TOPIC: CYANIDATION; CHEMICAL LEACHING

INQUIRY: Can you identify which states have amended or revised their mining statutes in the last year or two to include the regulation of chemical leaching of minerals, e.g., the cyanide heap-leaching process used to produce gold?

SEARCH RESULTS: Research was conducted using the state codes and bill tracking materials available in LEXIS. The state codes and the text of current state bills were searched for sections that define or otherwise mention "cyanidation" or leaching as an "extractive" process. A number of state code sections were retrieved that define or mention chemical leaching. However, it was not possible in every instance to determine when rules for chemical leaching became part of a state's law; dates are provided where possible. Information on toxic waste or acid mine drainage was included only if the statute section specifically mentioned chemical leaching. Study of state toxic waste and amd laws would require additional research.

Copies of the state code and bill items listed below, are attached. Also included is a copy of a survey of western states' mining regulatory programs released April, 1994.

SURVEY OF WESTERN STATES


The report, requested by the Mineral Resources Alliance and prepared by a Washington, D.C. law firm, is a survey of the status of state mining regulatory programs in the western states, e.g., states with public lands open to mineral exploration. The report lists the kinds of reclamation/environmental and enforcement regulatory provisions found in H.R. 322, the House bill that amends the Mining Law of 1872, and then summarizes which states have such provisions as part of the regulatory programs.
The states included in the report are: Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington and Wyoming.

The standards covered include: soils, stabilization, erosion and drainage, surface restoration, hydrologic balance, surface and ground water quality, surety forfeiture, permit suspension or revocation, suit for damages, civil and criminal penalties, citizen suits, etc.

ALASKA

Alaska Stat. Sec. 43.65.060 (1993). Title 43 Revenue and Taxation; Chap. 65 Mining License Tax; Definitions. (5) Cyanidation and leaching are included under "ordinary treatment processes”.

ARIZONA

From Arizona Advance Legislative Service: 41st Legislature, 2nd Regular Sess., 1994:

Chap. 118, Senate Bill 1365. Sec. 2. Title 49, Arizona Revised Statutes, is amended by adding:


..."Mining facility' means property that is owned, operated or managed by the same person to develop, mine, concentrate or leach minerals and associated mineral recovery activities...."

Chap. 95, Senate Bill 1529.

Amended Arizona Revised Statutes relating to the environment including water quality monitoring and schedule for designation of wastes.

CALIFORNIA

Cal Wat Code Sec. 13260 (1994). Water Code; Div. 7 Water Quality; Chap. 4 Regional Water Quality Control; Art. 4 Waste Discharge Requirements; Reports, Fees, Exemptions.

Subsection (l) describes the content of the report that must be submitted before any person discharges mining waste.

Cal Pub Resources Code Sec. 21151.7 (1994). Public Resources Code; Div. 13 Environmental Quality; Chap. 4 Local Agencies; Environmental impact report.
This section requires "the completion of an environmental impact report for any open-pit mining operation which is subject to the permit requirements of the Surface Mining and Reclamation Act of 1975...and utilizes a cyanide heap-leaching process for the purpose of producing gold or other precious metals."

[NOTE: Also included are excerpts from 1993 and 1994 bills that amended the statute sections.]

COLORADO: Title 34 Mineral Resources; Art. 32 Colorado Mined Land Reclamation Act (1993):

C.R.S. 34-32-103 Definitions.

Included in the definition of "designated mining operation" (3.5) is the use of toxic or acidic chemicals "in extractive metallurgical processing".

Requirements for "designated mining operations" are found in these sections:

C.R.S. 34-32-112.5 Designated mining operation.

C.R.S. 34-32-115 Action by board - appeals

C.R.S. 34-32-116.5 Environmental protection plan - designated mining operation.


C.R.S. 34-32-121.5 Reporting certain conditions.

C.R.S. 34-32-124.5 Emergencies endangering public health or the environment.

MAINE

36 M.R.S. Sec. 2855 (1993). Title 36 Taxation; Part 4 Business Taxes; Chap. 371 Mining Excise Tax; Definitions.

Definition of "mining": "Cyanidation" and "leaching" are included as examples of processes used in the separation or extraction of "minerals from the mine or other natural deposit".

MASSACHUSETTS

This section requires the commissioner to promulgate rules that will "insure that all debris and acid forming materials, toxic chemicals or materials constituting a fire, water or public health hazard are treated and disposed of in a manner compatible with sound health policy and good water supply."

MONTANA

Included under Metal Mine Reclamation statutes are requirements for "cyanide ore-processing", defined as the use of cyanide or a cyanide compound as a reagent in leaching operations. Two code sections are attached.

Mont. Code Anno., Section 82-4-303 (1993). Title 82 Minerals, Oil, and Gas; Chap. 4 Reclamation; Part 3 Metal Mine Reclamation; Definitions.


OREGON

ORS 517.910 (1993). Title 43 Mineral Resources; Chap. 517 Mining and Mining Claims; Reclamation of Mining Lands; Nonaggregate Mineral Surface Mines; Definitions for ORS 517.910 to 517.987.

This section uses the terms "surface mining operation or surface mining processing operation" and specifically includes "cyanide leaching or any other chemical leaching processing".

SOUTH DAKOTA

S.D. Codified Laws Section 45-6B-53 (1994). Title 45 Mining, Oil and Gas; Chap. 45-6B Mined Land Reclamation; Small-scale operation -- Special permit laws applicable.

A 1989 amendment added "cyanide leaching or other chemical or biological leaching process" as a mining operation which cannot receive a "small-scale operation" exemption.

Also see:

S.D. Codified Laws Section 45-6B-20.1 (1994). Board may require additional proof of financial assurance from certain operators -- Content and amount -- Factors for consideration.

S.D. Codified Laws Section 45-6B-93 (1994). Annual report on large-scale gold or silver surface mining operation -- Information to be included.
S.D. Codified Laws Section 34A-2-110 (1994). Title 34A Environmental Protection; Chap. 34A-2 Water Pollution Control; Assessment of operators for purpose of research -- Procedure -- Disposition of fees.

WASHINGTON

On April 1, 1994 the Governor signed House Bill 2521 which regulates metals mining and milling operations. Part of the bill declared "a moratorium on mining operations using the open pit cyanide heap leach extraction process."

ATTACHMENTS

C. ARIZONA Advance Legislative Service: 41st Legislature, 2nd Regular Sess., 1994:
   2. Chap. 95, Senate Bill 1529. Amending Title 49.
D. CALIFORNIA
E. COLORADO
   1. C.R.S. 34-32-103 Definitions.
   2. C.R.S. 34-32-112.5 Designated mining operation.
   3. C.R.S. 34-32-115 Action by board - appeals
   4. C.R.S. 34-32-116.5 Environmental protection plan - designated mining operation.
   6. C.R.S. 34-32-121.5 Reporting certain conditions.
   7. C.R.S. 34-32-124.5 Emergencies endangering public health or the environment.
H. MONTANA
J. SOUTH DAKOTA
2. S.D. Codified Laws Section 45-6B-20.1 (1994). Board may require additional proof of financial assurance from certain operators -- Content and amount -- Factors for consideration.

K. WASHINGTON: 1994 WA H.B. 2521