

HARDROCK MONITORING REVIEW COMMITTEE
POINTS FOR BOARD CONSIDERATION

007510

JOAN E.
from the Committee
of the Water Board

- 1) The Board may wish to have Yukon hardrock mine licences specify both a maximum 'grab' sample concentration and a maximum average concentration.
 - the standards for allowable metal concentrations should be based on the total metals in the waste not the present 'extractable'.
 - the Board may wish to allow licensees to report extractable rather than total metal values where the licensee has demonstrated that such analyses provide similar results.
 - this system is used in N.W.T. licences and is recommended by the Metal Mining Liquid Effluent Regulations and Guidelines.

- 2) The level of 0.05 mg/l of free cyanide specified in water licences is well below the detection limit of standard analytical methods for free cyanide.
 - The Freshwater Aquatic Life section of The Canadian Water Quality Guidelines recommend the measurement of weak-acid-dissociable cyanide or total cyanide in mine wastewaters.
 - General EPS guidelines for effluent quality are:
 - CNT 1 - 2 mg/l
 - CNWAD 0.3 - 0.5 mg/l
 - The Water Board may choose to recommend a cyanide analytical technique and equipment in its licences. The lack of a standard method in the licence is causing problems for licensees and government agencies.
 - there are none in the Metal Mining Liquid Effluent Regulations and Guidelines.
 - the EPS modification of the Burlington method was suggested

- 3) The list of parameters and standards specified for waste discharge in hardrock licences should be complete to provide legal certainty for the licensee and the government agencies.
 - monitoring requirements in each licence should reflect the site conditions and provide an appropriate balance between cost and environmental security.

- 4) Provisions should be continued in each licence to change chemical and physical monitoring requirements when appropriate.
 - the monitoring schedule may be reviewed near the time of the annual report.
 - the licensee and regulatory agencies should discuss proposed changes and provide their comments prior to Board consideration.

- 5) Benthic monitoring should be required annually for the first five years and every second year thereafter. Similar bioassay monitoring requirements may be appropriate if the milling process remains unchanged. This schedule will maintain a good record of biological change and reduce costs.

6) The Water Board may wish to include a clause in water licences which outlines simply the steps taken to assure the quality of water sampling, sample analysis and data reporting.

7) The Board should obtain expert advise in the field of water quality standards and monitoring when drafting metal mill licences.

Board members are referred to the complete minutes of meetings which have been included in their meeting packages. Members who may be missing copies of these minutes may obtain copies from the secretarial staff.

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