



**Review of the
National Environment Protection
(Ambient Air Quality)
Measure**

Issues Scoping Paper

October 2005

CONTENTS

GLOSSARY	3
1 INTRODUCTION.....	4
1.1 THE AMBIENT AIR QUALITY NEPM	4
1.2 REVIEW OF THE AMBIENT AIR QUALITY NEPM	4
1.3 APPROACH TO THIS REVIEW	4
1.4 PURPOSE OF ISSUES SCOPING PAPER	4
2 BACKGROUND	6
2.1 AMBIENT AIR QUALITY NEPM	6
2.2 ACTIONS TO SUPPORT THE NEPM.....	7
2.3 FILLING INFORMATION GAPS	8
3 DISCUSSION OF ISSUES TO BE CONSIDERED IN THE REVIEW	10
3.1 TERMS OF REFERENCE FOR THE REVIEW	10
3.2 EFFECTIVENESS OF THE NEPM IN ACHIEVING THE DESIRED ENVIRONMENTAL OUTCOME AND NATIONAL ENVIRONMENT PROTECTION GOAL	11
3.3 AIR QUALITY STANDARDS	13
3.4 MONITORING PROTOCOLS	16
3.5 REPORTING PROTOCOLS	19
3.6 IMPLEMENTATION ISSUES.....	20
3.7 APPROACHES TO IMPACT ANALYSIS FOR A NEPM VARIATION	22
4 WHERE TO FROM HERE	24
4.1 THE NEXT STEPS	24
4.2 TIMEFRAME FOR THE REVIEW	25
4.3 FORM OF SUBMISSION	26
APPENDIX 1	27
A. NATIONAL ENVIRONMENT PROTECTION COUNCIL.....	27
B. ENVIRONMENT PROTECTION AND HERITAGE COUNCIL	27

GLOSSARY

AAQ NEPM	Ambient Air Quality National Environment Protection Measure
Airshed	A body of air bounded by topography and meteorology in which a substance, once emitted, is contained.
enHealth Council	A subcommittee of the National Public Health Partnership, advising on environmental health matters.
EPHC	Environment Protection and Heritage Council
GRUB	Generally Representative Upper Bound - the upper bound of pollution levels likely to be experienced by the general population in a specified region, while avoiding the direct impacts of localised pollutant sources
Hot spots	See Peak site
JRN	Jurisdictional Reference Network
Jurisdiction	The Commonwealth, a State or a Territory
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NGO	Non-Government Organisations
NHMRC	National Health and Medical Research Council
National Public Health Partnership	A subcommittee of the Australian Health Ministers Advisory Council, advising on public health matters.
PAH	Polycyclic Aromatic Hydrocarbons
Peak site	A location where emissions from one or a number of cumulative sources give rise to elevated levels of particular pollutants.
Performance Monitoring Station	Means a monitoring station used to measure achievement against the NEPM goal. The station is located to measure air quality likely to be experienced by the general population in a region or sub-region.
PM_{2.5}	Refers to particulate matter with an equivalent aerodynamic diameter less than or equal to a 2.5 micrometres
PM₁₀	Refers to particulate matter with an equivalent aerodynamic diameter less than or equal to a 10 micrometres
Population formula	The number of performance monitoring stations for a region with a population of 25,000 people or more must be the next whole number above the number calculated in accordance with the formula: $1.5P + 0.5$ where P is the population of the region (in millions).
PRC	Peer Review Committee
WHO	World Health Organisation

1 INTRODUCTION

1.1 THE AMBIENT AIR QUALITY NEPM

The National Environment Protection Council (NEPC) is a national body with responsibility for making National Environment Protection Measures (NEPMs). As a statutory entity within the Environment Protection and Heritage Council (EPHC), its role is to harmonise environmental protection approaches across Australia. (See Appendix 1 for background on the NEPC and EPHC).

In 1998, NEPC made the Ambient Air Quality National Environment Protection Measure (NEPM) that set national ambient air quality standards to apply in all States and Territories and over land controlled by the Commonwealth. These standards cover six pollutants – particles, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide and lead. The NEPM provides a nationally consistent framework for the monitoring and reporting of these six pollutants. This was the first time that national air quality standards had been set in Australia.

1.2 REVIEW OF THE AMBIENT AIR QUALITY NEPM

When the NEPM was made NEPC committed to commencing a full review of the NEPM in 2005. The overall purpose of the NEPM review is to evaluate the performance of the current AAQ NEPM in achieving the desired environmental outcome of the measure, and to recommend to Council any changes required to the measure to reflect changes in science or policy that underpins the NEPM. This will allow NEPC Ministers to make informed decisions about the need to vary any aspects of the NEPM.

In April 2005 NEPC commenced the review of the NEPM with an agreement to prepare an Issues Scoping Paper to be considered by NEPC in October 2005.

1.3 APPROACH TO THIS REVIEW

NEPC agreed that the review would be undertaken in stages with the first stage being the preparation and consultation on this Issues Scoping paper. This Paper identifies some of the issues for consideration during the review, seeks the input of the public and key stakeholders on the range and scope of these issues, and subsequently will lead to the development of a fully scoped project plan to undertake the subsequent stages of the review.

It is proposed that the review of the Ambient Air Quality NEPM be undertaken as outlined below:

- Consult on this Issues Scoping Paper to seek the feedback of stakeholders on the issues that should be considered during the review of the AAQ NEPM;
- Prepare Terms of Reference, a project plan and detailed budget to undertake subsequent work on the review for NEPC approval in April 2006; and
- Undertake a detailed review of the AAQ NEPM. This process would lead to recommendations regarding the need to vary the AAQ NEPM.

1.4 PURPOSE OF ISSUES SCOPING PAPER

The purpose of this Issues Scoping Paper is to gain stakeholder input to identify key issues that are to be considered in the Review of the Ambient Air Quality NEPM. The paper does not represent a position on any issue, and as such does not reflect the views of the Australian Government or that of any State or Territory.

50 This Issues Scoping Paper is available on the EPHC website <www.ephc.gov.au> for comment for a period of 7 weeks (28 October 2005 to 19 December 2005). All submissions are public documents unless clearly marked “confidential” and may be made available to other interested parties, subject to Freedom of Information Act provisions.

2 BACKGROUND

2.1 AMBIENT AIR QUALITY NEPM

55 The NEPM set national standards and goals for air quality and provides a nationally
consistent framework for the monitoring and reporting of six criteria pollutants - nitrogen
dioxide (NO₂), ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), particles (as PM₁₀)
and lead (Pb). 'Criteria' air pollutants are those that are emitted from a variety of sources
and are widely distributed in ambient air in Australian cities. They are also associated with
60 photochemical smog and secondary particle haze formation, and with adverse health effects.
The NEPM contains health based air quality standards for these pollutants and an associated
goal that sets a maximum number of exceedances of the standard to be met within 10 years
of making the NEPM.

65 Jurisdictions are required under the NEPM to monitor for the criteria pollutants at
'performance monitoring stations' and report the results of this monitoring annually to
NEPC. Monitoring plans were developed and approved by NEPC and monitoring is
undertaken in accordance with those plans. Annual reports are available on the EPHC
website www.ephc.gov.au.

70 'Performance monitoring stations' are located to give representative measure of the air
quality experienced by the general population in a region to the six main pollutants. The
NEPM monitoring protocol does not apply to monitoring and controlling peak
concentrations from major sources such as heavily trafficked roads and major industries.
75 Any monitoring of these major 'point sources' continues to be the responsibility of each
individual jurisdiction and is outside the scope of this NEPM. (NEPM Impact Statement
Section 1.5).

80 The NEPM provides a nationally consistent framework for the monitoring and reporting of
air pollution, however, the implementation of the NEPM and air quality management
strategies to improve air quality is the responsibility of individual jurisdictions. In some
jurisdictions the requirements of the NEPM have been incorporated into State legislative
frameworks.

85 Air quality management strategies have been developed in many jurisdictions with the aim
of driving improvements in air quality so that the standards and associated goals in the
NEPM are met. Many of these strategies will drive long-term improvements in air quality
making assessment of the effectiveness of these actions difficult in the short-term.

90 The NEPM standards and associated goals are summarised in Tables 1 and 2.

Table 1: Standards and Goals for Pollutants other than Particles as PM_{2.5}

Pollutant	Averaging Period	Standard (Maximum concentration)	Goal within 10 years Maximum allowable exceedances
Carbon monoxide	8 hours	9 ppm	1 day a year
Nitrogen dioxide	1 hour 1 year	0.12 ppm 0.03 ppm	1 day a year none
Photochemical oxidants (as ozone)	1 hour 4 hours	0.10 ppm 0.08 ppm	1 day a year 1 day a year
Sulfur dioxide	1 hour 1 day 1 year	0.20 ppm 0.08 ppm 0.02 ppm	1 day a year 1 day a year none
Lead	1 year	0.50 µg/m ³	None
Particles as PM ₁₀	1 day	50 µg/m ³	5 days a year

95 **Table 2: Advisory Reporting Standards and Goal for Particles as PM_{2.5}**

Pollutant	Averaging Period	Standard (Maximum concentration)	Goal
Particles as PM _{2.5}	1 day 1 year	25 µg/m ³ 8 µg/m ³	To collect sufficient data nationally to facilitate a review of the Advisory Reporting Standards as part of the review of this Measure to commence in 2005.

100 The standards contained in the NEPM have been developed using the results of international studies into the health effects of air pollution. At the time of making the NEPM very few studies had been conducted in Australia investigating the effects of air pollution in Australia on health. A number of studies have subsequently been undertaken and can be considered in this review (see section 2.4). At the time of making the NEPM a number of issues were raised that could not be resolved. To ensure that these issues were addressed, NEPC committed to a range of future actions.

105

2.2 ACTIONS TO SUPPORT THE NEPM

When the NEPM was made it was seen as the first step in developing a more consistent approach to air quality management in Australia so that Australians can enjoy equivalent protection from the adverse health impacts of air pollution. To further facilitate this objective the following future actions were agreed:

110

- establish a Peer Review Committee with NGO representation to advise on jurisdictional monitoring plans;
- establish a taskforce to investigate a risk assessment approach to guide the application of standards, to report within 3 years;
- 115 • by 2001 commence a review of the particles standard, in particular, the need for a standard for particles less than 2.5 microns;
- by 2003 commence a review of the practicability of developing a 10 minute sulfur dioxide standard;
- 120 • by 2003 commence a review of the practicability of setting a long term goal (> ten years) of achieving a one hour average standard for photochemical oxidants of 0.08 ppm measured as ozone within the major urban airsheds;

- make public all jurisdictional monitoring plans assessed as complying with the NEPM;
- make public annual monitoring reports prepared by the jurisdictions in accordance with the NEPM;
- 125 • commence a review of the NEPM in 2005;
- jurisdictions will commence or continue programs for monitoring particles less than 2.5 microns in major airsheds to provide the basis for NEPC to review the need for a related standard; and
- 130 • Jurisdictions will collect and collate information to enable a review of the practicability of a 10 minute standard for sulfur dioxide.

When the Ambient Air Quality NEPM was made in 1998 there was not sufficient monitoring data available to set standards for PM_{2.5}. Given the emerging evidence of health effects associated with PM_{2.5}, Ministers committed to a review of the particle standards to commence
135 in 2001 with a view to setting a standard for PM_{2.5}.

In 2003 the NEPM was varied to include advisory reporting standards for fine particles – PM_{2.5}. These advisory reporting standards are health-based standards but the associated goal is to facilitate the collection of data to inform the review of the NEPM. There was not
140 sufficient monitoring data available in all jurisdictions at the time of the review to enable the setting of compliance standards. The varied NEPM contains provisions that require all jurisdictions to monitor for PM_{2.5} commencing by 1 January 2004.

The preliminary work for the review of the ozone standards is due for completion in October
145 2005. All other future actions have been addressed and reports are available on the EPHC website (www.ephc.gov.au). In addressing these actions to support the NEPM a range of information gaps were identified and these have been addressed by the formation of working groups or the initiation of research. These are discussed further in Section 2.3

150 **2.3 FILLING INFORMATION GAPS**

To inform this review process and address information gaps that have been identified, the Environment Protection Heritage Council (EPHC) and other bodies have commissioned a number of studies, which include:

- 155 1. Time activity study (completed 2003);
2. Multi-city mortality and morbidity study (due for completion late 2005);
3. Children's air pollution and health study (Likely completion June 2007);
4. Elderly Air pollution and health study;
5. Ozone standard review preliminary work (to be completed late 2005);
- 160 6. Analysis of health data with particle composition data; and
7. PM_{2.5} Equivalence Study (to be completed late 2007).

Most of these studies have been initiated to fill information gaps identified through the development of the original AAQ NEPM, and subsequent future actions and the work of the
165 Cooperative Studies Working Group (report available www.ephc.gov.au).

In addition to these studies a range of studies are underway in individual jurisdictions to investigate the associations between air pollution and adverse health outcomes. Many of these studies have been completed and will be available to inform the review.

170

175 A Burden of Disease study is being conducted by the health sector and utilises the World Health Organisation methodology to quantify the risk posed by air pollution in Australia. The Burden of Disease study rates the risk posed to human health by air pollution along with other risk factors (e.g. smoking, obesity etc). This is a critical input to the impact assessment to determine the costs and benefits of any changes that may potentially be proposed to the NEPM standards.

180 A study into the composition of particles in four Australian cities was funded by the Australian Government Department of the Environment and Heritage. This study is expected to be completed in 2005 and will provide important data to inform the review of the particle standards in the NEPM.

185 EPHC has also established a working group to recommend a methodology to develop air quality standards in Australia (Standards Setting Working Group - SSWG). Jointly chaired by the health and environment sectors, the group will build on the work done by the Risk Assessment Taskforce, the PM_{2.5} and Air Toxics Project Teams and the enHealth Council. The SSWG will recommend a methodology to develop or vary any air quality standards in the NEPM. The SSWG report will be completed prior to the initiation of any potential variation process and will form an important component of the NEPM review.

190 The outcomes from the research and working groups are important to inform the review process and any variation of the NEPM that may be required. However the results of the studies do not have to be available at the beginning of the review process. There are many other aspects of the NEPM for review consideration including the current scope and framework, an assessment of the effectiveness of the current NEPM in meeting the desired environmental outcome and standards and goals of the NEPM, and the barriers encountered by jurisdictions in implementing the NEPM.

195

3 DISCUSSION OF ISSUES TO BE CONSIDERED IN THE REVIEW

200

3.1 TERMS OF REFERENCE FOR THE REVIEW

At the time of making the NEPM, a clause relating to terms of reference for the review was not included. NEPM's made since then have included a clause that outlines the requirements for a review of a NEPM and states:

205

This Measure will be subject to a review (x) years from the date of commencement, or within any lesser period determined by the Council, which will consider:

210

- i. the effectiveness of the Measure in achieving the desired environmental outcome set out within it;
- ii. the resources available for implementing the Measure; and
- iii. the need, if any, for amending the Measure, (in accordance with the Act) including:
 - whether any changes should be made to the Schedules; and
 - whether any changes should be made to improve the effectiveness of the Measure in achieving the desired environmental outcome set out within it.

215

In terms of the review of the Ambient Air Quality NEPM, it may be appropriate to adopt this clause as a guide to conducting the review. Guidance for the review is also provided by Section 15 of the *National Environmental Protection Council Act 1994*, which sets out the factors that Council must take into account in making national environmental protection measures. These considerations include:

220

- the environmental, economic and social impact of the measure;
- the simplicity, efficiency and effectiveness of the administration of the measure; and
- any regional environmental differences in Australia.

225

Q1. Would the above clause represent appropriate terms of reference for the review of the NEPM? What, if any, terms of reference should be added, modified or removed?

230

Q2.. Should the review consider what resources have been needed by jurisdictions to implement the NEPM and whether these resources are being used in the most efficient way to achieve the objectives of the NEPM?

235

The consideration of sustainability issues is key to the approaches that Governments are taking to environmental management, including the management of air quality and associated health impacts. Sustainability issues were not explicitly addressed in the development of the NEPM. Consideration of sustainability is important at a jurisdictional level when developing implementation strategies.

240

Q3. Should sustainability issues be considered in the review of the NEPM? If so, how should this be taken into account?

245

3.2 EFFECTIVENESS OF THE NEPM IN ACHIEVING THE DESIRED ENVIRONMENTAL OUTCOME AND NATIONAL ENVIRONMENT PROTECTION GOAL

250 Clause 5 of the NEPM sets the desired environmental outcome for the Ambient Air Quality NEPM

The desired environmental outcome of this Measure is ambient air quality that allows for the adequate protection of human health and well-being.

255 Clause 6 establishes the National environment protection goal

The National Environment Protection Goal of this Measure is to achieve the National Environment Protection Standards as assessed in accordance with the monitoring protocol (Part 4) within ten years from commencement to the extent specified in Schedule 2 column 5.

260 Clause 17 of the NEPM sets out the requirements for the evaluation of performance against standards and goal. Clause 17 states:

(1) *Each participating jurisdiction must evaluate its annual performance as set out in this clause.*

265 (2) *For each performance monitoring station in the jurisdiction or assessment in accordance with subclause 11(b) there must be:*

(a) a determination of the exposed population in the region or sub-region represented by the station; and

(b) an evaluation of performance against the standards and goal of this Measure as:

270 *(i) meeting; or*

(ii) not meeting; or

(iii) not demonstrated.

(3) *Jurisdictions may provide an evaluation of a region as a whole against the standards using appropriate methodologies that provide equivalent information for assessment purposes.*

275 (4) *Performance must be evaluated as "not demonstrated" if there has been no monitoring or no assessment by an approved alternative method as provided in clause (11).*

280 As discussed in Section 2 the Ambient Air Quality NEPM provides a nationally consistent framework for the monitoring and reporting of air quality. The implementation of the NEPM and the actions taken by jurisdictions to ensure that the National Environment Protection Goal is achieved is the sole responsibility of the individual jurisdictions.

285 It is important to recognise that actions at a national level (such as the setting of motor vehicle and fuel standards) can have significant effects on air quality throughout Australia. States have consistently supported the Australian Government in pursuing tighter motor vehicle standards as a key strategy to improve air quality in Australian cities.

290 Progress of jurisdictions towards meeting the NEPM standards and goal provides one means of measuring the effectiveness of the NEPM. Annual jurisdictional compliance reports provided under the NEPM are designed to allow progress toward meeting the standards to be assessed. Other methods of measuring the effectiveness of the NEPM could include:

- whether the NEPM resulted in more comprehensive monitoring of air pollution in Australian cities;
- whether monitoring is more reflective of population exposure;
- the introduction of new policies or air quality management strategies at an individual jurisdictional level;
- lower average levels of air pollution rather than just fewer exceedances;

- improvements in the quality and consistency of air quality data collection and reporting; and
- the identification of environmental health indicators that could be used to monitor long-term improvements in air quality.

The concept of “adequate protection” implies a range of issues around the appropriate balance between population health, economics, social equity and lifestyle. It is assumed that if air quality meets the current the National Environment Protection Standards, this implies adequate protection. However, some pollutants have no discernible thresholds for human health effects, therefore the costs and benefits of both adverse health outcomes and the implementation of strategies to improve air quality need to be assessed so that the appropriate balance of health, environmental, social and economic outcomes is achieved. This was done in the development of the NEPM and air quality standards and goals.

One issue that could be of importance is whether the population formula embodied in Clause 14 of the NEPM provides for adequate protection of the population. This is particularly important in some jurisdictions, where smaller (sub-threshold) communities may have air pollution issues similar to those in larger cities and towns but there is no requirement to monitor. The minimum threshold population set by the NEPM is 25,000 people. In larger cities the question is whether the formula provides for enough coverage of the population to be able to accurately assess exposure at a reasonable cost. A related issue is whether the framework of the NEPM provides protection for population groups within the community whose health and socio-economic status is generally less than that enjoyed by the broader population.

Q4. In terms of assessing the effectiveness of the NEPM, do the following cover the range and scope of issues to be address in the Review?

- Is the role of the NEPM in Air Quality Management in Australia clear and appropriate?
- Does the NEPM provide an adequate basis for the desired environmental outcome of the Measure to be achieved?
- Is the national environment protection goal of the NEPM still appropriate to ensure that the desired environmental outcome is achieved?
- Is the national environment protection goal being achieved in the implementation of the NEPM?
- Could the NEPM be strengthened to ensure that implementation of the NEPM by individual jurisdictions is effective in achieving the desired environmental outcome and national environment protection goal?
- How should the effectiveness of the NEPM in achieving the desired environmental outcome be assessed?
- Has NEPM monitoring and reporting contributed to community understanding of air quality issues in Australia?
- Has NEPM monitoring and reporting assisted in the development of focussed air quality management programs by participating jurisdictions?
- Are the requirements specified in Clause 17 of the NEPM for evaluating performance against the standards and goals appropriate?
- How should “adequate protection” be measured, or even defined.
- Does the population formula provide sufficient monitoring to ensure “adequate protection” can be assessed?

350 **Q5. What other issues should be considered in reviewing the assessment procedures to**
355 **determine the effectiveness of the NEPM?**

Standards and monitoring protocols have been developed for the criteria air pollutants.
355 These pollutants arise from multiple sources and are widely spread in the environment. A
consideration in the review of the NEPM may be whether there are additional pollutants that
are wide spread in the environment that could be considered for inclusion in the NEPM.
These could include pollutants that arise mainly from motor vehicle emissions. In addition a
360 number of programs that have been implemented since the making of the NEPM have led to
significant reductions in ambient levels of some pollutants, eg the removal of lead from
petrol. (The main sources of lead are now industrial sources and lead is no longer widely
distributed in ambient air).

365 **Q6. Does the NEPM set standards for the correct pollutants and do any of the standards or**
measurement protocols need review?

370 **Q7. Should the review consider examining the inclusion of additional pollutants or the**
removal of existing pollutants from the NEPM? If so, which ones?

3.3 AIR QUALITY STANDARDS

375 Periodic reviews of air quality standards to take into account emerging evidence about the
health effects of air pollution are conducted in many parts of the world. The USEPA are
required under the Clean Air Act to review air quality standards every five years and is
currently undertaking a review of the National Ambient Air Quality Standards (NAAQS) for
ozone and particles. The World Health Organization sets guidelines for air quality to be
380 used by countries in managing air pollution. The current guidelines were set in 2000, and in
2003 WHO reviewed the health aspects of nitrogen dioxide, ozone and fine particles
(<http://www.euro.who.int/document/e79097.pdf>). Subsequently the WHO is reviewing its
guidelines for fine particles and ozone. It is expected that this work will be completed
during 2005.

385 In December 2004 NEPC made a NEPM for air toxics. This addresses pollutants that are
mainly localised to 'hot-spots' such as heavily trafficked roads and industrial complexes,
although some, such as benzene and PAHs are found across most regions.

390 Clause 8 of the NEPM establishes the National environment protection standards

- 1) *The national environment protection standards of this Measure are the standards set out in Schedule 2.*
- 2) *For each pollutant mentioned in Schedule 2, the standard for an averaging period mentioned in the Schedule is the concentration in column 4.*

395

Air quality standards are concentrations of air pollutants adopted by governments to protect the health of the population. In setting the air quality standards, NEPC considered standards from other countries, evidence of health effects, existing air pollution levels, current air shed management strategies, and potential impacts on society and the economy.

400

The standards in the NEPM were developed based on the understanding at that time of the health effects of air pollution. The standards were set primarily on the results of research conducted overseas as very few studies had been conducted in Australia. Since that time there has been considerable research undertaken both overseas and within Australia investigating the associations between exposure to air pollution and adverse health effects such as increases in mortality, hospital admissions for respiratory and cardiovascular disease and exacerbation of existing diseases including asthma. In addition a significant effort has been made in the understanding of the mechanisms whereby air pollution may cause the observed effects and in the identification of susceptible groups within the population that may be more likely to be impacted by air pollution.

405

410

The averaging period for each of the standards in the NEPM was established on the understanding of the averaging periods associated with adverse health effects. The standards in the NEPM were developed after evaluation of exposure of the population in Australian cities over 10,000 people by combining the averaging periods identified in the health studies, the patterns of air pollution in Australian cities with population statistics and the technological advances likely to occur within a ten year period to control air pollution. In some cases, the final standards and associated averaging times were a compromise to obtain the best outcome in terms of health protection while making the standards achievable within a 10-year period.

415

420

Q8. Should the review consider alternative averaging periods for the standards? If yes, for what pollutants and what averaging periods?

425

Another issue under consideration in the review of the NEPM is whether the new information obtained from epidemiological studies conducted in Australia and overseas since the NEPM was made in 1998 provide any evidence that the standards need to be reviewed to ensure that the goal of the NEPM, adequate protection of human health for all Australians, is being met. An assessment needs to be made as to whether health effects are being observed at concentrations lower than the current standards and whether there are additional groups that have been identified within the population that are more sensitive to the effects of air pollution than those considered when the standards were first established.

430

435

The understanding of mechanisms of health effects from exposure to air pollutants has also progressed since the standards were set. Although epidemiological studies produce associations of individual pollutants with adverse health outcomes, it is very difficult to separate these effects as pollutants often arise from the same sources and are highly correlated. For example, NO₂ and CO arise mainly from motor vehicles and their respective health effects are difficult to separate in epidemiological studies. In this case it may be considered that these pollutants act as a marker for this source.

440

445

Q9. Do the standards in the NEPM need to be reviewed in light of new scientific information? Please provide information as to why to assist the review.

450

Another consideration of the basis of setting standards relates to pollutants that are precursors for other pollutants, for example, nitrogen dioxide and volatile organic compounds are precursors for ozone formation.

455

Q10. In addition to setting health-based standards for pollutants, should the review also give consideration to their photochemical smog forming potential? If yes, then which pollutants?

460

Sub-groups within the population that have been identified as being susceptible to the effects of air pollution include:

465

- the elderly;
- children and infants;
- people with existing respiratory and cardiovascular disease; and
- people with asthma.

470

In addition, there is emerging evidence that diabetics and people in low socio-economic groups may be more vulnerable to the effects of air pollution than the general population. Internationally, some jurisdictions have passed specific legislation requiring air quality standards to protect children. Environmental justice issues are also prominent with the aim to provide equal protection for all groups within the population.

475

Q11. In addition to the groups identified above, are there other groups within the population that may be considered particularly susceptible to the effects of air pollution, which should be considered in the review? If so, which ones?

480

Many of the pollutants in the NEPM are considered as non-threshold pollutants. This means that there has been no level identified below which adverse health effects are not observed. This means that the health effects associated with exposure to these air pollutants are experienced at even low levels and that there is some level of risk at the standards that have been set. Compliance with the standards and goals in the NEPM is expressed in terms of exceedances of the standards. These exceedances may arise from unusual events such as bushfires or dust storms and may not reflect the typical pollution levels or the distribution of pollution that is normally experienced by populations. This can be interpreted that one exceedance can lead to adverse health effects where in fact the normal distribution of air pollution may be the more important factor that impacts on health. In the US the standards are expressed as the 98th percentile of the 3-year average with no exceedances allowed. This accounts for unusual events and is considered to be more reflective of typical air pollution levels experienced by the population.

495

Q12. Should the review consider alternative forms of the standards and goals? If yes, what forms should be evaluated?

500

There is some information that demonstrates the effects of air pollutants on vegetation and animals, however very little has specifically addressed Australian flora and fauna. The available research documents human health effects at lower concentrations than has been demonstrated for plants or animals, however there is comparatively little non-human research undertaken. In the particular case of vegetation being more sensitive to the effects of fluoride than humans, jurisdictions have set guidelines for point source impacts. The NEPM standards are set based on the protection of human health and do not consider the effects on flora and fauna. The USEPA sets secondary standards for the protection of vegetation. In many cases the secondary standards are the same as the primary standards set to protect human health. The UK has also established guidelines for the protection of vegetation. The standards/guidelines in both the US and UK are based on research conducted in those countries.

505

510

515

Q13. Should the review consider whether standards should also be set for the protection of flora and fauna? If yes, what data should be used and how should this be done? What species should be protected?

520

Q14. What other issues should be considered regarding standards setting in the review of the NEPM?

525

3.4 MONITORING PROTOCOLS

Clause 10 of the NEPM sets out the requirements for Monitoring plans

(1) *Each participating jurisdiction must ensure that a monitoring plan consistent with this Part is prepared setting out how the jurisdiction proposes to monitor air quality for the purposes of this Measure.*

530

(2) *Each monitoring plan must be submitted to Council.*

Clause 11 establishes the methods of measuring and assessing the concentration of pollutants

For the purpose of evaluating performance against the standards the concentration of pollutants in the air:

535

(a) *is to be measured at performance monitoring stations; or*

Note: Because the concentrations of different pollutants vary across a region, it would not be necessary or appropriate to co-locate the measuring instrumentation for all pollutants at each performance monitoring station.

540

(b) *is to be assessed by other means that provide information equivalent to measurements which would otherwise occur at a performance monitoring station.*

Note: These methods could include, for example, the use of emission inventories, windfield and dispersion modelling, and comparisons with other regions.

545 Clause 13 specifies the location of performance monitoring stations

- (1) *To the extent practicable, performance-monitoring stations should be sited in accordance with the requirements for Australian Standard AS2922-1987 (Ambient Air-Guide for Siting of Sampling Units). Any variations from AS2922-1987 must be notified to Council for use in assessing reports.*
- 550 (2) *Performance monitoring station(s) must be located in a manner such that they contribute to obtaining a representative measure of the air quality likely to be experienced by the general population in the region or sub-region.*
- (3) *A performance monitoring station should be operated in the same location for at least 5 years unless the integrity of the measurements is affected by unforeseen circumstances.*

555

Clause 14 establishes the number of performance monitoring stations

- (1) *Subject to sub-clauses (2) and (3) below, the number of performance monitoring stations for a region with a population of 25,000 people or more must be the next whole number above the number calculated in accordance with the formula: $1.5P + 0.5$, where P is the population of the region (in millions).*
- 560 (2) *Additional performance monitoring stations may be needed where pollutant levels are influenced by local characteristics such as topography, weather or emission sources.*
- (3) *Fewer performance monitoring stations may be needed where it can be demonstrated that pollutant levels are reasonably expected to be consistently lower than the standards mentioned in this Measure.*

565

Clause 15 establishes trend stations for the assessment of air quality. Clause 15 states:

- (1) *A number of performance monitoring stations in each participating State and participating Territory must be nominated as trend stations.*
- 570 (2) *The number of performance monitoring stations to be nominated as trend stations must be sufficient to monitor and assess long term changes in ambient air quality in different parts of the jurisdiction.*
- (4) *A trend station must be operated in the same location for one or more decades.*

575 Clause 16 stipulates that monitoring methods set out in Schedule 3 should be used for monitoring pollutants in the air. Clause 16 states:

- (3) *Where an Australian Standard Method has not yet been developed for a monitoring method, appropriate internationally recognised methods or standards may be used that provide equivalent information for assessment purposes.*
- 580 (4) *Other monitoring methods may be used if:*
 - (a) *Calibration and validation studies show:*
 - (i) *the accuracy and precision of the other method; and*
 - (ii) *the method can be compared with the relevant Australian Standard Method;**and*
 - 585 (b) *the equipment used is calibrated to the standard required by the equipment manufacturer;*
 - (c) *the equipment provides equivalent information for assessment purposes.*

590 The NEPM monitoring protocol established a nationally consistent framework for monitoring. This allows for comparison of data between jurisdictions and national reporting to NEPC allows for an assessment of progress toward meeting the standards and the risk posed by air pollution to the health of the population in Australian cities. The monitoring protocol specifies that monitoring of air pollution be conducted at sites that are generally

595 representative of exposure of the general population. The NEPM does not include
monitoring and assessment at peak locations or in areas impacted by individual industries.

To assist in the preparation of jurisdictional monitoring plans to ensure consistency across
the jurisdictions, a Peer Review Committee (PRC) was established. The PRC comprises
600 monitoring experts from each of the jurisdictions as well as four NGO representatives. To
assist in the development of individual jurisdictional monitoring plans the PRC prepared a
technical Paper No. 3 – Monitoring Strategy. The individual jurisdictional monitoring plans
were developed in accordance with this paper and approved by Council. NEPM monitoring
networks have been established in accordance with these plans.

605 The PRC Technical paper No 3 introduces the concept of GRUB for community exposure
sites. The GRUB sites are located in populated areas that are expected to experience
relatively high concentrations of pollutants. The aim is to locate performance monitoring
stations in these locations to adequately assess whether the standards and goals of the NEPM
610 have been met. The PRC Technical paper also recommends inclusion of performance
monitoring stations to be located at sites that are representative of air quality experienced by
most of the population. These sites are termed by the PRC as population-average sites.
Population average stations are sited to ensure adequate monitoring of large portions of the
population area and of the total population within a region. In areas where only one
615 performance monitoring station is required, it is expected that it will be a GRUB station (PRC
Technical Paper no 3, 2001)

Clause 16 of the NEPM requires that monitoring methods set out in Schedule 3 should be
used for monitoring pollutants in the air. These are generally Australian Standard Methods
620 or relevant internationally recognised standards such as USEPA Federal Reference Methods.
Other methods are allowable, provided that they can be shown to produce equivalent
information, including accuracy and precision, and can be calibrated to the Australian
Standard.

625 There is a range of air measurement methodologies being used in Australia, and technology
is developing constantly. The measurement of particles is a particularly rapidly developing
field. Some techniques provide real-time data, and have advantages for the management of
air quality. Other techniques may have benefits of greater efficiency or relevance in
particular applications. Each method provides a slightly different measurement of air
630 quality, and it can be difficult to compare the results from different techniques. While these
are valid measurements in their own right, the data they produce are difficult to relate to
those of the other methods.

Essentially this means that there is a set of methods that are enshrined in Schedule 3 of the
NEPM, usually until the next review. The process to have new methods included into the
635 NEPM can take several years, especially where the type of data from the alternative method
may not be strictly comparable with data from the methods specified in the NEPM.
Examples may include long-path optical measurements and some continuous particle
monitoring methods.

640 There is an overriding need to maintain the integrity and consistency of air quality
information produced under the NEPM. However, should the protocol allow reporting of
data produced from some existing “non-NEPM” methodologies, where they can be shown to
be contributing to meeting NEPM requirements in a jurisdiction? A broader question is
whether the NEPM protocol allows sufficient flexibility to keep pace with future

645 developments in measurement technology, and whether it will restrict our ability to adopt
newer, cheaper and more efficient methodologies in the next decade or so.

650 **Q 15. Should each of the following questions be addressed in the review of the NEPM?**

- Does the monitoring protocol allow for the national environment protection goal and desired environmental outcome of the Measure to be achieved?
- Is the current monitoring protocol still appropriate?
- Should changes be made to the monitoring protocol? If so, what changes should be considered?
- Is the PRC requirement for GRUB stations appropriate and consistent with the intent of Clause 13 of the NEPM?
- Should an alternative framework be developed separate to the NEPM to provide jurisdictions with a nationally consistent mechanism to deal with exposures near peak sites or industrial sources?
- Is the use of Clause 11(b) still appropriate for the purpose of evaluating performance against the standard?
- Is the formula specified in Clause 14 (1) to determine the number of performance monitoring stations appropriate?
- How successful has the NEPM been in ensuring the quality and consistency of monitoring data?
- Is there a need for a body to oversee the implementation of the monitoring protocol and the national consistency and quality assurance of monitoring data, and if so, how could this be done?
- Is there room for more flexibility in approaches to monitoring, provided that the data is being used effectively to achieve the Desired Environmental Outcome and National Environment Protection Goal of the Measure?
- Should the NEPM allow for the monitoring protocols to be amended introducing new monitoring methods without initiating a formal NEPM review and variation process?
- If yes, how can this be done without compromising data consistency?

680 **Q16. Are there other issues regarding monitoring that should be considered in the review of the NEPM?**

3.5 REPORTING PROTOCOLS

Clause 18 of the NEPM establishes the reporting requirements:

- 685
- (1) *Each participating jurisdiction must submit a report on its compliance with the Measure in an approved form to Council by the 30 June next following each reporting year.*
 - (2) *In this clause "reporting year" means a year ending on 31 December.*

- (3) *The report must include:*
- a. *the evaluations and assessments mentioned in clause 17; and*
 - b. *an analysis of the extent to which the standards of this Measure are, or are not, met in the jurisdiction; and*
 - c. *a statement of the progress made towards achieving the goal.*
- (4) *The description of the circumstances which led to exceedences, including the influence of natural events and fire management, must be reported to the extent that such information can be determined.*
- (5) *A report for a pollutant must include the percentage of data available in the reporting period.*

In addition to the general requirements under Clause 18, the PRC have prepared a guidance document specifying the format for reporting of air quality data. Jurisdictions have been reporting annually under the NEPM since 2000 and the NEPC annual reports are available on the EPHC website: www.ephc.gov.au

Reporting of air quality data under the NEPM is also a means of communicating with the community about air quality and actions being taken to improve air quality in Australia. The question arises as to whether the current reporting is an effective tool for communicating with the community about air quality and provides the community with the information that they require.

- Q17. Should the review assess whether the current reporting of air quality data under the NEPM provides an effective tool for assessing compliance and communicating with the community?**
- Does the protocol need to be reviewed?
 - Should the review look at alternative ways of reporting the air quality data collected under the NEPM?
 - Should the review assess whether national consistency in the reporting of data is being achieved and how it can be improved?

In addition to NEPM monitoring many jurisdictions conduct monitoring to inform local air quality management issues. This data is usually not reported through NEPM reporting but can provide useful information to give a more complete picture of air quality in an air shed. It can provide an important information tool for communicating with the community.

- Q18. Should consideration be given to reviewing the reporting protocol to incorporate non-NEPM data in the annual reporting to NEPC? Should this be encouraged on a voluntary basis or required in a NEPM variation?**

- Q19. Are there other issues to be considered in the review regarding reporting protocols.**

3.6 IMPLEMENTATION ISSUES

The framework of the NEPM has posed some challenges for jurisdiction in implementation. Although the objective of the NEPC Acts is to provide equivalent protection from air, water,

740 soil and noise pollution to all Australians wherever they live, the NEPM only requires performance monitoring stations for a region with a population greater than 25,000. Furthermore, the NEPM specifies that performance monitoring stations are located to give a representative measure of the air quality experienced by the general population in a region. The NEPM monitoring protocol does not apply to monitoring and controlling peak concentrations from major sources of air pollution such as at heavily trafficked roads or near industry.

745 As a result, there are a number of regional centres and communities that are near major point source emitters and in areas where the cumulative impacts of smaller sources may lead to elevated levels of air pollution but currently do not fall within the scope of the Ambient Air Quality NEPM monitoring and reporting protocol. With the continued growth of cities, 750 there are also many urban areas, such as transport corridors, 'café strips' and shopping precincts, which may not qualify for monitoring and assessment under the NEPM. As schools and childcare facilities are often situated within these areas, the need for health guidelines that can be applied to assess air quality in these areas often arises.

755 For these communities, non-NEPM health guidelines may offer a suitable alternative. The National Health and Medical Research Council (NHMRC) previously set ambient air quality goals, but these were rescinded in 2002. The development of non-NEPM health guidelines for air quality under the auspices of EPHC, either alone or in partnership with other national bodies such as the National Public Health Partnership or NHMRC, may allow uniformity in 760 the application of such guidelines or could incorporate recommended monitoring protocols.

765 **Q20. Should the review investigate the possible expansion of the scope of the NEPM? If so, what should be considered?**

770 **Q21. Should the review investigate non-statutory guidelines that could be developed to deal with air quality issues where formal standards are legally or practically inappropriate? If yes, for what pollutants and why?**

775 The review of the practicability of developing a 10-minute sulfur dioxide standard found that there is exposure to concentrations of sulfur dioxide above known thresholds for health effects in communities close to some point sources in Australia, however there was not a justification to require monitoring across all air sheds. With the removal of lead from petrol lead is no longer found in significant concentrations in most Australian air sheds.

780 The air toxics NEPM establishes monitoring and reporting requirements and incorporates monitoring investigation levels for five pollutants (benzene, toluene, xylenes, PAHs and formaldehyde), and consideration of further pollutants for inclusion in the air toxics NEPM is underway. These pollutants are not widely spread in the air environment and are localised to 'hot spots' near heavily trafficked roads, areas affected by wood smoke and industrial complexes. Air pollution standards can be set under the air toxics NEPM.

785

790

Q22. Should the review address how pollutants with known health effects, but limited distribution within an air shed, be addressed? If yes, what issues need to be considered?

795

The NEPC Act leaves the implementation of the NEPM and compliance with the air quality standards to each individual jurisdiction. Under the NEPC Act, the accountability for meeting the standards is in the public reporting. If the data from performance monitoring stations show some areas in a particular jurisdiction are above the recommended standard then it is entirely at the discretion of that jurisdiction as to what action should be taken to manage the problem.

800

Q23. Should the review examine requirements for the accountability of jurisdictions in meeting the air quality standards be addressed in the NEPM or are the current requirements adequate? If yes, what requirements should be included for consideration?

805

Q24. Are there other issues that the review should consider regarding implementation?

810

3.7 APPROACHES TO IMPACT ANALYSIS FOR A NEPM VARIATION

815

The NEPC Act requires consideration of economic, social and environmental considerations in the Variation of an existing NEPM. This is done through the Impact Statement that accompanies the draft Variation. This occurs after the review process, during the development of the draft Variation. In some cases this timing has made it difficult for governments to make informed decisions to begin the variation process, since a full analysis of the implications of any proposed changes to the NEPM are not clear at that stage.

820

An important consideration is at what point in the review process an assessment of the costs and benefits is undertaken. The assessment could be undertaken towards the end of the review when and if a decision is made to commence a NEPM variation process. Alternatively, an assessment of the potential impacts of changes to the NEPM could be undertaken early on to inform the deliberation about whether changes to the standards should be considered and the decision about whether a variation should be undertaken.

825

The staged design of the review provides an opportunity to collect information on economic, social and environmental effects during the review process, even though the recommendations will not be formulated at that stage. A wide range of options may need to be canvassed. The studies commissioned by EPHC contribute to this information base, by relating air quality to health effects. Other areas of impact could also be investigated.

830

Q25. Should the review design include the collection of the costs and benefits of any proposed changes to the NEPM as the review takes place?

835

840 **Q26. Should an analysis of the impact of the options to change any aspects of the NEPM take place during the review or once the recommendations are clear in the variation process?**

845 The Impact Statement for the Ambient Air Quality NEPM in 1998 considered the costs imposed by requirements of the NEPM itself, those being the monitoring and reporting costs associated with the standards. It did not consider the costs of meeting the standards in cities in Australia. Actions to meet the NEPM standards are the responsibility of individual governments, which have adopted the NEPM standards in a way that reflects their own legal structure and division of responsibilities. Jurisdictions individually consider the costs and

850 benefits of strategies and policies designed to meet the NEPM standards.

855 Given that the NEPM has been in place for several years and jurisdictions have implementation programs in place, it may be appropriate to consider in the review process any costs that may be encountered by jurisdictions in implementing changes to the NEPM. In assessing any costs the potential health benefits would also need to be evaluated

860 One approach is to define the effects of the NEPM, or any potential changes to the NEPM, as only those costs and benefits directly resulting from requirements under the NEPM for States and Territories to monitor and report air quality.

865 Alternatively, the effects could be characterised more broadly to include the costs and benefits associated with achieving the air quality goals set out in NEPM. This would include benefits resulting from improved health outcomes and costs to industry and government of additional pollution reduction and efficiency measures. This is likely to be a difficult process to undertake during the review as the details of any proposed changes are developed through the Variation process. It may be difficult to predict what strategies will be developed by Governments to respond to the range of options, but likely approaches and their effects could be evaluated.

870 While some of the costs associated with changes to air quality standards and management approaches are readily quantifiable, there may be benefits resulting from improvements to air quality and air quality reporting which are difficult to value in monetary terms and need to be described more qualitatively.

875 **Q27. What scope should the Impact Statement for any variation to the NEPM have? Should it consider only the specific requirements of the NEPM, or should it include the range of costs and benefits arising from actions implemented by individual jurisdictions to meet the standards in the NEPM?**

880 **Q28. What are other issues not yet included in this Issues Scoping Paper that should be considered in the review of the Ambient Air Quality NEPM?**

885

4 WHERE TO FROM HERE

890 The purpose of this Issues Scoping Paper is to identify key issues that are to be addressed in the Review of the Ambient Air Quality NEPM, and on which stakeholder comments are invited. The paper does not stipulate a position on any issue, and as such does not reflect the views of the Commonwealth or any State or Territory government.

895 This Issues Scoping Paper is available on the EPHC website <www.ephc.gov.au> for comment for a period of 7 weeks (28 October 2005 to 19 December 2005). All submissions are public documents unless clearly marked "confidential" and may be made available to other interested parties, subject to Freedom of Information Act provisions.

4.1 THE NEXT STEPS

900 This Issues Scoping Paper raises potential issues, seeks confirmation or negation on whether these are issues to be examined during the review, and asks for comment on other issues that should be considered during the review of the NEPM. No formal response will be provided on submissions to the Issues Scoping Paper. In the light of the comments received, terms of reference for the review, an informed project scope, project plan and budget will be developed to direct the conduct of the review.

905 The next step in the process will involve the development of a range of Discussion Papers by the Project Team on proposed ways to address specific issues. The NGO and JRN groups will provide input, and broader stakeholder input will be sought prior to finalising this phase of the process.

910 The final step prior to varying the NEPM (if required) will involve the preparation of a draft of the variation and an Impact Statement (as required by Section 20 of the NEPC Acts). The Impact Statement must include an assessment of environmental, economic and social impacts. The National Environment Protection Council Act (1994) specifies the requirements (section 17(b) and section 15) in preparing an Impact Statement. The Act states:

915 **Section 17.** "Before making any national environment protection measure and not earlier than 30 days after the day on which paragraph 16(2)(b) has been fully complied with in all participating jurisdictions, the Council must prepare:

- 920 (a) a draft of the proposed measure; and
(b) an impact statement relating to the proposed measure that includes the following:
- (i) the desired environmental outcomes;
 - (ii) the reasons for the proposed measure and the environmental impact of not making the measure;
 - (iii) a statement of the alternative methods of achieving the desired environmental outcomes and the reasons why those alternatives have not been adopted;
 - 925 (iv) an identification and assessment of the economic and social impact on the community (including industry) of making the proposed measure;
 - (v) a statement of the manner in which any regional environmental differences in Australia have been addressed in the development of the proposed measure;
 - 930 (vi) the intended date for making the proposed measure;
 - (vii) the timetable (if any) for the implementation of the proposed measure;
 - (viii) the transitional arrangements (if any) in relation to the proposed measure.

- 935 Section 15. "In making any national environment protection measure, the Council must have regard to:
- (a) whether the measure is consistent with section 3 of the Agreement (*ie the Inter-governmental Agreement on the Environment*); and
 - (b) the environmental, economic and social impact of the measure; and
 - (c) the simplicity, efficiency and effectiveness of the administration of the measure; and
 - 940 (d) whether the most effective means of achieving the desired environmental outcomes of the measure is by means of a national environment protection standard, goal or guideline or any particular combination thereof; and
 - (e) the relationship of the measure to existing inter-governmental mechanisms; and
 - (f) relevant international agreements to which Australia is a party; and
 - 945 (g) any regional environmental differences in Australia".

950 In accordance with the NEPC Acts and the NEPC Consultation Protocol, both the draft variation and the Impact Statement must be made available for public consultation. NEPC must then have regard to the Impact Statement and submissions received during the statutory consultation period in deciding whether to adopt a proposed variation to the NEPM.

4.2 TIMEFRAME FOR THE REVIEW

The anticipated timeframe and process for the review is as summarised below:

Date	Phase
October 2005	Approval from NEPC to release the Issues Scoping Paper for targeted consultation.
October/November 2005	Undertake consultation on the Issues Scoping Paper.
December 2005/February 2006	Develop review project plan and budget
March/ April 2006	NEPC to consider final project plan and budget to undertake the Review of the AAQ NEPM.
May 2006/February 2008	Commence Review and prepare discussion papers. Consultation on the discussion papers Assess outcomes of consultation Prepare Review Report outlining the findings from the reviews, the outcomes of public consultation and the resulting recommendations on the need to vary the AAQ NEPM or aspects of the NEPM.
April 2008	NEPC consider the release of Review Report. Undertake Consultation on the Review Report.
October 2008	Prepare recommendation on the need to vary the NEPM.

4.3 FORM OF SUBMISSION

960 An electronic form for lodging comments is preferable. The form can be emailed to you by the NEPC Service Corporation or downloaded from the EPHC website <www.ephc.gov.au>. This form can be filled out and submitted electronically.

Should you wish to provide your comments in another format, submissions may be made by:

- 965
- email to **kscott@ephc.gov.au**
 - on a 3.5 inch floppy disk
 - CD Rom, or
 - in hardcopy to:

970 **Ms Kerry Scott**
Project Manager
NEPC Service Corporation
Level 5/81 Flinders Street
ADELAIDE SA 5000

975 Fax (08) 8224 0912

Submissions should be received by the NEPC Service Corporation by close of business **Monday, 19 December 2005**. To allow ease of photocopying, hardcopy submissions should be unbound. Electronic submissions should preferably be provided as a Word for Windows file.

980

APPENDIX 1

A. NATIONAL ENVIRONMENT PROTECTION COUNCIL

985

The National Environment Protection Council (NEPC) is a national body established by State, Territory and Commonwealth Governments. The objective of the NEPC is to work cooperatively to ensure that all Australians enjoy the benefits of equivalent protection from air, water, soil and noise pollution and that business decisions are not distorted nor markets fragmented by variations in major environment protection measures between member Governments.

990

995

The NEPC stems from the Inter-Governmental Agreement on the Environment 1992, which agreed to establish a national body with responsibility for making National Environment Protection Measures (NEPMs). The NEPC and its operations are established by the *National Environment Protection Council Act 1994* (Commonwealth) and corresponding State and Territory Acts.

1000

NEPMs are broad framework-setting statutory instruments, which, through a process of inter-governmental and community/industry consultation, reflect agreed national objectives for protecting particular aspects of the environment. NEPMs may consist of any combination of goals, standards, protocols, and guidelines, although for the assessment of site contamination, the NEPC Acts specify that guidelines may be developed.

1005

Implementation of NEPMs is the responsibility of each participating jurisdiction. A NEPM will take effect in each participating jurisdiction once it is notified in the *Commonwealth of Australia Gazette*, but is subject to disallowance by either House of the Commonwealth Parliament. Any supporting regulatory or legislative mechanisms that jurisdictions might choose to develop to assist in implementation of proposed NEPMs go through appropriate processes in those jurisdictions.

1010

B. ENVIRONMENT PROTECTION AND HERITAGE COUNCIL

1015

The Council of Australian Governments (COAG) agreed in June 2001 to the establishment of the Environment Protection and Heritage Council. The scope of activities of the EPHC incorporates the National Environment Protection Council (NEPC).

1020

Since May 2002, NEPC has met in conjunction with the Environment Protection and Heritage Council. The functions of the statutory NEPC will continue under the EPHC as NEPC remains the legal entity for developing and making NEPMs.