

OVERVIEW OF MINING LAW AS PRACTICED IN THE WEST

A. What is Mining Law?

1. Real estate and environmental law practiced with different vocabulary.
2. Public lands law – 53% of Oregon is public lands. BLM and Forest Service both at about 16 million acres in state...
3. Financing.
4. “It takes a Village.”

B. Current minerals of importance.

1. Gold & use of cyanide
 - i. 1.1 million tons of hydrogen cyanide produced a year; 6% for reagents for gold processing. Rest for plastics, adhesives, cosmetics, pharmaceuticals, food processing and in table and road salts.
 - ii. Other possible agents are less stable such as bromide & chloride.
 - iii. Most cyanide is used in heap leaching in Nevada.
 - iv. Calico Resources proposes vat leaching of gold ores using cyanide to dissolve the ore at Grassy Mountain. Currently envisioned would pass 40% of ore through vats; rest recovered by gravity separation.
 1. Ore is ground to powder like consistency in ball mills
 2. Milled ore is placed in vats and agitated which increase contact with cyanide and oxygen.
 3. Gold dissolves as a stable gold-cyanide complex and precipitates using a highly activated carbon either in the vat or in a separate tank.
 4. Cyanide occurs naturally in apple seeds, apricot seeds, almonds, alfalfa, sorghum and root vegetables. Incomplete combustion during forest fires is a major source of cyanide in the environment.
2. Aggregate, sand and gravel – big Oregon mineral. State receives approximately \$1.3 million/year in mineral royalties, mostly from submerged lands.

3. Rare earths – Chinese control 97% of production; but huge environmental issues.
4. Coal – if it can be exported.
5. Uranium – for those willing to face delay.
6. Oregon State-owned lands have historically produced gold, diatomite and gas.
7. Oregon and Washington role will be limited because of geology - too much basalt.

C. Structure of Mining Transactions

1. Leases – private and governmental.
 - i. Major concern is term and size of parcel
 - ii. Tenure of title under lease – landlord issues.
2. Sale –
 - i. Assures title security as mines are expensive projects and money generally borrowed.
 - ii. Uranium mills by law go to Federal government after reclamation by law
3. Alaska Natives- rarely sell land for mineral uses; exception millsites and environmentally suspect land.
4. “Joint Venture” between mining entities.
 - i. Spread risk.
 - ii. Combination of land owner and mineral explorer.
5. Mining Claims on Federal Land
 - i. Oregon BLM public room is at 333 SW 1st Ave
 - ii. Open 8:45-4:30.
 - iii. 503-808-6001.

D. Applicable Law.

1. All existing environmental laws.
2. Not OSHA but MSHA for safety.
3. General Mining Law of 1872.
 - i. Yes, you can still stake mining claims.
 - ii. Must be land open for location – no withdrawal, no prior claim.
 - iii. No royalty.
 - iv. Right of self initiation.
4. General Leasing Act of 1920.
 - i. Basically all other minerals - coal, oil and gas, trona, geothermal leases, phosphate.
 - ii. At whim of government.

E. Risk Factors for Location of Mine.

1. Mineral deposit and metallurgy.
2. Transportation.
3. Location – can't move a mine like a Wal-Mart.
4. Political risk – example fracking.
5. Legal and regulatory risk.
6. Financing.
7. Tenure of title.
8. Environmental issues.
9. Business climate – dependent perhaps on size
10. Labor availability
11. Reclamation burdens and surety required.