Towards the Elimination of Rockfall Fatalities in Australian Mines

ACG Research Report No.: ACG 1009-01 (Phase I Report)
MERIWA Project No. M341

ROCKFALL: “An uncontrolled fall of ground of significant size in an entry area, or an uncontrolled fall of ground of any size that causes (or potentially causes) injury or damage.”

It is estimated that in the past decade, falls of ground caused 25% of all lost time injuries and 40% of all fatal accidents in WA underground mines. The ACG, in response to industry demand, has completed the one-year research project, Towards the Elimination of Rockfall Fatalities in Australian Mines.

With input from the project sponsors, the Centre has assembled probably Australia’s most comprehensive database on rockfalls, investigating more than 750 incidents that occurred between 1993 and 2001 at 26 underground metal operations.

Rockfall risks can be divided into two types:
1) the risk existing in the intense working areas near the active faces;
2) and the risk present in the rest of the mine, including travelways, declines and accesses.

Since 1993, most rockfall injuries have occurred within 10 m of active faces and have involved rocks smaller than 1 tonne.

The report findings will assist industry to develop solutions that will reduce the incidence of rockfall related injuries and accidents.

In the second phase of this project the ACG will continue to gather and analyse critical research information and disseminate these important findings to industry. With directive from the CEO Elimination of Rockfall Fatalities Workshop held in April 2002, the ACG in collaboration with the MCA is developing a national guideline for underground rockfall management to cover metalliferous and coal mining, collate available and potential training and education resources, and also collate available and potential technology to address rockfall risks.

Project Sponsors

Preventing recurrence of underground mining accidents remains a top priority requiring constant vigilance and a substantial commitment from all involved in underground mining operations. The Centre appreciates the support from the project sponsors – Barrick Gold of Australia, Henry Walker Eltin, Sons of Gwalia, KCGM, Outokumpu, Pasminco, MIM Lead Mine, BHP Cannington, RTZ Peak Mine, Normandy Bronzewing, WMC and MERIWA.

Authors: Y. Potvin (ACG), P. Nedin (Underground Mining Solutions), M. Sandy (AMC Consultants), K. Rosengren (Kevin Rosengren and Associates) and M. Rosengren. Published: December 2001. Number of pages: 54 Pages.

www.acg.uwa.edu.au
Towards the Elimination of Rockfall Fatalities in Australian Mines

ACG Research Report No.: ACG 1009-01 (Phase I Report)
MERIWA Project No. M341

I am an: __ Affiliate Member
__ Full Time Student (please provide proof of current enrolment)

Delivery Details
Please send goods and receipt to the following street address
*Please print clearly to avoid courier delivery errors*

Method of Payment

<table>
<thead>
<tr>
<th>Qty</th>
<th>Non-discounted price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A$165.00 each</td>
</tr>
</tbody>
</table>

Australian price (includes GST and courier delivery)

Overseas price (includes courier delivery)

Credit Card

Cheque Number

Invoice Request / Electronic Funds Transfer (EFT)

<table>
<thead>
<tr>
<th>Account Name</th>
<th>The University of Western Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB and Account</td>
<td>036 054 (BSB) 000 086 (Account)</td>
</tr>
<tr>
<td>Swift Code</td>
<td>WPACAU2S</td>
</tr>
<tr>
<td>Bank Name</td>
<td>Westpac Banking Corporation</td>
</tr>
<tr>
<td></td>
<td>109 St Georges Terrace</td>
</tr>
<tr>
<td></td>
<td>PERTH WA 6000</td>
</tr>
<tr>
<td></td>
<td>AUSTRALIA</td>
</tr>
</tbody>
</table>

ACG Reference

ACG Invoice Number/SURNAME-ACG
(Please fax EFT remittance advice to the ACG)

Order 3 or more items to receive a discount

All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

| Items are sent via courier, please provide a street address

<table>
<thead>
<tr>
<th>Qty</th>
<th>Non-discounted price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A$200.00 each</td>
</tr>
</tbody>
</table>

Australian price (includes GST and courier delivery)

Overseas price (includes courier delivery)

I am an: __ Affiliate Member
__ Full Time Student (please provide proof of current enrolment)

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*

Order 3 or more items to receive a discount

*All bank fees and charges for overseas sales, including currency conversions, are to be paid by the client*