B.8. Mine Rehabilitation in Ontario: Legislation Development and Progress

by W.R. Cowan Ministry of Northern Development and Mines (Ontario) -

MINE REHABILITATION IN ONTARIO:

LEGISLATION DEVELOPMENT AND PROGRESS

by W.R. Cowan

6th Annual B.C. Metal Leaching/ARD Workshop 1/Dec/99

MINE ENVIRONMENT LEGISLATION

- Provincial
 - Mining Act
 - Aggregate Resources Act
 - Public Lands Act
 - Environmental Protection Act
 - Ontario Water Resources Act
 - Environmental Assessment Act
 - Lakes and Rivers Improvement Act
- Federal
 - Fisheries Act
 - Atomic Energy Control Act
 - Canadian Environmental Assessment Act
 - Canadian Environmental Protection Act

PURPOSE OF THE ONTARIO MINING ACT

- to encourage prospecting, staking and exploration for the development of mineral resources
- to minimize adverse effects on the environment through rehabilitation of mining lands

REHABILITATION PRIORITIES

- public health and safety
- alleviation or elimination of environmental damage
- limit public financial liability
- allow a productive after use (original or alternative) of the old mine site
- provide for public acceptance and sustainable mining

1991 LEGISLATION PRINCIPAL COMPONENTS

- Create Director of Mine Rehabilitation
- Require notification of projects
- Require public notice and consultation
- Require submission of closure plans
- Require financial assurance

CLOSURE PLANS

- detailed project description
- closure objectives
- progressive rehabilitation measures
- rehabilitation at closure
- monitoring plans
- long term site management
- · financial assurance

PRINCIPLES FOR CHANGE - BILL 26

- reduce red tape
- reduce regulatory burden
- streamlined approvals that maintain environmental standards

BILL 26 OBJECTIVES

- increase private sector responsibility vis-à-vis government for mine rehabilitation (self regulation)
- decrease government costs by switching from a negotiation process to an audit process
- increase financial assurance options mine reclamation trusts, royalty streams, sinking funds and pledged assets named as forms of financial assurance
- provide for financially strong companies to self assure

BILL 26 OBJECTIVES (continued)

- provide for "exit ticket" where warranted
- clarify "holders liability" for pre-existing hazards on a staked claim
- provide for certain lessees to revert historic mine hazards to the Crown
- provide greater confidentiality on financial information related to financial assurance
- provide for emergency access to mine hazards

CLOSURE PLANS

- certified by proponents
- accepted as filed if requirements are met
- regulated by inspections and audits
- no approval except:
 - by request (142(1))
 - at cost of proponent
 - amendments also require approval
- proponents may change from certification process to approval process and vice versa

ADVANCED EXPLORATION

- all advanced exploration projects are now subject to closure plans
- public notice remains discretionary

CERTIFICATION

A closure plan filed under Part VII of the Act shall contain the following certificate signed by the proponent, where an individual, or by two senior officers, one of which must be the chief financial officer, where the proponent is a corporation, "I (We) hereby certify that:

- (1) the foregoing closure plan complies in all respects with the Mining Act, Regulations and Mine Rehabilitation Code;
- (2) the proponent utilized qualified professionals in the preparation of the foregoing closure plan, where required, under the Mining Act, Regulations and Mine Rehabilitation Code;

CERTIFICATION

(continued)

- (3) the costing of the rehabilitation work described in the foregoing closure plan in based on market value costs of the material goods and services;
- (4) the amount of the financial assurance provided for in the foregoing closure plan is adequate and sufficient to fund the rehabilitation work required for the described site in order to comply with the Mining Act, Regulations and Mine Rehabilitation Code;
- (5) the foregoing closure plan constitutes full, true and plain disclosure of the rehabilitation work currently required for the described site in order to comply with the Mining Act, Regulations and Mine Rehabilitation Code."

CERTIFICATION

(continued)

All filed closure plans must be submitted with all certificates required in the preparation of the closure plan. The certificates shall be signed by the responsible professional and be attached to the original closure plan and all copies, and shall state:

- (a) the name, address and occupation of the certifier:
- (b) the qualification of such person;
- (c) whether or not the certificate is based on personal examination;
- (d) the date of such examination;

CERTIFICATION

(continued)

- (e) if the certificate is not based on personal examination, the sources of the information assessed in making the certificate;
- (f) all details, if such person has, directly or indirectly, received or expects to receive any interest, direct or indirect, in the property of the proponent or any affiliate, or beneficially owns, directly or indirectly, any securities of the proponent or any affiliate.

TECHNICAL MEASURES REQUIRING CERTIFICATION*

- stability of tailings and impoundment structures
- rebar design and shaft cap testing
- shaft backfill design
- crown pillar stability assessment and rehabilitation designs
- hydrogeology and groundwater monitoring
- surface water monitoring parameters and frequency
- other
- * to be certified by appropriate professionals

TRANSITIONAL ISSUES

- accepted plans on date of proclamation are deemed to be filed
- if FA proposal not accepted proponent must file a certified plan
- proponents notified of filing date prior to proclamation must file a certified plan if amendments come into force prior to this date

FINANCIAL ASSURANCE

- Form and amount of financial assurance
 - 145 (1) The financial assurance required as part of a closure plan shall be in one of the following forms and shall be in the amount specified in the closure plan filed with the Director or any amendment to it:

FINANCIAL ASSURANCE

- cash
- a letter of credit from a bank named in schedule 1 to the *Bank Act* (Canada)
- a bond of an insurer licensed under the *Insurance Act* to write surety and fidelity insurance
- a mining reclamation trust as defined in the *Income Tax Act* (Canada)
- compliance with a corporate financial test in the prescribed manner
- any other form of security, or any other guarantee or protection, including a pledge of assets, a sinking fund or royalties per tonne, that is acceptable to the Director

OPERATING MINES AND MILLS

- Companies having a single A- rating (Standard and Poor's) or equivalent from at least two specified ratings agencies will be able to fully self-assure for the life of the mine.
- Companies having a rating of BBB- (Standard and Poor's) or equivalent from at least two specified rating agencies will be able to fully self-assure for the first half life of a mine provided that the life of the mine is equal to or greater than eight years.
 - Life of a mine is based on the proponent's proven and probable reserves against planned schedules of production

COMPLIANCE

- Director may require changes to closure plans
- orders may be appealed to Commissioner or referred to an agreed upon 3rd party
- costs for 3rd party referral borne by proponent
- decision is binding

EMERGENCY POWERS

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- "Proponent of a mine hazard likely to cause an immediate and dangerous effect" has a duty to act
- Minister may order proponent to rehabilitate the hazard
- Minister may direct employees to do everything practicable to ameliorate the adverse effect
- does not apply to holder of an unpatented mining claim who did not create or materially disturb the hazard

CONFIDENTIALITY

Confidentiality:

145(10) The Director or any person who works for the Director's office shall preserve confidentiality with respect to all financial and commercial information relating to the establishment of a proponent's financial assurance

F.O.I. Act:

145 (11) Subsection (10) prevails over the Freedom of Information and Protection of Privacy Act

LENDER LIABILITY

- "Owner" includes "SECURED LENDER...
 who has entered into possession of the mine or
 mining lands pursuit to their security."
- Other options are under review

EXIT TICKET

- Minister may refuse a voluntary surrender, or:
- Accept a surrender by agreement if:
 - site is closed out in accordance with closure plan or with prescribed standards
 - perpetual care funding, if required, is in place in a special purpose account
- Lands surrendered in this manner are not subject to EPA liability clauses

CLOSURE PLAN PROGRESS (Jan/99)

- 63 plans accepted with scheduled financial assurance
- 21 at financial assurance negotiation stage
- 39 under active review
- 25 other

ABANDONED MINES PROGRAM 1991-94

- \$10 million three year program
- Determine emergency response mechanisms
- Test, monitor, remediate known high risk sites
- Identify, locate & assess abandoned hazards
- Fund AMD research

New program proposed for 1999-03 period

ABANDONED MINES PROGRAM 1999-2003

- \$27 million over 4 years
- \$2M, \$5M, \$10M, \$10M
- Initial focus on safety hazards on Crown land

MAJOR ISSUES

- Long term care and maintenance, e.g. civil structures, water treatment
- Crown pillars
- Rehabilitation of open pit walls
- Verification of AMD measures
- Inactive & abandoned sites
- Engineering & financial risks

SUMMARY

- Progress is being made
- Attitude to rehabilitate is strong with proponents, dinosaurs face extinction
- Successful rehabilitation programs will remove the environmental stigma formally associated with mining operations

Authority (1990)

C. RECENT RESEARCH STUDIES

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