



Queensland

Environmental Protection (Air) Policy 2019

Subordinate Legislation 2019 No. 153

made under the

Environmental Protection Act 1994

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1 Short title

This policy may be cited as the *Environmental Protection (Air) Policy 2019*.

2 Commencement

This policy commences on 1 September 2019.

3 Definitions

The dictionary in schedule 2 defines particular words used in this policy.

4 Application

This policy applies to the air environment.

5 Purpose

- (1) The purpose of this policy is to achieve the object of the Act in relation to the air environment.

Note—

See section 3 of the Act.

- (2) The purpose is achieved by—
- (a) identifying environmental values to be enhanced or protected; and
 - (b) stating indicators and air quality objectives for enhancing or protecting the environmental values; and
 - (c) providing a framework for making consistent, equitable and informed decisions about the air environment.

6 Environmental values

The environmental values to be enhanced or protected under this policy are—

-
- (a) the qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems; and
 - (b) the qualities of the air environment that are conducive to human health and wellbeing; and
 - (c) the qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property; and
 - (d) the qualities of the air environment that are conducive to protecting agricultural use of the environment.

7 Air quality objectives for indicators

- (1) This section and schedule 1 state the air quality objectives to be achieved and maintained under this policy.
- (2) An air quality objective stated in schedule 1, column 3 for an indicator stated in column 1 and for a period stated in column 4 is stated for enhancing or protecting the environmental value stated in column 2 of the schedule for the objective.
- (3) An air quality objective stated in schedule 1, column 3 must be worked out as an average over the period stated in column 4 for the objective.
- (4) Despite subsection (2), an environmental value may be enhanced or protected in an area or place if the amount of an indicator in the air environment in the area or place is more than the amount of the air quality objective stated in schedule 1, column 3 for the indicator for not more than the number of days stated in column 5 of the schedule for the indicator.
- (5) It is intended that the air quality objectives be progressively achieved as part of achieving the purpose of this policy over the long term.
- (6) This section does not apply to an air emission that may be experienced within a residence or workplace if the air emission is released within the residence or workplace.

(7) In this section—

workplace see the *Work Health and Safety Act 2011*, section 8.

8 Management hierarchy for air emissions

(1) This section states the management hierarchy for an activity involving air emissions that affect, or may affect, an environmental value to be enhanced or protected under this policy.

Note—

See section 35 of the *Environmental Protection Regulation 2019*.

(2) To the extent that it is reasonable to do so, air emissions must be dealt with in the following order of preference—

(a) firstly—avoid air emissions;

Example for paragraph (a)—

using technology that avoids air emissions

(b) secondly—recycle air emissions;

Example for paragraph (b)—

re-using air emissions in another industrial process

(c) thirdly—minimise air emissions;

Example for paragraph (c)—

using technology, materials or industrial processes that minimise air emissions

(d) fourthly—manage air emissions.

Examples for paragraph (d)—

- locating a thing that releases air emissions in a suitable area to minimise the impact of the air emissions
- treating air emissions before release
- dispersing air emissions to minimise the impact of the air emissions

9 Repeal

The Environmental Protection (Air) Policy 2008, SL No. 441 is repealed.

Schedule 1 Air quality objectives

section 7

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
1,2-dichloroethane	health and wellbeing	764	0.173	24 hours	
1,3-butadiene	health and wellbeing	2.4	0.001	1 year	
arsenic and compounds (measured as the total metal content in PM_{10})	health and wellbeing	$6\text{ng}/\text{m}^3$		1 year	
benzene	health and wellbeing	5.4	0.002	1 year	
benzo(a)pyrene (as a marker for polycyclic aromatic hydrocarbons)	health and wellbeing	$0.3\text{ng}/\text{m}^3$		1 year	
cadmium and compounds (measured as the total metal content in PM_{10})	health and wellbeing	$5\text{ng}/\text{m}^3$		1 year	

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
carbon disulfide	health and wellbeing	109	0.032	24 hours	
	protecting aesthetic environment	22	0.006	30 minutes	
carbon monoxide	health and wellbeing	11mg/m ³	9	8 hours	1 day each year
dichloromethane	health and wellbeing	3.3mg/m ³	0.9	24 hours	
		0.49mg/m ³	0.13	1 week	

Schedule 1

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
fluoride	health and biodiversity of ecosystems (other than protected areas)	2.9		24 hours	
		0.84		30 days	
		0.5		90 days	
	health and biodiversity of ecosystems (for protected areas)	0.1		90 days	
	protecting agriculture	1.5		24 hours	
		0.4		30 days	
		0.25		90 days	
formaldehyde	health and wellbeing	54	0.04	24 hours	
	protecting aesthetic environment	109	0.082	30 minutes	
hydrogen sulfide	health and wellbeing	164	0.108	24 hours	
	protecting aesthetic environment	7.5	0.005	30 minutes	

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
inorganic mercury vapour	health and wellbeing	1.1		1 year	
lead and compounds (measured as the total metal content in total suspended particles)	health and wellbeing	0.5		1 year	
manganese and compounds (measured as the total metal content in PM_{10})	health and wellbeing	0.16		1 year	
nickel and compounds (measured as the total metal content in PM_{10})	health and wellbeing	$22\text{ng}/\text{m}^3$		1 year	
nitrogen dioxide	health and wellbeing	250	0.12	1 hr	1 day each year
		62	0.03	1 year	
	health and biodiversity of ecosystems	33	0.016	1 year	

Schedule 1

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
ozone	health and wellbeing	210	0.10	1 hr	1 day each year
		171	0.08	4 hours	1 day each year
ozone (measured as accumulated exposure over a threshold of 40 ppb during daylight hours)	protecting agriculture		0.2 ppm-hr	5 days	
			3 ppm-hr	3 months	
	health and biodiversity of ecosystems (for semi-natural vegetation)		3 ppm-hr	3 months	
		health and biodiversity of ecosystems (for natural or uncultivated areas)		10 ppm-hr	6 months
PM _{2.5}	health and wellbeing	25		24 hours	
		8		1 year	
PM ₁₀	health and wellbeing	50		24 hours	

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
	health and wellbeing	25		1 year	
styrene	health and wellbeing	284	0.061	1 week	
	protecting aesthetic environment	76	0.016	30 minutes	
sulfate	health and wellbeing	27		24 hours	
sulfur dioxide	health and wellbeing	570	0.2	1 hr	1 day each year
		229	0.08	1 day	1 day each year
		57	0.02	1 year	
	protecting agriculture	31	0.011	1 year	
	health and biodiversity of ecosystems (for forests and natural vegetation)	21	0.0075	1 year	

Schedule 1

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
tetrachloroethylene	health and wellbeing	0.27mg/m ³	0.037	1 year	
	protecting aesthetic environment	8.7mg/m ³	1.2	30 minutes	
toluene	health and wellbeing	4.1mg/m ³	1	24 hours	
		400	0.1	1 year	
	protecting aesthetic environment	1.1mg/m ³	0.3	30 minutes	
total suspended particles	health and wellbeing	90		1 year	
vanadium and compounds (measured as the total metal content in PM ₁₀)	health and wellbeing	1.1		24 hours	
vinyl chloride monomer	health and wellbeing	28	0.010	24 hours	
visibility reducing particles	protecting aesthetic environment	20km visibility in the air environment		1 hr	

Column 1	Column 2	Column 3		Column 4	Column 5
Indicator	Environmental value	Air quality objectives		Period	Days
		$\mu\text{g}/\text{m}^3$ (except where noted)	ppm (volume/volume)		
xylenes (as a total of ortho, meta and para isomers)	health and wellbeing	1.2mg/m ³	0.25	24 hours	
		950	0.2	1 year	

Schedule 2 Dictionary

section 3

air emission means a substance released into the air.

air environment means the part of the environment of an area or place characterised by the air emissions that may be experienced there.

air quality objective, for an area or place, means—

- (a) for an air quality objective for an indicator that is the amount of the visibility in the air environment—the minimum amount of visibility that should be in the air environment of the area or place despite the presence of the indicator; or
- (b) otherwise—the maximum level that an indicator should be in the air environment of the area or place.

equivalent aerodynamic diameter, in relation to a particle (a ***measured particle***), means a length equivalent to the diameter of a spherical particle with a density of 1g/cm³ that has the same settling velocity as the measured particle.

health and biodiversity of ecosystems means the environmental value mentioned in section 6(a).

health and wellbeing means the environmental value mentioned in section 6(b).

indicator means a contaminant that may be present in the air environment.

mg/m³ means milligram per cubic metre at 0 degrees Celsius and an atmospheric pressure of 1.

ng/m³ means nanogram per cubic metre at 0 degrees Celsius and an atmospheric pressure of 1.

PM_{2.5} means particles in the air environment with an equivalent aerodynamic diameter of not more than 2.5 microns.

PM₁₀ means particles in the air environment with an equivalent aerodynamic diameter of not more than 10 microns.

ppb means parts for each billion.

ppm means parts for each million.

ppm-hr, for an indicator, means the average concentration of the indicator measured in parts for each million, multiplied by the length of time in hours to which the average applies.

protected area see the *Nature Conservation Act 1992*, schedule.

protecting aesthetic environment means the environmental value mentioned in section 6(c).

protecting agriculture means the environmental value mentioned in section 6(d).

residence includes a building, or part of a building, capable of being used as a dwelling.

total suspended particles means particles in the air environment with an equivalent aerodynamic diameter of less than 100 microns.

$\mu\text{g}/\text{m}^3$ means microgram per cubic metre at 0 degrees Celsius and an atmospheric pressure of 1.

ENDNOTES

- 1 Made by the Minister for Environment and the Great Barrier Reef, Minister for Science and Minister for the Arts on 15 July 2019.
- 2 Approved by the Governor in Council on 15 August 2019.
- 3 Notified on the Queensland legislation website on 16 August 2019.
- 4 The administering agency is the Department of Environment and Science.

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