

# Understanding the amendments to the Ontario Health and Safety Act:

- Regulation 490/09 Designated Substances
- Regulation 833 Control of Exposure to Chemical and Biological Agents

Review of Designated Substance Regulation 490/90 changes include:	What this change means:
<p><b>Section 26.1 (1):</b> An employer who provides a worker with a respirator shall ensure that the respirator,</p> <p>(a) Is appropriate in the circumstances for the form and concentration of airborne designated substance in respect of which the respirator is to be used.</p>	<p>Supplied air respirator assemblies are no longer required when using isocyanates. Air purifying respirators may be adequate as long as concentrations aren't over the assigned protection factor (APF)'s x occupational exposure limit (OEL).</p> <p>A cartridge change out schedule is required.</p> <p>Exposures must be assessed by a person who is deemed competent as per the OH&amp;S Act and the regulation.</p>
<p>Schedule 2 assigned protection factor for respirators.</p>	<p>See appendix A below.</p>
<p><b>26.2 (5) 2.</b> If a compressed breathing air system uses a compressor with an operating pressure greater than 103.4 kPa to supply the breathing air, the breathing air must be tested at least once every six months to ensure that it meets the requirement set out in paragraph 1.</p>	<p>Since ambient air pumps are a low pressure source of air, typically providing 103.4 kPa or less (15 psi), they no longer need to be tested to CSA Z180.1 air quality requirements.</p>

Review of Control of Exposure to Chemical and Biological Agents 833 changes include:	What this change means:
<p>1. (1). Section 1 of Regulation 833 of the Revised Regulations of Ontario, 1990 is amended by adding the following definitions:</p> <p>“<b>maximum use concentration</b>” means the maximum concentration of an airborne biological or chemical agent that a respirator can be expected to protect a worker using the respirator from, as determined by multiplying the assigned protection factor set out in Schedule 2 for the respirator, or, if applicable, the simulated workplace protection factor for the respirator, by the occupational exposure limit set out for the substance in the Ontario Table or in the ACGIH Table; (“concentration d’utilisation maximale”)</p> <p>“<b>SWPF</b>” or “<b>simulated workplace protection factor</b>” means a surrogate measure of the workplace protection provided by a respirator, as determined in a controlled laboratory setting that simulates a workplace setting; (“FPSMT”, “facteur de protection simulé en milieu de travail”)</p>	<p>Inclusion of simulated workplace protection factor (SWPF) is recognized. Contact the manufacturer of your respirator for documentation that a simulated workplace study has been conducted showing that a higher APF is anticipated from the respirator.</p>

## Appendix A – Assigned protection factor for respirators:

	Respirator Type	CSA Z94.4-18 assigned protection factor
Air-Purifying	Air-Purifying Respirator – filtering facepiece (eg. 3M™ Particulate Respirator, 8210)	 10
	Air-Purifying Respirator – half facepiece (eg. 3M™ Rugged Comfort Half Facepiece Reusable Respirator, 6500 Series, or 3M™ Half Facepiece Reusable Respirators, 6000 and 7500 Series)	 10
	Air-Purifying Respirator – full facepiece (eg. 3M™ Ultimate FX Full Facepiece Reusable Respirator, FF-400 Series, or 3M™ Full Facepiece Reusable Respirator, 6000 or 7800S Series)	 10 <sup>1</sup> /50 <sup>1</sup>
Powered Air Purifying Respirator (PAPR)	Powered Air-Purifying Respirator – half facepiece (eg. 3M™ Tight-Fitting Powered Air Purifying Respirator systems utilizing 3M™ Versaflo™ PAPR TR-600/TR-800, 3M™ Half Facepiece Respirators and 3M™ Breathing Tubes BT-60 Series)	 50
	Powered Air-Purifying Respirator – full facepiece (eg. 3M™ Tight-Fitting Powered Air Purifying Respirator systems utilizing 3M™ Powerflow™ or Versaflo™ PAPR TR-600/TR-800 with 3M™ Full Facepiece Respirators and 3M™ Breathing Tubes BT-60 Series)	 1,000
	Powered Air-Purifying Respirator – helmet/hood (eg. 3M™ Versaflo™ M-400 Series Respiratory Helmets, 3M™ Versaflo™ S-Series Respiratory Hoods)	 25 <hr/> 1,000 <small>If supported by an SWPF study as 3M does for these head tops.</small>
	Powered Air-Purifying Respirator – loose fitting facepiece/visor (eg. 3M™ Versaflo™ M-200 Series Respiratory Visors and M-300 Series Respiratory Hard Hat, 3M™ Versaflo™ S-Series Respiratory Headcovers, 3M™ Speedglas™ 9100 Series Welding Helmets)	 25

<sup>1</sup>APF of 10 if Qualitative fit test (QLFT), if Quantitative fit test (QNFT) APF per above Appendix A

## Appendix A – Assigned protection factor for respirators (continued):

	Respirator Type	CSA Z94.4-18 assigned protection factor
Airline Respirator – continuous-flow	Airline Respirator – continuous-flow half facepiece (eg. 3M™ Half Facepiece Respirator with 3M™ Dual Airline Breathing Tubes [except 6500QL])	50
	Airline Respirator – continuous-flow full facepiece (eg. 3M™ Full Facepiece Respirator with 3M™ Dual Airline Breathing Tubes)	1,000
	Airline Respirator – continuous-flow helmet/hood (eg. 3M™ Versaflo™ M-400 Series Respiratory Helmets, 3M™ Versaflo™ S-Series Respiratory Hoods)	25 ----- 1,000 <small>If supported by an SWPF study as 3M does for these head tops.</small>
	Airline Respirator – continuous-flow loose-fitting head top (eg. 3M™ Versaflo™ M-200 Series Respiratory Visors and M-300 Series Respiratory Hard Hat, 3M™ Versaflo™ S-Series Respiratory Headcovers, 3M™ Speedglas™ 9100 Series Welding Helmets)	25
Airline Respirator – pressure-demand	Airline Respirator – pressure-demand full facepiece (eg. 3M™ Scott™ E-Z Airline Supplied Air Respirator)	1,000
	Self-Contained Breathing Apparatus (SCBA) – pressure-demand full facepiece Self-Contained Breathing Apparatus (e.g. 3M™ Scott™ X3 Pro SCBA)	10,000
	Multi-functional SCBA/Airline Respirator (e.g. 3M™ Scott™ SKA-Pa AT Supplied Air Respirator)	10,000

Reference: <https://www.labour.gov.on.ca/english/resources/notices.php>



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