

STATEMENT OF JOHN F. SLACK

Thank you Representative Landry and members of this committee. My name is John Slack and I support LD 1363. I speak to you today as an economic geologist with more than five decades of experience in mineralogical and geochemical research on many types of mineral deposits, nationally and internationally. Over the past several years, I've focused my studies on the potential for critical minerals in Maine. In order to promote a low-carbon future and green technology, the mining of critical minerals is not an option but is, in fact, a necessity. Maine is unusual among states in the US for having very diverse geology; consequently, it has many different critical mineral deposits, including lithium, manganese, rare earth elements, cobalt, and graphite. These minerals and elements are required for the manufacture of electric vehicles, wind turbines, cell phones, computers, and more.

The 2017 Maine mining law should be revised to allow for the responsible open-pit mining of mineral deposits that contain few or no sulfide minerals. This revision should also remove the current restriction for open pits to be a maximum of three acres. If this 3-acre-maximum is maintained, it will in most cases limit the commercial extraction of valuable critical minerals. Environmental concerns about open-pit, as well as underground, mining are largely related to the potential for acid-mine drainage, but such acid-mine drainage comes only from sulfide-rich deposits, particularly those that contain abundant pyrite. However, lithium pegmatite deposits such as Plumbago North, and many other types of mineral deposits and prospects known in Maine including manganese and graphite, lack sulfide minerals. Hence, the mining of these deposits will not produce acid-mine drainage and related environmental problems. The mining—one could say “quarrying”—of spodumene for lithium at Plumbago North would be the same as the historic quarrying in Maine of granite, feldspar, slate, and limestone that has gone on for many decades without evidence of acid-mine drainage.

Finally, I urge you to take a global perspective on the mining of critical minerals. Western countries like the United States, Australia, and most of those in Europe have good mining laws that protect the environment. If the US and these countries do not mine for critical minerals, then we will be largely dependent on China and on some countries in Africa and South America where few if any such laws exist, thus resulting in major environmental damage. It is better on a global scale to promote responsible mining in countries such as the US and in states like Maine where strict and scientifically valid environmental regulations can be enacted.

In summary, I urge those of us in Maine to do our part: to aid our nation and the world in mitigating global warming and its dire effects. This can only be accomplished by the mining of US critical minerals, including in Maine.

Thank you.

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