



Guideline for Assessing and Minimising Air Pollution in Victoria

(for air pollution managers and specialists)

Response to Public Comments Report



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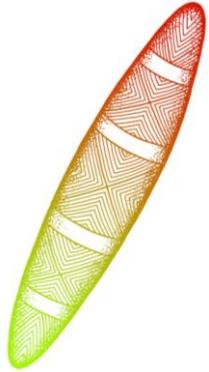
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We pay respect to Aboriginal Elders, past and present.

As Victoria's environmental regulator, we pay respect to how Country has been protected and cared for by Aboriginal people over many tens of thousands of years.

We acknowledge the unique spiritual and cultural significance of land, water and all that is in the environment to Traditional Owners, and recognise their continuing connection to, and aspirations for Country.



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Overview

The cornerstone of the *Environment Protection (EP) Act 2017* is the general environmental duty (GED). The GED requires anyone engaging in an activity that may cause harm to human health or the environment from pollution or waste to eliminate, or if not possible, reduce the risks so far as reasonably practicable (SFARP).

The Guideline for Assessing and Minimising Air Pollution in Victoria provides a framework to assess and control risks associated with air pollution to support industries and businesses that release air pollution emissions in Victoria in minimising risks from their emissions in an appropriate way.

The Environment Protection Authority Victoria (EPA) thanks those who took the time to comment on the draft guideline.

Creating these guidelines

In developing this guideline, EPA worked with a broad section of stakeholders and community so we could:

- Better understand issues and concerns raised by stakeholders so they were adequately addressed in the guideline
- Seek stakeholder input to make the guideline more user-friendly
- Ensure all stakeholders were involved in the consultation process

These objectives were achieved through a variety of ways, including consulting the Department of Environment, Land, Water & Planning, Victorian Department of Health, Earth Resources Regulator, National Air quality Technical Advisory Group and regulators from other states and territories.

EPA also encouraged feedback via:

- Dedicated presentations to the Clean Air Society of Australia and New Zealand (CASANZ).
- Discussion with community and major industry reference groups' on the guideline's progress and framework
- Inviting the general public to comment on the guideline draft published on Engage Victoria website via EPA's website, social media and direct stakeholder.

Summary of submissions

The draft guideline was published on the Engage Victoria website in June 2021

During consultation, the draft guideline received:

- 1,324 visits to Engage Vic

- 4 submissions
- 3 queries from individual community members.

Submissions received were from the following organisations:

- Clean Air Society of Australia and New Zealand (CASANZ)
- Cement Concrete and Aggregate Australia (CCAA)
- Construction Material Processors Association (CMPA)
- Centre for Air pollution, energy and health Research (CAR)

Submissions/feedback received about the draft guideline were mainly about revising or clarifying some sections.

Some of this feedback was either out of scope or involved the provision of information that was already available in other EPA guidelines; changing some wording was also suggested to improve readability.

Submission themes

Analysis of all formal submissions identified nine individual themes, shown in Figure 1.

More than half of the submissions (61 per cent) related to language used and editorial review, general comments, as well as comparisons between air pollution assessment criteria (APACs)¹ with other criteria, such as those in the Environment Reference Standard (ERS), State Environment Protection Policy (Air Quality Management) (SEPP AQM) design criteria, National

¹ In the final guideline the criteria used for assessment will be called air pollution assessment criteria (APAC) rather than air quality assessment criteria (AQAC).

Air quality is a term used to classify the levels of air pollution into a category for general communication purposes. Air pollution causes harm to human health and other sensitive environments and this harm for some pollutants occurs below the respective standard or guideline. Therefore, to be consistent with the new Environment Protection Act 2017, the focus needs to be on how to prevent and minimize the air pollutant and how to manage and reduce the harm caused by the air pollutant. Using the term air Quality diminishes the emphasis of this purpose.

Using the term AQAC is also inconsistent with the title where the emphasis is on air pollution.

Environment Protection Measure (Ambient Air Quality) (AAQ NEPM) values and classes of substances in the Environment Protection Regulations 2021 and the risk assessment methodology (including inherent and cumulative risk).

Other areas of concern included amenity (total suspended particulate matter (TSP) and dust management), application of the guideline (who are the intended users of the guideline?), the general environmental duty (GED), including questions relating to the Air Pollution Assessment Criteria and the principle so far as reasonably practicable the level of assessment proposed for mining and extractive industries and sensitive land uses, particularly agent of change and future use.

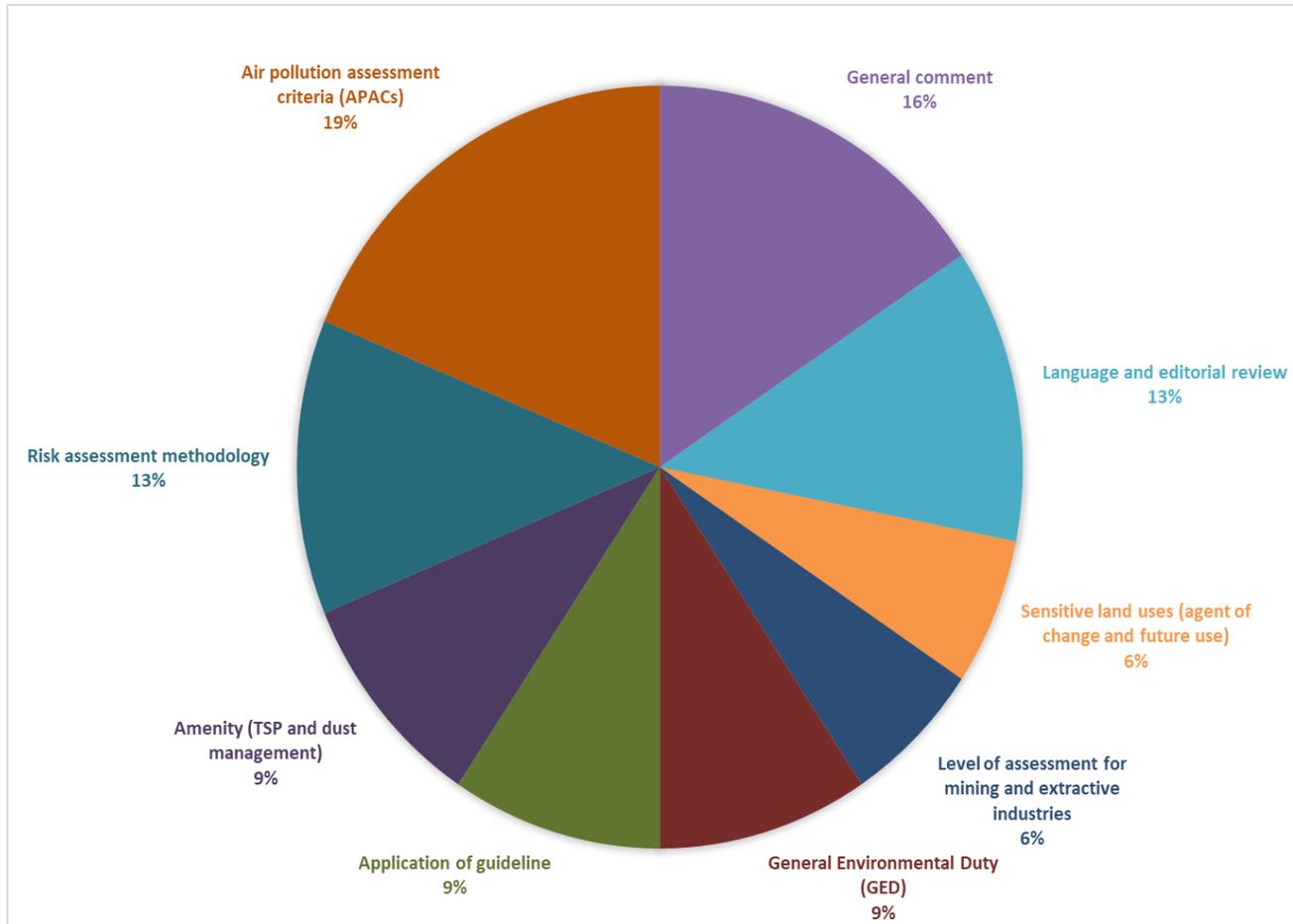


Figure 1: Submission themes.

Draft Guidance: submission themes and responses

Response to submissions

Theme	Theme summary	EPA Response
General comment	Submissions and feedback received about the guideline were mainly positive. However, some submissions expressed concern that the time allowed for public consultation of the guideline was inadequate and there needed to be an impact assessment of the guideline.	<p>EPA extended the standard six weeks consultation period for a further two weeks to support this request.</p> <p>While there is no formal requirement for an impact assessment of this guideline, EPA's internal assessment helps understand the extent of behaviour change, together with external consultation. This helps inform our understanding of behaviour change and impacts to consider.</p>
Feedback on language and editorial review	<p>Feedback on the language of the draft guideline was generally positive, however some submissions expressed concerns that:</p> <ul style="list-style-type: none"> The document could be improved by some editing There was some duplication and simplification in areas that were generally well understood by the target audience There were documents referenced in the guideline without a hyperlink There was no simplified version of the guideline. 	<p>This document underwent editorial and scientific review.</p> <p>EPA has changed some text to improve clarity by incorporating some of the suggested text edits.</p> <p>The following documents referenced in the guideline are being developed and will be published on EPA's website once finalised.</p> <ul style="list-style-type: none"> EPA publication 1954 'Guide to air pollution source monitoring' EPA publication 1955 'Guide to ambient air pollution monitoring' EPA publication 1956 'Guide to indicative air pollution monitoring' EPA publication 1957 'Guide to air pollution modelling' <p>EPA will also consider publishing a simplified version of the guideline.</p>
Air pollution assessment criteria (APACs). Please note that the term "air quality assessment criteria (AQAC)" in	<p>Comments on APACs included:</p> <ul style="list-style-type: none"> Adopting Environment Reference Standard as APACs Not using APACs as pollution thresholds 	<p>APACs are concentrations of pollutants in air that provide assessment benchmarks of potential risks to human health and the environment. It should be noted that these are not values that should be polluted to when carrying out a given activity.</p>

Theme	Theme summary	EPA Response
<p>the draft guideline for consultation has been replaced with air pollution assessment criteria (APAC) in the final version (see footnote 1) published on EPA's website.</p>	<ul style="list-style-type: none"> • The absence of direct reference to different class indicators. This may hinder clear prioritisation of overall risk • Complexity in the use of Environment Reference Standard as APACs when assessing sources; particularly when substances are not directly emitted • Comparison between SEPP AQM and the guideline is needed to avoid any misunderstanding about the different statutory documents. SEPP AQM used design criteria as acceptance criteria and the guideline uses APAC as acceptance criteria • Adopt a continual reduction approach to air pollution guidelines/standards over time • Relevant health-based APACs, as well as the Environment Reference Standard, should be updated to reflect the recently updated standards for nitrogen dioxide and sulfur dioxide as part of variations to the AAQ NEPM. 	<p>The class indicators with design criteria in the State Environment Protect Policy for Air Quality Management (SEPP AQM) were previously used as screening values for ambient air pollution assessments; if there were no exceedances of the design criteria, then no further action was proposed. This approach is not consistent with the GED or preventative measure which is the emphasis of the new <i>Environment Protection Act 2017</i>.</p> <p>The SEPP AQM's design criteria will no longer have a formal role for assessment purposes. They should also not be compared with the APACs since the APAC are live values that will be reviewed as required.</p> <p>APACs and the Environment Reference Standard are good representations of risk and can be used to assess risk from all sources, including point source emissions.</p> <p>Like the Environment Reference Standard, APACs are not intended to be concentrations one can 'pollute up to', or below which no action is required.</p> <p>The revised Ambient Air Quality National Environment Protection Measure (AAQ NEPM) standards are being considered for adoption into the Environment Reference Standard (in whole or in part). It is noted that the new <i>Environment Protection Act 2017</i> allows for more stringent standards than the AAQ NEPM. Any amendment to the Environment Reference Standard is likely to be finalised in early 2022 and will be automatically adopted as APACs.</p>
<p>Application of the guideline (audience)</p>	<p>Some submissions asked who the users of the guideline will be, adding that EPA should specify that these guidelines apply to the whole of Victoria.</p>	<p>As stated on page 11, section 1.1 of the guideline, "This guideline applies to any industry or business that releases air emissions in Victoria". This guideline can also be used by air quality consultants, risk assessors and other environmental professionals involved in the assessment and control of air pollution</p> <p>The guideline will also be valuable to Victorian communities interested in Victoria's air quality management framework</p> <p>Further context will be provided on the website when the report is published</p>

Theme	Theme summary	EPA Response
Amenity	<p>EPA received several submissions about amenity impacts, including:</p> <ul style="list-style-type: none"> • This guideline should be practicable and proportionately beneficial to human health, the environment, the extractive industry and EPA • The absence of APAC based on amenity (for example an APAC for TSP) in the guideline is unsatisfactory. 	<p>The emphasis of the <i>Environment Protection Act 2017</i> is prevention. This applies to nuisance dust management to prevent or minimise emissions associated with an activity.</p> <p>EPA encourages a proactive approach in implementing nuisance dust management measures to prevent or minimise potential off-site impacts.</p> <p>The updated Construction Material Processors Association Dust Management Guideline should also be consistent with Earth Resources Regulation guidance: Preparation of Work Plans and Work Plan Variations and Guideline for Mining Projects.</p> <p>Preventing/minimising dust impacts can be achieved by applying the best available technologies, techniques and practices, to control dust emissions at the source.</p> <p>Note: the updated Dust Management Guideline (Best Practice Management) CMPA 2016; will be reviewed by EPA to meet the intent of the new EP Act 2017 and associated legislative instruments.</p>
General Environmental Duty (GED)	<p>The following issues were raised:</p> <ul style="list-style-type: none"> • Should cost benefit analysis be considered and what criteria might apply when assessing what is reasonably practicable? • Should best available technology, be defined for different industries? Should emissions offsets and emissions trading be considered? <p>Some submissions were concerned by the reference in EPA publication 1856 'Reasonably Practicable' where it states that cost should be considered as a factor when determining what is 'so far as reasonably practicable'.</p>	<p>The GED (section 25 of <i>Environment Protection Amendment Act 2018</i>) requires someone doing an activity that may increase risk of harm to human health or the environment, due to pollution or waste, must minimise those risks.</p> <p>EPA expects duty holders to be able to articulate and understand their relevant risks of harm to human health and the environment and demonstrate how these risks are being minimised so far as reasonably practicable.</p> <p>By their very nature, determining these risks requires judgment and balancing of competing criteria.</p> <p>Guidance on this can be found in the EPA publication 1856 'Reasonably Practicable'; EPA publication 1695.1 'Assessing and controlling risk for business'; EPA publication 1741 'Industry Guidance: Supporting you to comply with the General Environmental Duty'.</p> <p>The cost of eliminating or reducing risks is a statutory consideration of so far as reasonably practicable as outlined in the EP Act 2017.</p>

Theme	Theme summary	EPA Response
Level of assessment for mining and extractive industries	One submission supported in principle the level of assessment for mining and extractive industries provided in Table 1 of the guideline but did not support the prescriptive requirement for the level of assessment to be based on the site's production level. A change to the level of assessment for mining and extractive industries in p.45 Table 1 was recommended.	No change to approach. The guideline provides an indication of the required level of assessment for mining and extractive industries. EPA should be consulted when confirming the level of assessment required.
Risk Assessment Methodology	<p>Several submissions raised issues about cumulative risk, inherent risk and the risk assessment matrix such as:</p> <ul style="list-style-type: none"> • What would happen in situations where an extractive industry is compliant with the GED but there are neighbouring air polluters that are not? • Extractive industries being allowed to expand their production rate/extraction limit • Not enough clarity about what is required to reduce risk beyond the APAC levels as expected by the GED • Why is there an inherent risk assessment step in the guideline? The interpretation of 'inherent risk' as risk in the absence of controls was seen in one submission as a misleading concept, that are not consistent with recognised Australian Standard or ISO publication concepts. 	<p>The GED requires that all risks are reduced or minimised so far as reasonably practicable; that includes pre-control risk (inherent risk) and post-control risk (residual risk). So, understanding inherent and current residual risks is needed to inform appropriate actions and/or control measures.</p> <p>The language is currently consistent with that adopted by EPA to establish a reference point for risk evaluation and treatment and is consistent with EPA publication 1695.1 'Assessing and controlling risk for business'. The risk level achieved after the application of control measures to reduce the risk is of primary importance for the demonstration of so far as reasonably practicable.</p> <p>Any given extractive industry, new or expanded, would undergo site-specific assessment.</p> <p>Some general guidance is provided in:</p> <ul style="list-style-type: none"> • EPA publication 1695.1 'Assessing and controlling risk for business' • EPA publication 1741 'Industry Guidance: Supporting you to comply with the General Environmental Duty' • EPA publication 1856 'Reasonably Practicable'. <p>It is important to note that duty holders can improve their state of knowledge of risk assessment methodologies from other information sources beyond the publications listed above.</p>
Sensitive land use	Submissions related to sensitive land uses were:	If council refers a sensitive land use or development to EPA for comment, EPA always considers the agent of change principle as outlined in EPA publication 1518 - Recommended separation Guideline distances for industrial residual air emissions. However, as there is not a statutory trigger for referral of all sensitive

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	<ul style="list-style-type: none"> • Potential future sensitive land uses should be included in the discussion in Section 4.5 of the guideline • Risk assessments should also consider the timeframes of the operation and proposed neighbouring land use, particularly in urban growth areas • The agent of change should be responsible for providing relevant evidence to the planning regulator • The agent of change principle should be incorporated into all approvals for developments within an EPA recommended separation distance to existing industrial land uses. 	<p>land use/development within the buffer of existing industrial uses to EPA, EPA does not have visibility of all such proposals.</p> <p>However, it should be noted that an amendment to the Victorian Planning Provisions (VC175 - 26 May 2020) has updated the Planning Policy Framework.</p> <p>Clause 53.10 of the Victorian Planning Provisions improves how the planning system addresses buffers for amenity, human health, and safety impacts. This includes updating the reference to EPA publication 1518 as a policy document to consider as relevant to Clause 13.06-1S (Air quality management) and Clause 13.07-1S (Land use compatibility) of the Provisions.</p> <p>A subsequent amendment to the Victorian Planning Provisions (V10 - 1 March 2021) has also introduced the Buffer Area Overlay (BAO) (V10) as a tool to identify areas where there is potential for off-site impacts to safety and human health, and significant off-site impacts on amenity, from industry, warehouses, infrastructure, or other uses. The BAO also ensures that use and development within buffer areas responds to such potential off-site impacts.</p> <p>Together these provisions will support a better consideration of buffers in the planning system.</p>