

## Alberta Ambient Air Quality Objectives

ppb = parts per billion  
 ppm = parts per million  
 ugr/ m<sup>3</sup> = micrograms per cubic metre of air



<b>Substance</b>	<b>Average</b>	<b>Measure</b>	<b>Basis (reason for level)</b>	<b>Effective Date</b>
<b>Ammonia</b>	1 hour	2,000 ppb	Odour perception	1976, reviewed 2005
<b>Benzene</b>	1 hour	9.0 ppb	Hematological effects	1999, reviewed 2012
	Annual	0.9 ppb	Carcinogenic effects	
<b>Carbon Monoxide</b>	1 hour	13 ppm	Oxygen carrying capacity of blood	1975
	8 hour	5 ppm		
<b>Ethylbenzene</b>	1 hour	460 ppb	Adopted from Texas	2005
<b>Ethylene</b>	1 hour	1,050 ppb	Crop yield	2004
	3 day	40 ppb	Crop yield	
	Annual mean	26 ppb	Conifers and perennials	
<b>Hydrogen Sulphide</b>	1 hour	10 ppb	Odour perception	1975
	24 hour	3 ppb		
<b>Nitrogen Dioxide</b>	1 hour	159 ppb	Respiratory effects	1975, reviewed 2009
	Annual	24 ppb	Vegetation	
<b>Ozone (ground level)</b>	1 hour daily maximum	76 ppb	Pulmonary function	2018
<b>Fine Particulate Matter – 2.5 microns</b>	1 hour	80 ugr/ m <sup>3</sup>	Canadian standard	2018
	24 hour	29 ugr/ m <sup>3</sup>		2019
<b>Styrene</b>	1 hour	52.0 ppb	Adopted from Texas	1999
<b>Sulphur Dioxide</b>	1 hour	172 ppb	Pulmonary function	1975, reviewed 2008
	24 hour	48.0 ppb	Adopted from European Union human health	
	30 day	11 ppb	Adopted from European Union ecosystems	
	Annual	8.0 ppb	Adopted from European Union ecosystems	
<b>Toluene</b>	1 hour	499 ppb	Adopted from Texas	2005
	24 hour	106 ppb	Adopted from Michigan and Washington	
<b>Xylenes</b>	1 hour	530 ppb	Adopted from Ontario	2005
	24 hour	161 ppb	Adopted from California	