
AER Brine-hosted Minerals Engagement

The Alberta Energy Regulator (AER) is expanding its mandate to include the regulation of minerals under the *Mineral Resource Development Act* (MRDA). The MRDA intends to establish the AER as the lifecycle regulator for Alberta's mineral resources including critical minerals and rare earth elements, in addition to oil, oil sands, natural gas, and coal, which are already under its jurisdiction. Mineral resource development has already been taking place across Alberta; however the regulations have been spread over multiple agencies, and the MRDA seeks to bring these all under a single regulator at the AER.

Across spring 2022, AER hosted multiple information sessions regarding the development of the MRDA and Alberta's Minerals Strategy Implementation. Most of these sessions focused on the development of rules and directives for the extraction of brine-hosted minerals – minerals that reside in underground saltwater reservoirs – which are extracted through the use, construction and operation of sub-surface wells, similar to oil and gas recovery. Examples of brine-hosted minerals include calcium and magnesium, which are already being extracted from brines in Alberta. AER is hoping to have a draft regulatory framework released for public comment this fall, with applications for brine extraction to be accepted in early 2023.

The Government of Alberta's (GoA) push to coordinate and expand the mining of minerals in the province is the result of recent increases in the global demand for lithium for the manufacture of batteries for electric vehicles and other electronics – known as the lithium rush. The GoA wants Alberta to be the preferred producer and supplier of minerals and mineral-derived products in Alberta, Canada, and internationally as the world shifts away from internal combustion vehicles and towards a low carbon economy. Other reasons given during these presentations include diversifying Alberta's economy, creating new jobs, and attracting foreign capital investment.

AWA attended three information

sessions hosted by AER to learn more about the environmental considerations that AER is incorporating into the development of this new regulatory framework. During these sessions AWA and other interested parties such as local landowners expressed many concerns with the expansion of another extractive industry on Alberta's landscape. Our concerns include the extent of new surface disturbance required for mining. Could existing linear disturbance (i.e. roads, power lines, pipelines etc.) be repurposed for brine extraction, or would entirely new linear disturbance be required? We expressed that the reclamation of mine sites needs to be planned for and enforced to avoid abandoned wells and other infrastructure in contrast to what we have seen with the oil and gas industry.

During these sessions, we asked the AER presenters how cumulative effects are being considered in the regions where minerals mining is proposed? They responded that they are still focusing only on developing the rules and directives at this point in time, and that cumulative effects aren't typically under the purview of the AER. According to the presenter, cumulative effects are typically addressed at higher levels within GoA policies. The AER team followed our question by asking AWA if we had any recommendations for incorporating cumulative effects into their regulatory framework? We suggested that AER ensures that they have an adequate understanding of baseline environmental conditions before any development occurs on the landscape. Sufficient data is necessary in advance in order to better understand the impacts of development into the future. Baseline data should be paired with a robust and science-based monitoring program to ensure that the cumulative effects of mineral development are understood and managed sustainably.

We appreciate that the AER was willing to listen to feedback from environmental interests and other stakeholders in the development of this

regulatory framework, but we still have many unresolved concerns regarding the implementation of Alberta's Mineral Strategy. AWA will continue to participate in this engagement process as we approach the release of the draft regulatory framework. We do not want to see the same mistakes repeated from our experience with the oil and gas industry in this new and emerging sector for the sake of Alberta's wilderness and all of us who depend on it.

- By Phillip Meintzer
