

NEPC AMBIENT AIR QUALITY PEER REVIEW COMMITTEE (PRC)

BACKGROUND

The functions of the National Environment Protection Council (NEPC) are to make National Environment Protection Measures, and to assess and report on the implementation and effectiveness of those Measures in participating jurisdictions.

In June 1998, as part of the decision to make the Ambient Air Quality NEPM, the NEPC agreed to establish a Peer Review Committee (PRC) with NGO participation to provide guidance to jurisdictions in developing monitoring plans and to advise on the adequacy of those plans, once developed.

The PRC has now been established and consists of two nominees from industry, two from the environment movement, one from each jurisdiction and an executive officer from the NEPC. Dr. Mike Manton, Bureau of Meteorology, chairs the PRC. ALGA did not take up its invitation to provide a nominee to the PRC (see Attachment A for membership details).

The PRC has undertaken significant 'out of session' work towards developing appropriate guidance to jurisdictions to support the development of monitoring plans.

The impact statement for the draft Ambient Air Quality NEPM (1997) and the Final Impact Statement (1998) describe the role and composition of a Peer Review Committee (PRC).

CHARTER OF OPERATIONS AMBIENT AIR QUALITY NEPM - PEER REVIEW COMMITTEE

Terms of Reference for the Peer Review Committee

1. to advise the NEPC Committee on the adequacy of the monitoring plans submitted by jurisdictions, both in terms of meeting the requirements of the NEPM, and national consistency of data and information
2. to advise the NEPC Committee on the technical interpretation of the air quality NEPM, in relation to location of measurement sites, measurement and assessment techniques (including emerging technologies), assessment of represented population, quality control, data handling, and reporting
3. to advise the NEPC Committee on technical issues associated with the consistent implementation of the air quality NEPM monitoring protocol across jurisdictions
4. to advise the NEPC Committee on scientific and technical developments relevant to the monitoring protocol and its evolution
5. to conduct expert reviews of technical aspects of the interpretation and implementation of the air quality NEPM, as requested by the NEPC Committee from time to time and drawing upon external expertise as required

Note: The PRC will not address the scope of the NEPM, but has been established to assist in the management of the NEPM. As the PRC is a technical committee, it is not expected to address major policy issues.

The PRC will also act as a resource for the sharing of knowledge and experience on air monitoring across jurisdictions.

Assessment of Jurisdictional Monitoring Plans

The assessment of ambient air quality against the standards established in the NEPM is critical to the success of the NEPM. The NEPM requires the preparation of airshed monitoring plans for each jurisdiction.

In assessing each monitoring plan the PRC will consider matters including:

- determination of regions to be monitored and exposed populations;
- establishment of performance monitoring stations;
- determination of the number of performance monitoring stations required in each region;
- siting of performance monitoring stations in accordance with Australian Standards, such that they contribute to obtaining a representative measure of the air quality likely to be experienced by the general population in the region;
- nomination of trend stations;
- use of Australian Standard methods for monitoring;
- accreditation of performance monitoring;

- use of means other than direct measurement for evaluating performance, as permitted in Clause 11(b) of the Air NEPM

All the above elements, together with more detailed information, need to be included in jurisdictional monitoring plans.

The PRC will operate in a cooperative manner with jurisdictions. In order to assist jurisdictions in the development of their monitoring plans it is expected that jurisdictions will provide the PRC with draft monitoring plans so that advice and feedback can be provided. This will allow each draft monitoring plan to be refined in an iterative manner before advice is passed formally to NEPC Committee. As the NEPM Monitoring Protocol includes an emphasis on equivalence across jurisdictions, every effort should be made to ensure that the PRC is able to consider all plans together, as well as individually.

The advice from the PRC to NEPC Committee on monitoring plans is expected to comprise a report on:

- a) the adequacy of each plan;
- b) the overall consistency of plans; and
- c) other relevant technical issues.

Operation of the PRC

Conduct of PRC

- a) Members will endeavour to bring a broad national perspective to the Committee. Members will consult with their respective constituencies and provide feedback to the PRC.
- b) PRC minutes and agreed documents will be made available to members' constituents. Working documents/drafts, where appropriate, will be made available as a basis for consultation, at the discretion of the PRC. Wider public release of documents is at the discretion of the NEPC Committee.
- c) Minutes will record decisions and actions of Committee, with some background/justification where necessary and will be provided to NEPC Committee. Minutes may be approved out of session through email or fax.
- d) PRC may advise NEPC Committee on the need for specific mechanisms, such as workshops, for communication and consultation on some aspects of its work.
- e) To enable the Peer Review Committee to develop substantial corporate expertise there should be continuity of membership.
- f) The PRC may establish small expert teams to consider specific technical issues.
- g) An annual report will be provided to NEPC Committee on progress and plans of PRC activities.
- h) The PRC will endeavour to develop a consensual position on all issues.

Chair

Dr Mike Manton of the Bureau of Meteorology will chair the PRC.

Executive Support

The NEPC Service Corporation will support the operations of the PRC, and Ms Judy Goode of the NEPC Service Corporation will be the executive officer to the PRC.

Membership

The PRC will comprise an expert from each jurisdiction together with two conservation/community representatives, two industry representatives, and a representative from local government. It is expected that nominees for the PRC will have relevant experience and expertise.

Meetings

Meetings of the PRC will have formal agendas, agenda papers (as required), and decisions will be minuted. Meetings may be face to face or by teleconference. Every effort will be made to accommodate the attendance of members but in the event where a member cannot attend a nominated proxy will be accepted. Only the PRC member or the nominated proxy may formally attend meetings. The use of proxies should be limited, so as to enable the Peer Review Committee to develop substantial corporate expertise.

Technical Assistance

The Peer Review Committee may be assisted by a technical expert (eg where the member is not able to cover all the technical issues). Any attendance and contributions of technical experts at meetings will be at the discretion of the Chair.

Reporting

The PRC will provide annual reports on progress starting June 1999. Reports will report on:

- progress towards establishing monitoring plans; and
- implementing the monitoring plans.

Advice to NEPC Committee will be by way of written Report signed by the PRC Chair to the Chair of NEPC Committee. Every effort will be made to achieve consensus in reports. Where a member of the PRC does not agree with the contents of reports that member will be able to provide a dissenting report, which the PRC Chair will forward with the main Report.

Timetable

In order to meet the timetable specified in the NEPM, jurisdictions will be expected to submit draft plans within a specified period, as determined by NEPC Committee on advice from the Peer Review Committee. This will allow the plans to be refined cooperatively. An iterative approach is likely to optimise the extent of consistency across jurisdictions. A further stimulus for the early consideration of plans is the expectation that consistent accreditation may require some years to achieve fully.

The science and technology of monitoring, as well as the needs of the community, evolve with time, and so the PRC needs to assist in the continuing process of review and refinement of the implementation of the NEPM. In particular, it is expected that

monitoring plans will be reviewed and revised from time to time. Some refinement of plans may occur each year as the NEPM is first implemented. However, once the process is well established, it may be appropriate for plans to be formally reviewed within five years.

MEMBERSHIP OF PEER REVIEW COMMITTEE

COMMONWEALTH	Dr Michael Manton (Chair)
NEW SOUTH WALES	Dr Steve McPhail
VICTORIA	Mr Doug Munro
QUEENSLAND	Mr David Wainwright
WESTERN AUSTRALIA	Dr Ken Rayner Dr Phil Morgan (deputy)
SOUTH AUSTRALIA	Mr Tom Whitworth
TASMANIA	Mr Rob Mitchell (deputy) Dr Frank Carnovale
ACT	Mr Rick Zentelis
NORTHERN TERRITORY	Mr Nigel Green
NECF	Dr Peter Brotherton Dr Graeme Lorimer
INDUSTRY NETWORK	Mr Ray Smith (to May 1999) Mr Adrian Heggie (after May 1999) Dr Nigel Holmes
ALGA	No nominee
Executive Support	
NEPC Service Corp	Ms Judy Goode (Executive Officer)

AMBIENT AIR QUALITY NEPM PRC

Work Program 1998-2000

Based on the PRC Operating Strategy, the PRC has developed the following work plan for 1998-2000. Over this period, the committee expects to complete phase 1 of its operating strategy. The expected outcome over that period is that all jurisdictions will have plans prepared for submission to NEPC in a form that should satisfy the NEPM protocol.

The work program, which will evolve with time, is outlined below.

October 1998

Meeting no. 1

- Develop charter of operation
- Recommendations to NEPCC on terms of reference
- Analyse NEPM protocol to identify issues:
- Detailed interpretation of Schedule 2 required
- Resolve uncertainty in averaging periods for observations
- Identification of non-monitoring methods to satisfy NEPM
- Selection of regions for monitoring
- Accreditation
- Revision of AS for siting of instruments
- Criteria for selection of sites (upper bound concept for exposed population)
- Screening criteria for reduced no. of sites
- Use of TEOMs for particles
- Expected monitoring of PM_{2.5}
- Develop methods of analysis for reporting
- Develop agreed requirements on data recording, archive and access
- Agree on timeline for draft plans (June 1999)

December 1998

Papers prepared on accreditation, screening, upper-bound estimation, and meteorological observations.

Meeting no. 2

- Revise charter of operation
- Review paper on accreditation
- Review screening criteria paper
- Review papers on upper-bound estimation
- Review paper on meteorological observations
- Recommendation to prepare paper for AS on TEOMs
- Decide that revision of AS on instrument location is not priority
- Identified anomaly in observation of oxidants in one jurisdiction
- Decide to develop papers on meta-data and data issues
- Agree to uniform documentation on site selection
- Review draft structure of plans

March 1999

Refine papers on accreditation, meteorology, screening, region selection.

Meeting no. 3

- Review charter of operation and strategy
- Agree to develop guidelines on meteorological observations
- Agree to work with AMF to resolve particles issues
- Agreed to recommendations on uniform accreditation
- Decided on action to develop links with NATA
- Review paper on selection of regions
- Review papers and concepts on screening
- Noted need for action on data issues

May 1999

Draft plans of one jurisdiction available for discussion as a model
Documentation on accreditation made available by one jurisdiction
Discussion with NATA on national approach to accreditation
Establish task group for TEOM standard
Refine papers on screening, data issues

Meeting no 4

- Final draft of meteorological observations guidelines
- Final draft accreditation guidelines
- Draft guidelines on instrument comparison between jurisdictions
- Review proposals for anomalous measurements in some jurisdictions
- Draft guidelines on selection of regions
- Jurisdictions to consider regions in the light of guidelines
- Refine concepts and draft guidelines on screening
- Refine concepts and draft guidelines on data issues
- Refine concepts and draft guidelines on upper-bound site selection
- Agree on broad structure of plans
- Commence action on reporting guidelines

June 1999

Prepare and submit annual report to NEPCC
Workshop on particle measurements
Action on transfer of particle observations from TEOMs
Agreement on siting criteria for particle measurements (spatial homogeneity)
Submit to NEPCC guidelines on meteorological observations, accreditation

September 1999

Meeting no. 5

- Final draft of guidelines on selection of regions
- Agreement on regions selected by jurisdictions
- Progress reports on accreditation
- Final draft of guidelines on screening
- Review status of TEOM standard
- Draft guidelines on TEOM transfer
- Final draft of guidelines on instrument comparison
- Final draft of guidelines on screening

- Final draft of guidelines on data issues
- Draft guidelines on reporting

December 1999

Meeting no. 6

- Finalise guidelines on reporting
- Review plans for consistency

March 2000

Meeting no. 7

- Finalise plans
- Decide action on outstanding issues

June 2000

Plans submitted to NEPC for approval

December 2000

Monitoring commences under approved plans

Future Issues

Assessment of population exposure

Extension of NEPM areas to regions with populations just below 25000 or with industrial sources

Monitoring of PM2.5

Monitoring of lead and CO at low concentrations

Review of AS for meteorological measurements

30 August 1999

