



# Link Line



an update from **MASHA** on **YOUR** Mine Rescue program

**Issue #3 July 2007**

## THE WORLD WATCHES US



*From LtoR: Alex Gryska - MASHA, Mr. Tian Deyu and Dr. Zhao Xiaokui from the State Administration for Worker Safety China*

▶ The world continues to watch Ontario's mine rescue competition.

A two-man Chinese delegation from the State Administration for Worker Safety, Mr. Tian Deyu and Dr. Zhao Xiaokui, in Beijing attended this June's competition in Sault Ste. Marie to watch the province's best rescue teams in operation. Chinese mining authorities were invited to send a delegation following a visit by Alex Gryska, mine rescue manager for the Mining and Aggregates Safety and Health Association to China last fall. The Chinese mining industry has more than 10 million workers, including 20,000 full-time mine rescue personnel using modern equipment identical or similar to that used by Ontario mine rescuers. Mr. Tian, director of the Division of Rescue Performance, National Workplace Emergency Management Center, and Dr. Zhao, resident surgeon at the Mine Medical Service Centre of China Coal Hospital are the latest international visitors to the event.

In 2006, a mine rescue team from the Kahama Mining Corp. Ltd.'s Bulyanhulu Mine in Tanzania, participated in the provincial competition held in Timmins. Other visitors in recent years have come from Australia, Ghana, Ireland, Norway, the United States and the United Kingdom.

### 2007

## ONTARIO PROVINCIAL MINE RESCUE COMPETITION AWARD WINNERS

### OVERALL COMPETITION WINNERS

First Place: CVRD INCO – East Mines

Second Place: Xstrata Copper, Kidd Mine

**FIREFIGHTING AWARD**  
Xstrata Nickel, Craig/TL Mines

**TEAM FIRST AID AWARD**  
CVRD INCO, East Mines

**SPECIAL EQUIPMENT AWARD (Lifting Bags):**  
Canadian Gypsum Co.,  
Hagersville Mine

### EQUIPMENT TECHNICIAN AWARD

**First Place:**  
Norm Begin,  
Hemlo Operations

**Second Place:**  
Craig Jorgensen,  
Xstrata Nickel, Craig/TL Mines

**Third Place:**  
Drew Dagleish,  
Compass Minerals, Sifto Canada

*Thank you to all  
volunteers & staff who  
made this event possible.*



Visit  
[www.masha.on.ca](http://www.masha.on.ca)  
for more information and pictures!

### We need you!

If you have comments about the newsletter, or suggestions for future articles, please contact Susan Haldane at MASHA, (705) 474-7233 ext. 261, or [susanhaldane@masha.on.ca](mailto:susanhaldane@masha.on.ca)



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# RESEARCHING MINE RESCUERS

Laura Chaudry wants to know how fit and prepared Ontario mine rescuers are to undertake the physically strenuous work of saving lives under the adverse conditions found in mines.

The Laurentian University nursing student, assisted by nurse Karen Adamic, took blood pressure, temperature and pulse rates of mine rescue team members immediately before they competed in this year's provincial mine rescue competition in Sault Ste. Marie in June.



*Laura Chaudry, Laurentian University Nursing Student, and MASHA summer student employee.*



*Registered Nurse Karen Adamic took blood pressure, temperature and pulse rates of mine rescue team members.*

Team members were also asked to anonymously complete questionnaires

about their personal fitness, and how much fluid they drink before and after a competition.

Chaudry's research builds on work done by two other Laurentian nursing students at last year's competition in Timmins.

The nursing student, on a two-month placement at MASHA's Sudbury office, said the projects will create a baseline of information that can be used to help rescuers better prepare for mine rescue activities and more quickly recover from the physical exertion the activities require.

Chaudry will present the research to her class at Laurentian before graduating this summer and also share findings with MASHA.

## FAREWELL TIMMINS STATION

Ontario Mine Rescue said farewell to a unique part of its history this spring with the closing of the Timmins Mine Rescue Station, the oldest operating mine rescue station in the province. The station, originally located in a building behind the city's fire hall and later moved to the Schumacher Highway, opened in 1929 as a result of recommendations made by T.E. Godson following the 1928 Hollinger Fire that claimed 39 lives.

The Godson Commission into the fire proposed a series of mine rescue stations be built and staffed by men to train miners in rescue work and maintain rescue apparatus. Stations were opened in Kirkland Lake in 1930 and Sudbury in 1931.

Austin Neame, a retired RCMP officer, was hired as the first mine rescue officer for the Timmins station. He retired following the East Malartic fire in 1947.

The final introductory mine rescue course at the Timmins station in early March was attended by miners from Porcupine Joint Venture, Xstrata Copper - Kidd Creek, and

The Redpath Group which operates Xstrata's Montcalm Mine. The new station in South Porcupine will host its first introductory mine rescue course in September. The new station address is:

Timmins Mine Rescue Station  
48 Shamrock Ave.  
P.O. Box 477  
South Porcupine ON  
P0N 1H0



*The final introductory mine rescue class at the old Timmins Mine Rescue Station pauses for a "graduation" photo. The station, the oldest in Ontario, has moved to a new facility in South Porcupine.*

# MINING GOLD HELMETS

▶ CVRD-Inco East Mine's rescue team mined gold helmets instead of nickel at the 2007 Ontario mine rescue competition in Sault Ste. Marie in June.

The East Mine team had won the Sudbury District competition in May and the right to test their rescue skills against winners from each of the other five districts in the final competition. Teams had to search the 600 level of the Provincial Mine to find four missing miners after a fire filled the level with smoke. One of the missing miners stumbled out of the cage lift in the headframe with the information that two companions were unconscious in a corner of the 600 crosscut where they had fled when a tire fire broke out on a scoop tram. Teams quickly found those miners, one suffering severe burns to his arms and the other a suspected broken leg, and used foam to extinguish the fire. After coping with an unexpected shakeup in their team – each No. 2 man had to be replaced as his wife was in labour delivering their seventh child – the rescuers continued their search for the final missing miner. When searching the level proven fruitless, the teams climbed up Manway No. 1 to the A Zone stope



*Resplendent in their gold helmets, CVRD-INCO East Mine's rescue team shows off the silverware they earned in the 2007 Ontario mine rescue competition in Sault Ste. Marie.*

– actually the top of Drager Safety's firefighter training trailer – and worked their way up through the stope – on their hands and knees, most pushing their breathing apparatus through a maze of confined tunnels inside the trailer – finally finding the

missing miner, unconscious near a manway to the 500 level. Xstrata Copper, Kidd Mine's rescue team, winners of the Timmins/Kirkland Lake District competition, came second.

## ARE YOU READY?

Emergencies happen. When they do, will you be ready? MASHA has two products – Emergency Response Planning in Shaft Sinking and Emergency Response Planning in Surface Mining – to help you be prepared. Each set of guidelines offers a nine-step outline to develop an emergency response plan from assembling a team through to implementing the plan and training employees. The guidelines also include some practical, easy-to-use tools – a vulnerability analysis, an emergency response checklist and more – that help you assess what emergencies you need to plan for, and how complete your plan is. Price is \$15 each to MASHA members and \$45 to non-members, plus taxes, shipping and handling.

## LEARNING TO BEAT THE HEAT

**A new training module on heat stress will be integrated into the Mine Rescue program this fall.**

**The module is currently under development and will be incorporated into basic mine rescue training so that all mine rescuers will receive the training.**

**The module will focus on helping mine rescuers understand the dangers of overheating, and how to recognize, treat and prevent heat stress disorders. Heat stress occurs when the body's cooling system is overloaded, causing a rise in the body's core temperature.**

**The nature of mine rescue – psychologically and physically challenging work in hot, often humid, and poorly ventilated environments – places mine rescuers at greater risk of suffering from a heat stress disorder.**

**Two mine rescuers died of heat stress in an abandoned mine ramp stope in Nevada in 2002, and 10 collapsed, six died and one suffered severe injuries in Poland in 1998.**

**Training will not only better safeguard mine rescuers, but also their team, and allow the best opportunity for a successful mission.**

## MINE RESCUE COURSE ONLINE

MASHA's Ontario Mine Rescue is set to launch its first on-line course in September.

The Northern Ontario Centre for Advanced Technology (NORCAT) Inc.'s training website will host the course on mines gases with two modules – mine gases and specific hazards.

The mine gas module will cover material about gases commonly found

in mines, while specific hazards covers dangers associated with specific gases found in mines.

Each module offers the required information with charts, diagrams and pictures, review questions after each section, and final tests with an 80 percent mark required for completion. Placing the course online increases accessibility and improves convenience for mine rescuers who

want to take the course or review important course material.

The course will be available to all current MASHA Ontario Mine Rescue personnel and all new volunteers. The course will be available to others for a fee.

All participants will need to register first with MASHA's Ontario Mine Rescue by contacting Isabella Caron.

## TAKING MINING'S TEMPERATURE

It's getting hot out there, or to be more precise, down there.

As mines go ever deeper, workers are more often exposed to high ambient air temperatures created by high rock temperatures and radiant heat from mining equipment. Ventilation, air movement and cooling become more problematic and expensive.

Concerned that the increased exposure combined with the traditional mine environment of dust and gases will subject miners to greater risk of heat stress, industry and government are studying the effects of deep mining.

Phase Two of a study led by the University of Ottawa will focus on developing appropriate heat stress exposure limits for work performed in deep, mechanized mines.

The results will be valuable to Ontario Mine Rescue teams, who are exposed to heat hazards under normal conditions, and will continue to respond as mines reach new depths.

The research will produce information on heat stress countermeasures, the development of monitoring techniques, systems for risk assessment of heat injuries, and implementation and monitoring policies for heat stress management.

Partners in the research include the Deep Mining Research Consortium, Laurentian University and the Northern Ontario School of Medicine.

## GOODBYE RZ 25, HELLO TEST-IT 6100

After almost 40 years of faithful service to Ontario Mine Rescue teams, the RZ 25 Universal Tester will be retired this fall, replaced by Drager's new Test-It 6100.

The move was made necessary by Drager's decision to stop servicing and offering replacement parts for the RZ 25 in 2009.

The new unit will perform all the function tests on the BG4 oxygen breathing apparatus currently done by the RZ 25, plus has the added advantage of having software that will monitor and record all the data for download to a computer database.

The Test-It 6100 is also smaller and half the weight of the RZ 25.

Ontario will become the first North American jurisdiction to switch to the Test-It 6100, which has been in use elsewhere since it was released by Drager in 2006.

The phase-in will begin in September with training on the new units for mine rescue teams and should be completed by the spring of 2008.

Ontario Mine Rescue Teams switched to the RZ 25 in 1969 though the newest units were purchased during the 1980s.

### On the move...

The mine rescue station near Manitouwadge moved to the Williams Operating Corp. Mine late last year.

The new mailing address is: Pat Gauthier  
Mine Rescue Officer/Consultant  
Ontario Mine Rescue Station  
Williams Mine  
P.O. Bag 500  
Marathon, Ontario POT 2EO

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The information in this publication is accurate to the best of our knowledge. However, the association assumes no responsibility or liability for the accuracy or sufficiency of this information, nor does it endorse any product mentioned herein with the exception of those produced by MASHA. MASHA©2006

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