

Your Source for Hydraulic Safety Awareness NEWS, TIPS & INFORMATION

## NEWS & EVENTS

### GOVERNMENT OF ALBERTA INSPECTORS

Alberta Workplace Health and Safety recently approved Hydraulic Safety courses for mandatory training for all regions of new and current officers. The Alberta Government has recognized the great amount of information compiled by the Hydraulic Safety Authority of Canada and will utilize this not only to create awareness for their inspectors but in further prevention of work place incidents. Increasing knowledge of hydraulic system hazards will greatly assist Inspectors and Investigators in their duties in the field.

### Health and Safety Ontario Partners in Prevention Health and Safety Trade Show

October 4, 2011

Holiday Inn Sudbury, Ontario

Stop by and visit the Hydraulic Safety Authority of Canada Inc.

**Safety Services Manitoba** is hosting HSAC's Hydraulic Safety Awareness Exposure Level course. This will be a one day Instructor led class on **October 20, 2011** in Winnipeg.

Visit [www.safetyservicesmanitoba.ca](http://www.safetyservicesmanitoba.ca) for more information.

### Alberta Health and Safety Conference

October 24 to 26, 2011

BMO Centre, Stampede Park Calgary

Stop by and visit the Hydraulic Safety Authority of Canada Inc. at **BOOTH 301**

### The Board of Canadian Registered Safety Professionals (BCRSP)

HSAC's High Risk Maintenance Level course was recently submitted to the Canadian Board of Registered Safety Professionals for approval in the Continuing Maintenance Program.



Specific procedures for hydraulic energy control (LOCKOUT) are vital to safety.

## BEYOND Hydraulic Safety Training

By Colin Bonner, CEO/President HSAC

By request from industry clients, HSAC has produced site specific training programs. Once employees have trained in hydraulic safety courses they soon point out hydraulic hazards in their own environment. These hazards should be relayed to coworkers and future personnel. Customized courses create a recognition that personnel can identify within their work environment, and duties of their occupation. This is highly recommended for orientation of new and young workers, greatly increasing their awareness of hydraulic hazards on equipment.

### Project developments resulting from HSAC courses:

- ◆ The implementation of specific procedures for tasks involving hydraulic systems.
- ◆ The implementation and compliance to standards that are favorable and in use in other countries.
- ◆ Integration of components for identification and control of hydraulic energy (lockout) as hydraulic energy is very difficult to identify and control.

Projects of this nature are a Co-operative between HSAC consultants, equipment manufacturers, stakeholders and company personnel. These projects are most often initiated by those who recognize the effectiveness of site specific hazard awareness and procedures. This is very effective in the overall protection of personnel, property and environment from hydraulic system hazards.

Contact an HSAC Consultant at [info@hsac.ca](mailto:info@hsac.ca) for further information on procedures, training, integration and compliance.

# THE FACTS ABOUT HYDRAULICS

by Colin Bonner, CEO/President HSAC

## Pressurized Hydraulic Fluid

Never vent hydraulic fluid under pressure to atmosphere. The result of venting pressurized hydraulic fluid to atmosphere has been the cause of many injuries, including death. Pressure released across a small opening can cause atomization of the fluid, depending on the type of fluid, an atomized spray is extremely flammable, and is also easily inhaled. Other hazards such as injection injuries and loss of supported loads including environmental damage may result.

## Hydraulic Hose Failure

Tens of thousands of feet of hydraulic hoses are sold in Canada each day to replace failed hose. Hoses that fail are an extreme hazard and can lead to injury, death, property and environmental damage. Hydraulic hose maintenance inspections and record keeping will reduce this risk.

## Hydraulic Hose Crimping

A common misconception is that a hose can be "cut back" and re-used with a new crimp fitting. When a hose is subjected to pressure it expands and contracts which over time permanently changes its dimensions. This will further increase the chance of a subsequent failure, more downtime and unsafe exposure to personnel.

## PCB's in Hydraulic Fluid

Polychlorinated Biphenyls (PCBs) may exist in pre 1984 hydraulic fluid of equipment such as tractors, elevators, presses, mobile equipment, and test lab equipment. Older equipment that did not have fluid maintenance done is very common throughout the work place. Testing is available to test for PCBs.

## Hydraulic Equipment for Lifting

Workers are at a much higher risk when using mobile equipment designed for earth moving to lift things such as equipment, pipe, or anything that requires a worker to rig the item being lifted. Equipment such as excavators are not equipped with the same safety devices as cranes are equipped with. Cranes are equipped with stabilizing,



Workers rigging to mobile equipment other than certified cranes, are at extreme risk should a hydraulic hose or seal fail.

counter balance valves, friction breaks, inspections, and a licensed operator. Workers rigging to mobile equipment other than certified cranes, are at extreme risk should a hydraulic hose or seal fail. Failure of a hydraulic hose could result in loss of the load.

# WEB Based Training

When break downs occur maintenance staff are always in urgent need. Some industries will train their maintenance staff outside of their facility knowing an undisturbed training session is impossible in house.

Taking advantage of e-learning has given maintenance staff the flexibility to start and stop their training to suit the hectic demands of their job.

Congratulations to **Harris Rebar** and **IKO Industries** for taking advantage of our Hydraulic Safety Awareness E-learning Programs.

Visit [www.hsac.ca](http://www.hsac.ca) for web based hydraulic safety awareness training.

## HYDRAULIC HOSE SAFETY



Hydraulic Hose Blistering indicates a failing hose which could rupture at any time.



Debris from the cutting process or other foreign objects may contaminate your system.

HSAC is building a library of meeting topics, short videos and posters for distribution to increase awareness of hydraulic hazards in safety meetings and on safety bulletin boards.