



How industrial owners are leading the way to improve health and safety standards on their job sites

Everybody's Business

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BY THEIR VERY NATURE, industrial projects are huge, complex and potentially dangerous. No matter how well run a project may be, add in thousands of construction workers unfamiliar with the hazards, the job site and the processes occurring there, and you have the potential for disaster.

Statistics from the Workers Compensation Board – Alberta (WCB) indicate that in 2001, there were 6,375 lost-time injuries in the Alberta construction industry. The construction workforce, which represents about 12% of all workers in the province, represented 28% of workplace fatalities and 17% of all lost time claims. In general, however, safety performance is improving with more hours being worked and fewer injuries. Still, there is room for improvement. Alberta is the site of billions of dollars of industrial construction. Owners have been challenged to take a long, hard look at their safety records with a view towards improvement.

Because the number of incidents directly related to industrial construction is difficult to accurately tabulate, most industrial firms benchmark their performance against their peers and the industry in general. Many firms, however, are getting a real wake up call when they compare their performance in Alberta against the international scene. In fact, while not providing precise numbers, a number of companies have revealed that injury rates on their Alberta sites are higher than for their operations elsewhere in the world.

It begs a simple question: why? While safety on industrial sites isn't a new concern, in Alberta's case the problem has been compounded by an acute labour shortage, an influx of new, inexperienced workers and, some suggest, a slightly macho wild west attitude that shuns the need for safety precautions.

So what is being done to improve construction safety on industrial work sites? As more and more industrial owners realize the link between safety performance and business performance, they are taking the matter into their own hands, setting aggressive zero incident targets, formulating progressive safety programs and implementing stringent guidelines for contractors working on their projects.

Creating a culture of safety

ACCORDING TO GARY WAGAR, Canadian Registered Safety Professional (CRSP) and executive director of the Alberta Construction Safety Association (ACSA), there has been a tremendous culture shift since the early 1990s. Back then, he says, incidents were seen as an inevitable part of the construction business. Today, companies are realizing that so-called "accidents" are fully preventable and, in doing



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so, are creating a workplace culture that is intolerant of unsafe work practices.

For the most part, the industrial sector has been quick to adopt this view as the province’s largest purchasers of industrial construction are demanding better safety conditions and practices. In fact, Wagar says, safety on industrial sites is improving faster than in the commercial and residential sectors.

A joint effort

ONE GROUP THAT has been a catalyst of increased safety on industrial sites is the Construction Owners Association of Alberta (COAA). The association – a group of the province’s largest purchasers of industrial construction including companies such as Syncrude, Shell, Sherritt, Suncor, Dow Chemical and Imperial Oil – has taken a collective approach to improving the safety performance of the construction industry.

One of the main areas of focus for the association’s safety committee has been developing and implementing Safety Best Practices, a set of, literally, the best practices shown to have reduced injury rates. Developed collaboratively, they serve as useful guidelines for industrial owners and contractor construction companies, many who have adopted them in whole or in part on their sites.

One of the most successful best practices has been the requirement from industrial owners that all tradespeople working on their sites complete the Construction Safety Training System (CSTS), as recommended by the COAA. Because tradespeople often move from one firm to another and from one construction site to the next,

they are often exposed to various safety practices. CSTS was designed to address this issue when it established a comprehensive system of standard construction health and safety practices such as the Workplace Hazardous Materials Information System (WHMIS) – a training program that covers the safe use of hazardous materials on the job site. WCB analysis indicates workers trained on the CSTS program have one third less injuries than the industry average.

Other best practices include the *Canadian Model for Providing a Safe Workplace Alcohol and Drugs Policy and Guidelines*. It includes an industry-accepted framework for employers to implement an effective alcohol and drug policy and rules for their work force. The model has been implemented all across Canada by a large range of industry groups and companies. Another best practice that has proven successful in helping create the desired safety culture change has been the *COAA Owners’ Guide for a Contractors’ Health & Safety Management Program* – a how-to manual to help owners manage construction safety by designing and creating a contractors’ health and safety management program for a particular job, including pre-qualification and job site safety checklists.

According to Peter Dunfield, chair of the COAA safety committee and senior loss advisor for Syncrude Canada, there’s no single solution that will solve all industrial safety problems. Instead, it’s a continuous journey, with each activity a single step towards injury reduction. “Once leaders in industry – and I don’t mean just the owner companies, but leaders of construction, leaders of unions, leaders of [industry associations] and individuals in general – realize that all accidents are preventable, it’s not an unreasonable next step for them to acknowledge that they have a moral responsibility to prevent them from happening,” Dunfield says.

“I’m coming to the conclusion that the silver bullet that will fix safety issues is leadership – every leader in the industry not putting up with unsafe behaviour, enabling safe work practices, correcting unsafe work practices and consistently going after that zero target,” he adds.

Raising the bar

OWNERS ARE NOT just setting high standards for their own employees. They are also raising the bar for the contractors that work for them. More and more, owners are defining what is and isn’t acceptable and passing those expectations on to their general contractors.

Many industrial owners have adopted stringent pre-bid requirements to ensure a prospective contractor’s ability to meet minimum health and safety performance criteria. Syncrude, for example, requires firms to submit a formal loss management program for eva-



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Developing an Injury Prevention Strategy

According to the Workers Compensation Board - Alberta, the following eight elements are critical to an effective injury prevention program:

1. Hazard Identification

Identify and assess all hazards from equipment, machinery, work areas and work processes.

2. Hazard Control

Use control measures to eliminate or reduce the risk of harm to workers or equipment.

3. Management Leadership and Organizational Commitment

Ensure that management exhibits its commitment to and leadership of the program. Involve workers in the process.

4. Ongoing Inspections

Have formal and informal inspection systems in place for timely hazard control.

5. Qualifications, Orientation and Training

Provide training to employees to ensure they understand how to do their jobs without risking their health or safety.

6. Emergency Response

Identify steps employees should follow to reduce their risk of injury and loss in the case of emergency.

7. Accident/Incident Investigation

Create a plan and systems that will be used to investigate accidents, identify their cause and develop measures to prevent them from recurring.

8. Program Administration – Ensure that employees fully understand the company's health and safety plan and its procedures.

Courtesy Workers' Compensation Board - Alberta

evaluation prior to accepting bids. The oil producer also expects firms to implement the *COAA Best Practice - Field Level Risk Assessment* process to identify and eliminate on-the-job hazards and risks. All contract employers must also have a process that addresses protection of new workers and up-to-date CSTS certification for trade-related workers is mandatory.

Another pre-qualification requirement for companies to do work on COAA sites is the Certificate of Recognition (COR). It is issued by the Alberta Construction Safety Association and Alberta Human Resources to firms that have met an established safety standard. Because COR holders have significantly lower lost-time claims, more and more buyers of construction services are adopting the Certificate of Recognition or equivalent standard as a pre-bid qualification.

Meeting the challenge

ONE OF CANADA'S largest industrial contractors, PCL Industrial Constructors Inc., has worked on high profile projects for Syncrude, Imperial Oil and Albian Sands and prides itself on its progressive safety program. The firm was awarded the COAA Leadership and Innovation Award in 2001 and 2002, was co-winner of the COAA Best Practices Implementation Award in 2001 and a finalist in the WCB Worksafe Awards in 2000, 2001 and 2002.

Hal Middlemiss, district safety manager for PCL Industrial Construction Inc., says the expectations of industrial owners are huge – and rightly so. “The good news is these extremely high expectations have prompted contractors and labour to increase their awareness and performance of safety and it's actually changing the workplace culture in the industry. After all, when Syncrude, Suncor or Nova sets these expectations, it can't help but filter through the entire economy,” Middlemiss says, adding that he thinks that if a company has a poor safety record, and no or limited evidence of an effective safety program, it's increasingly unlikely it will obtain work with one of the major owners.

Thanks to their innovative safety programs, PCL Industrial experienced a 35% reduction in lost time accidents, an 82% reduction in days lost from work and a 74% reduction in WCB claim costs since 1999.

Some of PCL's safety initiatives include:

- weekly reviews of safety performance to identify trends and measure the effectiveness of project safety programs;
- internal safety awareness campaigns to raise awareness of potential safety issues;
- reporting of all unsafe workplace behaviours in order to correct them before they lead to incident or injury;
- a modified work duties program to help employees injured on the job return to work;
- safety efforts such as pre-job safety instruction (or field-level risk assessment), tail gate meetings where workers can discuss issues with their supervisors, daily safety bulletins and near-miss reports.

“Our vision, and the vision of most industrial contractors, is zero incidents and zero accidents. That vision sets up a continuous improvement culture,” Middlemiss says. It also prompts management to think

of new ways to implement safety programs. "As a result, contractors, owners and employers are thinking more outside the box about injury prevention."

Ledcor is another firm recognized by its peers for its safety programs. Founded in 1947, the Ledcor Group of Companies is a leading North American construction company specializing in building, civil and industrial projects. The firm received the Canadian Construction Association's 2001 Gordon M. Vipond Memorial Award which recognizes achievement in program development, staff training, industry contribution and safe work record achievement. Ledcor also received the United States-based Associated Builders and Contractors National Safety Excellence Award making it the only firm to receive both awards in the same year.

According to Simon Schmid, a construction safety officer and manager of health, safety and environmental protection for Ledcor, one of the biggest challenges is ensuring subcontractors meet the stringent safety regulations required by the builder and the industrial owners. As such, Ledcor does a great deal of in-house training, including WHMIS, to bring smaller subcontractors up to speed with Ledcor's safety programs.

"When they work on our job site, we make our safety program very clear to them," explains Schmid. "We give them the tools and let them know, if you need assistance, we're here to help you."

Safety pays

WHILE REDUCING suffering is the primary reason firms are working to reduce on-job incidents, a solid safety program has other pay-backs as well. Safer companies have better cost control, a better reputation in the industry and better employee morale.

There are financial benefits as well. The average WCB premium rate increased over the past two years because of rising claims costs, in particular medical costs, to treat injured workers. Since WCB premiums are based on performance in a specific sector, reducing injuries means lower WCB rates. Firms with poor safety records pay more.

Further savings can also be earned by join-

ing the WCB's Partners in Injury Reduction (PIR) program. This voluntary program, designed to encourage injury prevention and effective workplace, health, safety and disability management systems, allows firms to earn between 5% and 20% in WCB premium discounts by achieving or maintaining their COR, improving performance or maintain-

ing industry leadership.

The bottom line? Safety is an investment firms make in their business, their company and their people. Workers benefit from safer, healthier workplaces while employers benefit from increased productivity and lower costs. And that's a win/win situation for everyone. ☐

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