule of the Department of Environmental Protection that was submitted to the Legislature for review pursuant to the Maine Revised Statutes, Title 5, chapter 375, subchapter 2-A on January 13, 2017, is authorized only if the following changes are made:

1. The rule must be amended in section 2 to define “dry stack tailings management” consistent with the statutory definition of “dry stack tailings management” under Title 38, section 490-MM, subsection 5-A;

2. The rule must be amended in section 2 to define “mine shaft” consistent with the statutory definition of “mine shaft” under Title 38, section 490-MM, subsection 10-A;

3. The rule must be amended in section 2 to amend the definition of “mine waste” as necessary to ensure consistency with the statutory definition of “mine waste” under Title 38, section 490-MM, subsection 10-B;

4. The rule must be amended in section 2 to amend the definition of “mine waste unit” as necessary to ensure consistency with the statutory definition of “mine waste unit” under Title 38, section 490-MM, subsection 10-C;

5. The rule must be amended in section 2 to define “open-pit mining” consistent with the statutory definition of “open-pit mining” under Title 38, section 490-MM, subsection 13-A;

6. The rule must be amended in section 2 to amend the definition of “tailings impoundment” as necessary to ensure consistency with the statutory definition of “tailings impoundment” under Title 38, section 490-MM, subsection 17;

7. The rule must be amended in section 2 to amend the definition of “wet mine waste unit” as necessary to ensure consistency with the statutory definition of “wet mine waste unit” under Title 38, section 490-MM, subsection 18;

8. The rule must be amended, as necessary, in section 11(A), section 20(B) and any other affected sections to incorporate the statutory prohibition against the permitting of a mining operation located in, on or under any state land listed in Title 12, section 549-B, subsection 7, paragraph C-1, as provided in Title 38, section 490-OO, subsection 4, paragraph K;
9. The rule must be amended, as necessary, in section 11(A), section 20(B) and any other affected sections to incorporate the statutory prohibition against the permitting of a mining operation involving the removal of metallic minerals in, on or from certain natural resources as provided in Title 38, section 490-OO, subsection 4, paragraph L;

10. The rule must be amended, as necessary, in section 11(A), section 20(B) and any other affected sections to incorporate the statutory prohibition against the permitting of a mining operation involving the placement of a mine shaft in, on or under certain natural resources as provided in Title 38, section 490-OO, subsection 4, paragraph M;

11. The rule must be amended, as necessary, in section 11(A), section 21, section 24 and any other affected sections to incorporate the statutory requirement for the use of dry stack tailings management and the statutory prohibition against the permitting of a mining operation involving the use of wet mine waste units or tailings impoundments as provided in Title 38, section 490-OO, subsection 4, paragraph N;

12. The rule must be amended, as necessary, in section 11(A) and any other affected sections to incorporate the statutory prohibition against the permitting of a mining operation that uses open-pit mining as provided in Title 38, section 490-OO, subsection 4, paragraph O;

13. The rule must be amended in section 17 and any other affected sections to clarify the coverage and form of required financial assurance pursuant to Title 38, section 490-RR, subsection 2;

14. The rule must be amended in section 22 and any other affected sections to clarify the limited definition of “mining area” pursuant to Title 38, section 490-OO, subsection 4, paragraph D;

15. All necessary grammatical, formatting, punctuation or other technical nonsubstantive editing changes must be made to the rule, including, but not limited to, the addition of subsection headings in section 2 and the removal of strikethrough letters or words remaining from prior drafts and edits; and

16. All other necessary changes must be made to the rule to ensure conformity throughout the rule and consistency with the provisions of this Act.

Sec. 12. Maine Land Use Planning Commission rulemaking; certification of mining permit applications.

By July 1, 2018, the Maine Land Use Planning Commission shall adopt rules related to commission certification of metallic mineral mining permit applications in accordance with the Maine Revised Statutes, Title 38, section 490-NN, subsection 2. Rules adopted pursuant to this section must include any additional provisions necessary to ensure consistency with the Maine Metallic Mineral Mining Act and rules related to the Maine Metallic Mineral Mining Act adopted by the Department of Environmental Protection.
History

Governor's Veto Overridden June 7, 2017

Effective date: 90 days after adjournment