STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION

In the Matter of:	)	
PROPOSED AMENDMENT TO 20.6.2 NMAC (Copper Rule)	)	**No. WQCC 12-01(R)**

EXHIBIT SCOTT – D-18

Developing an

Operation, Maintenance and Surveillance Manual

for Tailings and Water Management Facilities

2011

The Mining Association of Canada

Chapter 1 – Introduction

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Tailings and water management facilities are integral components of mine and mill operations. They must be managed for the long term to ensure that safe and environmentally responsible stewardship is achieved. Toward this end, in 1998, The Mining Association of Canada (MAC) published *A Guide to the Management of Tailings Facilities*, which recommended the implementation of a tailings management framework (Figure 1) to integrate environmental and safety considerations into each stage of the life cycle of a tailings facility, from initial site selection and design, through construction and operation, to eventual decommissioning and closure. Actions should be planned within the context of policies and commitments, implemented in accordance with plans, checked and corrected, and subjected to management review.

Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities has been compiled to provide additional guidance for preparing manuals that outline procedures for the safe operation, maintenance and surveillance (OMS) of tailings and water management facilities.

An OMS manual will provide the planning context for its application through the facility's life cycle (Figure 2). It should be in place upon commissioning, and maintained thereafter until closure, providing a clear, documented framework for actions. It will also provide a sound basis for measuring performance and demonstrating due diligence.

The level of detail of an OMS manual should reflect site requirements. It must be kept current and should be revised periodically with a view to continual improvement. Need for revision may be triggered, for example, by changes in dam classification, operational performance, personnel or organizational structure, regulatory or social considerations, or following changes in life cycle and/or design philosophy.

Chapter 2 – Preparing an OMS Manual

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OMS Manual Development Team

Objective of an OMS Manual

The preparation of an OMS manual requires:

- setting up a team to develop an OMS manual;
- establishing objectives, a realistic budget and schedule to develop the manual;
- compiling information from many sources, within the company and beyond;
- establishing procedures for implementing, controlling and updating the OMS manual; and
- assuring that operational, engineering, corporate and regulatory issues are addressed.

OMS Manual Development Team

One individual should be assigned prime responsibility for the preparation of an OMS manual. This person should be assisted actively by a broader team with representation from the facility designers, site operations personnel, management and others having a direct interest in the performance and management of the facility.

Objective of an OMS Manual

The objective of an OMS manual is to define and describe:

- roles and responsibilities of personnel assigned to the facility;
- procedures and processes for managing change;
- the key components of the facility;
- procedures required to operate, monitor the performance of, and maintain a facility to ensure that it functions in accordance with its design, meets regulatory and corporate policy obligations, and links to emergency planning and response; and
- requirements for analysis and documentation of the performance of the facility.

2 Preparing an OMS Manual

Objective of an OMS Manual

Resources and Scheduling

OMS Manual Control and Update

An OMS manual should present information in a clear, logical and user-friendly manner. Any supporting documentation should be clearly referenced. The reader should be able to identify easily what is required and how to access the information needed.

The manual should enable the performance of a facility to be compared to expectations, design criteria and operating intent, particularly in the event of significant incidents.

Resources and Scheduling

A realistic budget and an achievable schedule should be established for preparation of an OMS manual, as well as for its maintenance, continual improvement, periodic review and update.

OMS Manual Control and Update

An OMS manual should be a controlled document, with specified procedures for:

- distributing and filing the manual and supporting documents;
- reviewing and updating the manual; and
- removing and archiving out-of-date materials.

OMS procedures and requirements should be reviewed and the manual updated regularly, consistent with continual improvement, and particularly after significant incidents.

Annual tailings and water management system reviews should include evaluation of OMS manuals.