



Link Line



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

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World watches mine rescue Chilean incident prompts international effort

▶ Mine rescue took centre stage for much of the world this summer and fall, as the international mining industry pooled its resources – equipment, personnel, expertise – to rescue 33 Chilean miners trapped underground for 68 days.

“We were quite proud to be involved and able to help, but there were so many companies and so many individuals involved. It was such a global effort,” said Roy Slack, president of Cementation Canada, whose company with other members of the Cementation Group played a part in the rescue effort.

When a cave-in occurred at Chile’s San Jose Mine site Aug. 5, the fate of the 33 miners reported missing was uncertain and as time progressed looked less and less hopeful.

Though no Cementation Group company was directly involved in the San Jose mine, a drill operated by Terraservice, part of the Cementation Group, was brought to the site to assist in operations, Slack said.

As hope dimmed, on Aug. 22 “their drill was the first to break through,”



Cementation Canada’s Strata 950 raisebore, designed and manufactured by RUC Cementation in Australia, and operated by another Cementation Group company, Terracim, was a small part of a large international effort to save 33 Chilean miners.

Photos courtesy Cementation Canada

giving the miners a 12.5 cm lifeline to the surface, he said. The news the miners were still alive after almost two weeks underground, sparked an intense

effort by the Chilean government and the international mining community to rescue them.

See “World” Pg. 5

Nothing special for volunteers in ‘60s

▶ When John Guthrie joined Ontario Mine Rescue as a volunteer at Inco’s Garson Mine in 1960, it didn’t take long to be trained on special equipment.

“The only special equipment was whatever the mine had on hand,” said Guthrie, who later as Ontario Mine

Rescue’s equipment technician, was responsible for introducing much of the special equipment in use today.

Only Standard Equipment

As a volunteer, “I was trained on the McCaa, and the Scott Air Pack,” and later the Draeger BG 174, and several types

of respirators and gas monitors, but no special equipment, said Guthrie, who became a Mine Rescue Officer in 1968.

“The mining industry was booming. The west end (of the Sudbury Basin) was booming and the mine rescue people decided to open a station in Onaping.”

See “Shifted” Pg. 3

We need you!

If you have comments about the newsletter, or suggestions for future articles, please contact Susan Haldane at WSN, (705) 474-7233 ext. 261, or susanhaldane@workplacesafetynorth.ca



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Inmet Mining aims high

Asks Ontario Mine Rescue to assist operations to be among the best

To be among the best in health and safety is John LeClair's vision for Inmet Mining, an Ontario-based international mining company.

That's why LeClair, senior manager of health and safety with Inmet, asked Ontario Mine Rescue to assess and support the company's copper and zinc mining operations in Pyhäsalmi, in central Finland and Çayeli, in northeast Turkey.

"We're always looking to get better and Ontario Mine Rescue is at the forefront of mine rescue in the world," said LeClair, who received his 20-year pin as a volunteer with Ontario Mine Rescue in 2006 before beginning a short string of international jobs including in Papua New Guinea and Guatemala.

Inmet's requests reflect a growing international demand for Ontario Mine Rescue, as well as Workplace Safety North's mining sector services, said Alex Gryska, mine rescue manager. "It's a strong indication of how well regarded we are," he said.

"A Very High Standard"

"All those years I spent in Ontario Mine Rescue moving between different mines, being trained by different mine rescue officers," LeClair said, "the training I received was standard around the province, and at a very high standard."

So when LeClair wanted to assess the emergency response capability at the underground and open pit operation at Pyhäsalmi, and again later when he needed to review mine rescue training at the underground mine at Çayeli, near the Black Sea, he called OMR.

LeClair and OMR's Emergency Services Specialist Shawn Kirwan spent a week in Pyhäsalmi, 18 months ago where Kirwan audited emergency response capability and reviewed equipment, procedures and facilities. Though Kirwan found

some opportunities for improvement, he gave them a high mark.

"They have an enviable safety record with an extremely low frequency of serious incidents underground and on surface," he said. "There's a strong foundation of emergency preparedness and capability."

LeClair appreciated Kirwan's report.

"I felt assured we were in a fairly strong position to respond to an emergency," said LeClair, who also appreciated the recommendations on team structure and equipment replacement. "We're always trying to improve our performance and capability."



Inmet Mining sought Ontario Mine Rescue's assistance for its Pyhäsalmi Mine, in central Finland (pictured) and Çayeli Mine, in northeast Turkey.

Photo courtesy Inmet Mining

This year when a similar job, this time focusing on mine rescue training, needed to be done in Çayeli, he approached OMR and Kirwan again. Instead of an assessment, "we wanted to increase or better the skills of our trainers" whose own program "slightly mirrored the Ontario Mine Rescue program", LeClair said.

Again, Kirwan gave them high marks, as a "very capable emergency response group willing to remain current in techniques and abilities." He credited the "very qualified and capable

instructors" with "excellent materials for the classroom," but found them in need of support in developing practical simulations.

"Really Good Feedback"

"I think they just don't have experience in the range of incidents," so had difficulty developing 'what if' scenarios for training simulations, said Kirwan, who wrote 24 scenarios covering eight different potential emergency situations for them.

Kirwan provided "really good feedback on how we could improve our mine rescue process," LeClair said, and the simulations will be a valuable tool for the trainers.

Though LeClair has no current plans to call on OMR for assistance, he doesn't see that as the end of Ontario Mine Rescue's influence on Inmet.

"Our intent is to continue along this path to keep in line with Ontario Mine Rescue," he said.



Lifting bags and the hydraulic spreader were special equipment priorities for John Guthrie, who played a key role as equipment technician when Ontario Mine Rescue shifted from being a fire response service to an emergency response service.

Shifted to emergency response

Change in focus required special equipment

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Guthrie was interviewed by Senior Mine Rescue Officer George McPhail just before Christmas 1967. A few weeks later, “George phoned and he said if you’d still like to be with us, we’d like you to join us.”

“That was the best move I ever made.” He started in February, and moved into then just-constructed Onaping station a few months later with his family.

“We were the first and only family in that station,” said Guthrie, who spent his entire mine rescue career there until he retired in 1994. He and his wife still live in Onaping, a short distance from the former family home.

In 1984 a rockburst shook the Falconbridge Mine and despite the efforts of mine rescuers, trained in firefighting procedures, claimed four lives. A provincial commission confirmed what many in mine rescue believed had to occur - Ontario Mine Rescue was

expanded to handle all underground emergencies.

Ron Eveson, then the Senior Mine Rescue Officer, gave Guthrie a key role.

“I had the responsibility to go around and find out what equipment we should have in the trucks,” said Guthrie, who over the next 10 years purchased a range of special equipment now familiar to every Ontario Mine Rescue volunteer.

Lifting bags and the hydraulic spreader were the highest priorities, he said. The use of vehicles in mines was increasing, resulting in an increase in incidents involving vehicles, so that equipment quickly proved its worth, Guthrie said.

“Never Going to Use Those”

The mine rescue officers and volunteers were open, if not supportive, to the changes as mine rescue evolved into an emergency service.

“We consulted among ourselves and decided on what to get and then got it.”

Guthrie admits that of all the equipment he purchased, he only ever doubted the value of purchasing rock splitters. Eveson had told him to find the tool, so the equipment technician went to the store and “told them I wanted the biggest ones they had.”

“By the time they got to Onaping, I

started to have doubts they would ever be used. I said to myself, ‘We’re never going to use those things,’” Guthrie said.

“A week later, I got a call saying, ‘Come to Elliot Lake and bring your equipment.’”

A fall of ground had occurred, and a miner was missing. “The chunks were so big they couldn’t haul them,” he said. The splitters were needed to break through the fall.

But using the rock splitters proved problematic. They did a great job splitting rock with little effort, Guthrie said, but they stalled after several uses.

A store representative called to service the splitters proved unhelpful, so Guthrie asked for the mine’s “best mechanic” to help service them. They soon discovered dust and grit from underground easily jammed the air hoses, making the splitters inoperable.

After clearing the hoses and devising an inline filter, Guthrie said, the rock splitters proved his doubts were unfounded.

The purchase of and training in special equipment helped solidify Ontario Mine Rescue’s reputation, Guthrie said.

“We’re the best in the world. They come to us for mine rescue expertise. I’m pretty proud of that.”

In Memoriam

George McPhail
Senior MRO 1955-1977

Ron Eveson
Senior MRO 1977-1987



George McPhail test drives a new mine rescue truck.

George McPhail



George McPhail instructs mine rescuers in the use of a fog nozzle.



Ron Eveson straps on a Scott Air Pack.



George McPhail, kneeling centre, and Ron Eveson, next right, take centre stage during an all-Canada Mine Rescue Officers meeting in 1973.



Ron Eveson, left, pauses for a discussion during a mine rescue competition.



Workplace Safety North
Health and Safety Report
Mutual Aid Agreements



Guidance available on Mutual Aid Agreements

In mining there is a risk that any emergency can escalate into a major or prolonged incident that will require resources beyond the capabilities of an individual mine operation.

Mutual Aid Agreements (MAAs) give mine operations a tool to support their emergency response plans and services by sharing resources.

Ontario Mine Rescue with the support of the Mine Rescue Technical Advisory Committee has prepared a Health and Safety Report on Mutual Aid Agreements to help mine operations develop effective agreements with each other.

Topics covered include legislated requirements and responsibilities, risk assessment approaches, implementation, and agreement content, as well as sample mutual aid agreements. This report is not intended to be a substitute for legal or other professional advice, but to provide guidance on mutual aid agreements to mining sites in Ontario.

The Health and Safety Report on Mutual Aid Agreements is available for no charge on the Workplace Safety North website's products page - www.workplacesafetynorth.ca/products.



World mining industry mobilized for incident

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“We mobilized the next day,” Slack said. Plans were made to move a Strata 950 raisebore being used at another Chilean mine site to San Jose. The Strata 950 is owned by Cementation Canada and operated by Terracem in Chile, and was designed and manufactured in Australia by RUC Cementation. All these companies are part of the Cementation Group.

Cementation Canada sent Glen Fallon of North Bay to act as drilling supervisor, and throughout the rescue effort technical assistance and advice was contributed by other member companies of the Cementation Group, one of the largest mine contractors in the world.

“We were drilling by Sept. 1,” said Slack, who spent a week at Camp Hope – the on-site makeshift tent village to miners’ families, and the media – just after drilling started. “It was quite a busy place.”

The raisebore became what was designated as Plan A, a job with few if any precedents – excavate a 37.5 cm diameter access hole from surface approximately 700 metres, almost half a mile, to the trapped miners, and then enlarge it to 72 cm to allow their escape.

“Very Smart Thing”

After drilling got underway, the Chilean government, which managed the rescue effort, did “a very smart thing,” Slack said. They didn’t wait to see the results of Plan A, “they started to plan and work on Plan B and Plan C.”

Plan B broke through to the miners first, and on Oct. 12 drilling stopped on Plan A less than 100 metres short of its target, while a successful rescue attempt took almost 24 hours to extricate the miners from their underground prison.

To Slack the international rescue effort was unprecedented, but is not likely to be the last.

“I can think of nothing like this. The number of companies, the number of countries, and the number of organizations involved. It was great.”

The mining world is becoming so small, he said, companies have international resources and contacts on which to draw during an emergency.

“I don’t think it matters where in the world something like that happens,” said Slack, companies and individuals will be willing to assist.

“But I think the main thing is to make sure it doesn’t happen again, anywhere.”



“Is it safe to breathe yet?”

A Sudbury area student tests a BG4 at the recent Maintenance Engineering Mine Operators conference at Laurentian University, where mine rescue volunteers from Vale and Xstrata hosted a display.

Did you see us on YouTube?

It's not a viral video hit yet, but Ontario Mine Rescue is now on YouTube.com.

Video shot at this year's provincial mine rescue competition in Timmins has been used to produce a two and a half-minute promotional video on Ontario Mine Rescue.

The promo, shot entirely underground during the competition at

the Hollinger Gold Mine Tour, shows brief clips of all six competing teams doing a range of rescue activities at various scenes.

A direct link to the video can be found near the bottom of the Ontario Mine Rescue website home page - www.masha.on.ca/mine_rescue.

Aussie mine rescuers claim title

A mine rescue team from Appin Colliery, NSW, Australia, claimed victory at the 7th International Mines Rescue Competition, in Wollongong, Australia in November.

The competition, hosted by Coal Services Australia, was designed to test the skills of mine rescue competitors

from around the world. Assessments included an underground exercise at a colliery, and virtual reality exercises at a Mines Rescue Station, Woonona.

A Chinese team, Zibo Mining Group, was runner up. Sixteen teams representing seven countries competed.

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