RECLAMATION PROJECTS SPONSORED BY THE CANADA - B.C. MINERAL DEVELOPMENT AGREEMENT

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On July 30, 1985, a 5 year $10,000,000 agreement was signed in Prince George between Canada's Minister of State for Mines, the Minister of Energy, Mines and Petroleum Resources, and the Minister of Industry and Small Business. The object of the joint agreement was to stimulate development of the provinces mining industry. One item included within that agreement was in the amount of $18,000 to fund year one of a proposed 3 year study of mine waste dump resloping. The project was described in the application for funding as follows:

"Dump faces constitute a significant portion of the approx. 25,000 hectares of land disturbed by mining in B.C. The cost of resloping waste dump faces is factorially higher than other reclamation costs. The Technical and Research Committee on Reclamation - an ad hoc industry, government and university committee - has made this issue the No. 1 research priority. A consultant study is recommended to search literature, interview individuals, examine sites, analyze findings and present a report at the annual B.C. Mine Reclamation Symposium. The Technical and Research Committee will assist in review of results, and corporate members of the committee will dedicate project work to it in the field."

The MDA management committee approved this request and proposals were subsequently solicited from consultants for undertaking the work at a set fee of $18,000, plus an extra $1,000 which was donated from the Technical and Research Committee's sinking fund.

A contract was subsequently let to Norecol Environmental Consultants who, in conjunction with Thurber Consultants Ltd. undertook literature reviews, interviews and analysis and submitted a report entitled, "Mine Waste Dump Management (Resloping) Study, May 1986".

The report proposed three groups of criteria to be used in determining the need for and extent of resloping required:

GROUP 1: Those that are important at all mines:
1) Cost
2) End land use

GROUP 2: Those that are important in certain circumstances:
1) Safety
2) Sediment production
3) Acid mine drainage and production of toxins

GROUP 3: Those of secondary importance:
1) Ease of revegetation
2) Substrate considerations
3) Appearance

Committee members have not had sufficient time to fully review and comment on this report so it will be kept confidential to the committee and the MDA management group until released.

A proposal covering year 2 of the study is under preparation and will soon be submitted to the MDA management group.

A second project was recently approved for funding by the MDA in the amount of $10,000. This one is designed to evaluate the state-of-the-art of flow-through rock drains. The project was described in the application for funding as follows:

"Mining in B.C. requires waste rock to be dumped into valleys. When streamcourses are encountered, these must either be relocated, or dumping directed to a more remote location. Both options are costly and each will have its advantages environmentally. A technique recently tried on a few sites involves the placement of a blanket of large rock over the streamcourse on top of which the overburden dump is constructed. The result is a flow-through rock drain. Questions are however posed as to the limiting factors in design and construction (stream flow maximum, bedload, foundation, etc.) and function over geological time. These must all currently be answered on a case-by-case basis. An initial symposium of experts from around the world is proposed, to document the state-of-the-art with a follow-up two year study program to develop design and construction criteria."

Further support for the symposium has been provided by the Coal Association of Canada, Ministry of Environment, Mining Association of B.C., and Crows Nest Branch CIM. The symposium will be held this September 8th to 11th at the Inn of the South, Cranbrook, B.C. and will feature a two day field trip September 8th and 9th of the Kootenay coal mines (and a cook-out) and two days of talks at Cranbrook. All for the amazingly low price of $150. It is hoped to have sufficient surplus to fund a follow-up study.

MDA funding has proven to be a valuable aid in attempting to resolve what has been a long-standing debate (with respect to re-sloping), and a vital assist in the attempt to prove out a promising development technique. The Technical and Research Committee looks forward to further progress courtesy of the Canada-B.C. mineral development subagreement.

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ASSOCIATION CANADIENNE DE REHABILITATION DES SITES DEGRADES

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BOX 682 - GUELPH, ONTARIO, CANADA - N1H 6L3

ISSN 0705-5927

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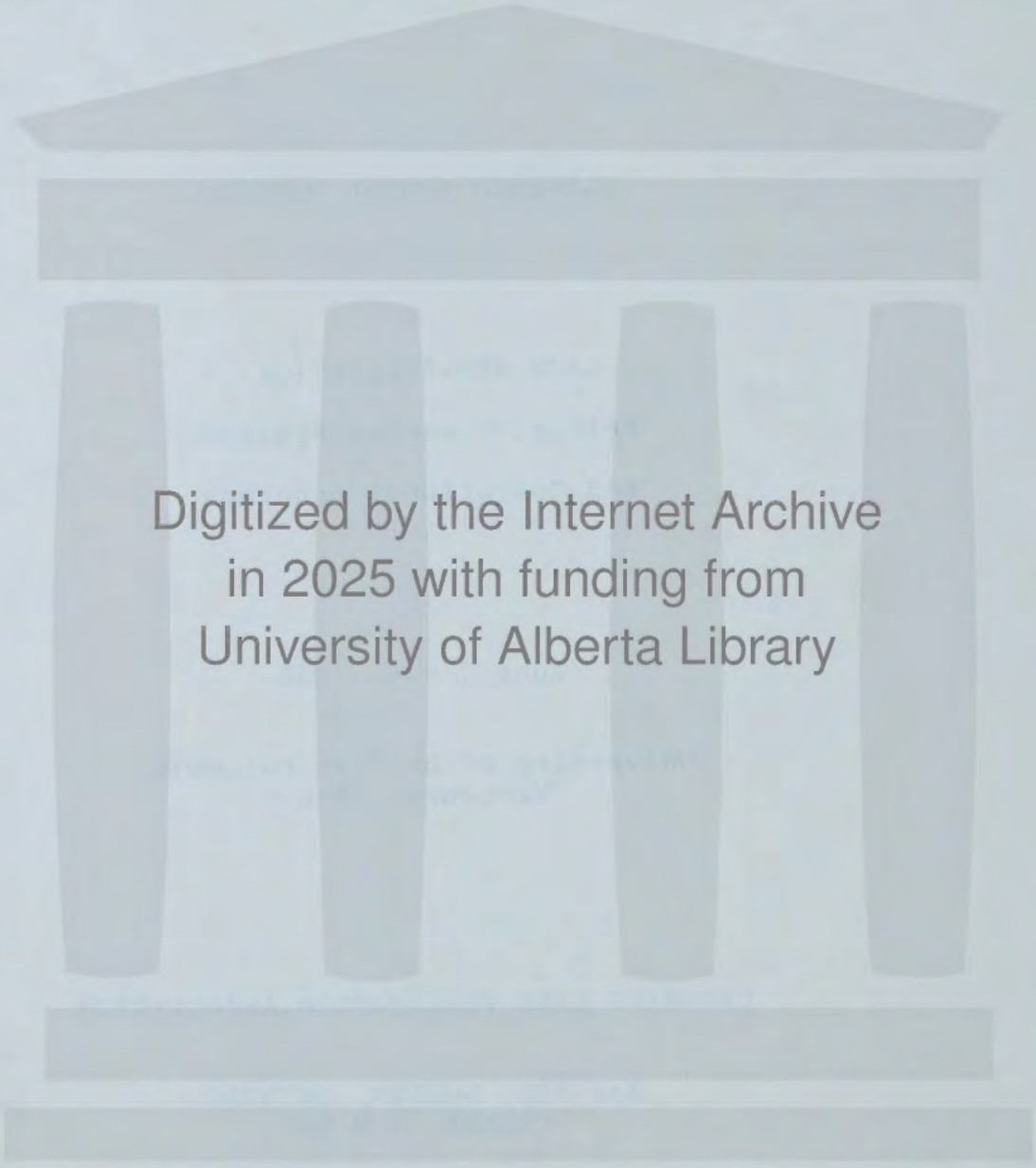

TABLE OF CONTENTS

FOREWORD

The British Columbia Chapter of the Canadian Land Reclamation Association was formed in 1985 to provide a local public forum for the exchange of information and experience in land rehabilitation. Comprised of professionals from a wide range of backgrounds and interests, this organization pulled together quickly to host the 1986 Annual Meeting. The diverse membership in the B.C. Chapter was realized in a program that expanded the scope of the conference to include many fields that have not been represented in past programs. The quality of presentations and range of topics kept audience participation at a spirited level. It is our hope that we have initiated a trend to widen the scope of the annual meetings so as to not focus on traditional mining or energy development issues.

I wish to thank all speakers and attendees for making this first formal function of the B.C. Chapter a success. The enthusiastic support of chapter members in the planning and administration of the conference demonstrated a strong desire for a quality meeting. This drive bodes well for the future of our chapter.

A great deal of effort went into the publication of the proceedings of the 1986 Annual Meeting. Care was taken to accurately reproducce all papers, however minor errors may have escaped the review process. We hope that this will not detract from the information presented by the authors.

May the CLRA and all local chapters continue to grow and function as a focal point for land rehabilitation.