

Re: LD 1471 Additional comments for work session

The DEP begs the question of protecting the public health from the known detrimental effects of metallic mining by mentioning “public health” 45 times in the Chapter 200 rules. Sadly, however, within the 41,444 words of Chapter 200 rules there is not any attempt to answer that crucial question. LD 1471 provides a basis to help answer their crucial question.

Chapter 200 wisely provided protective buffer zone setbacks up to 1 mile for state property such as parks, bodies of water and wildlife. But what about protecting infants, toddlers, and children or pregnant women or women of reproductive age? Nothing!

In Pembroke an exploratory drilling at the site of an old lead mine was approximately 1 mile up wind from an active elementary school. In the Union/Warren area a proposed mine is about ½ mile from a school and homes. All aspects of mining operations generate health risk, especially to susceptible subpopulations, that must be properly assessed and mitigated. Some of these risks, such as from waste tailings, will be perpetual.

The harmful effects of mined metals have been demonstrated in El Paso, Texas, Hayden/Winkelman, Arizona, Corpus Christi, Texas, and Tar Creek, Oklahoma. In Maine, the mine of the bankrupt Callahan Corporation has been shut down for 50 years. Despite EPA Superfund clean up (the state of Maine pays 10% of costs), Goose Bay is still closed to shellfish harvesting due to toxic metals in the sediment.

- Human Health Assessment must be completed prior to issuing a permit. Areas and individuals placed at potential risk must be delineated. Geographic, topographic and publicly available demographic data, such as census and CDC, are to be evaluated. Baseline dust, air, water, and soil are collected. Special attention is given to (1) susceptible and vulnerable subpopulations such as extremes of age, chronic medical conditions, and pregnancy (2) schools, daycare, hospitals, residences. The assessment includes not only areas of mining operations but also any “offsite” waste or tailings deposit.

- A listing of toxic and hazardous chemicals and chemicals will be maintained. Not only metals and minerals mined, but also substances used in production, beneficiation, transport, and storage. Included would be chemicals such as cyanide, PFAS, persistent and bioaccumulative toxic substances (PBT's) strong acids and alkali, xanthates (used in sulfide flotation), lubricants and PCB (found at the Callahan mine site).
- Synergistic effect and cumulative risk must be evaluated not only for chemical exposure but also for stressors such as noise, blasting, vibration, light and vehicular traffic.
- Ongoing and adequate monitoring of air, water, soil, and dust (found in schools, day care, residences etc.) for the vicinity around the areas of mining operations, including any "off site" waste or tailings deposits. Transportation of mining materials must also be monitored due to potential for accidental spills or loss of product.
- Perpetual monitoring of waste sites since toxic metals and even some PFAS are chemically and biologically indestructible. Financial assurance must not only be made for monitoring but for any remediated that will be required in the future.
- Community involvement and notification must be mandated. Monitoring data should be available in real time.
- Adequate liability coverage for the affected community must cover harm from chronic pollution as well as acute exposure. Thus, policies with pollution exclusion are not acceptable.
- Resiliency of the mine during operation and after closure must be demonstrated, especially for the perpetual deposit of the waste and tailings. "Act of God" cannot excuse for lack of planning for wildfire, extreme weather, flooding, erosion etc.
- The ability for immediate shut or repair prior to a critical violation is essential. Better to prevent or to repair than to remediate after the fact.

Metals are a crucial component in health care. Metals are crucial for our economic and national security. However, that is not an excuse to put the public health at unnecessary risk. Health protective regulations are vital for mining to be done right. From the start, it must be done right.

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