Nature Conservation Council
The voice for nature in NSW

Environment Protection Authority
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Sydney South NSW 1232

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20 January 2017

NCC Submission on Clean Air for NSW Consultation Paper

Dear Sir/Madam,

The Nature Conservation Council of NSW (**NCC**) is the peak environment organisation for New South Wales, representing over 150 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

We welcome the opportunity to comment on the *Clean Air for NSW Consultation Paper.*

The consultation paper recognises the negative impact that air pollution is having on the quality of life of thousands of people in NSW, and the current trends in air pollution, which are rising for many key pollutants.

We are concerned that the consultation paper lacks measures to control major sources of air pollution, and that air pollution controls in NSW lags far behind international best practice. There is a huge opportunity to improve the quality of the air we breathe and yet the consultation paper fails address many urgent issues.

Air pollution reduces quality of life in NSW and impacts on our environment, we implore the NSW government to step up efforts to reduce pollution to the lowest levels achievable.

Yours sincerely,

Kate Smolski
Chief Executive Officer

NCC SUBMISSION CLEAN AIR FOR NSW CONSULTATION PAPER

In addition to the issues raised below, recent submissions also provide further information into various elements of the Clean Air Consultation Paper. Please see **Appendix A.** for NCC's submission into the proposed variation to the National Environment Protection Measure (Ambient Air Quality), and **Appendix B.** for NCC's joint submission into the National Clean Air Agreement Discussion Paper.

1. NSW must seek to reduce air pollution levels to the lowest possible.

There is no threshold below which particle pollution has no adverse impact. There are significant health benefits in reducing pollution concentrations to well below the national standards, all the way down towards zero. Merely committing to meet our national standards as contained in the National Environment Protection (Ambient Air Quality) Measure (Air NEPM) is not sufficient to avoid the health and environmental costs of air pollution.

An effective air pollution control strategy must be based on objectives that are measured (e.g. a 50% reduction in emissions from coal mines by 2020), actions that are monitored, and facilitate meaningful community involvement.

2. Tackle air pollution from power stations.

Our five coal-fired power stations - Bayswater, Liddell, Eraring, Vales Point and Mount Piper - emit large quantities of fine particle ($PM_{2.5}$) pollution, sulphur dioxide, oxides of nitrogen, mercury and a wide range of other toxic pollutants. Pollution from these plants compares very unfavourably to international best-available technology, as shown for Bayswater power station in ***Table 1***.

Table 1: Bayswater power station SO2 and NOX pollution compared to international best practice

Pollutant	Emissions intensity of Bayswater power station (kg/MWh)[1]	International best practice for coal-fired power stations (kg/MWh)[2]	Comparison
SO_2	4.47	0.06 – 0.08	Fifty-five times worse than best practice
NO_X	2.93	0.16 – 0.42	Seven times worse than best practice

We support the Clean Air Plan for Consultation goal which seeks to "minimise emissions from power stations to reduce primary and secondary particle precursors."

[1] National Pollution Inventory 2014/15

[2] Osamu Ito, Emissions from coal fired power generation, Workshop on IEA high efficiency, low emissions coal technology roadmap, International Energy Agency, 2011. Available at: https://www.iea.org/media/workshops/2011/cea/Ito.pdf

In the short-term, coal-fired power stations must be required to implement best available measures to control air pollution, such as flue gas desulfurisation, catalytic reduction and electrostatic precipitators. This could be achieved by setting strict emissions limits, and giving plants several years to comply, like the MATS scheme in the USA, or by increasing the load-based licencing scheme fees to levels that are reflective of the true health costs of pollution and would drive pollution reduction measures.

In the long term, i.e. by 2030, NSW Government must commit to supporting the rapid closure of these major polluters and a planned transition to 100% non-polluting renewable energy. This transition needs to be carefully managed to maximise benefits and limit negative impacts upon communities across NSW.

We welcome the EPA's one-year plan to study international best practice and make recommendations to Government regarding how to reduce air pollution from coal-fired power stations, and request that the EPA make the results of this work public once complete.

3. Control air pollution from coal mines.

New and expanded coal mines should not be approved where pollution levels exceed the national standards. Existing coal mines need to be much more actively regulated to control coal dust.

In the Hunter and other coal-mining regions, open cut coal mines are responsible for about 90% of coarse particle pollution. These emissions have doubled in the last five years and trebled in the last ten[3], and PM_{10} concentrations regularly exceed the national standard. This unfair health burden is shouldered by coalfield communities, not the mining companies. But the Consultation Paper proposes no significant new measures to tackle these emissions. The Dust Stop program which aims to reduce coal dust by 80% isn't working.

4. Cover coal wagons.

Each year, millions of uncovered coal wagons pass through residential areas throughout NSW. Numerous independent studies, including an inquiry conducted by the NSW Chief Scientist, have demonstrated that particle concentrations increase significantly as these wagons pass. The coal industry defines covering wagons as best practice, and studies confirm this can reduce coal dust emissions by 99%.

The NSW Government should require all coal wagons to be covered, for both new and existing mines.

5. Scrap dirty wood heaters.

Wood heaters are responsible for 47% of Sydney's fine particle ($PM_{2.5}$) pollution each year; up to 75% in July[4] This is a very high priority for controlling air pollution and one of the most cost effective options. But the Consultation Paper proposes no decisive actions to tackle this major source of $PM_{2.5}$ and passes the responsibility to local government. Local Government cannot control wood heaters. A modest incentive could support residents to replace their polluting wood heaters with clean, efficient heaters. Incentives for home insulation would reduce the need for heating.

[3] National Pollutant Inventory, 2011-2015
[4] Consultation Paper, p.35

6. Polluters must pay.

Air pollution costs the people of NSW dearly, with the most polluted communities carrying an unfair share of this burden. By requiring polluters to pay, the NSW Government can create incentives for cleaner production. One option would be to significantly increase the load-based licencing fees paid by major polluters[5]. An analysis by Doctors for the Environment Australia recommends increasing fees to 50 times the current rate, so that polluters pay for their health impacts. Load-based licencing fees should also be paid by coal mining companies who are currently exempt, as was recommended by by a 2011 review commissioned by OEH[6].

[5] NSW Government Load-Based Licencing Review: http://www.epa.nsw.gov.au/licensing/lbl/lblreview.htm
[6] Katestone Environmental Pty Ltd, 2011, p.275, available at:
http://www.epa.nsw.gov.au/resources/air/ke1006953volumei.pdf

APPENDIX A: Submission into Proposed variation to the National Environment Protection Measure (Ambient Air Quality)

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National Environment Protection Council
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10 October 2014

Submission on the proposed variation to the National Environment Protection Measure (Ambient Air Quality)

Dear Sir/Madam,

The Nature Conservation Council of NSW (NCC) is the peak environment organisation for New South Wales, representing 130 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

We welcome the opportunity to comment on the proposed variation to the National Environment Protection Measure (Ambient Air Quality) (**NEPM**). Our key comments are outlined below.

1. The annual average standard of 6 micrograms per cubic metre (ug/m^3) for $PM_{2.5}$ should be a compliance standard rather than an advisory standard. Science tells us that there is no safe level of $PM_{2.5}$ so the lowest possible level should be chosen as the standard. This should be combined with a mechanism to drive exposure even lower. As noted in the impact statement "The greatest proportion (>99%) of the health costs accrue from avoiding premature deaths due to long-term exposure to $PM_{2.5}$" (p.ix). Achieving 6ug/m^3 would reduce the estimated 1,590 deaths in Sydney, Melbourne, Brisbane and Perth attributed to $PM_{2.5}$ pollution by 34%, avoiding about 700 premature deaths.

2. The 24-hour $PM_{2.5}$ standard of 20μg/m^3 should be a compliance standard rather than an advisory standard. This is long overdue. The levels of 25μg/m^3 or 20μg/m^3 are proposed in the Impact Statement, although the draft NEPM variation itself lists 25μg/m^3. The stricter standard of 20μg/m^3 should be adopted. The impact statement shows that 20μg/m^3 is already being achieved at most monitoring sites on most days and so is achievable (p.70). Reducing the peak exposures would have health benefits of fewer hospitalisations and fewer exacerbations of respiratory symptoms.

3. Establish an annual standard for PM_{10} of 20 μg/m^3. There is good scientific argument for an annual PM_{10} standard on the basis of exacerbation of lung disease, reduction in lung function in both adults and children, and development of lung cancer from chronic exposure. There is no evidence that these risks are removed by controlling annual average $PM_{2.5}$. WHO guidelines are for a 20μg/m^3 annual mean.

4. The 24-hour standard for PM_{10} should be reduced from 50 to 40μg/m^3. The impact statement notes that on average the current standard of 50μg/m3 is being achieved (p.69) and that a tightening of the standard could encourage future improvements in air quality (p.70).

5 .Timeline for implementation: The draft NEPM variation (Part 2 Section 6) suggests allowing up to ten years for jurisdictions to comply with the standards. This 'moratorium' is unacceptable. State regulators should do everything within their powers to ensure compliance from the commencement of the NEPM.

6. The NEPM should aim to ensure the cleanest air possible: There is no threshold below which particle pollution has no adverse impact. Health experts are universally critical of the practice of managing 'up to' the national standards. The objective of the proposed NEPM is "ambient air quality that allows for the adequate protection of human health and well-being." The expression "adequate" is open to interpretation and does not create a basis for a strong regulatory framework. As recommended in the 2011 NEPM review, the objective should be "minimise the risk from adverse health impacts from exposure to air pollution for all people wherever they may live."[7]

7. An exposure reduction framework is needed: An exposure reduction framework is discussed in the impact statement but it does not appear in the draft NEPM variation itself. As the science is well established that current exposure is causing health problems, long-term targets to progressively decrease exposure should be adopted.

8. Community involvement: For too long, community members and groups have been ignored in the policy process for developing, implementing and reviewing air pollution standards. Industry groups have been much more actively engaged than non-government groups and individuals. A protocol for community involvement should be negotiated and adopted, along the lines of the protocol that guided community involvement in the initial development of the NEPMs for Ambient Air Quality and the National Pollutant Inventory.

9. Access to comprehensive and timely monitoring data: The NEPM should require state regulators (EPAs) to ensure easy and timely access to monitoring data including data from both EPA and industry monitoring. In the absence of meaningful enforcement action by state regulators, community access to data is often the main driver to reduce pollution. In many parts of Australia, monitoring data is difficult, expensive or impossible to access. The simplest arrangement would be the creation of one website where community members could access monitoring data from all states and regions in a standardised format. The NSW EPA air quality monitoring website is an excellent model for this. The monitoring plans and annual reports referred to in the draft NEPM variation (pages 8, 10) should also be publicly available on a coordinated national webpage.

10. Protecting human health in small communities: The NEPM currently exempts smaller population centres from monitoring and reporting obligations - levels only need to be monitored for population centres over 25,000 people. Monitoring by population size alone is not adequate protection. This is particularly important for people whose health is threatened by industrial activity setting up close to established residential areas of smaller populations. There should be stronger requirements for monitoring in small towns or suburbs where there is reason to believe that standards are being exceeded. The NEPM should require monitoring and reporting for both $PM_{2.5}$ and PM_{10} in population centres of 5,000 or more, particularly communities known or expected to experience high pollution levels.

The NEPM should also provide clear direction to States on the matter of where to monitor rather than leaving this to the discretion of state regulators (e.g. the draft NEPM variation states "additional performance monitoring stations may be needed" (p.9) but leaves it up each jurisdiction to determine whether to do so). An exposure reduction and continuous improvement model is recommended for all exposed populations.

11. Australia's federated policy processes: Institutional arrangements for developing, implementing and monitoring Australia's air pollution control laws are failing. The Council of Australian Government's Standing Committee on Environment and Water (SCEW) was disbanded in December 2013 and no

[7] National Environmental Protection Council, *Ambient Air Quality NEPM Review*, Adelaide (2011) p 20, available at http://www.scew.gov.au/resource/national-environment-protection-ambient-air-quality-measure-review-review-report.

alternative arrangement has been put in place. The National Environment Protection Council is under-resourced to the extent that it has inadequate capacity to manage this consultation. One consequence of these shortcomings is that this NEPM review has been stalled for years and the national Clean Air Action Plan (or Agreement) has been postponed despite its agreed urgency. A strong and proactive approach to air pollution prevention requires robust and well-resourced institutional arrangements capable of decisive policy intervention.

12. The variation must be finalised without delay. Government representatives have indicated that the aspirational timeframe to make the variation is mid-2015, or longer. Having considered standards for $PM_{2.5}$ for over a decade, there is no reason for the National Environment Protection Council to continue to delay. All State, Territory and Commonwealth Governments must ensure the NEPC adopts this variation as a priority – by the end of 2014, to be implemented from 2015.

13. New research and policy development is needed for the future: There is growing concern internationally about the health impacts of ultrafine particles. The 2011 review of the NEPM noted that there was not enough data to make a standard for ultrafine particles. The National Environment Protection Council should investigate including a reporting standard for ultrafine particles so we can better understand their impact on health. Similarly an 8-hour standard for all particulates should be considered as a new policy measure to better capture the significant short-term impacts that can occur.

14. The proposed variation is only part of the solution. National air pollution prevention laws are needed. Australia's current system of policies and laws to prevent and control air pollution, including the Ambient Air NEPM, are failing. The national air pollution standards adopted in 1998 are breached regularly, particularly in coal-affected communities. States currently do not take adequate steps to ensure the standards will be met through their laws, policies and licencing arrangements. A stronger set of national policies and laws are required to protect community health. The NEPM variation is a welcome but inadequate step toward effective air pollution laws. Commonwealth leadership to develop national air pollution prevention laws is needed as a priority.

Should you have any questions or require any additional information, please do not hesitate to contact Cerin Loane, Policy and Research Coordinator, on (02) 9516 1488 or cloane@nature.org.au.

Yours sincerely,

Kate Smolski
Chief Executive Officer

APPENDIX B: Submission into National Clean Air Agreement Discussion Paper