



# NSW GOVERNMENT RESPONSE

**Inquiry into the health impacts of exposure to poor levels of air quality  
resulting from bushfires and drought**

# CONTENTS

Introduction.....	2
RESPONSE TO RECOMMENDATIONS .....	3
RECOMMENDATION 1 .....	3
RECOMMENDATION 2 .....	3
RECOMMENDATION 3 .....	3
RECOMMENDATION 4 .....	4
RECOMMENDATION 5 .....	4
RECOMMENDATION 6 .....	4
RECOMMENDATION 7 .....	4
RECOMMENDATION 8 .....	5
RECOMMENDATION 9 .....	5
RECOMMENDATION 10 .....	5

## INTRODUCTION

The bushfires of unprecedented scale and duration that occurred between October 2019 and January 2020 impacted many people in New South Wales, as well as other states and territories. People were either directly impacted by the bushfires or the smoke from the bushfires. As a result, the NSW Government initiated an inquiry to examine the health impacts of exposure to poor air quality resulting from bushfires and drought, and the effectiveness of the NSW Government to plan for and improve air quality and any related matters.

The Portfolio Committee No. 2 – Health has examined important issues including the health impacts of poor air quality from bushfires and drought on people vulnerable to the effects of air pollution. This includes children, pregnant women, people with asthma and other respiratory-related illnesses, the elderly and people exposed to poor quality air in their workplace. The committee has also examined the effectiveness of strategies to mitigate the health impacts. This includes the NSW Government raising public awareness of the health effects of air pollution, and providing timely, clear and relevant air quality information so that people can take steps to protect themselves from exposure. Moreover, the committee has investigated nationally consistent reporting of air quality.

The NSW Government addressed several of these issues during and in the aftermath of the bushfires. More timely air quality information is now provided by reporting air pollution levels that are averaged over one hour, compared to previously provided 24-hour averages. The NSW Government has also worked with other jurisdictions to develop nationally consistent categorisation of air quality and accompanying health messages, which are now publicly available on the Department of Planning, Industry and Environment website.

The following agencies participated in the inquiry and provided input into the NSW Government response:

- NSW Health
- Department of Planning, Industry and Environment
- NSW Rural Fire Service
- Department of Customer Service.

## RESPONSE TO RECOMMENDATIONS

### Recommendation 1 Supported

That the NSW Government continue to expand its Air Quality Monitoring Network, and consider:

- the placement of additional permanent monitoring sensors in locations known to have emission producing industries and those likely to experience air pollution events, including Lake Macquarie and Lithgow
- the enhanced use of mobile sensors, including unmanned aerial vehicles, that can be rapidly deployed and relocated as required
- the use of low-cost sensors if necessary, in order to ensure the measurement of air quality in as many localities as possible.

The Department of Planning, Industry and Environment (DPIE) continues to expand the NSW air quality monitoring network (AQMN). A new permanent monitoring station at Lake Macquarie came online in December 2020.

The monitoring needs for Lithgow will be reassessed under the [NSW Air Quality Monitoring Plan](#). The updated Plan was published in December 2020 and will be reviewed annually, with major reviews every five years. The [final report](#) of the *Blue Mountains and Lithgow Air Watch* project was published by the Environmental Protection Agency in November 2020. It found that emissions from industry and traffic were not discernible during the study, but small rises in carbon monoxide and PM2.5 particulates early in the morning, and again at night, might be a result of wood-burning heaters. There were no specific recommendations for the Blue Mountains and Lithgow area arising from this project.

The *NSW Air Quality Monitoring Plan* highlights the continued work by DPIE to investigate and use emerging air quality monitoring techniques including low-cost sensors, mobile sensors and other new technologies such as Unmanned Aerial Vehicles (UAVs). A report evaluating low-cost sensors will be published by DPIE in 2021.

NSW has the most comprehensive air quality monitoring network in Australia, which includes monitoring across regional NSW. The DPIE will continue to investigate and assess the needs of all communities, including regional and rural communities, and improve the monitoring network.

### Recommendation 2 Noted

That the NSW Government work with the Australian Nuclear Science and Technology Organisation (ANSTO) to expand the sampling of particulate matter in the air statewide.

DPIE has a close working relationship with ANSTO and funds three of the ANSTO samplers in NSW (Stockton, Mayfield, Rockdale), and provides support for sampling at Richmond and Liverpool. DPIE will continue to explore further collaborations with ANSTO as part of the overall *NSW Air Quality Monitoring Program*.

### Recommendation 3 Supported

That the NSW Government prioritise working with other jurisdictions to achieve nationally consistent air quality measurement and reporting, including ensuring that PM2.5 is reported separately and hourly.

NSW Health has made a leading contribution to the development of nationally consistent public health messaging and categorisation of air quality through the national [Environmental Health Standing Committee](#) (enHealth).

DPIE has also participated in this process through its participation on the [National Air Technical Advisory Group](#) (NATAG). The Australian Health Protection Principal Committee (AHPPC) has endorsed enHealth-proposed categories of PM2.5 air quality averaged over one hour and associated public health messaging.

NSW Health has worked with DPIE in their update of their air quality website, which now contains the AHPPC-endorsed public health messages and hourly-averaged PM2.5 air quality categories.

**Recommendation 4** **Supported**

That the NSW Government commission a review on how effective air quality information and health advice is communicated to and comprehended by the public, with the review and any findings to be published.

See response to recommendation 6.

**Recommendation 5** **Noted**

That the NSW Government develop an air-smart public education campaign and identify and implement other strategies that will enhance public awareness and education in relation to managing and interpreting the health risks associated with exposure to poor air quality.

See response to recommendation 6.

**Recommendation 6** **Noted**

That the NSW Government provide additional resources to ensure that the air-smart public education campaign is widely advertised, particularly to vulnerable and at-risk groups.

Recommendations 4, 5 and 6 are addressed together as they are related matters.

DPIE and NSW Health will work together to commission a review of air quality information and messaging. This will build on the work already undertaken by enHealth and NATAG on improving messaging for PM2.5. The work will also help DPIE evaluate the outcomes of the *Air Program* and fulfilling the evaluation requirements of the Climate Change Fund.

NSW Government notes and supports the intent of the recommendation, however it would be premature to commit to a public education campaign before receiving the findings of the review of air quality communications (Recommendation 4). This review may identify that pathways other than singular public education campaigns are more effective at improving the uptake of air quality information and health messaging.

The resources needed to deliver the communications pathways, marketing and advertising needs for improved air quality communications will be guided by the review of air quality information and health advice (Recommendation 4).

**Recommendation 7** **Supported**

That SafeWork NSW engage with Unions NSW, unions, employers and other stakeholders to identify and develop policy and regulatory reforms that will improve the protection of workers from the harmful health effects of being exposed to poor air quality. In completing such work consultation will take place with medical and health experts, including thoracic specialists.

The government is committed to implementing and maintaining appropriate policy, regulatory schemes and initiatives to improve the protection of workers from the harmful health effects of being exposed to poor air quality in the workplace.

On 27 October 2020, the Minister for Better Regulation and Innovation launched SafeWork NSW's *Seasonal SAFE* plan, a guide to worker safety when dealing with the effects of extreme heat, sun exposure, bushfires and smoke.

SafeWork NSW will continue to consult with workers, employers and other stakeholders where workers may be affected by poor air quality. SafeWork NSW will consider any reforms necessary to provide clear guidance on the existing regulatory responsibilities in this area.

**Recommendation 8**

**Supported**

That all NSW Government departments and agencies with a role in responding to bushfire events continue to develop and implement strategies to coordinate, collaborate and communicate more effectively on the management of air quality, to ensure optimal planning for and responses during future bushfire events.

The Smoke Management Steering Committee has established protocols to assess the likely impact of smoke on communities, actions which may limit the impact of smoke where possible, and how to communicate with members of the community about preventative action to reduce the effects of smoke. The committee will continually evaluate and refine these cross-agency protocols, working towards more effective management of air quality during bushfires and hazard reduction burns.

**Recommendation 9**

**Supported**

That the Department of Planning, Industry and Environment ensure that it completes and releases the Clean Air for NSW Strategy by early 2021. Further, that the strategy:

- incorporate a strong framework for regulation of air pollution from industry, vehicles and wood heaters
- link to a comprehensive plan for air quality monitoring across the state
- be supported by adequate resourcing of the agency responsible for the implementation.

The NSW Government will release a *Clean Air Strategy* in 2021. The strategy will outline the strong regulatory and policy framework already operating successfully in NSW. It will identify further actions to achieve ongoing reductions in the impacts of air pollution on the people of NSW, while supporting liveable communities, healthy environments and the NSW economy.

Actions will address improved management of exposure to poor air quality during extreme events, and on a day-to-day basis to deliver immediate health outcomes. Longer term outcomes will be delivered by continuous improvement in reducing emissions across priority sectors, including industry, vehicles and wood heaters, and in planning and place design to protect communities from pollution sources. The strategy will refer to a comprehensive air quality monitoring plan for NSW that is published separately.

**Recommendation 10**

**Supported**

That the NSW Government support data collection and research on air quality in general, and in particular, the health effects of poor air quality and the most effective ways to mitigate those effects.

The NSW Government continues to support air quality research through multiple channels and partnerships. DPIE funds the NSW Bushfire Risk Management Research Hub which provides valuable insights into health impacts of bushfires. DPIE also funds the Human Health and Social Impacts Node of the NSW Adaptation Research Hub, which is focussing on climate change impacts on health, including from air pollution and bushfires.

DPIE is also a partner of the National Health and Medical Research Council Centre for Air pollution, energy and health Research (CAR) and the National Environmental Science Program Clean Air and Urban Landscapes Hub.

The NSW Government will continue to support all aspects of air quality research both through partnerships or through the government's own extensive research excellence in air quality and health.