PUBLIC COMMENTS RECEIVED FOR PROPOSED RULEMAKING TO REPEAL AND REPLACE THE COMMISSION'S CHAPTER 13 RULES, "METALLIC MINERAL EXPLORATION, ADVANCED EXPLORATION AND MINING" AND TO AMEND RELATED SECTIONS OF THE COMMISSION'S CHAPTER 10 RULES

Maine Land Use Planning Commission Maine Department of Agriculture, Conservation, and Forestry

Published Date: March 21, 2018

Public Comment Deadline: April 23, 2018

Rebuttal Comment Deadline: April 30, 2018

Beyer, Stacie R

From:	Craig Terrell <cterrell51@yahoo.com></cterrell51@yahoo.com>
Sent:	Sunday, April 08, 2018 8:22 AM
То:	Beyer, Stacie R
Subject:	Chapter 10 revisions Metallic Mining
Attachments:	Effected Area of Bald Mountain Mining Project.pptx

Stacie Beyer

The LUPC has a unique opportunity to protect the Unorganized Territory of Maine. You have the opportunity to require that Metallic Mining if done in the Territory is done in a manner that will not harm the Waters of Maine. As written the Metallic Mining will be allowed to have contamination in the Mining area.

We have a responsibilities as citizens to speak out against the Chapter 10 revisions that have been written by the Mining interest and decisions that were made in the face of over 1,000 Maine voices commenting on not allowing contamination of the Waters of Maine by allowing ARD. This was the Fatal flaw that was compromised behind closed door and not presented in the light of day to the general public.

As concerned citizens we have followed and attended all the hearings since John Martins first attempts' to allow Metallic Mining cart blanch. We have commented and testified and researched Metallic Mining in due diligence to understand the dangers involved and shape the rules you are now facing.

Should you like to discuss the well documented progression of these rule that aim at degradation of our pristine waters and destroy the natural biota of our Heritage Trout and Salmon streams feel free to contact me.

My family has had property in the Territory since 1902 and hold the waters of Maine to be sacred and are in a Metallic Mining affected area T13 R8 Carr Pond. We have seen the affects of Metallic Mining first hand over 500 holes drilled left open on Bald Mt. The devastation and toxic silt that was allowed in exploration alone should never happen again in the state of Maine.

Please take this opportunity to think of how fragile our poor hydrological mountains regions of Maine will be affected and put the safeguards in place to protect future generation from experiencing the degradation of the last strong hold of AA and AAA waters.

Craig Terrell T13 R8 Carr Pond ME

Effected Area of Bald Mountain Mining Project

Open-pit mining leaves large toxic acid ponds which could potentially drain through ground and surface waters into the Fish River and the Fish River Chain of Lakes. This watershed provides some of the best brook trout fishing in the country.



A pH of 5 or higher is essential for the survival of Brook Trout. Carr Pond and the surrounding tributaries, have a class A water rating; and as a fishery, has been managed as a self perpetuating system.





Fish of Carr Pond

- Blacknose dace Rhinichthys atratulus
- Blacknose shiner Notropis heterolepis

- Landlocked salmon Salmo salar sebago
- Longnose sucker Catostomus catostomus
- Northern redbelly dace *Phoxinus eos*
- Rainbow smelt Osmerus mordax
- Round whitefish *Prosopium* cylindraceum
- Slimy sculpin *Cottus cognatus*
- Threespine stickleback Gasterosteus aculeatus
- White sucker Catostomus commersoni
- Yellow perch Perca flavescens
- Sunfish Centrachidae perciformes
- Catfish disambiguation

- Brook trout Salvelinus fontinalis
- Common shiner Luxilus cornutus
- Creek chub Semotilus
 atromaculatus
- Cusk Lota lota
- Fallfish Semotilus corporalis
- Golden shiner
 Notemigonus crysoleucas
- Lake chub Couesius
 plumbeus
- Lake trout Salvelinus namaycush
- Lake whitefish Coregonus clupeaformis

Carr Pond T13 R8 WELS Aroostook County, Maine

Area (acres): 323

- Perimeter (miles): 3.4
- Mean Depth (feet): 27
- Max Depth (feet): 72
- Delorme Page: 63
- Fishery Type: Coldwater
- Invasive Aquatic Infestation: None known
- Water Quality: Class AA
- PH 5
- Three inlets Mud Pond, Bishop Brook and Moose Brook
- Spring Fed Springs PH 6.2
- Outlet at Carr Pond, Carr Pond Stream, is at West end
- Primitive Boat launch

Carr Pond Stream



Salmon Spawning area

View of Bald Mt. from Carr Pond Popular recreation area for hunting, boating, fishing, and swimming



Fiddlehead Ferns



Long recognized and harvested by Native Americans

Old Growth Cedar Bog Painted Trillium



Lupines



A symbol of the vast flora and fauna that abounds area

Amanita Mushroom



Just one of a multitude of species that abound Carr Pond

Carr Pond is a beautiful place! Sunset



Wood Frog - Lithobates sylvatica



Otters



Canada Lynx



Watchful on the bank of the Clayton Stream above Fish River Lake

Carr Pond is a natural brook trout and salmon hatchery



Carr Pond Outlet Native Spawning Salmon



2013 Fish Stocking Rule Change Fish Lake

The new program that underwent IFW peer review, coupled with a pending fishing rule proposal; large fall yearling salmon will be stocked to create a fall/winter riverine fishing opportunity in northern Maine.

Clean water is essential for this program to be successful.

These inlet spawning salmon rely on high oxygen demand from cold waters.

Forests are needed to keep these waters cool and to supply the needed shade.

Carr Pond Resident Golden Eagle



And of course our local fleet of Loons - Mom with her chic close to shore at Carr Pond



2013 Carr Pond gaggle of Mergansers *Mergus merganser* Migratory Bird Act - protected



Illusive Black Back Woodpecker



Let's not forget the moose



Hundreds of visitors of all ages will be effected, as it's a part of the tourism of the North Maine Woods





Swimming, boating, fishing are favorite summer activities



Kids of all ages enjoy the waters of Carr Pond and the Fish River Chain



Beautiful Carr Pond Western View



North shore cabins – their view looks at Bald Mountain



Former Maine State Forest Warden Camp – south shore



South Shore Spring House Public Water Source!



Fall Colors on Bishop Mountain





A place for relaxation


Winter activities - camping, snowshoeing, ice fishing



Snowshoe trail



Winter Snow brings snowmobilers



Ice Fishing at Carr Pond



Camp Early Winter -south shore



Carr Pond Artesian Spring-south shore Drinking Water - constant 38F



Terns at Fish Lake



Headwaters of Fish River



Fish River Falls





Metalic Mines in High Sulfide Mineral deposits will result in:

- Run Off during periods of high rain fall and containment failure
- Seepage from tilling piles into bedrock aquifers
- Acid mine drainage
- Unacceptable water quality standards
- Degradation to Fish River Chain
- Loss of endangered Canada Lynx habitat
- Loss of protected Merganser habitat
- Loss of Golden Eagle habitat
- Loss of tourism from hunters, fisherman, hikers, kayakers/boaters, snowmobilers, and birders alike

Volcanogenic massive Sulfide Deposit

- Bald Mountain contains massive amounts of Sulfide and contains high amounts of Arsenic
- The public has never been informed of these dangers.
- In 1988 J.S Cummins reported levels of Arsenic as high as 1258 to 29,155 ppm.
- Tens of Millions of Tons of high sulfur tailings would contain Very high levels of Arsenic and be impossible to contain.

"Long term management for tailings and containment impossible"

Maine needs:

- Strict and specific rules that protect the air and the waters of the state that can be relied on to last the test of time.
- Well defined provisions for the closing of high risk situations
- DEP's ability to have a hand in monitoring the potential risk and demanding remediation in a timely manner.
- Have the total cost, start to finish, in hand and the ability to insure the public doesn't get stuck with the bill for closure.

Monitoring Wells

- While wells are necessary, they need to have a long range plan; most seem to only monitor for short periods and then rely on mother nature.
- In fact, no one knows how the ground water travels till its too late for damage control.
- Wider aspects of groundwater quality needs to be studied and addressed as to their source and destination.
- Provisions for testing in perpetuity will be necessary
 - Test holes drilled at Bald Mt. both horizontally and diagonally show large deposits of iron sulfide.
 - Currently there are open exploratory holes that have the potential to oxidize and leach into the groundwater and surface waters.

Conclusion

With all the information available, it is irrefutably, that the flawed mining law must be rewritten.

- The flawed mining laws are lacking specific rules for groundwater, streams and lakes, leaving them open to degradation.
- It has no long term commitment to the environment on what is typically a short term industry.
- It doesn't have provisions to stop dangerous situations from precipitating from mines.
- I have tested the arsenic levels in Carr Pond and would appreciate the mine's closure and future consideration for this mine to be considered as extremely hazardous.
- Take the time to do this right and ask a third party experts to peer review your end results.



PAUL R. LEPAGE GOVERNOR STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY LAND USE PLANNING COMMISSION 22 STATE HOUSE STATION AUGUSTA, MAINE 04333-0022

WALTER E. WHITCOMB COMMISSIONER

NICHOLAS D. LIVESAY EXECUTIVE DIRECTOR

Memorandum

- **To:** Maine Land Use Planning Commission
- From: Stacie R. Beyer, Chief Planner
- Date: April 19, 2018
- **Re:** Proposed Chapter 13 and Chapter 10 Rule Revisions Regarding Metallic Mineral Exploration and Mining Certification

The proposed Chapter 13 and Chapter 10 rule revisions (the mining rulemaking) are intended to implement the directive of Public Law 2017, Chapter 142, as well as to ensure consistency with the Metallic Mineral Mining Act and the rules adopted by the Department of Environmental Protection related to that act. The proposed revisions include several changes to Section 10.21,G, Planned Development Subdistrict (D-PD), including removal of references to level C mineral exploration and clarification of the limited relationship of the procedures set out in the section to mining activities. Since posting the mining rulemaking to public comment, the Commission has initiated a separate miscellaneous rulemaking. The miscellaneous rulemaking package includes revisions to Section 10.21,G pertaining to Planned Development Subdistricts. Several of these D-PD-related revisions are intended to provide the same consistency and clarity as the revisions to 10.21,G proposed in the mining rulemaking. The majority of the D-PD-related revisions in the miscellaneous rulemaking.

Since these two rulemakings are happening at relatively the same time and to avoid the possible confusion of having two different versions of Section 10.21,G in rulemaking processes, staff recommend keeping all the D-PD-related revisions in a single rulemaking. The present miscellaneous rulemaking contains all the revisions. Staff recommend removing changes to Section 10.21,G from the mining rulemaking.



PHONE: 207-287-2631 FAX: 207-287-7439

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





April 19, 2018

Ms. Stacie Beyer Department of Agriculture, Conservation and Forestry Land Use Planning Commission 22 SHS Augusta, ME 04333-022

Dear Ms. Beyer:

Thank you for the opportunity to review your proposed rulemaking on the 01-672 C.M.R. Chapter 10, Land Use Districts and Standards and the 01-672 C.M.R. Chapter 13, Metallic Mineral Exploration, Advanced Exploration and Mining rules.

After reviewing the proposals, the Department finds that the proposed Chapter 13, Metallic Mineral Exploration, Advanced Exploration and Mining rules provide the Land Use Planning Commission (Commission) with a regulatory framework for metallic mineral exploration and metallic mineral mining certification that is consistent with the Maine Metallic Mineral Mining Act (38 M.R.S. §§ 490-LL et seq.) and the Department's 06-096 C.M.R. Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining rules implementing this law. At the same time, we would like to offer the following comments on the Commission's proposed amendments to its Chapter 10, Land Use Districts and Standards rule:

 The Commission should consider revising the proposal to exclude advanced exploration activities from the definition of "Level B Mineral Exploration Activities" in Section 10.02(101). Both the Commission's Chapter 13 proposal and the Department's Chapter 200 rules define "advanced exploration" as follows:

Advanced Exploration. "Advanced exploration" or "advanced exploration activity" means any metallic mineral bulk sampling or exploratory activity that exceeds those activities that are exploration activities, but removes 10,000 tons or less of mine waste. Samples taken as part of "exploration" are not considered bulk sampling.

Revising the proposal to exclude advanced exploration activities as follows will improve the rule's consistency with both the Commission's proposed Chapter 13 and the Department's Chapter 200 rules, and help eliminate potential confusion over the use of these terms:

Level B Mineral Exploration Activities: Mineral exploration activities involving the bulk sampling of mineral deposits, or any mineral exploration activities which exceed those defined as Level A mineral exploration activities, <u>having a maximum</u>

AUGUSTA 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017 (207) 287-7688 FAX: (207) 287-7826

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401 (207) 941-4570 FAX: (207) 941-4584 PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 822-6300 FAX: (207) 822-6303 PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769 (207) 764-0477 FAX: (207) 760-3143 surface opening of 300 square feet per test pit or trench. -and which are not defined as Level C metallic mineral exploration activities.

If the Commission revises its proposal as suggested above, the Department also suggests revising the definition of "Level A Mineral Exploration Activities" in Section 10.02(100) to limit the disturbed area on each site. This change would allow the Commission to better align the definition of "Mineral Exploration Activities" in Chapter 10 with the Metallic Mineral Mining Act and the Department's Chapter 200 rules, and allow for the appropriate oversight of exploration activities in certain environmentally sensitive subdistricts. The Department recommends the Commission consider the following revisions to the definition of "Level A Mineral Exploration Activities:"

Level A Mineral Exploration Activities: Mineral exploration activities engaged in for purposes of determining the location, extent and composition of mineral deposits, provided that such activities are limited to test boring, test drilling, hand sampling, the digging of test pits having a maximum surface opening of 100 square feet, or other test sampling methods which cause minimum disturbance to soil and vegetative cover. Level A mineral exploration activities shall not include bulk sampling of mineral deposits. Access ways for Level A mineral exploration activities shall include only access ways the creation of which involves little or no recontouring of the land or ditching, and does not include the addition of gravel or other surfacing materials. Clearing of the vegetative cover shall be limited to the minimum necessary to allow for the movement of equipment <u>and shall not exceed</u> <u>1 acre of total disturbed area.¹</u>

 The current definition of "Metallic Mineral Mining Activity" in Section 10.02(123) is inconsistent with the Metallic Mineral Mining Act and both the Commission's Chapter 13 proposal and the Department's Chapter 200 rules. This definition should be revised to state:

> Metallic Mineral Mining Activity. "Metallic mineral mining activity" means activities, facilities or processes necessary for the extraction or removal of metallic minerals or overburden or for the preparation, washing, cleaning or other treatment of metallic minerals and includes the bulk sampling, advanced exploration, extraction or beneficiation of metallic minerals as well as waste storage and other stockpiles and reclamation activities, but does not include exploration. any activity or process that is for the purpose of extraction or removal of metallic minerals, and includes processes used in the separation or extraction of metallic minerals from other material including, but not limited to: crushing, grinding, beneficiation by concentration (gravity, flotation, amalgamation, electrostatic, or magnetic); cyanidation; leaching; crystallization; or precipitation; mine waste handling and disposal; and processes substantially equivalent, necessary, or incidental to any of the foregoing.

¹ The Department suggests that a 1 acre disturbed area limit may be appropriate based on the stormwater control requirements of its 06-096 C.M.R. Chapter 200: Stormwater Management rules.

Letter to Ms. Beyer April 19, 2018 Page 3 of 3

Metallic mineral mining or metallic mineral mining activity does not include Level A, B or C exploration activities, or thermal or electric smelting.

The Department appreciates the opportunity to participate in the Commission's rulemaking activities, and would like to commend the Commission's staff for their efforts in complying with Public Law 2017, Chapter 142 and the Maine Metallic Mineral Mining Act. If you have any questions, please feel free to contact either Jeff Crawford at 287-7647 or Mark Stebbins at 592-4810.

Sincerely,

Much & Byeran

Mark Bergeron, P.E. Director, Bureau of Land Resources

Cc: Jeff Crawford, DEP Mark Stebbins, DEP



PAUL R. LEPAGE GOVERNOR STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY Maine Geological Survey 93 State House Station Augusta, Maine 04333-0093 Walter

WALTER E. WHITCOMB COMMISSIONER

23 April 2018

Stacie Beyer Land Use Planning Commission

RE: Comments on Chapter 13 and Chapter 10 Metallic Mining Rules revisions

The primary concern with the Land Use Planning Commission's (LUPC) Chapter 13 and Chapter 10 draft revisions to Metallic Mineral Exploration, Advanced Exploration and Mining Rules is to bring the definitions of Exploration and Advanced Exploration in line with those used by the Maine Department of Environmental Protection (DEP).

Currently, the DEP defines **Exploration** as "activities conducted in accordance with this Chapter for the purpose of determining the location, extent, and composition of metallic mineral deposits, test boring, test drilling, hand sampling, the digging of test pits, trenching or outcrop stripping for the removal of overburden having a maximum surface opening of 300 square feet per test pit or trench, or other test sampling methods determined by the Department to cause minimal disturbance of soil and vegetative cover."

DEP's **Advanced Exploration** definition: "any metallic mineral bulk sampling or exploratory activity that exceeds those activities that are exploration activities, but removes 10,000 tons or less of mine waste. Samples taken as part of "exploration" are not considered bulk sampling."

In the draft Chapter 10 rules, LUPC defines two levels of metallic mineral exploration:

Level A Mineral Exploration Activities: "Mineral exploration activities engaged in for purposes of determining the location, extent and composition of mineral deposits, provided that such activities are limited to test boring, test drilling, hand sampling, the digging of test pits having a maximum surface opening of 100 square feet, or other test sampling methods which cause minimum disturbance to soil and vegetative cover. Level A mineral exploration activities shall not include bulk sampling of mineral deposits."

Level B Mineral Exploration Activities: "Mineral exploration activities involving the bulk sampling of mineral deposits, or any mineral exploration activities which exceed those defined as Level A mineral exploration activities and which involve disturbance of a site, by excavation, of less than two acres of surface area and removal of 10,000 tons or less of soil, overburden, rock, ore, tailings or other earthen materials from the site of exploration."

There clearly is a conflict between DEP's Advanced Exploration definition and LUPC's Level B Mineral Exploration Activities that will lead to confusion among the regulated community and stakeholders, particularly in a situation where an exploration program spans both the Unorganized Territories and organized towns. The LUPC Level B Mineral Exploration Activities definition should be adjusted to align with DEP's Exploration definition, limiting the test pits to 300 square feet and removing the reference to the "removal of 10,000 tons or less of soil, overburden, rock, ore, tailings or other earthen materials from the site of exploration." Furthermore, the LUPC should consider adopting DEP's definitions of Tier 1 and Tier 2 Advanced Exploration. Doing so will make the LUPC rules fully consistent with DEP's rules and reduce confusion for the regulated community and stakeholders.

Robert G. Marvinney State Geologist



Ralph Chapman

Minority Leader Green Independent Party 455 Varnumville Road Brooksville, Maine 04617 Phone: (207) 326-0899 chapmanHD133@gmail.com House of Representatives 2 State House Station Augusta, Maine 04333-0002 (207) 287-1400 TTY: (207) 287-4469

April 23, 2018

Stacie R Beyer Stacie.R.Beyer@maine.gov
22 State House Station
18 Elkins Lane, Harlow Building
Augusta, Maine 04333-0022
(207) 557-2535

Reference: Chapters 13 and 10: Proposed Rulemaking to Repeal and Replace the Commission's Chapter 13 Rules, Metallic Mineral Exploration, Advanced Exploration and Mining, and Amend the Commission's Chapter 10 Rule Definition, Planned Development Subdistrict, and Mineral Exploration and Extraction Sections

I welcome and appreciate the opportunity to comment on the above referenced proposed rules related to Metallic Mineral Mining. Thank you for considering my comments below.

- Maine Constitution Article IX Section 23 cannot be violated through minor technical rulemaking. No reduction in use nor substantial alteration in use of designated state lands can be made through LUPC rules
- 2. Minor technical rulemaking charge in Public Law Chapter 142 is inconsistent with Maine's Administrative Procedures Act; these should be major substantive rules and processed accordingly
- The seven categories of state lands identified in PL Ch 142 Section 1 should be explicitly included in the LUPC rules as areas in which mining activity (including exploration and advanced exploration) is prohibited
- 4. "Lakes" should be explicitly included in the LUPC rules listing in #3 above
- 5. The terms "sintering", "roasting", and "in situ leaching" should be removed from 13.01 B 2. The first two are smelting operations, not beneficiation operations, and the third is legally prohibited
- 6. The definition on Pg 16 of 10.02 should be consistent with #5 above
- 7. The Federal Clean Water Act and Federal Clean Air Act should be explicitly included in the list under 13.01 D 1 Obligation to Comply

Ralph Chapman

- 8. 13.02 C 1 should explicitly identify contamination of groundwater or its migration as an "adverse impact" related to non-compliance OR the non-compliance section should be removed (why allow non-compliance of any type?)
- 9. In addition to exploration tonnage limits (which are arbitrary), limits on exploration material removal should be tied to the neutralizing potential / acid producing potential (Np/Ap) ratio consistent with current science

Thank Kilph Chapmen