



Environmental Defenders Office

3 June 2022

Air Policy

NSW Environment Protection Authority (**EPA**)

Submitted by email: air.policy@environment.nsw.gov.au

Dear EPA,

Draft Protection of the Environment Operations (Clean Air) Regulation 2022

Environmental Defenders Office (**EDO**) welcomes the opportunity to provide feedback on the draft *Protection of the Environment Operations (Clean Air) Regulation 2022* (**Draft Regulation**).

EDO is keenly aware of the health and environmental impacts of air pollution, and has advised and represented many communities throughout NSW in relation to these impacts. We have written extensively on the need for effective regulation of air pollution across NSW.

The EPA, through the Draft Regulation, seeks to update the *Protection of the Environment Operations (Clean Air) Regulation 2021* (**Current Regulation**) to make it more current and relevant, following a review of the latest environment and health research, current technologies, environmental practice, regulations and emission standards in other Australian jurisdictions and evolving community and stakeholder concerns. The Draft Regulation proposes a number of significant changes to the Current Regulation, including:

- extending the summer period when less polluting petrol must be supplied in the NSW Greater Metropolitan Region;
- requiring older activities and plant to comply with more stringent air emission standards; and
- requiring stricter emission limits and controls for volatile organic liquids for storage tanks, loading plant and tank vehicles and across a broader part of the NSW Greater Metropolitan Region that is at high risk of ozone formation.

EDO strongly supports more stringent standards on air pollution. Our submission identifies a significant gap in the framework governing air pollution in NSW, including in the Draft Regulation, recommends addressing this serious oversight, and identifies opportunities for the EPA to comply with relevant statutory obligations recognised by the Court, the former Minister and the EPA Board itself. In short, **we strongly recommend that the Draft Regulation be amended to regulate emissions of carbon dioxide, methane, and other greenhouse gases from industrial plants**

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and activities. We also identify opportunities to strengthen emissions exceedance limits and standards for other air impurities in NSW to better align with best practice.

Improving regulation of greenhouse gas emissions

Neither the Current Regulation nor the Draft Regulation include limits or standards for greenhouse gases emitted by activities and plant, despite the stationary energy sector (primarily public electricity production) being the largest source of greenhouse gas emissions in NSW.

Greenhouse gases such as carbon dioxide and methane are air impurities for the purposes of the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**), which provides that:

air impurity includes smoke, dust (including fly ash), cinders, solid particles of any kind, gases, fumes, mists, odours and radioactive substances.

Air pollution is defined as “the emission into the air of any air impurity”. That is, for the purposes of the POEO Act as it stands, carbon dioxide, methane and other greenhouse gases are air impurities, and when emitted to the air by coal fired power stations or any other point source, are air pollution. They should therefore be regulated as such by the EPA.

To that end, **we strongly recommend that the Draft Regulation be amended to regulate emissions of carbon dioxide, methane, and other greenhouse gases from industrial plants and activities.**

The scope of the Draft Regulation should be expanded to include the regulation of greenhouse gas emissions from scheduled premises, and in particular from stationary energy sources. The Draft Regulation already imposes standards of concentrations for other air impurities released from scheduled premises, including coal-fired power stations with capacity to generate more than 30 megawatts of electrical power, metropolitan electricity works (gas turbines), and metropolitan electricity works (internal combustion engines).

In August 2021, the Land and Environment Court of NSW found that the EPA has a duty under s 9(1)(a) of the *Protection of the Environment Administration Act 1991* (NSW) (**POEA Act**) to develop environmental quality objectives, guidelines and policies to ensure the protection of the environment in New South Wales from climate change.¹

In September 2021, less than nine months ago, the now Treasurer, then Minister for the Environment, Matt Kean, said that that he and the EPA Board had decided that “we will not be appealing that decision and will in fact be doing everything necessary to give it full effect.”² Minister Kean went on to state that “we want to use all our agencies, all the levers within government, to set the quality objectives, guidelines and policies to ensure we protect the environment from climate change, as we should be doing.”

¹ *Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority* [2021] NSWLEC 92.

² ABC Radio National Breakfast, 10 September 2021, available at <https://www.abc.net.au/radionational/programs/breakfast/matt-kean-inaction-climate-change-covid-nsw/13535922>.

Regulations under the POEO Act are an ideal vehicle the EPA can use to comply with its judicially recognised, and Minister and Board endorsed, statutory duty to develop environmental quality objectives, guidelines and policies to ensure the protection of the environment in NSW from climate change.³

Placing limits on the emission of greenhouse gases by stationary energy sources is not a novel regulatory mechanism. The United States Environmental Protection Agency (**US EPA**) in October 2015 made a rule establishing emissions concentration limits for carbon dioxide equivalent emissions for both new and modified power plants.⁴

Placing limits on the emission of carbon dioxide from coal-fired power stations is an essential and practicable step that can be taken to commence mitigating the devastating harm caused by the emission of carbon dioxide and other greenhouse gases.

The Regulatory Impact Statement (**RIS**) for the Draft Regulation underestimates the costs of air pollution by not considering greenhouse gases as air pollution. This means it does not consider the health impacts of climate change, which is caused in large part by the greenhouse gases emitted by the combustion of fossil fuels (such as coal and gas) for electricity and industrial purposes. This air pollution and the resultant climate change will have an increasing impact on public health in the future.

In *Sharma v Minister for the Environment*,⁵ the Federal Court found that climate change will have devastating impacts on human health, and in particular, the health of today's children and future generations:

291. *A comprehensive account of the risks to the lives, safety and health of the Children has already been given. Perhaps the most startling of the potential harms demonstrated by that evidence is that one million Australian Children are expected to suffer at least one heat-stress episode serious enough to require acute care in a hospital. Many thousands will suffer premature death from either heat-stress or from bushfire smoke.*⁶

...

293. *It is difficult to characterise in a single phrase the devastation that the plausible evidence presented in this proceeding forecasts for the Children. As Australian adults know their country, Australia will be lost and the World as we know it gone as well. The physical environment will be harsher, far more extreme and devastatingly brutal when angry. As for the human experience – quality of life, opportunities to partake in nature's treasures, the capacity to grow and prosper – all will be greatly diminished. Lives will be cut short. Trauma will be far more common and good health harder to hold and maintain. None of this will be*

³ *Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority* [2021] NSWLEC 92 at [16].

⁴ See US EPA, 2021, *NSPS for GHG Emissions from New, Modified, and Reconstructed Electric Utility Generating Units*, available at <https://www.epa.gov/stationary-sources-air-pollution/nsps-ghg-emissions-new-modified-and-reconstructed-electric-utility>

⁵ *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560

⁶ *Sharma* at [291].

*the fault of nature itself. It will largely be inflicted by the inaction of this generation of adults, in what might fairly be described as the greatest inter-generational injustice ever inflicted by one generation of humans upon the next.*⁷

This evidence was not contested by the federal Minister at first instance, and was accepted on appeal by the Full Court of the Federal Court of Australia.⁸

In the face of undisputed evidence on the quantifiable impacts on public health and the environment from greenhouse gas emissions, the EPA can no longer justify inaction on regulating greenhouse gas emissions. Further, this failure to act breaches EPA's duty under s 9(1) of the POEA Act.

Prescribed concentrations remain too high

The Draft Regulation does not prescribe stricter standards of concentration than the Current Regulation for the emission of the air impurities. These standards, particularly those prescribed for electricity generation, significantly exceed those set in comparable jurisdictions such as the European Union,⁹ or those recommended by the OECD.¹⁰

We welcome that the Draft Regulation proposes to require activities and plant on scheduled premises that belong to Groups 3 and 4, to comply with higher emissions standards on currently scheduled pollutants (Group 5 levels in 2025 and Group 6 levels in 2030).

However, we consider that the timeframe within which these changes will be required are overly generous. These facilities have been permitted to pollute at many times the levels that could have been achieved with modern pollution control mechanisms for a number of years already. Under the Draft Regulation many will reach the end of their life-cycle without having been required to update their pollution controls.

Each year that these facilities are permitted to continue polluting at current levels is a significant cost to the community in terms of impacts on human health, and particularly to infants and children in crucial development years.¹¹ The RIS for the Draft Regulation acknowledges this:

The public health impacts and costs of air pollution and, conversely, the benefits of reducing people's exposure to air pollution are substantial. Air pollution leads to (NSW Government 2016):

⁷ Sharma at [293].

⁸ *Minister for the Environment v Sharma* [2022] FCAFC 35.

⁹ See Commission Implementing Decision (EU) 2021/2326 of 30 November 2021 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2021:469:FULL&from=EN>.

¹⁰ OECD (2020) *Best Available Techniques (BAT) to Prevent and Control Industrial Pollution*, available at <https://www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm>.

¹¹ Farrow, Anhäuser and Myllyvirta, August 2020, *Lethal Power: How burning coal is killing people in Australia*, available at <https://www.greenpeace.org.au/research/lethal-power-how-coal-is-killing-people-in-australia/>.

- 520 premature deaths and 6,300 cumulative years of life lost in Sydney per year (Morgan, Broome & Jalaludin 2013)
- 1,180 hospital admissions in Sydney per year (Broome et al. 2015)
- an estimated \$6.4 billion (2015 \$) in health costs per year in the NSW GMR (DEC 2005).

As above, the costs of the contribution to climate change of facilities emitting greenhouse gases have not been considered by the RIS for the Draft Regulation, and therefore the true costs of air pollution are higher.

We are also concerned that the future tightening of air pollution limits for Groups 3 and 4 is undermined by the proposal that “if Group 3 and 4 activities and plants are unable to meet these updated emission limits by the due dates, different limits can be agreed via variation of the conditions of the environment protection licence.”¹² Clean air should not be subject to a negotiation exercise between regulator and regulated but should be guided by health evidence.

Requiring continuous improvement

We note our submission to the *NSW Legislative Council Portfolio Committee No. 7 – Planning and Environment Inquiry into the Protection of the Environment Operations Amendment (Clean Air) Bill 2021*,¹³ in which we recommended that industrial emitters be required to use **best available techniques** (or **BAT**, a standard set for the regulation of air pollution from industrial installations by bodies such as the OECD¹⁴ and EU¹⁵) to manage the emission of pollutants from industrial facilities to air, land, and water.

BAT means the most effective and advanced pollution control methods available for the polluting activity in question. Although the concept is technology-based, requiring the implementation of a particular technology or combination of technologies, directives and guidance documents setting out what constitutes BAT for a particular industrial activity and pollutant will also set out the range of pollution concentration levels that can be achieved with BAT.

For example, the European Commission considers that BAT for NO_x emissions from coal-fired power stations is to use one or a combination of the following to achieve an emissions level for a large, existing coal-fired power plant, of a yearly average of 65-150 mg/m³ or a daily average of <85–165 mg/m³.¹⁶

- Combustion optimisation;
- Primary techniques such as air staging, fuel staging, flue-gas recirculation, or low NO_x burners;
- Selective non-catalytic reduction;

¹² NSW EPA, April 2022, *Regulatory Impact Statement Proposed Clean Air Regulation 2022*, p 3.

¹³ **Attached** and available at <https://www.edo.org.au/publication/submission-to-the-inquiry-into-the-protection-of-the-environment-operations-amendment-clean-air-bill-2021/>

¹⁴ OECD, 2020, *Best Available Techniques (BAT) to Prevent and Control Industrial Pollution*, available at <https://www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm> .

¹⁵ See Commission Implementing Decision (EU) 2021/2326 of 30 November 2021 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2021:469:FULL&from=EN>.

¹⁶ Ibid.

- Selective catalytic reduction; or
- Combined techniques for NO_x and SO_x reduction.

We **recommend** further regulatory reforms requiring that industrial emitters use best available techniques to continually drive emissions reductions.

As the Black Summer bushfires showed, air quality and climate events are inextricably linked, and the regulatory responses must also be coordinated – focussing on both mitigation as well as management. We refer to EDO reports including recommendations to maximise co-benefits across pollution policy, climate change and the NSW planning system,¹⁷ as well as recent submissions EDO has made on air quality in NSW.¹⁸

We would be happy to discuss these recommendations in more detail. For further information, please contact rachael.chick@edo.org.au or (02) 9262 6989.

Yours sincerely,

Environmental Defenders Office



Rachael Chick
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Attachments

Attachment A: *Empowering the NSW EPA to Prevent Climate Pollution*, EDO, November 2020.

Attachment B: *Submission to the Inquiry into the Protection of the Environment Operations Amendment (Clean Air) Bill 2021*, EDO, June 2021.

Attachment C: *Submission on the Clean Air for NSW Consultation Paper*, EDO NSW, January 2017.

¹⁷ See: *Climate-ready planning laws for NSW: Rocky Hill and beyond*, available at: <https://www.edo.org.au/publication/climate-ready-planning-laws/>; *Empowering the NSW EPA to Prevent Climate Pollution*, **attached** and available at: <https://www.edo.org.au/2020/11/26/empowering-the-nsw-epa-to-prevent-climate-pollution/>.

¹⁸ See: *Submission to the Inquiry into the Protection of the Environment Operations Amendment (Clean Air) Bill 2021*, **attached** and available at <https://www.edo.org.au/publication/submission-to-the-inquiry-into-the-protection-of-the-environment-operations-amendment-clean-air-bill-2021/>; *Submission on the Clean Air for NSW Consultation Paper*, **attached**.