4.3 Overview of MTR levels and target levels for air quality

The overview below gives the air quality values for priority substances and substances requiring attention which are relevant for air.

Air quality values are divided into:
- Dutch statutory standards (limit values and target values) included in Dutch decrees;
- European statutory standards (limit values and target values); and
- non-statutory standards (MTR levels and target levels).

Limit values and target values are always statutory standards. A limit value must be complied with and must produce a result. MTR stands for maximum permissible level (*maximale toelaatbare niveau*). MTR levels and target levels are always non-statutory standards. With respect to MTR levels and target levels efforts must be made to comply with them.

Values in µg/m³, unless otherwise indicated.
Values printed in bold are statutory limit values.
N.a. means not available due to insufficient knowledge.

The *MTR level* is the upper limit for a substance which on the basis of scientific data indicates at which concentration there is either no effect assessed to be negative or, in the case of carcinogenic substances, whether a mortality risk of 10^{-6} can be predicted. The *target level* indicates whether there are negligible effects on the environment.

In the National Environmental Policy Plan 3 (NMP3) a policy goal has been formulated stating that for all substances the MTR level may no longer be exceeded as a result of emissions in the very short term, if possible before 2000, and that the target level may no longer be exceeded as a result of emissions in the longer term, if possible before 2010.

Component	MTR	Target level	Average time	Comment
Acrolein	25		30 minutes	*target level is determined by natural background; this level is below the currently existing detection limit
	0.5	0.01 (*)	year	
Acrylonitrile	10	0.1	year	
Arsenic	0.5	0.005	year	
Asbestos	100,000 (number of fibre equivalents per m³)(*)	1,000 (number of fibre equivalents per m³)(*)	year	*for the type of fibre it applies: *equivalent factor* • chrysotile fibre, length<5µm *0.1* • amphibole fibre, length>5µm *10* • amphibole fibre, length<5mm *1*
Benzene	30	1	year	
	10		year	limit value[1)]
	5		year	target value[1)]
Cadmium	n.a.	n.a.		
Carbon monoxide	(mg/m³) 10	—	8 hours	*target level is determined by natural background
		(mg/m³) 0.1 (*)	year	
	(mg/m³) **6**		98-P (8 hours)	limit value[1)]
	(mg/m³) **40**		99.99-P (hour)	limit value[1)]
3-Chloropropene	7	0.07	year	
Chromium (VI)	(ng/m³) 2.5	(ng/m³) 0.025	year	
1,2–Dichlororethane	100	1	year	
1,1-Dichloroethylene	200	2	year	
Dichloromethane	(mg/m³) 25	—	4 hours	
	(mg/m³) 1.7	(µg/m³) 20	year	
1,2-Dichloro-propane	12	0.1	year	
1,3-Dichloro-propene	40	0.4	year	
Ethylene	300	—	hour	*target level is determined by natural background
	9	—	24 hours	
		0.5 (*)	year	
Ethylene oxide	3	0,03	year	
Fine particulates (PM10)	[till 2005] **125**	—	year	limit value[1)]
	[till 2005] 250	—	day	limit value[1)] may be exceeded a maximum of 18 days per calendar year
	[in 2005] **40**	—	year	limit value[1)]
	[in 2005] **50**	—	day	limit value[1)] may be exceeded a maximum of 35 days per calendar year

Component	MTR	Target level	Average time	Comment
Fluorides	0.3	—	day	
	0.05	(ng/m3) 0.5	year	
Formaldehyde	120	—	30 minutes	*target level is determined by natural background
	10	1 (*)	year	
Hydrogen sulphide (*)	n.a.	n.a.		*in case odour nuisance is lacking, toxic effects on humans and the environment will most likely no longer be an issue
Lead	0.5	0.005	year	
	0.5		year	limit value[1)]
Mercury	n.a.	n.a.		
Methyl bromide	10.000	100	hour	
	100	1	year	
Nickel	0.25	0.0025	year	
Nitrogen dioxide	**200**		hour	limit value[1)] may be exceeded a maximum of 18 times per year
	[in 2010] **40**		year	limit value[1)]
	30		year	limit value[1)]) for very large nature reserves (Art. 12)
Ozone	n.a. (*)	120 (**)	hour	*no threshold value can be given due to health effects; **target level is determined by natural background
		50 (**)	growing season (May-September, 8–20 hours)	
PAH (as benzo(a) pyrene)	(ng/m^3) 1	(ng/m^3) 0.01	year	
Phenol	100	1	year	
Propylene oxide	90	1	year	
Styrene	800	8	year	
Sulphur dioxide	**350**		hour	limit value[1)], may be exceeded a maximum of 24 times a year
	125		day	limit value[1)], may be exceeded a maximum of 24 times a year
	20		year	limit value[1)] for very large nature reserves (Art. 6)
Tetrachloroethylene	250	2.5	year	
Tetrachloromethane	60	1	year	
Toluene	3.000	—	day	
	300	3	year	
1,1,1-Trichloro-ethane (*)	(mg/m^3) 4.8	(µg/m^3) 48	year	*MTR level and target level may only be used very temporarily as a reference level due to the ban on production and use since 1 October 2002[2)]
Trichloroethylene	5.000	50	year	
Trichloromethane	100	1	year	
Vinyl chloride	100	1	year	
Zinc	n.a.	n.a.		

[1)] Decree on air quality, Staatsblad 269, 2001.
[2)] Regulation (EC) No. 2037/2000 of the European Parliament and Council of 29 June 2000 on substances that deplete the ozone layer.