

Air quality and the South Australian planning system

Updated August 2016

EPA1085/16: This position statement will assist planning authorities and proponents of development understand the position of the Environment Protection Authority (EPA) on air quality in relation to the South Australian planning system.

Introduction

This statement describes how air quality is to be addressed at each stage of the South Australian planning system to meet the requirements of the *Environment Protection Act 1993* (EP Act) and *Environment Protection (Air Quality) Policy 2016* (AQ Policy)

It informs how the EPA will assess actual and potential air quality impacts at the various stages of the South Australian planning system.

This position statement is not legally binding and cannot be used to alter, broaden or narrow the exercise of the EPA's functions and powers.

Air quality

Ambient air quality in South Australia is influenced by emissions and climatic factors. Air pollution is caused by emissions from a variety of anthropogenic and natural sources including industry, light and heavy vehicles, domestic solid fuel heaters, and events such as bushfires and dust storms. Local air pollution feeds into global effects on climate through emission of greenhouse gases such as carbon dioxide, methane and nitrous oxide.

Exposure to air pollution can have adverse effects on human health, including respiratory and cardiovascular effects, or in some cases an increased risk of cancer. Sensitive individuals, such as the elderly, children or those with existing cardiorespiratory diseases are particularly susceptible to air pollution. Some pollutants also have the potential to cause environmental nuisance. For example larger dust particles can cause annoyance to people through soiling washing or collecting on surfaces. Odours such as from food outlets also have the potential to cause nuisance to people. Persistent exposure to nuisance levels of dust and odour can lead to indirect health effects through stress.

The EPA's air quality environmental goal is 'air quality is protected from atmospheric pollutants'.

Air quality in the planning system

The South Australian planning system affords a first opportunity to address potential air emissions that may either arise from or impact on proposed development. It enables development that may produce air emissions to be located in a

suitable place away from sensitive land uses¹, to prevent sensitive land developments encroaching on established industries, and for development to be designed to minimise environmental impacts. Proper and careful planning ensures that not only will potential air quality impacts associated with development be minimised but also that sensitive development does not encroach on established industries.

Legislative framework

Air quality in respect of the South Australian planning system is regulated through the EP Act and the AQ Policy.

Section 25 of the EP Act provides the general environmental duty that requires a person not to undertake an activity that pollutes or might pollute the environment unless that person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm. The general environmental duty applies to a person undertaking an activity that produces air emissions.

The AQ Policy provides a legal framework for the assessment of air emissions from a wide range of industries and activities. The interests of those whose legitimate activities may cause air pollution, and the rights of those who are exposed to and potentially affected by pollution are considered within the policy.

In addition to the AQ Policy, the EPA uses guidelines when preparing planning responses and evaluating off-site impacts to ensure the general environmental duty and policy requirements are met. Key guidelines relevant to air quality and the planning system are [Evaluation distances for effective air quality and noise management](#) (2016) and [Ambient air quality assessment](#) (2016).

The EP Act also provides for the assessment of adverse air quality impacts on flora and fauna and, where appropriate, this may form part of the EPA's considerations in consultation with other relevant state government departments or environmental experts.

Addressing air quality at each stage of the South Australian planning system

The major components of the South Australian planning system—Planning Strategy, Development Plan, and development application, and major development or project—are interconnected and the system is regulated through the *Development Act 1993* and the *Development Regulations 2008*.

Within this framework the EPA provides advice on proposed changes to the Planning Strategy and Development Plans, and assesses development applications and major development or project applications referred under the Development Regulations.

Any proposed changes to the major components of the South Australian planning system will necessitate that potential air quality impacts be assessed and addressed to ensure that sensitive land uses will not be exposed to unacceptable air quality.

The South Australian planning system provides the opportunity to ensure that a proposed land use area (such as an Industry Zone) or an individual development proposal is located or designed in such a way that the community is not exposed to unacceptable air quality; whether this is the result of emissions from a proposed new source that could affect a sensitive land use, or where a sensitive land use is proposed near an existing source.

¹ Sensitive land uses include, but are not limited to, residential housing, childcare centres, educational establishments, hospitals, nursing homes, parklands and recreation areas. Industrial and commercial premises can also be affected by noise and air emissions – [Evaluation distances for effective air quality and noise management](#) (2016).

South Australian Planning Strategy

At this stage the EPA will have an interest in the location of land identified for future development such as transport corridors, ports, industry, and sensitive land uses, and ensuring that high-level planning policy in respect of air quality is incorporated into the various volumes of the Planning Strategy.

When an amendment to the Planning Strategy is prepared it is the EPA's position that:

- key development areas will not create land use conflicts through exposure of sensitive land uses to unacceptable air quality.
- background levels of pollutants in the region and the potential cumulative impact of development on the airshed be taken into account when identifying key development areas.
- principles and policies that reference air quality are included to enable further consideration and expansion of those principles and policies in other levels of the planning system.

Development Plan Amendment (DPA)

At this stage the EPA has an interest in proposed changes to planning policy or rezoning of land, such as rezoning land to Residential Zone adjacent to an Industry Zone, which could result in land use conflicts through exposure to unacceptable air quality.

When a DPA is prepared it is the EPA's position that:

- key development areas not create land use conflicts through exposure to unacceptable air quality, with consideration given to background levels of pollutants in the region and the potential cumulative impact of development on the airshed.
- the Statement of Intent proposes to investigate any potential air quality issues where these may be present; if not the EPA will recommend additional investigations that should be undertaken.
- the DPA proposes policy for inclusion in the development plan, or there is existing policy in the development plan, to avoid or mitigate any adverse air quality impacts of activities.

Such policy could include the 'Noise and Air Emissions Overlay', the 'Interface between Land Uses' module, or specific principles of development control from the *South Australian planning policy library version 6* (2011). The inclusion of such policy enables the proper assessment of air quality impacts at the development application stage.

Development application, and major development or project

At the development application or major development or project stage the interest of the EPA is in whether the development would expose sensitive land uses to unacceptable air quality.

In instances in which air quality may be an issue an assessment of emissions and their potential impacts on communities will be required. The comprehensiveness of the assessment should reflect the environmental risk associated with the development. The EPA will assess whether the proposal would meet the requirements of the EP Act, including those of the AQ Policy and the general environmental duty, and will apply appropriate environmental criteria such as ground level concentrations and odour criteria.

In accordance with 'Division 2 – Major developments or projects' of the *Development Act 1993*, the environmental impact statement, public environmental report, or development report for a proposed major development or project must include a statement of the extent to which the expected effects of the development or project are consistent with the general environmental duty and objects of the EP Act and the requirements of the AQ Policy if it involves, or is for the purpose of, a prescribed activity of environmental significance as defined by the EP Act.

When a development application or major development or project is prepared it is the EPA's position that:

- the proposed development not have an adverse air quality impact on existing sensitive or other land uses, or cause an adverse air quality impact by encroachment of sensitive land uses on existing industry, with consideration given to background levels of pollutants in the region and the potential cumulative impact of development on the airshed.

This could be achieved by:

- demonstrating that the proposed development would be able to achieve the evaluation distance recommended by the EPA's [Evaluation distances for effective air quality and noise management](#) (2016)

In general for separations greater than the recommended evaluation distance, EPA is unlikely to request specific evaluation of impacts predicated on typical activities. However, in exceptional circumstances it may be necessary for the proponent to demonstrate that adverse impacts are reduced to acceptable levels (or below) even though the proposed development would be able to achieve the recommended evaluation distance.

- demonstrating that odour criteria and ground level concentrations of pollutants identified in the AQ Policy can be met.
 - the proposed development not have an adverse air quality impact on the natural environment, with consideration given to background levels of pollutants in the region and the potential cumulative impact of development on the airshed.
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Further information

Legislation

[Online legislation](#) is freely available. Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet
Adelaide Service SA Centre
108 North Terrace
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General information

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