Mining and Mining Law Reform Policy (including minerals for Clean Energy)

Mining by its very nature is a dirty business and highly disruptive of the natural and human environment. It involves disturbing the terrestrial and/or marine environment with short term and long term negative impacts from all phases including exploration, development, mining, milling, waste disposal, upgrading, transportation, and post mining land use. Concerns include water pollution; air pollution; changes in land use; human displacement and impacts downstream and downwind; Indigenous rights violations; human rights violations; worker safety; fair living wages and anti-unionization practices; wildlife and ecosystem displacement and destruction; high energy use; and toxic waste management and treatment.

Because of these negative impacts, additional or new mining must be kept to a minimum to meet essential human needs and alternatives to mining undisturbed ore bodies should be encouraged and pursued. Avoiding unnecessary waste and packaging, encouraging recycling, reuse, and substituting materials that are more sustainable and environmentally acceptable must all be prioritized and promoted by law and regulation. (Link to Zero Waste Policy.) Relying on recovery of minerals from mining waste and brine discharges must also be pursued before tapping new additional ore bodies as a way to help clean up and get more use out of existing wastes.

On federal Public Lands within the United States mining falls into three categories:

- 1) Locatable or "hard rock" minerals such as iron, copper, platinum, lithium, cobalt, uranium etc. On federal public lands, these are governed by the 1872 Mining Law and are subject to non-discretionary claim staking by private interests on any federal lands not specifically withdrawn from mineral entry. Most minerals fall into this category.
- 2) Leasable minerals such as phosphates, sodium, sulfur, and potassium as well as hydrocarbon deposits such as coal, oil, gas, oil shale, and tar sands. These are subject to discretionary leasing under the 1920 Mineral Leasing Act.
- 3) Saleable minerals such as sand and gravel used in construction and road building, are subject to the Materials Act of 1947, as amended.

The United States must avoid promoting mining to meet its needs and demands in other parts of the world while restricting it domestically. We need to see mining as a global environmental and human rights challenge that needs to be resolved globally. Where mining is necessary to meet global needs for additional minerals, the operations where

mining takes place must all be subject to the highest standards to protect human rights, labor rights, communities, and the environment. Indigenous communities need to be full participants in reviewing, rejecting or approving mining that would impact their sovereign lands and waters and any other areas that hold significant cultural or religious significance. The <u>Jemez Principles for Democratic Organizing</u> must be followed when reviewing, rejecting or approving mining.

To address the climate crisis, the Sierra Club advocates an end to the leasing, extraction, and burning of all fossil fuels as rapidly as possible. The Sierra Club opposes all new or renewed fossil fuel leasing on public lands and waters. As part of its Energy Resources Policy the Sierra Club advocates that mountaintop removal coal mining must be stopped immediately, and other existing harmful mining practices such as long wall mining must be significantly improved or banned as coal burning is phased out. The Sierra Club supports strict enforcement of the Surface Mining Control and Reclamation Act and all coal mining health and safety laws until such time as coal mining is phased out and a just transition is accomplished. Similarly, other fossil fuel extraction, processing, storage, transportation and burning should be subject to the strictest regulation to protect the environment, health, safety, climate concerns and community, cultural, and indigenous rights until they are phased out and a just transition is accomplished. Goals and timing for phasing out fossil fuel dependence are also included in the Energy Resources Policy

Where mining is necessary it must be compliant with high-bar environmental and human rights standards such as the Initiative for Responsible Mining Assurance (IRMA) Standard for Responsible Mining, and assured by a global, third party certification system overseen by a multi-stakeholder board that includes frontline community, labor and environmental interests so that manufacturers and consumers know that the products they are buying meet the same strict and protective human rights, labor rights, and environmental protection standards. International trade agreements must protect and defend these universal high protection standards and not allow countries or companies to undermine them in a race to the bottom. Multilateral Development Banks must only lend money to mines projects that are fully certified to the highest standards. Companies and countries must refuse to import minerals, raw materials or products that come from uncertified mining operations.

Minerals and metals needed for the transition to 100% clean renewable energy worldwide and ultimately zero net carbon need to meet these same high standards and there should be no waiving of standards to provide these minerals and metals. Clean

energy manufacturers and others involved in building out and maintaining the clean energy supply, storage and distribution system should be leaders in the reforms listed above. They must seek minerals that first come from recycling and reuse. They must seek minerals from mining waste before mining new ore bodies. They must work to establish the highest standards for mining and then promote certification to meet those standards and only purchase raw materials that are certified to meet those high standards. Manufacturers must adopt programs that accept full responsibility for waste recovery, reuse and recycling of their products to minimize the demand for new virgin ores.

Reducing the demand for lots of individual batteries for storage will be a necessary strategy in both the transportation and electric sectors. In transportation, rather than purely relying on private electric vehicles for all of our needs, we can reduce vehicle miles traveled through mass transit solutions, carpooling, congestion pricing, transportation demand management, and other policy options that will ultimately reduce the demand for batteries and thus the demand for minerals. In the electric sector, batteries are not the only means to integrate high amounts of clean energy onto the grid. Demand response (load shifting, smart loads, dynamic pricing, open markets for wholesale power through regional transmission organizations etc.) and energy efficiency will prove to be cost effective alternatives to batteries in many cases. Research and development into other long-term storage solutions should be encouraged, as they may lead to cost effective alternatives to lithium ion batteries with fewer mining impacts.

In the United States, the federal government and the states must adopt strict high standards for all domestic mining whether it is on public or private lands. Federal and state mining laws -- including and especially the General Mining Law of 1872 --must be reformed to allow full agency discretion to deny mineral claim staking, leasing, sale or extraction that is determined to not be in the public interest and protect human communities and the natural environment. Where mineral extraction is judged to be acceptable, after full public review and participation, then fair mineral royalties for public minerals must be required and any violations of environmental or labor standards should lead to strict fines and the possibility of mine closure. Adequate bonds, which do not include corporate guarantees or self-bonding, must be required to cover the costs of damages and reclamation. Mining reclamation should be funded from assorted fees, fines, donations and investments, not by taxpayers.

Regular monitoring of mine operations to ensure compliance by independent inspectors must be a requirement. There must be no privatization or patenting of public lands for

mining. Mining companies must remain liable for any lingering negative impacts and pollution. All significant mining, whether on public or private lands, must be subject to full environmental, climate and social impact reviews and public disclosure and public comment before any commitment is made to allow approval.

In the United States and elsewhere all mining must fully comply with all applicable environmental and health and safety laws and standards and independent monitoring and enforcement must be applied to guarantee compliance. Site remediation and reclamation must be required and fully guaranteed by adequate bonding so that there is no legacy pollution and the land and waters are restored to protect the natural ecosystem and the surrounding human communities.

Mining companies must pay a family-supporting living wage with full benefits and not discourage or impede their workers' right to unionize.

Government research programs and companies must constantly seek ways to manufacture products that are more efficient, rely on fewer resources, substitute non-toxic and less damaging raw materials and minerals, and are more easily recycled and reused.

There must be a moratorium on deep seabed mining and the issuing of exploitation and exploration contracts until and unless the environmental, social and economic risks are comprehensively understood and can be well-managed to ensure effective protection of the marine environment. Antarctica must remain off limits to mineral exploitation by any country.

Adopted by the Board of Directors February 20, 2020