BACKGROUND

These guidance documents were prepared as projects of the Toxicological Investigations of Mining Effluents (TIME) Network.

In 1999 the TIME Network was launched to address toxicological issues related to the then proposed *Metal Mining Effluent Regulations* (MMER), which later came into force in December 2002. The MMER include a provision for non-acutely lethal effluents and some mines were challenged to consistently meet this new requirement. TIME Network participants agreed that a multistakeholder program would be an effective approach to the issue of effluent toxicity. The TIME Network Program was launched with the following goals:

- To undertake projects that will broaden the knowledge base with respect to the causes of, and solutions to, effluent toxicity;
- To investigate and develop methodologies to identify causes of, and solutions to, reduce or eliminate toxicants;
- To look for cost-effective and environmentally sound pollution prevention and control treatment technologies to consistently achieve non-acutely lethal effluents; and
- To provide a mechanism for information dissemination.

In 2000, four projects were undertaken that focused on issues of concern to all stakeholders. Each project was guided by a Scientific Authority and a multistakeholder Project Task Force.

Two of the reports were guidance documents:

1. Development of a Guidance Document for Acute Lethality Testing of Metal Mining Effluents (prepared by ESG International and sponsored by Environment Canada)

   The objective of this project was to develop a guidance document to assist users in maximizing the reliability of data generated from effluent acute lethality tests. Document was to include acute lethality tests for rainbow trout and *Daphnia magna.* Guidelines were to be designed for use by the metal mining industry, but will be useful to others with an interest in acute lethality testing.

2. Development of a Toxicity Identification/Reduction Evaluation/Treatability Evaluation (TI/RE/TE) Guidance Document (prepared by ESG International and sponsored by Environment Canada and The Mining Association of Canada)

   The objective of this project was to develop consistent, cost-effective protocols for the Canadian mining sector to identify, evaluate and treat toxicants and achieve non-acutely lethal effluents.

Two other projects conducted under TIME were:

- Literature Review of Toxicity of Mercury, Cadmium, Selenium and Antimony in Mining Effluents (prepared by Beak International Incorporated and sponsored by Natural Resources Canada, The Mining Association of Canada and Environment Canada, March 2002)
- Best Management Practice (BMP) for Ammonia in the Canadian Mining Industry (sponsored by The Mining Association of Canada; in progress)

DISCLAIMER

The guidance documents and synopsis contained on this site have has been extracted, without modification, from the CD-ROM titled "Guidance Documents: Acute Lethality of Mining Effluents". They have been posted on this site for convenience of reference purposes only.

The material contained within these documents is valid as of February 2003. This information may be subject to change over time as new techniques or reference methods are developed. It is the responsibility of users of these documents to ensure that they are using the latest information.

Information provided in these documents should not be construed as endorsement in whole or in part by the various reviewers or the partners in the TIME Network (The Government of Canada, Provincial Governments, The Mining Association of Canada, contributing mining companies and participating non-governmental organization).

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