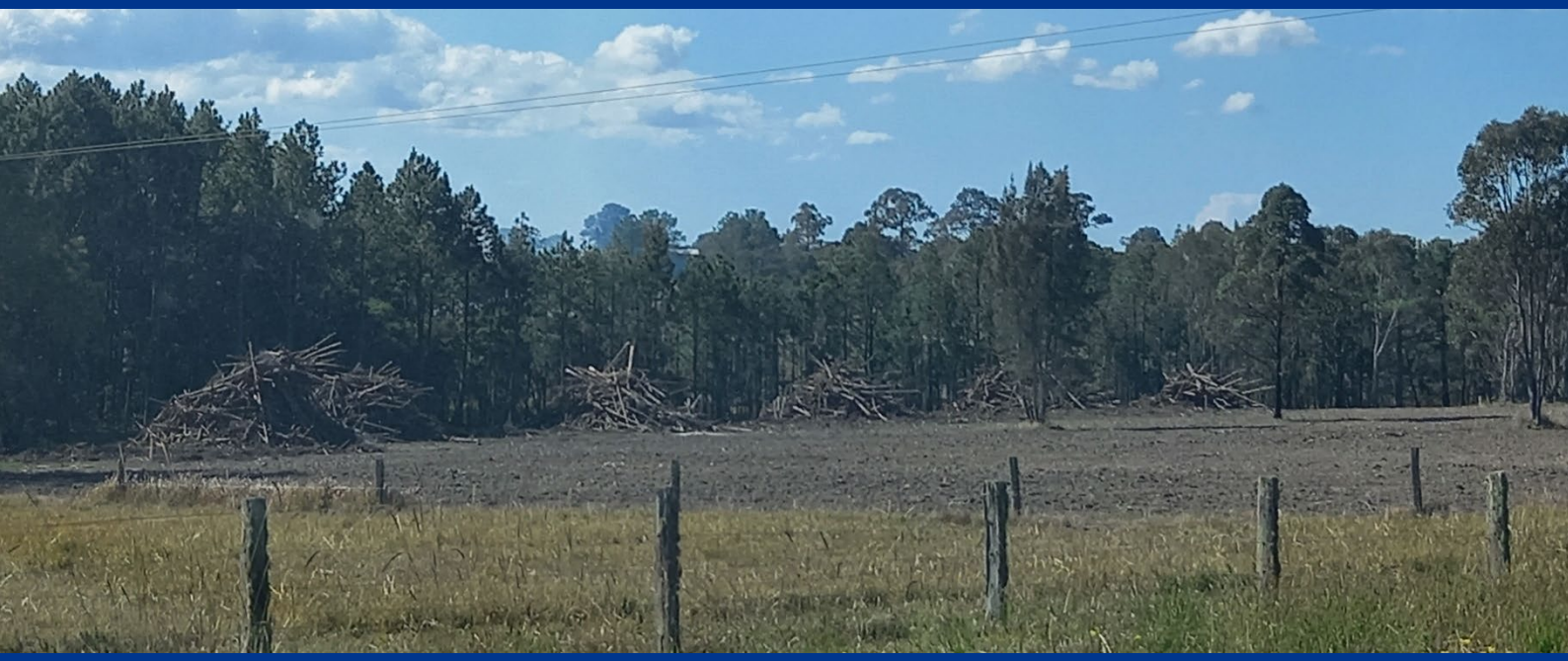

Local Government Air Quality Toolkit

Module 4: Practical regulation of air pollution

NSW GOVERNMENT

Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live.

We pay our respects to Elders past, present and emerging.

This resource may contain images or names of deceased persons in photographs or historical content.

The Local Government Air Quality Toolkit has been developed by Department of Climate Change, Energy, the Environment and Water in collaboration with the NSW Environment Protection Authority, the NSW Department of Planning, Housing and Infrastructure, Local Government NSW and local councils.

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Emily Nicolson/MidCoast Council

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Contents

1. Introduction

Regulating sources of local air emissions is a vital part of local government air quality management. This module contains an overview of air quality management, outlining the broad role that local government plays in both local and regional air quality management, and covers management, legal, administrative and technical considerations.

This module is concerned with the practical management of sources of air pollution for activities for which local councils are the appropriate regulatory authority (ARA) under the *Protection of the Environment Operations Act 1997* (POEO Act), commonly called 'non-scheduled activities'.

Air quality management focuses on these 5 key steps:

1. identifying the problem
2. exploring options for its solution
3. deciding on a solution by analysis – including costs and benefits
4. implementing the chosen solution
5. checking and, if necessary, reviewing the outcome.

1.1 Context

The guidance provided is framed in terms of the broader context of local government administration. It is recognised that each council has its own procedures and internal administrative policies for processing development consent applications and dealing with key industries and businesses.

The case studies, checklists, example operational and control recommendations provided throughout the technical guidance notes and resource pack in the Local Government Air Quality Toolkit are for illustrative purposes and include information to help councils regulate in a fair, consistent and transparent way. Compliance with the toolkit may not be possible or appropriate in particular cases. Readers should not rely on the toolkit as indicating the procedure that ARAs, authorised officers and enforcement officers will follow in all cases. This toolkit does not cover all regulatory tools under key environment protection legislation and is not a substitute for a thorough understanding of the legislation that council officers administer, for appropriate training or for the need to obtain councils' own legal advice.

> Council officers should consider the circumstances of the cases they are faced with and their own council's investigation and compliance policies when undertaking their regulatory functions.

Larger councils tend to divide duties and functions according to their broad environmental responsibilities. Certain council officers might develop expertise in dealing with specific types of industries in the area; for example, smash repairers or poultry producers. Council officers should be encouraged to share their expertise, both formally and informally, as already happens in many council networks.

> Sharing knowledge and experience within and between councils will build the capability of all council officers to better manage air pollution issues.

1.2 General approaches and useful tips

Regulating non-scheduled activities where operations are technologically complex can be challenging for council officers who do not have specific training or experience in managing air quality.

The Local Government Air Quality Toolkit is intended to equip local council officers with knowledge and background to deal confidently with air pollution issues that arise in their areas. Training can help build capacity of investigation skills and techniques. Officers can register on the NSW Environment Protection Authority (EPA) *Training for authorised officers and environmental regulators* webpage (EPA 2022d) and enrol in courses directly.

2. Identifying the problem

A key consideration in defining the management issue from a local government perspective is whether the impact of the air pollution is local, regional or global (or a combination), as this will influence the degree of control a local council has over managing the issue.

If the issue is to manage air quality comprehensively in the local government area (LGA) to meet the National Environmental Protection (Ambient Air Quality) Measure (AAQ NEPM) standard or goal, then this may be beyond the capacity of many councils acting alone. For example, few local councils in large metropolitan areas can possibly manage all the factors that contribute to air quality in their LGA. There are 2 reasons for this:

- air pollutants cross council boundaries
- not all pollution sources in an LGA are under the council's regulatory control.

Conversely, councils in rural areas may be in a position to effectively achieve this outcome because their areas are larger and most sources of air pollution tend to be council-controlled.

Air pollution comes from many sources, and the multitude of small sources make a major contribution to the regional air quality problem in cities like Sydney. Therefore, councils almost always have some part to play, together with state and Commonwealth governments, in the management of regional air quality.

2.1 Councils and regional air quality

The extent of council involvement in addressing regional air quality problems will depend on:

- the extent of the sources that council controls in its area (i.e. for which council is the ARA under the POEO Act)
- any partnerships between councils and the EPA in air quality management
- the resources available to council to manage air pollution from sources, through legal instruments and technical tools.

2.2 Impacts separated from pollution source

Some regional air quality issues, such as photochemical smog and particle pollution, can be significantly influenced by sources that are located throughout the region and are regulated by multiple individual local councils.

An example would be domestic wood fires in the north-west of the Sydney air basin or parts of the Southern Highlands or Northern Tablelands. Fine particles and aerosols from wood fires are trapped in the early-morning winter drainage flow in these regions. They accumulate in the stable air (in the Sydney basin, moving slowly eastwards), exposing the communities it crosses to high levels of particulate air pollution. A similar phenomenon will occur in regional areas with a high proportion of domestic wood burning.

2.3 Local air quality impacts

For local impacts caused by activities for which a council is the ARA, the council often has effective control over all parts of the management loop. For example, an industry or activity causing a local odour or dust problem where council is the ARA is a management issue for council alone.

Some practical techniques that can be used by councils for identifying air quality issues in their local areas include:

- any EPA or large-industry monitoring in or adjacent to the LGA
- inventories of air pollutants emitted in the LGA such as the National Pollutant Inventory (NPI) (EPA 2022c) or the *Air Emissions Inventory for the Greater Metropolitan Region in NSW* (EPA 2021)
- geographic information system (GIS) data held by council on the spatial distribution of industries with potential for air emissions, looking especially for clustering of common types; for example, smash repairers
- council-generated data including analysis of complaint patterns relating to 'hot spots' and routine field officer observations.

2.4 National Pollutant Inventory

The NPI gives information on the types and amounts of pollutants being emitted to the Australian environment. There are 3 main ways that data is obtained for the NPI database:

- medium to large industrial facilities measure and/or estimate and report their emissions to the Australian Government
- state and territory governments estimate the emissions from smaller facilities
- state and territory governments estimate emissions from mobile and non-industrial sources (such as emissions from activities like driving to work and mowing the lawn), and other sources of pollutants.

NPI data can be useful for an overall view of the types of sources responsible for pollutant emissions in a particular area, and the differences between large urban centres and regional areas. However, caution is required in using NPI data for air quality assessments. In assessing potential impacts, consideration must be given to the location and way pollutants are emitted as well as the actual quantity of pollutant emitted.

2.5 GIS databases

Often a council's own GIS database of its industries and businesses can be a useful starting point in developing a priority program for air quality management. For example, the location of poultry operations, small piggeries or mushroom growers in relation to residential areas and likely prevalent wind directions might provide useful inputs to land-use planning and the formulation of local environmental plans (LEPs) and development control plans (DCPs).

3. Exploring options

There are many ways to reduce air pollution. The Local Government Air Quality Toolkit – Module 3 outlines some of the important techniques for the types of industries commonly controlled by local government.

In general, the management options fall into 3 categories:

- changes to practices
- changes to materials used
- changes to equipment.

Often a combination of 2 or even 3 of these categories can be used.

3.1 Changes to practices

Changes to practices might be, for example, ensuring paper or carbon filters are changed regularly in food preparation establishments. This will mean their containment capacity does not become overwhelmed, rendering the removal of fatty and smelly aerosols ineffective. Another change to practice might be applying adequate water to dusty surfaces on a construction site or within industrial premises.

3.2 Changes to materials

Changes to materials might be, for example, substituting an effective but less odorous or low solvent-content surface coating for a more odorous high solvent-content one in a smash repair shop, or on a whitegoods finishing line. This would reduce both odours and the volatile organic compound (VOC) contribution to photochemical smog. Another example would be ensuring wood used for domestic combustion is well-seasoned and dry.

3.3 Changes to equipment

Changes to equipment might involve, for example, using high-pressure low-volume applicators in the car repair trade to minimise overspray, or installing a catalytic oxidiser on the exhaust of a coffee bean roaster.

Another common equipment change is to raise the height of the exhaust point of the pollutant in the interests of better dispersion. While this can give real relief locally, it is ineffective for regional impacts. However, even to achieve the local benefits, the change in height must be enough to overcome building and topographic effects. It is not uncommon for these factors to defeat the purpose of raising stacks at small to medium sources that are surrounded by other high buildings and hills.

3.4 Deciding on a solution

Once a range of options have been developed to address the issue, the options are analysed, quantitatively if possible, to determine the optimum solution. The analysis should look at:

- costs
- effectiveness
- acceptability.

Options may not be easy to assess in situations where there has been extensive or prolonged public concern and solutions have been difficult to find.

Cost of a solution

The cost of an option is the most readily defined of the 3 factors. This task belongs to the person or organisation managing the pollution source, although care should be taken to make sure the costs claimed are reasonable.

Effectiveness of a solution

Effectiveness can sometimes be assessed quantitatively using the *Approved methods for the modelling and assessment of air pollutants in NSW* (EPA 2022a). However, the modelling may not always be warranted. In some situations, the results (predictions) may not provide enough certainty on which to base a management decision.

In some situations, an expert judgment (without modelling) may be adequate to guide the decision-making process and make a recommendation about likely effectiveness for smaller installations, especially where the cost of a modelling study could become a significant component of the total cost of the solution. The Local Government Air Quality Toolkit aims to help council officers develop this expertise. An additional option, always available to councils, is to require the business in question to provide an expert report addressing the issues of uncertainty.

Acceptability of a solution

Council must determine which of the possible solutions to the problem is the most acceptable, based on the consideration of the costs, the effectiveness and the benefits associated with each option.

Some practical judgment is warranted, especially when dealing with amenity impacts that may be a significant proportion of complaints to council. The amenity of the people affected by the pollution may need to be weighed against the capacity of the neighbouring source of air pollution to pay for the mitigation measures.

Acceptability will be more difficult to assess, especially for amenity issues such as dust and odour. For example, it is not uncommon for complainants against odour sources to become so sensitised to the odour over a period that a significant improvement, even to the level of industry best practice, will not satisfy them.

4. Implementation

The tools and resources needed for implementation of the chosen solution need to be carefully assembled and applied. Depending on the nature of the problem, different tools will be required. Essentially there are 3 tools used in implementation:

- legal instruments
- technical resources
- education.

Air pollution impacts can be avoided at the development assessment stage by assessing potential impacts early, appropriate siting for a proposed facility, or incorporation of appropriate controls.

The legal instruments available are outlined in other sections of the Local Government Air Quality Toolkit, including:

- Module 2 – *Legislative and policy framework for air quality management*
- *Land-use planning guidance note*.

The technical information needed can be generated by or elicited from the industry, either voluntarily in response to council recommendations, or in response to a prevention or clean-up notice.

> Even when a solution is developed voluntarily by a business, it is advisable for a council to issue a notice to formalise any agreement with the occupier of the premises or business.

4.1 Community education campaigns

A council campaign aimed at reducing a widespread local problem requires a different approach to implementation. An example might be a campaign to reduce woodsmoke from domestic premises.

> Council would need to make sure the technology is applicable and practical in the situation, that enforcement is feasible if necessary, and that financial, personnel and expert resources are available for promoting and implementing the campaign.

Education may be the principal means of addressing some problems, either as a broad issue-specific campaign or on an individual premises level. Planning needs to take account of the need for sustained advice and follow-up for effective implementation.

4.2 Industrial or commercial campaigns

Some councils have found planned campaigns in selected industrial areas to be effective. Techniques used include:

- short ‘audits’ by experienced council officers on a ‘walk-though-and-note’ basis, often using checklists for specific industry types. These may be planned on a precinct or industry-type basis. Checklists are provided in the Local Government Air Quality Toolkit – *Resource pack*

- blitz-type intensive inspections on selected key contributing industries, with widely publicised follow-up action
- development of partnerships with industry groups; for example, smash-repairers, wherein industry members participate in campaigns and competitions for best practice with the support and encouragement of council officers.

5. Checking and review

Any management program needs a checking or review step to ensure the outcomes satisfy the objectives. This holds whether the program is a broad action, such as reducing woodsmoke in an LGA over a period of years, or a specific action, such as reducing odours from the local charcoal chicken shop.

There are 2 benefits to checking and review:

- it ensure the action undertaken and the effort expended achieved the intended outcomes. For example, it may seem as if odour complaints have gone away, but the complainants may have just given up on council solving the problem
- reviewing programs leads to continual improvement and is the path to sustainability in environment protection. This approach can be adopted for all programs, from the smallest action to a council's overall environmental performance.

The formalised techniques for checking and review are:

- monitoring
- auditing
- reporting.

5.1 Monitoring

Monitoring can span a full range of actions from checking for odours through odour surveys, to emission testing of a source on completion of its installation, to ambient air quality monitoring to ensure air quality goals have been achieved. The expense increases across this range.

Ambient air quality monitoring, the most expensive, is rarely warranted in local government situations involving small to medium industries and businesses, even for limited periods. In fact, limiting the period of monitoring significantly reduces its validity as an effective tool.

Emission or source performance monitoring may sometimes be warranted, although it is also expensive; however, if toxic emissions are involved such testing may be warranted.

Finally, observation is the cheapest method and is frequently adequate to confirm performance; for example, dust is no longer visible or the odour is no longer smelt.

Consistent pre- and post-monitoring (scientific or by simple observation) is essential for the adequate assessment and management of new developments and changes to premises. 'Monitoring' may be anything from intelligent observation to specialised, scientific measurement. Wherever it lies on the spectrum it should be systematic, documented and analysed carefully.

Monitoring ambient air quality

Collecting and maintaining ambient air quality monitoring data is demanding and expensive. Scientific accuracy, consistency and continuity are essential for reliable assessment of air quality and trends. It is not feasible or warranted for the EPA to monitor air quality in every LGA.

In polluted air basins, reliable interpolations on air quality can be made between monitoring stations by using modelling techniques. However, this is rarely critical for local government purposes since the nearest air quality monitoring station within the same air shed will usually give an adequate indication of air quality in the LGA.

Monitoring by industries

Some industries are required to undertake specific ambient monitoring around their operations and to make the information publicly available. This can be usefully accessed and reviewed by local government for general air quality trends, even though these large industries may not be regulated by local government.

5.2 Auditing

Auditing is a systematic and thorough checking of operations and equipment to make sure they are performing as intended. There are various techniques for auditing that are described on the websites of the EPA, the Department of Climate Change, Energy, the Environment and Water (the department), and the Department of Planning, Housing and Infrastructure (DPHI), and in various standards such as the Australian and ISO standards.

Audits may take many forms. The purpose of an audit might be to address:

- compliance
- program effectiveness
- due diligence.

> Audits are most successful when their objectives have been carefully and precisely defined before any measurements or checks are undertaken.

Audits may be carried out by accredited or general auditors, or air quality specialists, and may be independent of or internal to the organisation involved.

Finally, the term ‘monitoring’ is also applied in a management sense to the overall process of checking that a program or policy is being implemented satisfactorily.

Reporting of monitored and audited results should take account of who needs to know and who might be interested in knowing. The feedback process should also be open, and ideally there should be a willingness to consider critical comment to improve management.

6. Planning

Although regional planning for air quality is primarily the responsibility of the EPA and DPHI, local government planning for local facilities can have significant impacts on air quality. For example, the development of a new shopping complex has obvious implications for traffic flow and vehicle emissions and certain types of commercial emissions; the development of marina-based businesses could result in increased emissions of VOCs as a result of boat maintenance activities, while development of a new industrial area can have significant impacts on air quality – both locally and regionally.

The best management of the regional and amenity impacts of air pollution is achieved at the planning stage, in which local government is an active partner with the state government.

The Local Government Air Quality Toolkit – *Land-use planning guidance note* provides further information on air quality considerations in land-use planning.

7. Consents, notices and enforcement

The principal legal instruments available to councils for air quality management at specific premises are conditions attached to development consents granted under the *Environmental Planning and Assessment Act 1979* (EP&A Act), and requirements attached to notices under the POEO Act.

The legal aspects of these instruments are outlined further in the Local Government Air Quality Toolkit – Module 2. Guidelines for conditions in various industries are covered in Chapter 7 of the Local Government Air Quality Toolkit – *Resource pack*.

7.1 Enforcement

When industries, businesses or householders are non-compliant with a local council's requirements to control or eliminate air pollution, enforcement action may be required.

Penalty notices under the EP&A Act and the POEO Act are useful tools for achieving compliance. Prosecution is a more demanding measure, but one that may be warranted in difficult cases. The approach taken will depend on circumstances and council policies and attitudes to enforcement.

Clean-up notices under the POEO Act where there has been an incident or persistent damage to the environment can serve the dual purpose of both remediating damage to the environment and being a costly deterrent to repeat offences.

Warning letters following inspections are used by some councils as the first action against offending premises. While the issuing of such letters can be effective for resolving a specific offence, the prosecution of an offender (which may be publicly notified) may provide specific and general deterrence to others.

8. Investigating air quality issues

For new installations, potential air quality issues are managed from project inception whenever possible, using development consent conditions. However, the more common experience for most council officers will be dealing with air quality issues arising from existing industries. The experience gained from investigating existing issues becomes valuable knowledge when it comes to assessing new proposals.

8.1 Overview of complaints and community feedback

Air quality management at the local level is often complaints driven. The EPA Environment Line and local councils receive thousands of calls a year, many of which relate to local government responsibilities under environmental legislation. The community provides dynamic and active environmental feedback to its government authorities.

Using complaints constructively

Complaints can function as an early indicator of an air pollution problem in a council's LGA. Members of the public can collect information on air pollution matters such as occurrence, times and weather conditions to support a further investigation by an authorised officer.

Persistent complaint patterns may point to a need to make concerted efforts to achieve solutions for particular premises or industries.

Public exhibition of development applications

Feedback during the consultation and exhibition periods of development applications can be useful in identifying issues for both the applicant and council. It can also point to the need for community follow-up to provide assurance that fears and concerns have been addressed in the consent process.

> While it can be difficult dealing with members of the public who express their dissatisfaction, the information from complaints should be regarded as a useful form of monitoring.

Sometimes, where complaints occur, the impacted community might not contact the council or other government agencies. Residents who do complain, including repeat complainants, can help build up patterns of air quality complaints that will assist a council to investigate the matter further.

Some complaints can be vexatious and sometimes complainants can exaggerate the severity of the impact, including the health impacts. A complainant may feel that exaggerating an impact will expedite a response by the relevant authority. However, it should be recognised there may be a history surrounding a particular matter that has led to a stressful situation, including impacts on mental health and wellbeing.

The pattern of complaints can indicate the seriousness of a problem. If several after-hours complaints are received about the same incident, by the EPA Environment Line or council's after-hours service, it is a strong pointer to a pollution matter that needs urgent attention.

If a complainant reports a serious health condition to a council officer, they must be referred to emergency services or a health professional.

Identifying the likely source is often very difficult, especially in urban areas. It may require analytical work.

8.2 Investigating complaints

A visit to the location and the suspected polluting premises, even in the middle of the night when the complaint has occurred, is likely to lead to the source and often the cause of the problem. After the event it may take many hours of reconstruction and examining information gathered over several interviews to learn what may have been discovered by visiting the site at the time.

It is noted that many local councils do not have 24-hour, 7-day a week complaint-receiving facilities, nor are officers always authorised to operate outside normal business hours. But, if possible, immediate investigation of air pollution problems is always worthwhile despite the short-term inconvenience that can be involved, as emissions, particularly odour, can dissipate rapidly.

Hour-by-hour wind direction information can be used to point to a likely source. General guidance on interpreting wind movements is contained in the Local Government Air Quality Toolkit – Module 1, Part 1. The Bureau of Meteorology (BoM) can provide wind information on request, but this often takes time to arrange, and to receive and process the raw data files. Meteorological data from the department's monitoring stations (wind speed and wind direction amongst other parameters) can be downloaded directly from the *Air quality data download facility* (NSW Government 2024).

Odour complaints

Complaints about odour are probably the most commonly encountered and are often made at night. A systematic approach should be followed in any investigation, including recording of information.

Chapter 3 of the Local Government Air Quality Toolkit – *Resource pack* provides checklists for council officers when investigating odour complaints and conducting a site inspection, including an odour diary. The EPA has also produced a *Guide to conducting field odour surveys* (EPA 2022b).

Dust fallout and other complaints

For dust fallout complaints (deposited dust on surfaces), there are several useful investigation techniques. Fallout complaints will often occur during daytime and often during windy weather. The complaint response is similar to that for odours, although the response can be less urgent because dust fallout evidence remains in place for a while.

Chapter 2 of the Local Government Air Quality Toolkit – *Resource pack* provides checklists for council officers when investigating dust events and other complaints and for inspecting sites with dust generating activities.

Many of the aspects to be checked for dust fallout can also be applied to investigations of visible smoke emissions.

8.3 Systematic investigations

Air quality issues are not only investigated in response to complaints. Air quality audits and other campaigns by local councils can reveal air pollution problems related to businesses and industries in the area. Also, observations by individual officers as they conduct their work in the council area can often suggest where there are potential issues including odours, visible emissions, dust fallout and unusual practices.

A checklist showing a systematic approach to investigations initiated by council officers has been included in Chapter 4 of the Local Government Air Quality Toolkit – *Resource pack*.

It is possible to proceed with an investigation by requiring, under the terms of a prevention notice or clean-up notice, that a report be produced and reviewed by council to ascertain the nature and extent of pollution or the risk of pollution.

The clean-up notice or prevention notice can require the report to be prepared by professional consultants, thus introducing a measure of air quality expertise to the situation.

In many cases it would be appropriate for consultants to be briefed to look for practical ways of fixing a problem, before conducting any dispersion modelling to determine the extent of an air pollution issue.

9. Air quality consultants

Many council officers have received training at university or college level, and are generally equipped to understand the basic principles of air quality science without being experts in the area. However, the air quality issues that arise, even with medium to small installations, can be quite complex.

From time to time when complex issues arise, councils will need access to training or skills beyond those available through their staff. Consultants can be used to supplement council skills, either employed by council or by the businesses posing the problems.

There are a few important aspects for local government to consider when overseeing external consultants' air quality assessment studies, to ensure the best outcome is achieved. These are summarised in a checklist in Chapter 6 of the Local Government Air Quality Toolkit – *Resource pack*.

In addition, it is helpful to be aware that:

- Certified Air Quality Professionals (CAQPs) are expected to conform to the ethical codes of their professions and to provide advice that is impartial, objective and within their area of expertise
- the advice will only be as sound or as comprehensive as the brief or terms of reference. It is worthwhile spending some time negotiating and finalising these requirements before a notice is issued.

9.1 Considerations for the consultant's brief

Questions to be explored when preparing a brief or terms of reference for a consultant include:

- What is the objective of the corrective action proposed?
- How will this solution be assessed?
- Can council measure this assessment objectively?
- Are there better alternatives?

10. Assessing applications for development consent

10.1 Statutory requirements

Part 4 of the EP&A Act sets out the process for the assessment and approval of applications to carry out development.

In assessing a development application under Part 4 of the EP&A Act, the designated consent authority (which may be the local council) is required to assess the 'likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality' (EP&A Act s 4.15(1)(b)), amongst other relevant matters for consideration (EP&A Act s 4.15).

The legislative requirements for environmental impact assessment are determined by the classification of the development proposed. Subject to some exceptions:

- an environmental impact statement (EIS) must be prepared if the development is designated development (as set out in Schedule 3 to the Environmental Planning and Assessment Regulation 2021) or declared to be state significant development (EP&A Act s 4.12(8))
- all other development applications must be accompanied by a statement of environmental effects (SEE).

10.2 Integrated development and scheduled premises

If the proposal also involves activities that are scheduled activities under the POEO Act and therefore require a licence, the application may be submitted as an 'integrated development' application. Such activities will be managed for pollution control under the POEO Act by the EPA for licensing purposes. Local government is the consent authority for an integrated development application.

For integrated development applications where a licence under the POEO Act is required, the EPA takes full account of air pollution impacts, so councils are required to grant a consent in a way that is consistent with the EPA's general terms of approval (EP&A Act s 4.47(2) and (3)).

Councils may encounter situations where there could be cumulative impacts from related multiple developments, such as a new or recently established industrial estate. In this case, council may have to consider from a planning perspective how air pollution impacts from a specific development could affect related future developments. The NSW Government has published *Cumulative impact assessment guidelines for state significant projects* (DPE 2022), which consider air.

10.3 Council as both the ARA and the consent authority

In granting consent for proposals involving activities that are non-scheduled activities under the POEO Act, council can be both the ARA and the consent granting authority under the EP&A Act. Some proposals may be designated development and will therefore require an EIS.

Statement of environmental effects

An SEE is prepared by the applicant and assesses impacts on air quality. Council needs to consider the following parameters:

- If there will be significant emissions, and potentially adverse impacts, an air quality assessment should be made according to the *Approved methods for the modelling and assessment of air pollutants in NSW* (EPA 2022a). This may involve dispersion modelling and assessment to demonstrate that the relevant EPA assessment criteria will be met.
- The control measures proposed must meet the prescribed standards of concentration for the emission of air impurities (in relation to non-scheduled premises) as set out in the Protection of the Environment Operations (Clean Air) Regulation 2022 (Clean Air Regulation).
- Any odour emissions must comply with the requirements of the:
  - *Approved methods for the modelling and assessment of air pollutants in NSW* (EPA 2022a)
  - *Technical Framework: Assessment and management of odour from stationary sources in NSW* (DEC 2006a)
  - *Technical Notes: Assessment and management of odour from stationary sources in NSW* (DEC 2006b).

  This may also involve dispersion modelling to demonstrate acceptable impacts.
- Where relevant, the guidelines and management practices contained in the Local Government Air Quality Toolkit guidance notes for specific activities should be followed.
- Public concerns, elicited through consultation during the public exhibition period specified in the EP&A Act, and by other means, should be adequately considered in any determination.

Assessing the technical merits of proposals

For development applications with complex technical and scientific components, councils may opt to engage an independent consultant with expertise in air quality assessment or related disciplines. This is not uncommon and enables councils to be confident that the information they are basing their decisions on is scientifically robust.

For considerations when reviewing EIS and SEE documents, an assessment and modelling checklist is provided in Chapter 6 of the Local Government Air Quality Toolkit – *Resource pack* to assist council officers.

Reading consultants' advice

Council staff will frequently be presented with reports and proposals from professional consultants having specialised expertise in air quality science and engineering. The specialist advice may cover modelling, control equipment and monitoring techniques. The consultants typically have expertise in the specific industries involved, such as agriculture or manufacturing.

Professional consultants can be expected to conform to the ethical codes of their professions and to provide advice that is impartial, objective and within their area of expertise. It should be noted that consultants will generally be constrained by the terms of their brief. To obtain the advice council requires to make an impartial assessment it is important these terms are clear and in writing.

10.4 Consent conditions

Appropriate conditions attached to development consents under the EP&A Act are an important tool for local government in managing air quality. A condition of development consent may be imposed where it satisfies the requirements under the EP&A Act.

> Years of irritation and impact on amenity can be avoided if appropriate separation distances are maintained when granting consent for a particular development at a particular site. Where such separation is not available the applicant should be encouraged to look for an alternative site.

Considerations for consent conditions

Chapter 7 of the Local Government Air Quality Toolkit – *Resource pack* provides guidance on potential requirements for specific types of development with air quality impacts (covered by guidance notes in the toolkit). These can form the basis of a condition of consent and should be adopted, modified, expanded, tailored or omitted as appropriate to each specific application. These examples aim to help local government officers think about each situation so the resulting conditions can be more effective than conditions that are merely drawn from a standardised menu.

Note on odour conditions

Odours from non-scheduled premises that are not residential premises, are governed by the following obligations on occupiers of premises (see POEO Act ss 124, 125, 126 and 128):

- to operate and maintain plant in a proper and efficient manner that does not cause air pollution (including odour)
- to deal with materials in a proper and efficient manner that does not cause air pollution (including odour)
- to not cause or permit the emission of air impurities from a point that exceeds a 'standard of concentration' as prescribed in the Clean Air Regulation
- for sources of air impurities where a prescribed limit does not exist, or the emissions are not point source emissions, to prevent or minimise air pollution through practicable means.

Offensive odour provisions in s 129 of the POEO Act only apply to premises that are licensed by the EPA.

Consent conditions are sometimes based on results of air emissions modelling – refer to Local Government Air Quality Toolkit – Module 1, Part 5 for considerations for modelling results and mitigation options.

11. References and other resources

All documents and webpages that are part of the Local Government Air Quality Toolkit are available from the EPA website.

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DEC (2006b) *Technical Notes: Assessment and management of odour from stationary sources in NSW*, NSW Department of Environment and Conservation, Sydney South NSW, www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/air/20060441notes.pdf [PDF 254 KB].

DPE (Department of Planning and Environment) (2022) *Cumulative impact assessment guidelines for state significant projects*, NSW Department of Planning and Environment, Parramatta NSW, www.planning.nsw.gov.au/policy-and-legislation/planning-reforms/rapid-assessment-framework/improving-assessment-guidance.

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EPA (2022b) *Guide to conducting field odour surveys*, NSW Environment Protection Authority, Parramatta NSW, www.epa.nsw.gov.au/your-environment/air/industrial-emissions/managing-odour.

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EPA (2022d) *Training for authorised officers and environmental regulators*, NSW Environment Protection Authority, Parramatta NSW, www.epa.nsw.gov.au/licensing-and-regulation/authorised-officers-and-enforcement-officers/resources-and-training.

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