Gastech Default Alarm Levels

Rev 1 | Issued 24 November 2026 | Based on the Gastech alarm derivation method, v0.6

From 1 December 2026, Safe Work Australia's Workplace Exposure Limits (WEL) replace the Workplace Exposure Standards (WES). These are the default alarm set points Gastech configures on new and hire gas detection equipment. How they apply is set out in clause 12 of our Terms and Conditions of Sale.

Default set points are general warning levels, not an assessment of your workplace. Checking and setting the right alarm levels for your site is your responsibility.

Low alarm: live reading, at the 8-hour limit. **High alarm:** live reading, at the 15-minute or peak limit. **TWA alarm:** average over 8 hours. **STEL alarm:** average over 15 minutes. "Off" means the gas has no 8-hour limit.

Default alarm levels (ppm)

Gas	WEL (ppm)	Low alarm	High alarm	TWA alarm (8hr)	STEL alarm	Notes
Ammonia NH_3	20 (8hr) 35 (15min)	20	35	20	35	
Arsine AsH_3	0.05 (8hr)	0.05	0.09	0.05	0.09	
Benzene C_6H_6	1 (8hr)	1	1.8	1	1.8	Read by PID with a benzene tube. New limit of 0.2 ppm (8hr) from 1 Jun 2027.
Bromine Br_2	0.1 (8hr) 0.3 (15min)	0.1	0.3	0.1	0.3	
Carbon dioxide CO_2	5,000 (8hr) 30,000 (15min)	5,000	20,000	5,000	20,000	0.5% vol (8hr), 3% vol (15min).
Carbon disulphide CS_2	1 (8hr)	1	1.8	1	1.8	Read by PID. Correction factor applies.
Carbon monoxide CO	20 (8hr)	20	36	20	36	
Chlorine Cl_2	1 (peak)	0.5	1	Off	1	Peak limit only.
Chlorine dioxide ClO_2	0.1 (8hr) 0.3 (15min)	0.1	0.3	0.1	0.3	
Diborane B_2H_6	0.01 (8hr)	No default	No default	No default	No default	Below sensor capability. Set only on written instruction.
Fluorine F_2	1 (8hr) 2 (15min)	1	2	1	2	
Formaldehyde HCHO	1 (8hr) 2 (15min)	1	2	1	2	Read by PID or a specialist sensor.
Hydrogen bromide HBr	3 (peak)	1.5	3	Off	3	Peak limit only.
Hydrogen chloride HCl	2 (peak)	1	2	Off	2	Peak limit only.
Hydrogen cyanide HCN	10 (peak)	5	10	Off	10	Peak limit only.
Hydrogen fluoride HF	0.5 (8hr) 2 (peak)	0.5	2	0.5	2	Later date may apply in Victoria.
Hydrogen peroxide H_2O_2	0.5 (8hr)	No default	No default	No default	No default	Below sensor capability. Set only on written instruction.
Hydrogen sulphide H_2S	10 (8hr) 15 (15min)	10	15	10	15	

Gas	WEL (ppm)	Low alarm	High alarm	TWA alarm (8hr)	STEL alarm	Notes
Methyl bromide CH_3Br	1 (8hr)	1	1.8	1	1.8	Read by PID. Later date may apply in Victoria.
Nitric oxide NO	2 (8hr)	2	3.6	2	3.6	Later date may apply in Victoria.
Nitrogen dioxide NO_2	3 (8hr) 5 (15min)	3	5	3	5	
Ozone O_3	0.1 (peak)	0.05	0.1	Off	0.1	Peak limit only.
Phosgene $COCl_2$	0.1 (8hr) 0.4 (15min)	0.1	0.4	0.1	0.4	Limit raised (was 0.02 ppm, 8hr).
Phosphine PH_3	0.05 (8hr) 0.15 (peak)	0.05	0.15	0.05	0.15	Deferred to 1 Dec 2029 in WA and Victoria. The current limit (0.3 ppm, 8hr) applies there.
Silane SiH_4	5 (8hr)	5	9	5	9	
Sulphur dioxide SO_2	0.25 (15min)	0.1	0.2	Off	0.2	No 8-hour limit. Later date may apply in Victoria.
Toluene C_7H_8	20 (8hr)	20	36	20	36	Read by PID. Correction factor applies.

Limits from Safe Work Australia's Workplace exposure limits for airborne contaminants (amended November 2025) and the WHS ministers' decision of 24 June 2026. Some states apply later dates for some substances, so check the limit that applies where your equipment is used.

Revision history

Rev	Issued	Change
1	24 Nov 2026	First issue. Based on alarm derivation method v0.6, reviewed by Halliwell (17 Nov 2026).

Questions? Call +61 8 6108 0000 or email info@gastech.com.