



What is a “Pre-Start Health and Safety Review”

Introduction

In 1999, Ontario’s Ministry of Labour (MOL) was alarmed by the lack of safety in industry and the rising number of violations involving machine guards and lockouts. Fatalities resulting from these types of violations doubled from just two years earlier, while critical injuries rose from 76 to 95 over the same period.

To make workplaces safer and more productive the MOL wanted to encourage the proper use of guards and lockouts. In April 2000, the MOL adopted a zero-tolerance approach towards violations involving machine guards and lockouts and reformed the way to enforce their proper use.

The reform became known as a Pre-Development Review (PRD). Owners, lessees and employers of certain hazardous equipment, or equipment used in hazardous processes, must have machinery, equipment or processes reviewed when constructed, altered or installed.

Implementation of such a reform required a substantial increase of review related work. Hence, engineers with the MOL became no longer involved in the review. The job of assessing individual situations was transferred to professional engineers registered in the province.

The industry, however, struggled with the interpretation of the PDR requirements and there were, perhaps, more questions than answers. To address the confusion and clarify the rules, the PDR requirements were revised and given a new name. The new provisions, introduced in October of 2000, were called PSRs or Pre-Start Health and Safety Reviews.

Pre-Start Health and Safety Reviews

PSRs are much more defined than their predecessors. A Pre-Start Health and Safety Review includes a written report on the construction, addition or installation of a new apparatus, structure, protective element or process, or modifications to an existing apparatus, structure, protective element or process. It is intended to identify potential hazards and recommend remedial measures (steps, actions or engineering controls) necessary to bring the construction, addition or installation into compliance with the applicable provisions of the Regulation for Industrial Establishment as listed in the section 7 Table 1:

Item	Applicable Provisions of this Regulation	Circumstances
1	Subsections 22 (1), (2) and (4)	Flammable liquids are located or dispensed in a building, room or area.
2	Sections 24, 25, 26, 28, 31 and 32	Any of the following are used as protective elements in connection with an apparatus: 1. Safeguarding devices that signal the apparatus to stop, including but not limited to safety light curtains and screens, area scanning safeguarding systems, radio frequency systems and capacitance safeguarding systems, safety mat systems, two-hand control systems, two-hand tripping systems and single or multiple beam systems. 2. Barrier guards that use interlocking mechanical or electrical safeguarding devices.
3	Clause 45 (b)	Materials, articles or things are placed or stored on a structure that is a rack or stacking structure.
4	Section 63	A process ^[1] involves a risk of ignition or explosion that creates a condition of imminent hazard to a person’s health or safety.
5	Section 65	The use of a dust collector involves a risk of ignition or explosion that creates a condition of imminent hazard to a person’s health or safety.
6	Sections 87.3, 87.4, 87.5 and 88, subsections 90 (1), (2) and (3), and sections 91, 92, 94, 95, 96, 99, 101 and 102	A factory produces aluminum or steel or is a foundry that melts material or handles molten material.
7	Sections 51 and 53	The construction, addition, installation or modification relates to a lifting device, travelling crane or automobile hoist.
8	Sections 127 and 128	A process ^[1] uses or produces a substance that may result in the exposure of a worker in excess of any occupational exposure limit set out in Regulation 833, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845 or 846 of the Revised Regulations of Ontario, 1990.

^[1] For the purposes of this section, the term “process” refers only to those processes listed and identified on Table 1 under items 4 and 8.

This table is taken from MOL's guidelines for PSR review. The first seven items must be reviewed and signed by a professional engineer registered in Ontario; the eighth item can be completed by either an engineer or a hygienist. Once completed, the PSR report must be presented to a joint health and safety committee before the machine or process is up and running.

HSP & PSRs

HSP became involved in PSRs in 2001 and has completed over 20 PSR's in the last three years. HSP's expertise is well known by local industry, the Ministry of Labour and their inspectors in Ontario.

PERSONAL SAFETY TIPS

- **Think Safety (know that a danger could exist).**
- **Realize that you could become a victim.**
- **Use good judgement.**

West Nile Virus Update

Some precautions that workers can consider for their protection are:

- *Wear protective clothing. Mosquitos are attracted to darker, more intense colours.*
- *Subject to other safety requirements, select light-coloured clothing, including longsleeved shirts or jackets, and long pants.*
- *Tuck pants into socks for extra protection.*
- *Reduce your exposure by eliminating likely breeding sites at your workplace.*
- *Where possible eliminate standing water in yards, grounds, parking lots, ditches and flat roofs on a regular basis or at least once a week.*
- *For example, clean up and empty any local containers or standing water such as old tires, barrels, cans or any items of any kind that hold standing water for any period of time outdoors.*
- *Apply a mosquito repellent containing DEET or another federally approved personal insect repellent according to the directions on the label, before outdoor activities. The amount of DEET in the insect repellent should be no greater than 30 per cent for adults.*

Lesser Known Proverb #1:

You have the right to remain silent. Anything you say can and will be misquoted and then used against you.

What's new?

ONTARIO STRATEGY TO REDUCE WORKPLACE INJURIES

TORONTO - The McGuinty government plans to reduce workplace injuries by 20 per cent by the end of four years through a comprehensive, integrated health and safety strategy spearheaded by aggressive enforcement measures.

Lesser Known Proverb #2:

Nothing is foolproof to a sufficiently talented fool.

HSP Employee Profile



Nick Djuriscic, P. Eng.
Senior Instrumentation Engineer
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Nick has over 30 years experience in electrical and instrumentation design and process control in the paper industry. He has managed design engineering groups and performed detail design for a variety of projects. Nick's experience includes feasibility and cost estimating; equipment start-up and commissioning and conducting Pre-Start Reviews in a wide range of manufacturing facilities.

AUGUST SAFETY SLOGANS:

Avoid accidents, keep guards in place.

Safety gear - 2 minutes...Risk assessment - 5 minutes...A mishap that takes a life - forever.



Selected Project Reference List

Pre-Start Health and Safety Reviews

HSP has completed numerous Pre-Start Health and Safety Reviews as required by the Ministry of Labour (MOL) for manufacturing operations, both for new processes and facilities and for modifications to existing processes.

A Pre-Start Health and Safety Review includes a written report on the construction, addition or installation of a new apparatus, structure, protective element or process, or modifications to an existing apparatus, structure, protective element or process. It is intended to identify potential hazards and recommend remedial measures (steps, actions or engineering controls) necessary to bring the construction, addition or installation into compliance with the applicable provisions of the Regulation for Industrial Establishments.

Facility	Key Processes and/or Equipment	Location
Glass Product Manufacturing	<ul style="list-style-type: none"> • Plastic Cutting Equipment • Lamination Equipment 	Eastern Ontario
Automotive Replacement Parts Production Facility	<ul style="list-style-type: none"> • Mixing Equipment • Automated Stapling Equipment • Moulding Press • Metal Straightening Equipment • Stretch Wrapping equipment • Drilling process 	Eastern Ontario
Foam Board Insulation Manufacturing Facility	<ul style="list-style-type: none"> • Boiler Equipment 	Eastern Ontario
Production Woodworking Facility	<ul style="list-style-type: none"> • Wood Saw Cutting Operations • Foam Cutting Operations 	Eastern Ontario
Fiberglass Manufacturing Facility	<ul style="list-style-type: none"> • Heat Forming Equipment • Trash Compactor System • New Production Line Installation 	Eastern Ontario
Sound-Proof Materials Manufacturing Facility	<ul style="list-style-type: none"> • Paint Booth Installation 	Eastern Ontario
Agricultural and Domestic Fan Manufacturing Facility	<ul style="list-style-type: none"> • Riveter machine 	Eastern Ontario
Pulp and Paper Mills	<ul style="list-style-type: none"> • Paper Rewind operations 	Ontario

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TO:

HSP Topics

by David Gordon

Congratulations

Congratulations are in order for Kevin MacDonald, who was married on August 14, 2004.

Kevin is a Junior Structural Specialist who has been with HSP since October 2003.

We congratulate Kevin and Paula and wish them the best of luck in their married life. We are sure that their marriage is based on a firm foundation.

Lesser Known Proverb #3:

Light travels faster than sound. That is why some people appear bright until you hear them speak.
