

NATIONAL POLLUTANT INVENTORY

Summary of submissions received by the National Environment Protection Council in relation to the National Environment Protection Measure and Impact Statement for the National Pollutant Inventory

and

National Environment Protection Council's responses to those submissions

27 February 1998

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	SUMMARY OF KEY CHANGES BETWEEN THE DRAFT NPI MEASURE ANI FINAL VERSION	
3.	THE PROCESS	6
	3.1 Development of the Measure	
4.	PUBLIC PARTICIPATION AND CONSULTATION PROGRAM	8
	4.1 Protocol for consultation	8
5.	SUMMARY OF PUBLIC COMMENT AND NEPC RESPONSE	9
	TITLE	10
	COMMENCEMENT AND TRANSITIONAL PROVISIONS	
	REVIEW OF THE MEASURE	
	SCOPE OF THE MEASURE	
	NATIONAL ENVIRONMENT PROTECTION GOALS	
	TRANSFERS	
	DEFINITIONS	
	EXEMPTIONS FROM REPORTING	
	DATA FROM REPORTING FACILITIES	
	INDUSTRY HANDBOOKS / EMISSION ESTIMATION TECHNIQUES	
	GUIDANCE FOR COLLECTING REPORTING FACILITIES' DATA (Schedule C)	
	DISCRETION OF JURISDICTION TO REQUIRE OTHER FACILITIES TO REPORT	
	ADDITIONAL INFORMATION SUPPLIED BY JURISDICTIONS	
	ASSESSMENT OF INTEGRITY OF REPORTED DATA	
	INFORMATION FROM REPORTING FACILITIES SUPPLIED TO THE COMMONWE	
	AGGREGATED EMISSIONS ESTIMATION	
	ADDITIONAL INFORMATION SUPPLIED TO THE COMMONWEALTH	
	CONFIDENTIALITY	
	ENFORCEMENT PROVISIONS	
	LEGAL STATUS OF DATA SUPPLIED TO THE NPI	
	SECURITY OF DATA	
	ACCESS & PROVISION OF NPI DATA TO THE PUBLIC	
	CONTEXTUAL DATA	51

	D PARTIES	53
REPORTING LIST:	SUBSTANCES AND THRESHOLDS (Schedules A and B)	54
TAP process		54
Impact statement	discussion of threshold issues	54
Definitions		55
Thresholds		55
General Composi	tion of the list	60
-	ces/Compounds	
-	Veterinary Substances	
	Bioaccumulation	
	st	
Size of List and	Criteria	67
	fects	
	REPORTING LIST	
	LOPMENT PROCESS	
	IENT	
IMPLEMENTATION	N ISSUES / MEMORANDUM OF UNDERSTANDING	76
APPENDIX A	SUBMISSIONS - PUBLIC CONSULTATIO	NI 70
		IN 73
APPENDIX B	SUBMISSIONS - KEY STAKEHOLDI	
APPENDIX B APPENDIX C	SUBMISSIONS - KEY STAKEHOLDI GLOSSAI	E R 82
		ER 82 RY 83
APPENDIX C	GLOSSAI	ER 82 RY 83 DN 84
APPENDIX C APPENDIX D	GLOSSAI PROTOCOL FOR CONSULTATIO	ER 82 RY 83 DN 84 LD 88

1. INTRODUCTION

This document is an analysis of public submissions to the draft National Environment Protection Measure (Measure) for the National Pollutant Inventory (NPI).

At its meeting in November 1996, the National Environment Protection Council (Council) decided to make a Measure for the National Pollutant Inventory. Council's intention to make this Measure was advertised in the metropolitan daily press on 18 and 21 December 1996 and the Commonwealth Government Gazette on 19 December 1996.

The objective of the NPI is to provide improved information on emissions entering the Australian environment to assist better environmental management by government, industry and the community. The NPI will detail the types and amounts of pollutants entering different areas of the environment. The NPI is expected to demonstrate trends in these emissions and to highlight areas where data gaps currently exist.

A draft Measure and Impact Statement for the National Pollutant Inventory were released for public comment on 12 June 1997, by the National Environment Protection Council. The availability of the draft Measure was promoted in statewide and national newspapers. In accordance with the National Environment Protection Council Acts passed in each jurisdiction, the draft Measure for the National Pollutant Inventory was made available for public comment for a period of two months and two weeks until 26 August 1997.

The submissions received were analysed and a revised draft Measure was released, by NEPC Committee, for key stakeholder consultation between 8 and 31 October 1997. This draft was released to enable comment on the amendments to be made as a result of the earlier consultation process. The draft was not considered or endorsed by Council and had no formal status.

Further submissions were analysed and the revised draft Measure was amended where appropriate. The final draft Measure was tabled in the Commonwealth Parliament, following its adoption by Council at their meeting on 27 February 1998.

2. SUMMARY OF KEY CHANGES BETWEEN THE DRAFT NPI MEASURE AND THE FINAL VERSION

Following consideration of:

- o the submissions received by Council in relation to the draft NPI Measure and Impact Statement;
- 6 the submissions received by Committee in relation to the second draft released for key stakeholder consultation;
- advice provided by the Technical Advisory Panel and the Non-Government Organisation Advisory Group;
- 6 input from the Jurisdictional Reference Network and the Project Team; and
- ó legal drafting advice

a number of changes to the draft NPI Measure have been included in the final version of the Measure. In addition to the substantive changes listed below, the Measure has been extensively re-drafted to improve the order and clarity of many of its clauses. These drafting changes, where they do not alter the intent or effect of the Measure, are not listed below.

The key changes are as follows:

- removal of all requirements relating to reporting of data on transfers of substances;
- provision for a comprehensive review of the Measure to commence in October 1999, to specifically consider the likely effectiveness of the Measure, resource availability for implementation of the Measure, and the need if any for amendment of the Measure, including whether:
 - ó to include reporting on transfers
 - 6 substances should be added or deleted from the reporting list
 - 6 any changes should be made to the thresholds or to the definitions of reporting facilities
 - 6 any changes should be made to improve the effectiveness of the Measure;
- extension (from two years to four years) of the phase-in period for reporting on all listed substances subject to the outcome of the review due to commence in October 1999;
- changes to the number of years (from the commencement of reporting obligations) in which no enforcement action will be taken for a breach of NPI reporting requirements:
 - 6 no enforcement action will be taken for a breach of reporting requirements in the first and second reporting years

- 6 no enforcement action will be taken for a breach of reporting requirements relating to lower priority substances (those listed in Table 2 of Schedule A but not in Table 1 of that Schedule) in the third reporting year;
- inclusion of a new provision that jurisdictions shall not require an occupier of a reporting facility to report until an industry handbook for that type of facility (setting out acceptable emission estimation techniques) has been agreed between jurisdictions and published by the Commonwealth;
- changes to, or clarification of, the definitions of the types of facilities exempted from the requirement to report individually:
 - inclusion of a specific exemption for mobile emission sources operating outside the boundaries of a fixed facility (eg. aircraft in flight and ships at sea)
 - 6 clarification that the exemption applying to petrol stations refers to a "petroleum retailing facility engaging in the retail sale of fuel" and not to wholesale storage and distribution of fuel
 - o inclusion of a 20 employee limit on the maximum size of an exempted drycleaning facility
 - 6 clarification that the exemption applying to scrap metal handlers refers to those facilities that are "not engaged in the reprocessing of batteries or smelting of metal"
 - of inclusion of an exemption for facilities, or those parts of facilities, solely engaged in agricultural production (other than those engaged in processing of agricultural produce or intensive agricultural production, such as piggeries and cattle feedlots);
- changes or additions to the reporting thresholds for some categories of substances:
 - of addition of category 1a substances, on which the reporting threshold is only exceeded for bulk storage facilities if their design capacity also exceeds 25 kilotonnes
 - 6 for category 2a substances, an increase from 0.5 tonnes to 1 tonne in the peak rate of fuel or waste that can be burnt in any hour
 - 6 for category 2b substances, inclusion of additional thresholds based on annual consumption of 60 000 megawatt hours or more of energy, or on maximum potential power consumption of 20 megawatts or more
 - ó removal of the category 2c threshold
 - of for category 3 substances, clarification that the threshold excludes amounts of substances emitted to groundwater;
- removal of the discretion of jurisdictions during the phase-in period to choose to collect emission data only from some types of facility;
- removal of the discretion of jurisdictions to require reporting by facilities that have not triggered the reporting thresholds;

- extension (from two months to three months) of the time allowed from the end of a reporting period for occupiers to report their annual emissions data;
- inclusion of a provision enabling jurisdictions to accept emissions data reported either on a financial year basis or on a different annual basis if the relevant jurisdiction considers that it already requires similar data from a reporting facility;
- inclusion of the requirement on occupiers to sign a statement that they have exercised due diligence in gathering and providing emission and other data;
- inclusion of a provision exempting from calculations of amounts of substances handled any amounts of those substances that the occupier could not reasonably be expected to know were contained within a proprietary mixture or other material;
- the following substances have been added to the list of substances to be reported in the first reporting year:
 - ó Cyanide (inorganic) compounds
 - ó Total Nitrogen
 - ó Total Phosphorus
- the following substances have been removed from the list of substances to be reported in the first reporting year, but are still included in the list of substances to be reported in the third and subsequent reporting years:
 - 6 Boron and compounds
 - ó Chlorine dioxide;
- the following substance has been added to the list of substances to be reported in the third and subsequent reporting years:
 - ó Total volatile organic compounds
 - ó Vinyl chloride monomer;
- the following substances have been removed from the list of substances to be reported:
 - ó 2-Butoxyethanol
 - ó n-Butyl alcohol
 - ó Cyclohexanone
 - ó Diacetone alcohol
 - ó Distillates
 - 6 Hydrogen fluoride (now included with fluoride compounds)
 - ó Solvent naphtha;
- the category 1 (amount handled) threshold has been removed for the following substance:
 - $\circ~$ Particulate matter 10.0 $\mu m;$ and

• inclusion of a specific date (31 January) by which it is envisaged the Commonwealth will publicly release information gathered in the preceding reporting year.

In addition to the substantive changes indicated above, the following minor changes have also been made to the Measure:

- clarification that the development of aggregated emissions data is to be undertaken on a cooperative basis by jurisdictions, and is not the sole responsibility of the relevant jurisdiction;
- clarification that the Commonwealth may not seek to recover any costs associated with the provision of emissions data, supporting data, contextual data or aggregated emissions data, and may only seek to recover costs associated with dissemination of value-added data;
- removal of Schedule A which set out proposed selection criteria for recommending amendments to the reporting list of substances;
- removal of Schedule C which set out a proposed pro forma to guide the collection by jurisdictions of data from reporting facilities;
- replacement of references to "validation of data" with references to "assessments of data integrity";
- replacement of references to data "accuracy" with references to data "reliability";
- removal of the need to include with supporting data details of the parent company of an occupier of a facility;
- removal of the need to include with emission data details regarding the state of the substance emitted (eg. gas, solid, liquid, sludge), the type of emission (eg. continuous flow, batch, accidental), or the exact location within a facility of each discharge point;
- inclusion of specific details of the type of contextual data to be included on the NPI database;
- inclusion of a definition of "off-shore facility";
- inclusion of the requirement to include information on the relevant OECD industry activity code(s) for each facility;
- inclusion of a provision allowing location to be reported either as latitude and longitude or as a map grid reference;
- removal of all references to "waste" and replacement, where necessary, with references to "substances"; and
- removal of references to "environmental authorisations".

3. THE PROCESS

3.1 Development of the Measure

The development of the NPI Measure has been carried out by a small project team of officers drawn from State and Commonwealth agencies and a project manager from the NEPC Service Corporation. A Jurisdictional Reference Network with representation from each member jurisdiction (Commonwealth, States and Territories) was established to advise the project team.

The Commonwealth agreed to fund the development of the NPI through the NEPC process. NEPC has recognised the substantial level of consultation that occurred prior to the NPI being developed through the NEPC process and this was taken into account in development of the Measure.

During the preparation of the draft Measure and Impact Statement, NEPC sought the participation of the general public and interested parties by advertising in major newspapers across Australia and public meetings were held by the jurisdictions in all capital cities and some regional centres.

To facilitate consultation, a Non-Government Organisations (NGO) Advisory Group was formed. This Group was charged with actively seeking views from its constituent organisations and providing high level policy advice to the NEPC Committee.

To provide independent expert advice on technical issues associated with forming the list of substances, a Technical Advisory Panel was formed. The Technical Advisory Panel prepared a report which was made publicly available at the same time as the original draft Measure and Impact Statement. The Panel has developed an updated report to reflect technical changes made to the draft Measure and providing an explanation of these changes.

A draft Measure and Impact Statement for the National Pollutant Inventory was released for public comment on 12 June 1997, by the National Environment Protection Council for a period of two months and two weeks until 26 August 1997. The draft was circulated for public comment to all individuals and organisations who expressed interest during the preparation of the draft Measure. It was also distributed to Commonwealth, State and Territory Government departments, and to key stakeholders identified by jurisdictions. The availability of the draft Measure was advertised in statewide and national newspapers. Submissions closed on 26 August 1997. 118 submissions were received from individuals and groups in the community including environmental groups, concerned individuals, unions, government agencies, industry bodies, companies and community groups with a special interest in the development of a National Pollutant Inventory. The project team analysed the submissions and sought advice from the Technical Advisory Panel, the Jurisdictional Reference Network and NEPC Committee in developing a response to the issues raised and ultimately in revising the draft Measure.

The revised draft Measure was released by NEPC Committee for consultation with key stakeholders between 8 and 31 October 1997. This revised draft was not considered by Council and its contents were not endorsed by jurisdictions. To provide transparency, the Project Team prepared an accompanying explanatory note to highlight the changes that were made in response to issues raised in the original submissions. 32 submissions were received.

Establishment of the NPI program as a Measure also requires an additional agreement of some description to ensure consistency of implementation. As implementation is not the responsibility of the NEPC, additional agreement from all jurisdictions in the form of a Memorandum of Understanding (MOU) was required. As a result, a Management Options Working Group, comprising officials from each jurisdiction, was established in April 1997. This Group was charged with developing coordinated arrangements which jurisdictions will use to implement the NPI. These arrangements are set out in the MOU, which outlines the principles and procedures that the Commonwealth, States and Territories agree to undertake cooperatively to facilitate a coordinated and consistent national approach to implementation of the NPI Measure throughout Australia.

To assist consultations with key stakeholders, a draft MOU and explanatory note were released to them to provide context and further information regarding the proposed implementation of the Measure.

The project team analysed submissions received from key stakeholders and again sought advice from the Jurisdictional Reference Network, Technical Advisory Panel, Management Options Working Group and NEPC Committee in developing a response to the issues raised and in further revising the draft Measure. The final Measure was endorsed by Council at their meeting on 27 February 1998, and will now be tabled in the Commonwealth Parliament.

Under the MOU, the Commonwealth has agreed to make a significant contribution towards funding the implementation of the NPI provided its core objectives are met. In turn, the States and Territories have supported the development of the Measure based on the understanding that implementation of the NPI will be reliant on ongoing funding by the Commonwealth to cover the demonstrated additional resource requirements that arise as a result of the Measure. The MOU was agreed to by environment Ministers at the same time as adoption of the NPI Measure.

3.2 Related trials, consultancies and studies

A number of trials, consultancies and studies have been initiated to support development and implementation of the National Pollutant Inventory Measure:

- A trial of the NPI in the South East Region of Queensland. The trial is testing implementation of the Measure and includes the development of a range of industry handbooks and application of the draft database. The trial is being undertaken by the Queensland Department of Environment with the support of the Commonwealth.
- A consultancy to develop other industry handbooks for facilities likely to report under the NPI. The consultancy is being undertaken by the NSW Environment Protection Authority with the support of the Commonwealth.
- A trial of the NPI in the Kalgoorlie mining area. The trial will test aspects of implementing the NPI in the mining sector. The trial is to be undertaken by the Western Australian Department of Environmental Protection with the support and assistance of WMC Resources Ltd. and the Commonwealth.
- A study to identify facilities in Tasmania likely to be required to report by the NPI Measure. The study was undertaken by the Tasmanian Department of Environment and Land Management with the support of the Commonwealth.
- Public release of the draft NPI database by the Commonwealth. The database was released in June 1997 and can be viewed on the internet at www.environment.gov.au/net/npi.html The database was developed by the Environment Resource Information Network of the Commonwealth.

4. PUBLIC PARTICIPATION AND CONSULTATION PROGRAM

The Measure development process is an extensive and open consultative process. The following sections outline the key components of that consultative process.

4.1 **Protocol for consultation**

A "Protocol for Consultation by NEPC" was developed (see Appendix D).

In accordance with this protocol, the overall aims of the NPI consultation were:

- to canvas the range of views on key issues and determine areas of agreement and disagreement among stakeholders; and
- to ensure that all views were taken into consideration in framing recommendations and reports to NEPC on the NPI National Environment Protection Measure.

Interested parties were given the opportunity to provide written comment through the Jurisdictional Reference Network, the NGO Advisory Group or directly to the Project Manager, NEPC Service Corporation.

In accordance with the protocol, consultation with stakeholders occurred through:

- formation of a broadly representative NGO advisory group;
- targeted consultation with NGO focus groups; and
- broad based consultation within the community.

Consultation within the individual jurisdictions was the responsibility of the Jurisdictional Reference Network and mechanisms used included workshops, meetings, focus groups and the taking of submissions.

4.2 **NEPC** public participation and consultation

The public participation and consultation program included:

- promotion of the availability of the draft Measure in major metropolitan newspapers, including an invitation to provide a submission;
- the establishment of a 1-800 telephone number to facilitate access to documents;
- the formation of a NGO Advisory Group to actively seek views from its constituent organisations; and
- a series of public meetings and workshops held across Australia, which were attended by a range of stakeholders including Commonwealth, State and local government, industry, and environment and community groups (see Appendix E).

The publication of this Summary document signals the end of the statutory and informal consultation processes for the development of the NPI Measure. Networks and contacts have been established within Government, business and the community by all those who participated in the development of this Measure and these networks have not only strongly contributed to the development of the Measure, but will greatly assist its implementation.

All jurisdictions have a strong commitment to a continuing consultation process both in the implementation of this Measure and in its review in 1999.

5. SUMMARY OF PUBLIC COMMENT AND NEPC RESPONSE

This Chapter presents a summary of public input to date so that stakeholders:

- have an understanding of the views being presented to NEPC; and
- can trace their input into the development of this Measure.

Many issues and comments were raised in more than one submission, and in different forms. Style and expressions differ from one submission to another, and

thus issues are raised in different ways having different connotations, contexts and emphases. As it is not possible in this Summary to deal with all the subtleties emerging from such variations, an attempt has been made to group similar comments together. Similarly, an attempt has been made, where possible, to provide a single response which captures the key issues raised in submissions.

Comments made in submissions have been assessed entirely on the cogency of points raised. No subjective weighting has been given to any submission for reasons of its origin or any other factor which would give cause to elevate the importance of any submission above another.

This Chapter does not seek to make judgements about the content or accuracy of statements, although different views about particular issues are contrasted. Some of the information presented was anecdotal and varied in its degree of accuracy. Nevertheless, NEPC believes that, while it is important to base the development of the NPI Measure on sound scientific and technical information, responses which may be less technically accurate also have a significant role to play in helping to design a community information program such as the NPI. Such responses show the ways in which people interpret their experiences and may also highlight gaps in access to information or in knowledge.

There have been three versions of the draft National Environment Protection Measure for the National Pollutant Inventory. The comments made in public and key stakeholder submissions refer to the first two documents (the 'comment' column below), the responses by NEPC refer to the final document (the 'response' column below).

The submissions are cited in the following manner. Submissions are given a unique number, in order of receipt, as indicated in:

- Appendix A for those received during public consultation (21 June-26 August 1997); and
- Appendix B for those received during key stakeholder consultation (8-31 October 1997).

For example, the reference (B1), refers to a comment made by the Western Australian Chamber of Commerce and Industry during key stakeholder consultation.

COMMENT	RESPONSE
Current title is inappropriate:	The Measure has retained the original
 wastes and transfers are not pollutants until they are discharged to the environment (B13). Suggest instead "National Emissions Inventory" (Submissions A48, A71, A75, A85, A87, A113, A114). 	title. Internationally the word pollutant is widely used in this context. In particular the OECD describes programs like the NPI as "Pollutant Release and Transfer Registers" and the Canadian Inventory is called the "National Pollutant Release Inventory". One

TITLE

TITLE

COMMENT	RESPONSE
 If transfers are included title should be "National Emission and Waste Transfer Inventory" (A48, B32). The title NPI is inappropriate if substances which are added to the environment for beneficial purposes are included (such as compounds of nitrogen, phosphorus and fluorides) (A36). 	exception, which was rejected, was to refer to the program as a "Toxics Release Inventory" as is the case in USA. Risk based criteria have been applied in selecting substances for the NPI. All the substances selected are considered to have a potential for significant adverse impact on human health or the environment. As such, they are all potential pollutants. Substances applied for a purpose (use) such as fertilisers will not be reportable
	under the NPI.

COMMENT RESPONSE The NPI should: The NEPC processes associated with development of a Measure are commence as soon as possible (A34, determined by the NEPC Act. Time is **B3**). required to consult fully in the be fully implemented before the 2 development of the Measure and to put years estimated in the draft Measure into place the necessary systems for (A45). implementation. Phase in of the Measure: The Measure now provides for a longer phase in of reporting requirements. The Time frames should be extended as first 2 reporting years will be limited to industry and governments will not be 36 substances, with no enforcement able to accurately report on all point action. Reporting on the full list will source and aggregated emissions and only commence after the October 1999 provide contextual data within the review. proposed time frames (A67, A71, A84, There is no nationally consistent list of A85, A100). substances that are currently reported to Reporting on the full list of substances jurisdictions. The list in the Measure of should not commence until the third substances to be reported in the first two year (A82, A108), the fourth year years is based on a scientific assessment (A102), the fifth year (A36), or the sixth of the relative environmental and health year (A57). risks of the substances. The use of a A longer transitional period is needed substantially smaller list would not meet (A36, A98, A106, A109, A112) as little is the objectives of providing a useful known about emission levels of many range of information about emissions to of the reportable substances, and the environment. appropriate estimation methods. This Reporting by facilities is also not would allow proper consultation in required until an agreed industry development of emissions estimation handbook is available.

COMMENCEMENT AND TRANSITIONAL PROVISIONS

COMMENT RESPONSE techniques (A57, A94, A96, A97, A98, A 99, A112). Supportive of the key stakeholder draft's proposal to extend the phase in of the Measure (B5, B6, B20, B23, B24, B25, B28). For the first two years the NPI should focus only on a small set of priority substances which have the most potential to harm the environment (A100, A106). Reporting in the first year should be limited to 5 or 6 key pollutants (A108). Reporting should be mandatory after an initial 12 months (A70, A88). The reporting list for the first three years should be reduced (A108, B4). It should be guided by the current list of substances reported to various jurisdictions (A84, A106). First reporting year should commence It is unlikely that the Measure will require additional monitoring within a reasonable minimum time (for example, 3-6 months) after gazettal of equipment. It is therefore envisaged that the Measure, as facilities will need to put the time between the making of the in place monitoring, estimation and Measure (currently anticipated to be reporting equipment and systems before February 1998) and commencement of they can produce reliable data (A29, A71, the first reporting year (1 July 1998) A87, A109, A114). would be sufficient. If a staged introduction of the reporting Under the Measure reporting is required list is to occur, all jurisdictions, including on 36 substances for the first 2 years the Commonwealth, should be across all jurisdictions. Government consistent, including reporting by owned facilities will also be required to government owned facilities (A29, A51, report if they exceed the appropriate A87, A100). thresholds. The Measure is substance-based not First phase of reporting should be based on a common list of facilities (A84). facility-based. This is in line with most overseas precedents and ensures equitable reporting of emissions. There should be uniformity in the The earlier references to jurisdictions implementation process - all facilities having the choice to collect information from all jurisdictions should begin only from some facilities have been reporting simultaneously (A36, A57, A64, removed from the Measure. Instead, A84, A87, A109). Clause 14 of the Measure now specifies

COMMENCEMENT AND TRANSITIONAL PROVISIONS

COMMENT	RESPONSE
	that jurisdictions will not require the occupier of a facility to report until an agreed industry handbook is available for that type of facility.
Reporting should only commence after all information has been provided, for example, Industry Handbooks and results of trials in Queensland and WA (A29, A38, A109).	Trials have been designed to deliver as much information as early as possible to enable refinement of the Measure. Experience from the trials and the transition years will be used to further refine the Measure. Clause 14 of the Measure provides that industry will only report after Industry Handbooks for that industry sector are available.
See the Industry Handbooks/Emission Estimation Techniques section for further discussion of reporting commencing on publication of Industry Handbooks.	

COMMENCEMENT AND TRANSITIONAL PROVISIONS

REVIEW OF THE MEASURE

COMMENT	RESPONSE
• The NPI should be bench-marked with other countries and reviewed to assess whether the objectives of the Measure are being met (A57).	Clause 33 of the Measure now provides for a comprehensive review commencing in October 1999. This review will consider the effectiveness of
• Review of technical aspects after two years and of the full program after five years is suggested (A86).	the Measure in achieving the national environment protection goals set out within it, the resources available to implement it, and the need for any
 The Measure should be subject to a sunset provision or a review in order to require assessment of its effectiveness and cost (A71, A87, A114). 	changes. The issues to be considered include the success and costs and benefits of the Measure, whether or not to report on transfers, whether substances should be
• There needs to be a clearly defined audit process for assessing the performance of the NPI after three years of operation (A61).	added or deleted, whether changes should be made to thresholds or definitions of 'reporting facilities', or whether any changes should be made to
• Critical assessment of the effectiveness of the program is crucial, and should occur every 3-5 years (A77).	improve the effectiveness of the Measure. It is envisaged that the review would
 A full review of the NPI (including cost-benefit analysis) should be conducted in five years (A111). 	include an assessment of the NPI in comparison with overseas experience. The need for future reviews will be considered at the time of the October
• The review proposed for October 1999 is supported (B5, B6, B8, B20, B24).	1999 review. Nothing in the Measure prevents NEPC from commencing a

REVIEW OF THE MEASURE

COMMENT	RESPONSE
Additional reviews are also recommended, suggestions including a review in 2000/01 to take account of experience from the first full year of reporting (B5), or regular reviews on a bi-annual basis (B6, B24).	review at any time.

SCOPE OF THE MEASURE

COMMENT	RESPONSE	
 Size of the NPI program: The NPI proposal is complex, ambitious and ambiguous (A28, A37). The NPI is becoming too complicated (A62). The NPI should require industries to report on what chemicals are used, what quantities are emitted and spilled, and how chemicals are managed (A53). How can an inventory which collects no transfer data and relates to only 38 substances, be regarded as broadly based? This makes a mockery of the stated goals (B3). The NPI should establish acceptable environmental standards of what is healthy (A34). The Measure should be delayed pending formulation of environmental standards, targets and monitoring programs. The focus of the NEPM needs to be redirected to the identification of benchmarks, targets and implementation responsibilities (A67). 	A program designed to provide a range of information to the community on the sources of impacts on the environment is inherently complex. While the program has been developed in a manner which is as simple as possible, there is no way in which these inherent complexities could be avoided. The length of the reporting list balances competing demands of minimising cost to industry and government in implementing the system, and the benefits derived from making information available. The full reporting list contains 90 substances which will be reported under the NPI. The NPI is a community information program and is not intended to establish ambient environmental quality standards or targets. Such standards are being developed in other Measures such as the Measure for ambient air quality, currently under development.	
 Issues to be considered in the program: The NPI should be limited to air emissions only (A28, A37). Import and export of waste must be addressed under the NPI (A65). The NPI should include information 	Impacts on the environment are not caused solely by emissions to air. For completeness, it is necessary to also collect information on emissions to land and water. The import and export of waste is clearly outside the boundaries of a program	

SCOPE OF THE MEASURE

COMMENT	RESPONSE
on site storage and use of toxic chemicals (A9, A13, A14, A15, A30, A31, A46, A47, A50, A53, A58, A62, A70, A83, A93, B32).	which is designed to provide information to the community on sources of adverse environmental impacts.
• Industries must report all potential pollution including air, land, water, trade waste, transfers of pollutants and odour (A93).	Reporting on quantities of chemicals stored, manufactured or imported is beyond the scope of the NPI and similar overseas inventories. However, any
 The NPI should include an inventory of imported and locally produced hazardous substances and chemicals (A70). 	emissions from stored chemicals and from use of these chemicals will be estimated and reported. The program will lead to the provision
	of a large range of information about emissions of pollutants into the environment. It would be inappropriate for the Measure to speculate about potential emissions and environmental impacts.
Relationship to environment protection systems throughout Australia:	The NPI will inform the development and refinement of environment
 NPI should form the basis for a broader program of environment protection initiatives. A clear Commonwealth commitment to this is required at this time (A60). There are already too many chemical regulatory procedures in Australia 	protection programs by all Australian governments in the future by providing a range of information on sources of impacts on the environment. In this way it should complement existing systems, rather than being an additional burden which does not deliver any value to the community.
which divert, inappropriately, our country's scarce business and government resources (A100).	Key links between NPI and other National Environment Protection Measures will include use of the NPI in
• The relationship between the NPI and the monitoring component of the Ambient Air Quality Measure needs to be clarified (A104).	assisting in identifying areas where the Air Measure's standards are likely to be breached, and setting out for the community the key air pollutants for
 The Measure should provide effective mechanisms for facilitating environmental improvement (A87). The Measure should be viewed as one 	concern to human health. The NPI will form a key part of Australian environment protection systems, particularly through providing
part of environment protection systems, but does not appear to be linked to State of the Environment Reporting and individual State's environment strategies (A86).	improved information to assist in the identification of existing and potential environmental degradation.

SCOPE OF THE MEASURE

COMMENT	RESPONSE
Required information should be confined to hazardous waste generation and disposal (A51).	There are other substances, such as Nitrogen and Phosphorus, which do not come into the category of hazardous waste yet are known to cause significant environmental harm and are of interest to the community.
Monitoring stations should also be established in areas where winds, currents, and tides carry emissions, to validate source emissions (A39).	The MoU sets out the processes by which jurisdictions will assess the integrity of reported data. The processes are designed to balance the need for quality data and the costs of ensuring this. In the first years the emphasis will be on ensuring that all facilities which are required to report do so and that the information provided has been provided in accordance with the relevant industry handbook or an approved alternative. Monitoring of ambient environmental quality is also expected to occur as part of future Measures, and is proposed in the draft Measure for ambient air quality.

NATIONAL ENVIRONMENT PROTECTION GOALS

COMMENT	RESPONSE
 Support for the NPI: Generally support the concept and goals of the Measure (A42, A58, A61, A70, A71, A72, A94, A96, A97, A98, A99, A115, B20). 	Support for the NPI concept and the goals of the Measure is appreciated.
• It is believed that the approach taken will assist in maintaining and improving environmental quality and reduce the release of hazardous wastes to the environment (A68).	
 Industry supports information being disseminated in a 'useful and accessible and understandable form' (A109). 	
 Accept NPI as a first step to measurement and reduction of harmful emissions (A40). The NPI may help to overcome 	

'chemophobia' in Australia, and if this occurs the program is supported (A100). The goals, guidelines and protocols are The draft Measure was drafted in plain difficult to understand (A45). language to the extent possible, however it is a legal document and for that reason may sometimes be difficult to understand. Community right to know: The NEPC Acts require inclusion of "desired environmental outcomes" Goals should be linked to community linked to national environment right to know requirements rather protection goals set out in those Acts. than desired environmental outcomes Clauses 16 and 17 state that the provision (A14, A28, A37, A70, A77, A81). of information to the community is a Information is an essential fundamental goal of the NPI. prerequisite to community The Measure will not, and can not fulfil involvement in environmental all desires for complete information to decision making, and community the community about emissions of right to know needs to be legislated pollutants to the environment. It is, for (A55). however, an important step forward in Support the collation and community information about the dissemination of information to the environment. community (A3, A64). While the provision of information to The NPI is a potentially valuable the community is obviously important, mechanism for the provision of it is the environmental outcomes information to the community (A64). anticipated to be achieved as a result of that information which are of most Industry has a responsibility to inform concern. the community of emissions of substances and potential health threats (A9). The Measure will not meet community right to know objectives (A46). Community right to know should be clearly enunciated and legislated for (A61). The stated goals are unable to be assessed. The major goal should be to . **b** 12 a 1

RESPONSE

NATIONAL ENVIRONMENT PROTECTION GOALS

COMMENT

provide publicly available information (A65).	
Waste minimisation and cleaner production:The current draft does not encourage	The Measure will encourage cleaner production by requiring facilities to estimate their emission levels. That

NATIONAL ENVIRONMENT PROTECTION GOALS

COMMENT	RESPONSE
 COMMENT recycling or reuse. Waste minimisation must be encouraged (A32). The Measure does nothing to address the bureaucratic hurdles to reuse and recycling of resources (A51). The impact statement sentence "the NPI will also assist in the promotion of waste minimisation and cleaner production" could be included as a goal (A79). A way to achieve these goals would be to promote technologies that achieve good environmental outcomes (A65). NPI should stimulate waste 	RESPONSEprocess will encourage firms to evaluatetheir emissions sources, and should leadto the identification of cleanerproduction opportunities.The public availability of emissionsinformation will also lead to communitypressure to reduce emissions in somecircumstances.The goals of the Measure have beenmodified as suggested in submission A79to incorporate the sentiment in thesentence from the impact statement.
minimisation and cleaner production and make companies more accountable for what they produce and discharge to the environment (A43).	
 Protection of the environment: Maintaining and improving land surface, soil, substratum quality must also be included as a desired goal (A76). The NPI will not achieve its desired environmental outcomes as there are no air and water quality standards against which performance can be compared, and recycling may be reduced as a result of cost of reporting and negative public perception (A38). The Measure does not contain requirements to reduce emissions or 	The goals are taken from the heads of power in the NEPC Acts which refer to air and water quality. While the protection of other environmental media are obviously important, the Goals clause still reflects the wording of the enabling legislation. The NPI is an information tool which will contribute to air and water quality by providing readily accessible information on emissions to air and water regardless of any standards applying at a given time. This information will assist in determination
 requirements to reduce emissions or programs for achieving the proposed outcomes (A49) or development of toxic reduction plans (B17). The desired environmental outcomes and goals are indirect outcomes of the Measure (A75). Making data available to the public to pressure for change is an abdication of responsibility by the government (A32). 	of priorities for environmental programs. While information on recycling is not now required by the Measure, if such data is provided it would be displayed so that it was viewed as a 'positive' rather than a 'negative' action by a facility. Many members of the community wish to be informed of impacts on their environment and to have the opportunity to be involved in ensuring

COMMENT	RESPONSE
	protection of the environment.
Suggested changes to particular sections of the proposed goals such as replacing 'ambient marine' with 'ambient coastal waters' and deleting the word 'hazardous' (A48, A81, A74, A109).	Clause 5 mirrors the words contained in the NEPC Act. Measures can only be made that relate to these words, for example, 'ambient marine, estuarine and fresh water quality'.
Suggests expanding scope of the NPI to include a program similar to the US EPA's 33/50 program (A3).	The first priority is to establish the NPI and the infrastructure for collecting, processing, analysing and displaying the information. Additions to the program can be considered as part of the review in 1999.
Introduce as a goal "a nationally consistent database of emissions of significant environmental interest across Australia" (B1).	In clause 6, the Measure refers to the goal of collection of a broad base of information on emissions and dissemination of that information to the community.

NATIONAL ENVIRONMENT PROTECTION GOALS

TRANSFERS

COMMENT	RESPONSE
 NPI must include reporting on transfers of waste containing pollutants (A14, A15, A30, A31, A46, A47, A50, A58, A61, A70, A74, A81, A83, B2, B3, B8, B11, B17, B29, B32). Reporting of transfers should not be included on the NPI as the NPI should focus only on emissions to the environment (A32, A36, A52, A64, A71, A75, A80, A84, A87, A95, A100, A101, A102, A106, A118, B5, B15, B20, B23, B25) and because of the potential for double counting and the increased resources required to provide the data. A full cost and benefit analysis should be carried out to justify inclusion of transfers (A111). The decision to leave transfers out until the 1999 review is supported (B4, B5, B13, B15, B18, B25, B26, B28, B31). Transfers to sewage treatment plants should not be included following the 1999 review (B6, B7, B25). 	As a result of concerns about the cost and complexity of including reporting on transfers from commencement of the NPI, NEPC decided not to include transfers at this time but to consider their inclusion as part of the review of the Measure in 1999. The review will take into account the result of the NPI trials which include transfers, and the experience with reporting of emissions. Decisions as to the inclusion of transfers and, if so, what types of transfers, will not be made until the time of the review. It is not considered appropriate to include deposit of waste to landfill as an emission to the environment because of the contained nature of that waste management method. Any emissions of substances from the landfill to groundwater, water or land will, however, be reported if the landfill exceeds the relevant thresholds.

TRANSFERS

COMMENT	RESPONSE
• Transfers to recycling should not be included following the 1999 review (B6, B7, B12).	
 The inclusion of transfers will significantly increase the cost to reporting facilities (A104). 	
• If transfers are reported they must be reported separately to ensure that positive processes (such as recycling) are not confused with emissions to the controlled environment ie landfill and must only relate to the off site movement of wastes (A48, A85, A113).	
 Transfers of waste for treatment and disposal should be reported. Reporting on transfers for recovery, recycling, reprocessing or purification could lead to double counting and should not be reported (A102). 	
• Transfers for treatment, recycling, reprocessing, recovery or purification should not be reported. Transfers to landfill should be reported (A4, A80).	
• Deposit of wastes in landfills should be considered an emission to the environment (B6).	
 Transfers for recycling, reuse, recovery or purification should be reported separately from transfers for disposal or treatment (A69). 	
 Transfers to tailings dams should not be included in the NPI - these are internal to the facility. There are other more appropriate mechanisms for dealing with tailings dams (A44, A52, A71, A82, A95, A101, A102, A110, A114, B20). Only transfers out of the facility should be subject to reporting (A73, A89). Reporting of discharges to tailings would be an inappropriate use of limited resources (A82, A114). 	While NEPC decided that transfers (including transfers to tailings dams) would not initially be reported under the NPI (see above), emissions to air and water from tailings dams are required to be reported where a facility exceeds the appropriate thresholds. When a tailings dam closes it effectively becomes a contaminated site and there are other existing mechanisms for dealing with such sites.
 Tailings dams should not be excluded from reporting as they need to be 	

TRANSFERS

COMMENT	RESPONSE
monitored for an extended period after the mine ceases operation. Tailings dams cannot be considered transfers, as no tailings dam has yet been constructed which ensures containment of tailings (A53). There may be a case for once off reporting once a mine has closed down (A95).	
 Clarification on the scope of transfers is required. Current drafting would potentially oblige every mining operation in Australia to report discharges to tailings dams irrespective of the on-site recycling activities. This would impose unnecessary cost and undermine the integrity of data collected under the NPI (A110). 	
 Transfers to tailings dams should not be included following the 1999 review (B8, B31). 	
How will Fly Ash storage areas be treated under the NPI? (B15).	Fly ash storage areas would be treated in the same manner as landfills or tailings dams. Transfers to the storage would not be reportable but, where a threshold is exceeded, emissions from the storage area into the environment would need to be reported.

COMMENT	RESPONSE
'Waste':	The definition of waste has been
 The definition of 'waste' would include a number of by-products in the steel industry which should be viewed as a resource rather than a waste. Substances listed as by-products which are not discharged or emitted to the environment should be excluded from the definition of 'waste'. (A29, A52, A80, A102). 	removed from the Measure. The draft definition was intended to ensure that only transfers of wastes were captured by the Measure. With the removal of transfers from the Measure, there is no longer a need to include this definition. Inclusion of the word waste in the definition of emission also created some confusion, which has now been resolved. See discussion of 'emission' below.
 Definition of waste is absurd (A51). Delete definition of 'waste'. Waste is not a pollutant unless it is discharged to the environment in such a manner as to cause harmful effects (A32, A81, B32). 	
 Definition of 'waste' is inconsistent with Tasmanian legislation. Recycled materials should not be considered emissions and subject to NPI reporting (A35, A95). 	
 Waste definition (a)(b)(c) are defined as transfers and are not necessary (A2, A69). 	
 Definition is ambiguous as to whether it refers to matter arising from one operation within a facility and being reprocessed by another operation within the same facility (A38). 	
The definition of 'emission':	The definition of emission has been
 Should refer to emission of substances not emission of waste, and the current definition presupposes that all substances are 'waste' (A81, A87, A106, B13). 	modified so that it refers specifically to emissions of substances or matter containing substances, and does not refer to emission of wastes. The reference to 'disposal' has been removed from the definition of
 Should be reworded to remove the reference to the removal of a substance from a facility for 'disposal', to avoid confusion between disposal and emission, and because all forms of disposal (ie. landfill, sewers and tailings dams) were specifically 	emission. The term 'destruction' has been added into the definition to ensure that substances being removed for the purpose of treatments such as incineration are not captured as emissions.

COMMENT	RESPONSE
 excluded in the definition (A49). Should include only the direct emission of waste from a facility to the environment (A118). 	It is considered appropriate that indirect emissions of substances from tailings dams, landfills and other indirect sources should be included.
There needs to be a definition of 'highly hazardous' and a 'highly significant environmental impact' (A103).	The use of the terms 'hazardous' and 'significant impact' in clause 7 of the Measure is intended to provide a broad statement of the goals of the NPI. The reporting list contained in Schedule A identifies those substances which meet those criteria and are included in the NPI database.
The definition of 'emissions data' includes the requirement to identify and report each source of each emission of a substance from a facility. The objectives of the NPI do not require the identification of point sources. Reporting of accidental emissions have no part in the NPI. Both should be removed from the definition (A49).	The definition of 'emissions data' has been amended to remove the need to report on discharge points and accidental emissions. However, Schedule D of the MoU, which sets out agreed data reporting fields, lists provision of this information as optional for those facilities which wish to provide it.
The word 'occupier' in relation to a facility includes a person who is in occupation or control whether or not that person is the owner of the facility. The legal responsibilities and liabilities need to be clearly defined (A35, A102, A109).	The Measure does not provide this level of detail. It will be a question of fact in each instance who is actually in occupation and/or control of a particular facility and therefore required to report to the NPI. Owners and occupiers are responsible for activities carried out on their land.
 Does the definition of 'facility' include: off-shore facilities such as oil rigs in the Bass Strait (A55, B13). a facility in a foreign country (A87). non stationary items such as ships, plant, equipment and appliances (A69,A87, A108). landfills (A52). road and rail networks (A69). storage and dispensing of diesel fuel (A68). 	The Measure has been amended to define 'off-shore facility'. Vessels used or constructed for the recovery of petroleum are therefore specifically included in the NPI. The definition of 'off-shore' facility does not include facilities in foreign countries. The Measure is not intended to operate extraterritorially. The definition of 'facility' has also been amended to clarify that mobile emission sources (eg. aircraft in flight, ships at sea) operating outside the boundaries of a fixed facility are not required to report to the NPI. It is clear that landfills are potential reporting

COMMENT	RESPONSE
	facilities. Industry handbooks will assist landfill operators to determine whether they need to report and how to estimate emissions. As emissions from road and rail networks will occur from mobile sources, these emissions will be estimated as part of aggregated emissions, except in those cases where the mobile source(s) is operated within the boundaries of a fixed facility. The reporting list has been amended to remove distillates.
 Off shore facilities: should not be required to report to the NPI because of their remote location. (A48, B20). are exempted under the USA's TRI, and should be exempted under the NPI because of their remote location. If they are required to report, then an exemption from reporting of air emissions of NOx, SOx and particulate matter would be appropriate because their remote location means that the environmental effects of these discharges are minimal. An exemption from requirements to report emissions of volatile compounds is also sought because of difficulties in achieving accurate estimates (A102). 	Off shore facilities, as defined, are required to report to the NPI as these facilities are potentially significant emitters and often located in environmentally sensitive areas. In terms of equity, they should not be treated any differently from on-shore facilities in remote locations, and should be required to report fully to the NPI. Reporting of emissions of volatile compounds is required for these facilities if they exceed the appropriate thresholds. It is recognised that emissions estimation will not be perfect, and an industry handbook will be developed in conjunction with the industry which allows the development of estimates of acceptable accuracy.
The phrase 'no or limited emissions' in the definition of 'reporting facility' needs to be defined (A69).	The definition has been redrafted and these words have been deleted.
Definition of 'facility' will potentially allow an organisation to avoid reporting thresholds by geographically relocating parts of its operations (A76).	It is highly unlikely that the cost of compliance with the NPI will lead to relocation of facilities to avoid reporting requirements.
Requirement to provide contact details should be deleted from the definition of 'supporting data' (A48). 'Supporting data' should also include the contact details for the person in charge of collecting and supplying the information to the NPI	The NPI is a public information tool. It is therefore important that contact details for a facility are provided. Facilities may choose to provide details of a public relations officer rather than a technical/engineering officer for the

COMMENT	RESPONSE
COMMENT	
(A13, A69).	database. In some cases the person responsible for collecting the NPI data may not necessarily be the most appropriate person for public contact.
Definition of supporting data' should include an alternative means for identifying the location of a reporting facility such as latitudes and longitudes for those facilities which do not have a street address (A69).	Clause 19 of the Measure specifically provides that jurisdictions must supply the latitude and longitude to the nearest second or the equivalent map grid reference for each facility prior to submitting the data to the Commonwealth.
Contextual data should include references to understanding hazardous properties and the various sources of a substance (A48, A71, A85, A86, A87, A109, B23). The Measure should establish who is responsible for providing contextual data (A109).	The Measure has been amended to provide a more comprehensive definition of 'contextual information'. It includes information on common anthropogenic and other sources of the substance and health and environment effects. Clause 5.5 of the MoU states that the
	Commonwealth is responsible for provision of contextual information; that Environment Australia, in consultation with nominated agencies, will approve contextual data; and lists the information which all parties will cooperate to ensure is included in the NPI including maps, land use details and urban infrastructure details.
A definition of 'pollutant' is required (B18).	The term is used according to its normal dictionary definition. Those pollutants of concern in the Measure are those identified in the substance reporting list (see discussion below).
The definition of reporting list should clearly state that the list was derived by a risk-scoring process (B8).	This addition, while factually correct, does not add any value in terms of improving the clarity or legality of the Measure.

EXEMPTIONS FROM REPORTING

COMMENT	RESPONSE
Why are petrol stations and dry	The Measure is designed to minimise the
cleaners exempted? (A35, A50, A55, A110, B11, B12)	impact on small business by, where possible, avoiding imposition of
A110, B11, B13).Petrol stations should be excluded	reporting obligations on individual
from individual site reporting (A4,	small businesses.
A86, A88). The concept of a storage threshold for petrol stations should be deleted (B6).	Petrol stations and dry cleaners were both seen to be small businesses which, because of the quantities of substances
 It is inequitable if the exemptions 	they handle, could trigger the reporting thresholds. Emissions from these
from reporting are based on the cost of compliance and the administrative problems with collecting data (A87).	facilities can be easily estimated and will be included in aggregated emission estimations.
• The thresholds for reporting should be sufficient for establishing whether or not reporting is required (A81).	The proposed storage volume threshold, above which petrol stations would be required to report, has been removed to
 Scrap metal handlers which have facilities for melting should be 	ensure that no retail petrol businesses are required to report.
requested to report, particularly where zinc is melted and cast (B10).	The exemption for scrap metal handlers in the definition of reporting facilities
	has been amended. Those facilities engaged in smelting of scrap metal or reprocessing of batteries are no longer exempted and will therefore be required
	to report to the NPI if they exceed thresholds.
Mine sites and energy generators in	In order to ensure equity, these facilities
remote locations should be exempted from reporting under the Measure.	are required to submit reports to the NPI if they exceed the thresholds. In many
Emissions from tailings dams should be exempted from reporting (A77).	cases, these facilities will be the only major commercial source of emissions in
exempted from reporting (A77).	a region and the NPI will provide important information to the local communities. There is no justification
	for exempting facilities from an obligation to report emissions from tailings dams.
Agricultural facilities:	The definition of 'reporting facility' in
• The Measure must contain an	the Measure has been amended to specifically exclude a facility, or those
exclusion for farms to clarify that farmers using NPI substances, such as	parts of a facility, engaging solely in
ammonia, during farming operations	agricultural production, including the
are not required to report to the NPI	growing of trees, aquaculture, horticulture or livestock raising. This

EXEMPTIONS FROM REPORTING

COMMENT	RESPONSE
(A7, A84, A106, B30).Small family farms should not have to report. The Measure should contain	ensures that family farms are not required to report. The exemption is not allowed for
an employee cut-off (B12).Broad acre cropping should be defined (B12).	processing of agricultural produce and intensive livestock production (eg. piggeries and cattle feedlots),
 Facilities such as forestry, plantation and agro-forestry activities should be excluded (B4). 	recognising the high levels of emissions which can be expected from these facilities. Cattle feedlots will be required to report
 Irrigated farms should be excluded (B10). 	when they exceed the thresholds. In the case of category 3 thresholds, cattle
 Should exclude agricultural enterprises involved in production of eggs, poultry, dairy cattle and feedlots (B26). 	feedlots are only required to report when they directly emit nitrogen and phosphorus above the specified amounts to water (excluding groundwater).
• Cattle feed lots should be exempted from reporting as they do not emit nitrates or phosphates (A10).	Research shows that only very large feedlots will trigger this threshold. Given the potential impacts of such large facilities, their inclusion is warranted.
 Exclusion of agricultural enterprises from individual reporting and estimating emissions as diffuse sources, is supported (A52). 	Agricultural and veterinary (agvet) chemicals are not covered by the Measure, and it is recognised that the current thresholds would not necessarily
• The Measure must include pollution from spraying, including insecticides and fertilisers (B11).	be relevant to these chemicals. The issue of public reporting on the use and emission of these chemicals has been
• Failure to include agricultural (agvet) chemicals makes the NPI too narrowly focused (A51).	referred to a SCEP/SCARM joint working group which is expected to report to the NEPC on whether or not it
• The lack of clarity in defining agriculture in the draft Measure raises concerns as to whether the NPI is translatable to the agricultural industry. Recommend that the matter of agricultural emissions reporting should be considered by the group considering agvet chemicals (B12).	considers the NPI to be an appropriate mechanism for dealing with these chemicals in the future.
• Agvet chemicals should be included by the year 2000 (B29).	
• Agro-forestry should not be required to report to the NPI (A35).	
Spills and accidental emissions:	Reporting of spills is an important

EXEMPTIONS FROM REPORTING

COMMENT	RESPONSE
 Spills or accidental emissions should not be required to be reported as they are not representative of the facility's discharge of that substance. Spills would also have to be reported to the local EPA, and including them in the NPI report would mean double- reporting (A66). Spills should be included in the inventory of emissions provided by companies (A61, A77). Spills and releases through emergency relief devices should not be reported (A112). 	component of facility reports because it ensures that one-off emissions of substances which impact on environmental quality are recorded on the NPI database. This will allow the identification of potential sources of environmental degradation, and will also assist in identifying opportunities to reduce emissions or better manage substances. In some cases, spills may be the primary form of emission from a facility.
Industries should only have to report on point source emissions where point sources are the major contributors to the overall emissions for a particular geographical area (A106). There should be no State or regional exemptions for data reporting (A62). Paint manufacturers producing less than 1 million litres per annum should be exempted (A6).	The Measure has not been amended in response to this comment, as a contribution which is small in terms of the total airshed or catchment, may not be small on a local scale. The Measure does not allow any such exemptions. On advice from TAP, the Measure has not been amended. Further exemptions for reporting facilities were considered but not recommended. It was agreed that those who exceeded the thresholds should report and that the current thresholds did not generally require businesses with less than 10 employees to report.
Large pulp mills may exceed the thresholds for some metals because of the naturally low concentrations of these metals in wood. They should be exempted from reporting (B4).	It is believed that it is appropriate for large pulp mills which exceed thresholds to report under the NPI in the same way as other large businesses.
Under no circumstances should reporting of waste rock be included in the NPI (B8).	The substances contained within waste rock are not reportable under the NPI, however, as with tailings dams or landfills, any emissions from waste rock is reportable if thresholds are exceeded.

DATA FROM REPORTING FACILITIES

COMMENT	RESPONSE
The Measure should directly place obligations for reporting on industry rather than jurisdictions (A52, A69, A106).	By their nature, NEPMs bind participating jurisdictions rather than the wider community. It is then up to individual jurisdictions to translate their obligations into appropriate legislation or other mechanisms which place requirements on industry to report.
To prevent duplication, minimise costs and accommodate existing reporting requirements, the Measure should allow reporting of NPI data on other than a financial year basis (A4, A35, A84, A85, A86, A106, A108, A109, A111).	The Measure provides that data can be provided for either the previous financial year or, where the jurisdiction already considers that it requires emissions data from a reporting facility on the basis of a different annual reporting period, that reporting period.
 Industry reporting obligations: The success of the NPI will be dependent upon keeping the reporting requirements at a reasonable level (A115). 	The NPI reporting obligations will be managed in a way which, where possible, reduces the requirement for the production of specific or additional information. The NPI is not intended to duplicate existing reporting
 Information reported by facilities under environmental licences may be more accurate than 'estimates' required by the NPI (A38). 	requirements. In recognition of this, the Measure now explicitly enables jurisdictions to accept, for NPI purposes, similar emissions data
 The NPI should primarily rely on existing EPA licence reports which can be augmented with additional information for the NPI (A112). 	that has been reported by facilities for other purposes.
 Many emissions are currently reported under other legislative requirements. The NPI should operate in conjunction with these, rather than duplicating reporting requirements (A102). 	
As aggregated emissions data will only be provided on a three year basis, the reporting list should be split into three equal sections and industry should only be required to report emission estimates every three years (A49, A109).	Splitting the list in the way suggested will not necessarily place an equitable burden on all facilities, as most facilities will in fact only report on a few substances. Also, in many instances, these substances may be emitted from the same process, so that such a split may lead to inefficiencies in emission estimations.
Period to compile facility reports:	Clause 9 of the Measure now allows

DATA FROM REPORTING FACILITIES

COMMENT	RESPONSE
 Industry should be allowed three months from the end of a reporting period to provide their data to jurisdictions (A75, A85, A108, A109). It is onerous and unrealistic to limit reporting to the small period from end of financial year to 31 August each year (A84). 	three months (ie. on or before 30 September each year) for reporting of data. Consultation with industry indicates that this is sufficient time to allow reports to be submitted. Note that alternative reporting periods are also available to reporting facilities if they are required to submit other environmental reports under reporting periods other than a financial year.
After the first reporting year, in those cases where emissions have changed by no more than 10 per cent, provision should be made for industry to report 'no change'. This would reduce cost of compliance (A29).	Facilities will need to conduct annual estimations in order to determine whether or not there has been a change in emissions of those substances for which they have triggered the reporting thresholds. Having undertaken this estimation, there should be only minimal additional cost in reporting this information.
 Inclusion of additional information: Industry should be given the opportunity to approve any descriptive or interpretive information relating to its own emissions prior to the inclusion of such information on the NPI (A102). There is no real incentive to recognise companies that have invested in clean production - there needs to be a mechanism for distinguishing good performers (A5). 	While it is unlikely that the NPI will include detailed analysis or interpretations of the emissions reports of any single facility, any such analysis would be developed in consultation with the reporting facility. Good environmental performance will be evident through comparison of emission levels from similar facilities. The database will also allow links to site- specific information, and facilities may choose to make further information about their environmental performance available.

COMMENT	RESPONSE
Clear guidelines should be provided to industry explaining how the measure is to be implemented (A48).	Industry Handbooks will play a key role in explaining the implementation of the Measure for reporting facilities. Other documents will be produced which will provide an overview of the whole program, and further information will be available from each of the jurisdictions.

COMMENT	RESPONSE
 Development of EETs/Industry Handbooks: Emission estimation techniques should be tailored to each type of industry and should be developed in full consultation with industry and other relevant stakeholders (A4, A13, A36, A43, A48, A75, A77, A86, A87, A94, A96, A97, A98, A99, A109, B4, B5, B10, B12, B14, B15, B16, B19, B22, B23, B24). 	The Measure now provides that reporting is not required until an Industry Handbook, containing approved emissions estimation techniques has been approved by jurisdictions and is available. For Handbooks finalised after the commencement of the first reporting year, reporting is not required until 3 months after the finalisation of that handbook.
 The Measure should require jurisdictions to agree on and publish EETs (A2, A77). Neither the Measure nor the MoU refer to consultation with industry over the development of the Handbooks (B13). 	Requirements for consultation with stakeholder groups are set out in the MoU. In some cases, industries may be requested to develop their own Handbooks. Trials are being conducted in a number of jurisdictions to test these techniques.
• During development of Industry Handbooks, regular progress reports should be issued (B6, B10). Discussions with industry associations need to be held at relevant points in this process (B6).	In addition, the MoU states that Industry Handbooks will be developed in full consultation with industry associations, peak industry bodies, environmental NGOs and respective facilities. The use of progress reports may be a useful method of keeping stakeholders informed, and will be considered.
 There can be no objective assessment of potential cost to industry until the EET has been finalised (A104). 	Handbooks will be developed so that the costs to industry are minimised through
• It is unlikely that EETs will be available for all industry sectors by the commencement of the first reporting year. Therefore, reporting should not be required until guidance on emission estimation techniques is available to industry (A71, A75, A87, A106, A109, A112, B24).	the use of appropriate emission estimation techniques and the provision of guidance as to their application. See also discussion of the costs to industry under comments on the impact statement, below. Priorities for handbook development are set out in the MoU. They have been largely determined by the requirements
 Industry should be consulted on the order in which Industry Handbooks are developed (B13). 	largely determined by the requirements of the NPI trials being conducted in Queensland and Western Australia. The TAP was not given a formal role in
 EETs should undergo appropriate review to determine their applicability in Australia (B28). More information is need on estimation techniques. Governments 	The TAP was not given a formal role in the development of these handbooks in recognition of the expertise that is held within jurisdictions and industry and the need for a cooperative approach to their development. The role of the TAP is to

COMMENT	RESPONSE
 should test the techniques on their own facilities and for diffuse sources before imposing costs on industry (A51). It will be essential to avoid the need for reporting facilities to individually devise estimation techniques (B14, B16). The TAP should be involved in developing techniques to determine emissions (A77). The TAP should provide recommendations to the NEPC for industry specific exemptions and deletions on the grounds of EETs not being technically available or being a demonstrable financial burden (A102, B18). Support for the Industry Handbook concept and the requirement for reporting only when a Handbook is produced is supported (B23). 	provide expert technical advice on health and environmental risk and not to recommend specific EETs, or exemptions related to the adequacy of or burden imposed by proposed EETs.
Reporting by individual facilities should not be required until relevant aggregated emissions data and/or contextual data are also available (A36, A42, A49, A51, A57, A64, A71, A75,A81, A85, A87, A94, A96, A97, A98, A99, A100, A109, A114, B1, B6, B13, B18, B23, B24, B28).	While aggregated emissions data will be available for most major population centres at the time that the first reports from individual facilities are included on the database, this will not be practical for some reporting facilities located outside these centres. The MoU sets out criteria for prioritising aggregated emission estimations, including the need to provide context for point source emissions data reported under the Measure. The core contextual data of maps, land use details, etc will be available for all regions prior to the publication of the first year of facility reports.
 Emissions monitoring: The level of accuracy required in estimating emissions needs to appropriately balance the cost and benefits (A85, A102, A109). 	To ensure that the costs of providing data to the NPI do not outweigh the benefits, the Measure specifically refers to 'estimation' of emissions rather than direct monitoring. Guidance will also be provided to industry to minimise the

COMMENT	RESPONSE
• A requirement for monitoring would significantly increase costs and may be unrealistic (A36, A77, A80, A102, A114, B14, B16).	cost of undertaking these estimations. In addition, the Measure also allows for reporting of existing more accurate data where this is available.
 Supports EETs but not actual monitoring of emissions where EETs are available (A6, A77). It is not clear whether expensive 	While the Measure refers to 'estimating' emissions, it specifically allows for reporting of more accurate data where this is available. This includes information already reported by licensed
emission monitoring equipment will be required (A96, A97, A98).	facilities. Industry handbooks will in no
 Increased requirements to monitor emissions under the NPI would be inappropriate (A115). 	circumstances require direct monitoring of emissions. While some firms may choose to directly monitor, or may do so
 Monitoring data, rather than estimations should be used where available (A13, A51, A102, A115). 	for some other purpose, the NPI will only require emission estimation rather than direct measurement.
 Information currently reported by licensed facilities should be used in the NPI, rather than duplicating reporting (A48, A77). 	
 How is the statement 'no additional monitoring requirements should be imposed on facilities for the purpose of providing data to the NPI' derived (A36). 	
Concern that the NPI will adopt a low standard for emission estimation (A34).	In each Industry Handbook, jurisdictions will agree on a minimum requirement
	for each EET. As far as possible, the EETs
	will reflect Australian conditions while recognising that overseas experience may provide a useful starting point.
Consistent estimation techniques should	The Industry Handbooks being
be used in all jurisdictions (A2, A38, A51, A77, A106).	developed in accordance with the Measure will assist estimation of both
	point source and diffuse source
	emissions and help to ensure consistency. Handbooks will contain
	agreed techniques to be used in all
	jurisdictions, except in those cases where a jurisdiction is satisfied that another
	technique would provide comparable data.
Point source and diffuse source emission	While every effort will be made to

INDUSTRY HANDBOOKS / EMISSION ESTIMATION TECHNIQUES

COMMENT	RESPONSE
data should have the same degree of accuracy (A87). The possible inaccuracy of diffuse emission data is a concern (A103).	ensure that diffuse source data is of comparable accuracy to point source data, the nature of diffuse source modelling is such that this will not always be possible.
The cost of developing emission estimation techniques should be shared by government and industry - licence fees should not be increased to pay for these costs (A87). The public should also share the cost burden (A104).	The Commonwealth is meeting almost all of the cost of preparing the required Industry Handbooks. It is not intended that licence fees will be increased as a result of the NPI.

GUIDANCE FOR COLLECTING REPORTING FACILITIES' DATA (Schedule C)

COMMENT	RESPONSE
 Standard reporting forms: The Measure should not specify a particular reporting form, it should only list the information required (A106). A common reporting format should be specified and used by all jurisdictions (A61, A65, A109). Collection of data should be nationally consistent (A81). 	Previous references to a reporting proforma have been removed from the Measure. This reflects the fact that different jurisdictions will require reporting in different ways in order to maximise efficiencies between NPI reporting and existing requirements for environmental reporting. The MoU specifies common reporting parameters but exact mechanisms used to collect the data may vary between jurisdictions to minimise duplication with existing reporting requirements.
Reporting of emissions should be on the basis of emissions from a facility, rather than emissions from individual stacks, pipes or other sources within a facility as was set out in Schedule C to the draft Measure (A102).	The Measure no longer requires reporting of emissions from particular sources within the facility.
Will there be a link between data provided to the NPI and data collected for other purposes? (A103).	The Measure aims to minimise any potential duplication of obligations on facilities by allowing jurisdictions to accept, for NPI purposes, similar emissions data that has been reported by facilities for other purposes.
There must be a sufficient phase-in period to educate and train all reporting facilities and collators of information. The cost of this education must be borne by the Commonwealth. Technical and	The Measure now includes a 2 year phase in period to allow industry and governments to establish reporting infrastructures and understand their obligations. Further, reporting is not

COMMENT	RESPONSE
analytical support should be also available to industry to assist in estimating emissions (A87). Workshops and guidance materials will be required to assist facilities to understand and comply with their commitments (A109).	required until an agreed industry handbook is available. The Commonwealth is not only meeting the costs of developing these handbooks to advise industry on how to estimate their emissions, but is also providing funds to State and Territory governments for liaison with industry.
Reporting should not be required on state of substance, type of emissions, or location of discharge point (A106).	On the basis that provision of this information could be onerous and of little benefit to the community, the Measure and MoU no longer include a requirement to report these details.
Forms for collecting data should include the name of a parent company (or companies) where this is applicable (A61).	This information is not considered necessary as part of the NPI. Clear identification of the source company will be included on the database.
Jurisdictions should call for voluntary information regarding the cost to industry of compiling NPI reports (B8).	This suggestion is valuable and would produce an improved information base for the October 1999 review of the Measure. The trials of the NPI currently being conducted in Queensland and Western Australia explicitly request this information.

GUIDANCE FOR COLLECTING REPORTING FACILITIES' DATA (Schedule C)

DISCRETION OF JURISDICTION TO REQUIRE OTHER FACILITIES TO REPORT

COMMENT	RESPONSE
• Jurisdictions should not have discretion to require a facility to report where it has not triggered a reporting threshold (A36, A64, A75, A84, A104, A106, A109).	This clause has been removed. However, the Measure now allows jurisdictions to accept additional emissions data where it has been voluntarily provided by industry.
 There are benefits in allowing jurisdictions the flexibility to require reporting from targeted facilities which have not triggered any thresholds (A34, A65, B3). 	

COMMENT	RESPONSE
Industry rather than governments should provide ANZSIC codes, geographic coordinates and accuracy codes (A106).	Governments are likely to be more able to provide this information than many individual facilities. Jurisdictions may choose to require this information from facilities.
 Data reliability: Industry, not governments, should be responsible for identifying the level of accuracy of the emission estimate (A106). The scale of data accuracy which is to be agreed between jurisdictions should be set out in order to ensure transparency (A36). An indication of reliability should be included with all estimates (A52, A77). Figures derived from emission estimates should be distinguished 	Under the final Measure and MoU, each Industry Handbook will include an indication of the data reliability associated with each EET. If the minimum acceptable EET is used by a reporting facility, the relevant jurisdiction will inform the Commonwealth that the data are of 'acceptable reliability'. If a more reliable EET, or direct measurement technique is used to produce the data, the relevant jurisdiction will inform the Commonwealth that the data are of 'more than acceptable reliability'.
from those based on actual amounts of chemicals (A77).	If a jurisdiction has agreed to the use of an EET which is not in the relevant Industry Handbook, the jurisdiction will inform the Commonwealth that the data are of 'acceptable reliability'.

ADDITIONAL INFORMATION SUPPLIED BY JURISDICTIONS

ASSESSMENT OF INTEGRITY OF REPORTED DATA

COMMENT	RESPONSE
 Assessment processes: There is an immediate need for discussion of the issue of what validation methods will be acceptable to the 'nominated agencies' (A89). 	Methods used for assessing the integrity of data will need to vary for different facilities and for different types of assessment (eg. rapid assessment of data integrity, full validation).
 Transparency of the auditing process is essential (A53). 	Some detail of approaches to be used is contained in the MoU, and it is intended that all assessments will be done in a
 Information used solely for the purposes of confirming or validating emissions data should be publicly available (A3). 	cooperative manner between the jurisdiction and the facility. While there needs to be an agreed approach to these assessments, it would
 There is a need for clear data validation processes to ensure that data is displayed consistently and to minimise the potential for 	be inappropriate to make the assessment itself publicly available in many cases. The inclusion of information used to assess the integrity of data may be

COMMENT	RESPONSE
misinterpretation of data resulting in unwarranted damage to companies' reputations (A5, A36, A77, A89).	legally prejudicial or commercially confidential and is unlikely to assist in achievement of the goals of the NPI.
 Data gathered for the purposes of validation should be automatically considered confidential without the need for further justification (A95, A109). It appears that information made 	Information provided to States and Territories for assessment purposes will be treated as confidential and will not be passed to the Commonwealth for use in the NPI unless the occupier consents to its release or the jurisdiction is legally
available to the States for validation purposes can then be passed on to the Commonwealth. This is inappropriate (B8).	compelled to release it.
The term 'validation' infers that the data will have a sense of legal force. This will be difficult as the data will be only estimates. Replace 'validation' with 'verification' (A106).	In recognition of this, and that jurisdictions should have a range of assessment options from targeted or random audits to desk-top analysis, the Measure now requires jurisdictions to 'assess' the integrity of reported data rather than 'validate'.
Data should not be released until validated (A36). In order to ensure community confidence in the data provided by industry, resources will be required to validate data (A39, A65).	The MoU sets out the processes by which jurisdictions will assess the integrity of reported data. The processes are designed to balance the need for quality data and the costs of ensuring this. In the first years the emphasis will be on ensuring that all facilities which are required to report do so and that the information has been provided in accordance with the relevant industry handbook or an approved alternative.
 Funding of assessments: All validation costs should be carried by government agencies (A51, A109). How the validation process will be funded is unclear (A77, A95). 	The MoU sets out the agreed funding arrangement for implementation of the NPI. Government agencies will be bearing substantial costs associated with the assessment of data integrity. Any additional costs on industry, in providing further raw data for the purposes of assessment of emissions data, should not be onerous. Reporting facilities should ensure the data they provide are as error free as possible and represent the facility's best efforts to apply the relevant EET.

ASSESSMENT OF INTEGRITY OF REPORTED DATA

COMMENT	RESPONSE
Resolution procedure is needed when there are discrepancies between reported and random validation data (A77).	The MoU now provides that in cases where there is a dispute between a jurisdiction and a reporting facility over integrity of the data, the data shall be passed to the Commonwealth with an annotation that the data are disputed. The jurisdiction and the facility will consult in an effort to resolve the dispute.
It is not clear how the Commonwealth intends to comply with the Measure, particularly with regard to validation of data (A106).	The proposed Commonwealth NEPC Implementation Act will provide a mechanism for the Commonwealth to meet its obligations under the Measure.
Criteria should be established which require the monitoring of compliance with reporting requirements of facilities which trigger the thresholds (A110).	In the first years the emphasis will be on ensuring that all facilities which are required to report do so and that the information provided has been provided in accordance with the relevant industry handbook or an approved alternative.
 Data retention period: Retention of data for 3 years, required to validate emission estimates, is excessive (A29). Data should be retained for longer than 3 years, perhaps as long as taxation records (A81). 	In order to ensure the integrity of the NPI system, a three year retention period is considered appropriate. The additional costs in maintaining records for this period will be minor.
 Requirements for retention of data for validation purposes should be consistent with other environmental reporting requirements (two years in Tasmania) (A35). 	
The impact statement fails to provide information on the costs to industry involved in validation, the chance of being involved in a validation process, and details of validation methodologies to be used (A36).	Processes for assessing data integrity are one of the implementation issues which were considered as part of the development of the MoU. The draft MoU released for key stakeholder consultation formed a basis for consultation with stakeholders over the implications of the proposals for data validation.
The status of jurisdictional officers when visiting sites to validate data needs to be clear (A84).	The status of jurisdictional officers when visiting sites should be made clear by the individual jurisdictions as it will depend upon the implementation mechanism

ASSESSMENT OF INTEGRITY OF REPORTED DATA

COMMENT	RESPONSE
	chosen by a particular jurisdiction.
 Validation requirements prior to release: The Measure infers that data will not be released until validated. Jurisdictions may not validate all data they receive and there should not be a public expectation that this will occur (A106). The key stakeholder version also implied that information would not be released until after it had been completely validated, and raised concerns that data for a year may be released progressively as validation occurred (B23). 	The draft Measure's reference to the need for data validation prior to release was removed to address this concern. It is not believed that the provision in the key stakeholder and final versions implied the need for validation of all data prior to release of the information. As required by the Measure, all data collected for a given year will be released together by 31 January in the following year.

ASSESSMENT OF INTEGRITY OF REPORTED DATA

INFORMATION FROM REPORTING FACILITIES SUPPLIED TO THE COMMONWEALTH

COMMENT	RESPONSE
Facility occupiers and jurisdictions must	The Measure now provides that the
furnish information by set times. There	Commonwealth will release, by 31
is no corresponding deadline set for the	January, information gathered for the
Commonwealth to establish the database	preceding financial year.
and publish the information (A106).	

AGGREGATED EMISSIONS ESTIMATION

COMMENT	RESPONSE
 Aggregated emissions: How will jurisdictions deal with discharges of pollutants from facilities which do not come within the definition of 'reporting facility'? (A7). The relationship between reporting thresholds and non point source emissions require greater clarification (A110). 	Clause 20 of the Measure sets out the requirements for jurisdictions to provide estimations of aggregated emissions. These are defined to mean emissions from facilities that are exempted from reporting, facilities which do not reach a reporting threshold, and from diffuse and mobile sources. Thresholds relate to the requirement for facilities to report point source emissions. All other emissions will be included in aggregated emission estimations.
Importance of aggregated emissions:Aggregated emissions data are essential to gain a real understanding	While aggregated emissions data will be available for most major population centres at the time that the first reports

AGGREGATED EMISSIONS ESTIMATION

COMMENT	RESPONSE
 of the significance of point source emissions (A110), and must be available before any related point source emission data are released (A36, A42, A49, A51, A64, A71, A75, A77, A85, A87, A94, A96, A97, A98, A99, A100, A109). Insufficient priority has been given to 	from individual facilities are included on the database, this will not be practical for some reporting facilities located outside these centres. The importance of aggregated emissions data is recognised, however there are not sufficient resources available to provide complete coverage of Australia from the
 diffuse sources of environmental degradation (A77, A86). Particularly in the early stages of the NPI's operation, aggregated emissions estimations will be very important to place industry reports in context. 	commencement of the NPI program. The MoU sets out criteria for prioritising aggregated emission estimations which include the need to provide context for point source emissions data reported under the Measure.
 (A36). Strengthened focus on aggregated emissions in the key stakeholder version is supported (B23). 	
 Aggregated emissions estimation techniques: Guidance should be provided on methods of estimating aggregated 	The Aggregated Emissions Handbooks being developed under the MoU (see Schedule B1) will assist estimation of aggregated emissions. Handbooks will contain agreed techniques to be used in
 emission data to ensure national consistency (A7). It is not clear how aggregated emissions estimates will be made. A detailed protocol on how estimates will be made for aggregated emissions data in discrete geographical areas should be provided to State agencies. A 	contain agreed techniques to be used in all jurisdictions, except in those cases where a jurisdiction is satisfied that another technique would provide comparable data. These estimation techniques will require a minimum level of data reliability so that comparisons between facility reports and aggregated emissions are possible. The Measure provides for jurisdictions to
 catchment based measure is preferred for land and waters (A77). Concerned that aggregated emissions information will be of limited value and not comparable to industry reports because the estimation techniques are unknown (A87). 	cooperatively develop, or cause to be developed, aggregated emissions data for substances specified in the reporting list, in specific regions within their jurisdictions at particular times.
 Biogenic sources of reportable substances: NPI should include data on emissions from natural causes (A27). There is no requirement to measure or 	The definition of 'contextual information' in the Measure has been amended to include a reference to provision of information relating to the common anthropogenic and other

AGGREGATED EMISSIONS ESTIMATION

COMMENT	RESPONSE
 report natural sources of pollutants. Excluding them will lead to incorrect assumptions about the significance of the risk from anthropogenic sources (B18). Regional variations in naturally occurring, yet listed, substances should be able to be provided to a jurisdiction (A36). 	sources of a substance. The MoU (clause 5.3) notes that jurisdictions will work towards inclusion of information on biogenic sources of pollutants. It is recognised that information regarding biogenic sources is valuable, however there are a range of technical difficulties with estimating biogenic sources of many substances.
 Funding and development responsibilities: Provision of diffuse source data should be a Commonwealth responsibility (A106). Estimation costs should be negligible (A34). Guidance should be provided on responsibilities for providing estimates, and equity of implementation costs (A60, A61, A65). For those jurisdictions which do not have the facilities to undertake aggregated emissions estimation in- house, who will pay for the work done by other jurisdictions or the private sector? (A77). 	The MoU defines the responsibilities of each jurisdiction with regard to estimating aggregated emissions in priority airsheds and catchments. In addition, the MoU sets out the agreed funding arrangements between jurisdictions and the Commonwealth. Handbooks will set out agreed approaches to estimation throughout the country, and may involve some specific variations to meet the needs of geographic areas where appropriate. As discussed in relation to thresholds, aggregated emissions are being conducted by Governments to avoid inequitably placing estimation costs onto small businesses and other small sources of emissions. It is anticipated that the costs of developing aggregated emissions will be significant. The MoU sets out the agreed funding arrangements for implementation of the NPI including aggregated emission estimations.
Emissions from contaminated sites which are not part of a reporting facility, and 'orphan' sites such as abandoned mines, should be treated as part of the aggregated emissions estimates (A52).	Estimation of emissions from these sources is difficult. Their inclusion will be investigated as part of the development of the handbooks for aggregated emissions estimation.

ADDITIONAL INFORMATION SUPPLIED TO THE COMMONWEALTH

COMMENT	RESPONSE
Reporting facilities should be recognised as a source of additional information, such as facilities which use coal seam methane gas or the production of gas from a landfill as energy resources, (A72) and should be encouraged to supply such information to be included on the NPI (A84).	The submission of additional information is encouraged. The Measure states that nothing prevents a jurisdiction from accepting additional data, however, to ensure national consistency, the data must be in an agreed format and would need to proceed through jurisdictions in the same way as other reportable data.
The inclusion of additional information provided by a facility for the NPI database should not be optional. Any such information should be included on the NPI database (with any qualifiers in relation to accuracy (B6).	It is intended that any additional information which is appropriate to the NPI would be included on the database, subject to the conditions noted above.

CONFIDENTIALITY

COMMENT	RESPONSE
 Process for confidentiality claims: A transparent process is required for dealing with claims by industry regarding the commercial confidentiality of data (A14, A15, A30, A31, A46, A47, A50, A58, A61, A77, A83, B29). Clear and nationally consistent criteria for protection of commercially sensitive information are needed (A13, A51, A55, A94, A95, A96, A97, A98, A99, A104). It is a concern that different systems in different jurisdictions may lead to valuable commercial intelligence being made available where confidentiality claims are very strictly assessed (and rejected) (B13). Disputes should be subject to appeal (A9, A15, A50, A61, B29). If claims for commercial confidentiality are challenged by a third party, the claimant should be advised of the challenge and be given the opportunity to respond (A66). 	Clause 24 of the Measure provides that the relevant jurisdiction will assess claims of commercial confidentiality in accordance with procedures agreed between participating jurisdictions. In the MoU, the jurisdictions agree that decisions regarding commercial confidentiality will be subject to the normal review mechanisms available in the relevant jurisdiction. The MoU also provides that jurisdictions will share generic information on their assessment of claims with the intention of encouraging consistency of approach in different jurisdictions. Jurisdictions have also agreed in the MoU to provide the claimant with a decision in writing regarding the claim, and to attempt to determine the claim within two months. Claims of confidentiality will not be assessed in a way which is biased against industry.

CONFIDENTIALITY

COMMENT	RESPONSE
• Jurisdictions refusing to grant a claim of confidentiality should provide the claimant with clear and prompt reasons for refusal (A110). All claims should be assessed by a central national panel or independent body (A84, B11).	
 A transparent process is required for dealing with claims by industry regarding the commercial confidentiality of data (A58). 	
 Confidentiality provisions seem to be skewed against commercial interests (B13). 	
 Data from sites granted confidentiality: Commercial confidentiality should not be a accepted as a reason for not reporting data (A9, A30, A34). Public interest needs to be taken into account (A46, A47, A50). Emission data should still be reported to jurisdictions even if subject to a commercial confidentiality claim (A106). Data for which commercial confidentiality has been claimed should not be provided to jurisdictions until the claim has been assessed (A52, A110). Confidential data should not to be publicised, sold or released (A32, A52, A77, A102). 	Clause 24 of the Measure provides that the onus is on occupiers of facilities to satisfy jurisdictions that any claim of commercial confidentiality is justified and that disclosure of information may result in loss of a genuine trade secret. Even if commercial confidentiality is claimed, a facility is still required to report all data. In assessing such claims, jurisdictions will weigh the potential commercial losses against the public interest in disclosure of the information. If the claim is granted, it is envisaged that the information for which the claim was granted would be included on the database, but in a form that preserves the confidentiality granted. The MoU requires jurisdictions to report on their determinations on commercial confidentiality claims as part of their
 A public record should be maintained on the NPI database of those facilities not required to report on the basis of confidentiality (A13). 	contribution to the NEPC annual report on implementation of the Measure. These reports will include information on the names of facilities granted commercial confidentiality. Clauses 24, 27 and 28 of the Measure require that confidential data be kept secure. Clause 24 of the Measure provides that, if a claim has been made, the information concerned will not be

CONFIDENTIALITY

COMMENT	RESPONSE
	made publicly available unless and until the claim has been assessed and refused.
In addition to national security and commercial confidentiality, it should be possible to claim confidentiality on the basis of potential threats (eg. terrorism/extortion) to the general security of a facility arising from providing public information on storage of substances (A29).	The NPI will not include information on the quantities of chemicals stored at a facility. The NPI will only include information on emissions from a facility.
Successful claims for commercial confidentiality should be subject to review after a set time (eg. two years) (A61, A77, A81). The Measure should specify whether grants of commercial confidentiality status are only valid for a particular period (A66).	The MoU requires jurisdictions to report on their determinations on commercial confidentiality claims as part of their contribution to the NEPC annual report on implementation of the Measure. These reports will include information on the proposed date of review of each grant of commercial confidentiality status. On the basis of these reports, the review of the Measure in 1999 could examine the need for the Measure to stipulate a set period for reviewing commercial confidentiality grants.
Inclusion on a public database of information on emissions from individual electricity generating facilities may allow competitors to infer information about how much electricity is generated and under what operating conditions. To protect confidentiality, the exact location of individual chimney stacks should not have to be reported (A94, A96, A97, A98, A99).	The Measure now requires reporting of emissions from the facility rather than from a particular point within the facility. However, if there are concerns about commercial confidentiality, the occupier of any facility will be able to lodge a claim for commercial confidentiality status if they believe that they have a valid case.
There is a danger that firms could lose their intellectual property rights through information provided to the NPI. The Measure should include a specific provision to protect pre-existing intellectual property rights (A6).	Intellectual property rights can be protected through the granting of claim of commercial confidentiality.

ENFORCEMENT PROVISIONS

COMMENT	RESPONSE
 Consistency of enforcement: There should be mechanisms for enforcement in the Measure otherwise enforcement will be left to jurisdictions (A14, A46, A47, A58, A61). It is arguable that dictating enforcement practices is outside the scope of the Measure as it may be implemented differently in each jurisdiction. Agreement could be reached through the MoU on enforcement practices (A106). There should be a right of appeal before enforcement action is taken (A77, A102). 	While the guidelines on enforcement in the Measure sets out the preferred enforcement options for jurisdictions, ultimately the method of enforcement will be a matter for the individual jurisdiction. Once Measures are made by the NEPC, each jurisdiction is responsible for implementing them, using its own appropriate legal mechanisms. These enforcement mechanisms adopted by the jurisdictions would be subject to normal appeal mechanisms. While jurisdictions may have the option of prosecuting, it is expected that they will embrace the principles in the Measure and hence there should be some enforcement consistency.
	The enforcement provisions of the Measure provide guidance to jurisdictions, rather than imposing mandatory obligations.
 Enforcement mechanisms: Enforcement of adequate penalties should be implemented by all States (A3, A14, A13, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A30, A31, A50, A53, A58, A62, A65, A70, A81, A83, B2). For example, asset stripping and imprisonment (A34). 	The purpose of the NPI is to gather information, and the enforcement provisions have been designed to encourage facilities to supply emission estimates for inclusion on the NPI. Stronger sanctions would not be appropriate as any non compliance is failing to provide information, not necessarily causing direct environmental
 Enforcement provisions in the Measure are appropriate at this stage (A29, A35, A75, A109). The draft Measure places emphasis on enforced compliance rather than encouragement, which tends to foster 	harm. However, jurisdictions may choose to introduce other (or adopt existing) forms of sanction to enforce the Measure if they believe this is appropriate. Experience from jurisdictions indicates
 an adversarial approach (A87) Fines and penalty options available under current legislation should not be available to enforce the NPI (A84, B13). 	that public naming is a sanction of considerable force.Enforcement provisions will be necessary to impose sanctions on the facilities which choose not to cooperate. It is expected that there will be few such

ENFORCEMENT PROVISIONS

COMMENT	RESPONSE
• In cases of repeat offences the preferred enforcement action must be monetary or custodial penalties (B3, B17).	facilities.
• Enforcement provisions need to be strengthened (A55).	
• There must be a clear hierarchy of sanctions including daily on the spot fines (B29).	
• Public naming for breach of reporting requirements is not adequate enforcement as some businesses are not reliant upon public goodwill (A13, A30, A39, A47, A50, A67). It should be an adjunct to prosecution (A81).	
 There should be a uniform enforceable NPI (A9, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A30, A31, A46, A50, A51, A58, A62, A67, A81, A83, B2, B32). 	
 Reporting should be voluntary as validity and accuracy of the data cannot be verified (A32). 	
 Phase in of reporting action: Enforcement should be waived for 3 years for large and complex facilities (A102). 	Enforcement action in relation to a breach of requirements should be consistent irrespective of the size of a facility.
• Penalties should apply from commencement of reporting - lack of penalties in first year removes incentive to report (A67, B29).	A phase in of enforcement measures has been allowed in recognition of the need for industry and governments to establish reporting infrastructures which will enable them to provide consistent
 No penalties during the reporting phase in period is supported (B6) 	and accurate data to the NPI.
The Measure should provide incentives to encourage compliance including recognition of good performance (A87).	The database will be updated annually and hence any reductions which occur will be apparent. Overseas experience shows that such reductions become widely acknowledged.
If jurisdictions fail to provide aggregated emissions data, they should be subject to the same enforcement action (ie. naming) as would a facility which fails to report	As part of NEPC's annual report, all member jurisdictions need to submit a report on implementation of Measures. These reports will include information

ENFORCEMENT PROVISIONS

COMMENT	RESPONSE
	regarding progress in the development of aggregated emissions data.

LEGAL STATUS OF DATA SUPPLIED TO THE NPI

COMMENT	RESPONSE
 There should be mechanisms to protect the occupier from information supplied under the Measure being used to provide evidence for prosecution under common law (A102). This restriction should be widened to 	The Measure cannot provide guarantees that information from the NPI will not be used in common law proceedings. It is not envisaged that estimations provided to the NPI would carry significant evidentiary weight to be used in prosecutions. However, jurisdictions
ensure that NPI data cannot be used as evidence in any legal proceedings otherwise this will be counterproductive to full and frank disclosure by companies (A73).	cannot be prevented from seeking further information under other legislation in those cases where NPI estimates suggest that there may be a problem.
 Support this restriction on use of data provided solely for NPI purposes (A48, A51, A109). 	
• Disagree with this restriction on use of NPI data (A34, A81).	

SECURITY OF DATA

COMMENT	RESPONSE
Information should not be altered without the permission of the provider (A36).	Data will only be altered if errors are detected. Such alterations will be carried out in cooperation with the provider. The MoU now provides that in cases where there is a dispute between a jurisdiction and a reporting facility over integrity of the data, the data shall be passed to the Commonwealth with an annotation that the data are disputed. The jurisdiction and the facility will consult in an effort to resolve the dispute.
What comeback is there for data providers where data is released prematurely? (A36, A75).	There is no intention that the data be released prematurely, unless the jurisdiction is legally compelled to release it. In the unlikely event of premature release of data, the

SECURITY OF DATA

COMMENT	RESPONSE
	jurisdiction would be expected to include in its annual report to its Parliament, an explanation of the circumstances surrounding the release. In the event of a demonstrable failure of security, data providers may be able to seek damages from the relevant jurisdiction.
Under what circumstances would a jurisdiction be legally compelled to release information? (A32, A102).	Jurisdictions may be legally compelled to release information under, for example, freedom of information legislation.
More detail is needed about security of data, for example, data supplied in confidence for the purposes of validation (A109).	How data will be secured will depend largely on the implementation mechanism chosen. However, the Measure is clear in the requirement for each jurisdiction to provide adequate data security.

ACCESS & PROVISION OF NPI DATA TO THE PUBLIC

COMMENT	RESPONSE
Information collected under the NPI should be presented on a GIS type system (A81, A112). Geographic location by latitude and longitude is insufficient. Location in relation to landmarks is more appropriate (B3).	Clause 31 of the Measure specifically provides for the information to be presented on a GIS. This will enable the NPI database to be viewed by locality, substance, reporting facility, activity or any combination of these factors. The GIS generates maps showing the facility within the context of major landmarks and other features.
The reporting of emissions will require contextual information if the public is to be fully informed and able to interpret the data and if the desired benefits of the program are to be achieved (A36, A77, A95, A100, A101, A104, A111).	Clause 31 of the Measure envisages that the Commonwealth will provide contextual information on the NPI to assist in interpretation. The definition of contextual data in Clause 3 of the Measure specifies that this contextual information includes information on chemical characteristics, health and environmental risks, sources, and common uses. The MoU details the type of contextual information which other jurisdictions agree to provide. for example: maps, land use details, water catchment boundaries and urban infrastructure.

COMMENT	RESPONSE
Circumstances relating to free public access and the sale of information need to be defined (A77, A81, A109).	Clause 31 of the Measure now explicitly specifies that the Commonwealth is not allowed to recover any costs associated with the provision of emissions data, supporting data, contextual information or aggregated emissions data. The Commonwealth may only seek to recover costs associated with information that has been derived from further processing of these data.
 Information relating to cleaner production and waste minimisation should be provided on a facility specific basis (A50). NPI could disadvantage firms that assist waste management by recycling or reprocessing wastes produced by others by showing high levels of emissions. This could be offset by allowing the inclusion of contextual information explaining the operation of the facility, etc (A69). 	The Measure now allows jurisdictions to accept additional information for inclusion on the NPI, where it has been provided by industry. Facilities may also wish to provide 'hot links' from the NPI database to their own home page outlining specific environmental details.
 Facilities should also be able to provide information on their environmental improvement programs (A104). 	
The NPI should explicitly give the community the right to know about pollution (A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A30, A31, A53, A77, A81, A83, A93).	The Measure specifically recognises the importance of the community right to know by specifying in its goals the dissemination of information to all sectors of the community and the establishment of the database in order to provide publicly accessible and available information.
 Information presentation: Information and data must be presented in a clear, meaningful way, in its proper context and in way which is not misleading (A13, A32, A48, A77, A82, A87). Making data available in 'plain language' will not prevent some sections of the public from misusing or misconstruing the data (A32, A66, 	The Measure requires that information and data is presented in plain language, is simply laid out, and includes sufficient contextual information to assist in its interpretation. Inclusion of information on the database which gives the most complete picture of emissions and provides sufficient context to understand this information, should minimise the potential for

ACCESS & PROVISION OF NPI DATA TO THE PUBLIC

COMMENT	RESPONSE
A77, A80).	misunderstanding or misuse of emissions data.
Each reported geographical area should have a statement defining its present status with respect to whether the area is highly, moderately or not contaminated with the NPI substances (A77).	At this stage, it is not intended to include overviews of contamination or emission levels for a geographic area in the NPI. Such overviews could, however, be produced from the information made available under the NPI database (although care would obviously need to be taken in comparing different types and levels of emissions in different environments).
The Measure should include a firm annual release date for NPI data (A11).	The clear intention, as set out in the Measure, is for the Commonwealth to release data by 31 January of each year.
A publicly available guidebook to the NPI, detailing forms of chemicals, their toxicity and environmental impacts would be useful (A48, A77).	It is intended that this information would be included on the publicly accessible database as contextual information.
Data should be provided to local libraries and educational institutions free of charge (A67).	The Measure envisages charging only for information which required special processing or some other form of value- adding. The normal dissemination of data to libraries and organisations through the internet or CD-ROMs will not incur a charge.
CD-ROMs should also be provided to industry and employee associations, and environment and community groups (A81).	All these groups will be able to access NPI information whenever required through the internet.
The Commonwealth's claim to 'assert intellectual property rights' over information with a commercial value is an undefined threat to the community's right to know and potentially compromises access to NPI data (A14, A15, A30, A31, A46, A47, A50, A58, A61, A83, B29).	The Measure now explicitly specifies that the Commonwealth is not allowed to recover any costs associated with the provision of emissions data, supporting data, contextual information or aggregated emissions data. The Commonwealth may only seek to recover costs associated with information that has been derived from further processing of these data.
The NPI should follow the approach adopted by the Netherlands and restrict public access to data relating to individual facilities. The public database	The system in the Netherlands is not designed for public dissemination of information in the same manner as intended under the NPI. One of the main

ACCESS & PROVISION OF NPI DATA TO THE PUBLIC

COMMENT	RESPONSE
should only include data from facilities in an aggregated manner (A35).	goals of the NPI is to provide all sectors of the community with easily accessible information on emissions, both in an aggregated form and from individual facilities.

ACCESS & PROVISION OF NPI DATA TO THE PUBLIC

CONTEXTUAL DATA

COMMENT	RESPONSE
Reporting under the NPI should assist wider community understanding of relative environmental performance, rather than merely being a technical list of emissions. It should also assist understanding of how substances interact through synergistic processes (A60).	Clause 31 of the Measure specifies that information disseminated on the NPI database should include contextual information to assist in its interpretation. This information will include inform- ation on the chemical characteristics and health and environmental effects of substances. The Measure also specifies that the database should include, where practicable, references to other relevant data sources.
The Commonwealth's obligation to provide contextual information should be included in the Measure as a 'protocol' rather than as a 'guideline' (A75, A109).	The NEPC Act defines what is a 'guideline' and what is a 'protocol', and the obligation to provide contextual data most closely fits the definition of a 'guideline'. Regardless of where it is included in the Measure, the Commonwealth's obligation to provide the data is clear.
 Importance of contextual information: Contextual data must include estimated ambient concentrations and details of health and environmental risks at concentrations which are relevant (A4, A36, A71, A77, A101). Information should also be provided on the relative contribution of different sources (A36, A40, A77, A118). Contextual information should not be included because it could be used to mislead and manipulate the public. The NPI should be a simple inventory of pollutants emitted by industry (A62). 	It is envisaged that the NPI will contain sufficient contextual information about the reported substances to enable judgements to be made about health and environmental risk. The definition of contextual data in Clause 3 of the Measure specifies that information on sources and risks will be included. Other information, such as ambient ground level concentration data, may be supplied by jurisdictions or may be modelled from inventory data and presented through the GIS display maps.

CONTEXTUAL DATA

COMMENT	RESPONSE
• Strengthened focus on contextual data in the key stakeholder version is supported (B23).	
Contextual data should give information on standards; how they are set, how they are applied, and why there are different standards for different purposes (A13).	Clause 3 of the Measure defines contextual information as information which will contribute to public understanding of emissions data. It is envisaged that this will include information on relevant standards, particularly standards included in other NEPMs.
Contextual data should indicate that different forms of the generic compounds (eg boron) have different health and environmental effects? (A66, A77).	Clause 3 of the Measure defines contextual information as including information on the chemical characteris- tics and health and environmental effects of substances. Where relevant, this information will note the different health and environmental effects of different forms or species of the listed substances.
Contextual information should be developed with input from relevant industry bodies (A57). States and Territories, and not the Commonwealth, should provide the contextual data (A77).	While the Commonwealth will meet the costs of developing contextual data, it is envisaged that the development of this data will involve input from a range of interested bodies.
The database should include information, where available, on licensed limits (A80, A118) and/or assimilative capacity of the receiving medium (A80).	The Measure defines contextual information as information which will contribute to public understanding of emissions data. It is envisaged that this may include, where available and appropriate, information on licensed limits and/or assimilative capacity of the receiving medium.

RIGHTS OF THIRD PARTIES

COMMENT	RESPONSE
 There should be clear, firm and uniform national third party rights to ensure community access to information (A14, A15, A30, A31, A34, A35, A46, A50, A53, A58, A81, A83, B29). Application of State and Territory legislation will result in lack of consistency and will not guarantee the community's right to information (A30, A46, A47, A55, A61, B32). This is particularly true where there are no applicable appeal mechanisms in jurisdictions (A35, A56). 	By their nature, all elements of National Environment Protection Measures require implementation through the legislative regimes of each State and Territory. As there are differences in the administrative law regimes in different jurisdictions, it is inevitable that there will be some variation in the handling of third party rights. As a result, there will be variation in the factors that need to be taken into account in decisions relating to third party rights. Although a balance of costs and benefits is appropriate for NPI purposes, the
• The approach adopted by the Measure is supported. State and Territory legislation provides adequate opportunities for third parties (A109).	Measure needs to ensure that it does not contradict the factors that legislation in the jurisdictions requires to be taken into account.
• The following sentence should be added from the impact statement "as a general principle, such mechanisms should aim to balance the costs and benefits to society of particular activities" (A79).	It is not envisaged that the estimations of emissions provided for the purposes of the NPI would carry sufficient evidentiary weight to be used in litigation.
• There should be no third party rights using information from the NPI (A51).	
• Third party rights could lead to results of the NPI being used in nuisance litigation (A102).	

COMMENT	RESPONSE
Note that the Technical Advisory Panel (TAP) has provided an updated report on the development of the NPI reporting list (February 1998) which incorporates concerns and issues raised in the submissions received by the NEPC and the TAP's own, further deliberations.	
TAP process	
The decisions made by the TAP were not transparent (A76, A66).	The complete text of TAP decisions was made available in the TAP report released on 12 June 1997. This included all raw data used and full background to decision making processes. In addition, TAP has reviewed the report extensively and its revised report is available separately.
There has been inadequate emphasis on scientific rigour in the process of developing the Measure, in particular given that the TAP and advisory committee deliberations have not been transparent and accessible to the public (A87).	NEPC has placed significant emphasis on the scientific basis of the Measure. The TAP process involved a range of experts, and their deliberations were subject to public comment through the draft TAP report released for public consideration at the same time as the draft Measure. Most respondents appeared to be well served by the transparency of the report.
The composition of the TAP and the effective work of its chairman is supported. The terms of reference for future TAP should be revised to allow for greater openness and transparency (B6).	Support for the TAP is appreciated. Terms of reference for a future TAP will be determined by NEPC when there is a need to re-establish such a group.
Impact statement discussion of threshold	issues
The concept, definition and levels of thresholds are not adequately explained in the impact statement (A94, A96, A97, A98, A99).	The impact statement attempted to provide a clear explanation of the rationale used in developing thresholds. The report of the TAP provided more detail on the reasons for the selection of particular thresholds for particular substances.
The impact statement does not adequately explain the scientific basis for the proposed reporting list (A36). The impact statement should include a	The impact statement attempted to provide a summary of the process used to develop the reporting list, and referred interested readers to the greater detail provided within the TAP's report (see p.20 of the impact statement). It would be an extremely complex and

COMMENT	RESPONSE
'risk-return' profile comparing the benefits and costs of different threshold levels (A110).	costly exercise to develop cost-benefit ratios for each of the possible configurations of thresholds. The thresholds proposed reflect a balanced approach to ensuring that the NPI only requires reporting from facilities which have the potential to emit significant volumes of the pollutants identified on the reporting list.
Definitions	
Article definition should be made clear (A29). Exclusion phrases questioned in definition of use - "permanently incorporated" is not defined, and the time scale of permanency is not defined. Recommend that exclusions (i) and (ii) be dropped from the determination of the reporting threshold, as the NPI should be able to follow the flow of a listed substance through the Australian environment (A76).	The definition of 'article' and its role in the NPI has been clarified (see discussion of definitions, above). Further definitions are regarded as being unlikely to aid sensible interpretation. The NPI has consistently focussed on emission of substances in a form that is likely to lead to adverse environmental impacts. The exclusions are consistent with this approach.
Thresholds	
 Threshold levels and design: Thresholds may not detect small firms which could be large emitters (A77). Thresholds currently target single large facilities - emissions from an aggregate of small facilities are just as important (A32). Thresholds will trigger reporting by many more facilities than indicated (A109). Review of the method for determining thresholds is recommended (A109). 	Thresholds will obviously not capture all large sources of emissions, and will often require small sources of emissions to report. They are useful, however, because they allow the NPI to target facilities which use large volumes of substances and are therefore likely to be significant emitters of those substances. To ensure the capture of all sources of emission, the Measure provides for collection and display of aggregated emissions data from all sources including small sub-threshold facilities. The thresholds are designed to exclude small business from individual reporting. On the basis of further examination, some revisions have been made to the thresholds and the definition of 'reporting facility' to ensure that this is the case. The potential number of reporting

COMMENT	RESPONSE
	development of the Measure. On the basis of the available information, it is now estimated that there will be approximately 3,300 reporting facilities. Of these facilities only a very small number (if any) will be firms which employ fewer than ten people. The 1999 review of the Measure will examine whether any changes should be made to the thresholds in the light of experience with the Measure.
Determining whether reporting is	Individual facilities have the primary
 required: No direction is provided on the manner in which jurisdictions will determine whether a facility needs to report (A13). Handling thresholds are not appropriate for the NPI. Being required to report to the NPI should be on the basis of the actual risk posed by a specific facility's emissions (A2, A106, A107, A3, A6, A76, A35, A48, B7). For many facilities, assessing whether or not they meet a threshold will be difficult and expensive (B13). 	obligation for determining whether or not they exceed the thresholds and therefore need to report. Industry Handbooks will provide guidance to assist industry in determining and meeting their reporting obligations. In developing the handling (or 'use') thresholds the TAP considered that simplicity was important as it wished to remove the need for facilities to first estimate their emissions to determine whether or not they have to report. This means that the thresholds remain somewhat arbitrary, but do serve to identify those facilities with the potential to generate significant emissions.
 Water and Sewage Treatment Plants (W/STPs) will find it difficult to apply the usage thresholds or report under the NPI due to their 'use' of substances. Use of existing licence parameters is suggested (A103, A112, A115). 	A small minority of facilities is expected to face difficulty in assessing whether they exceed a threshold. These firms will be assisted by Industry Handbooks, and by jurisdictions in making that assessment. The application of the NPI to W/STPs has been considered. The use of existing licence parameters was considered to be inappropriate given the variation across States and Territories. The water industry will be consulted as part of the development of the relevant Industry Handbooks. With regard WTPs it is noted that use of chlorine (or hypochlorite like substances) and ammonia would trigger

COMMENT	RESPONSE
	the usage threshold for chlorine. However the facility is only required to report its emissions of chlorine or ammonia. This does not include the chlorine or ammonia incorporated into water and released at a later stage by use somewhere else.
 Concentration thresholds and substance levels in input products: "De minimis" concentration thresholds should be included to simplify the treatment of trace contaminants in emissions, eg. coal and other naturally occurring materials. (A28, A29, A37, A38, A51, A102, A109). Industry may not always be aware of or be in a position to identify reportable substances in their raw materials or consumables (A87). 	TAP has considered the use of concentration thresholds, including de minimis concentrations. TAP notes that while a good idea in principle, its application complicates the thresholds assessment process. However, it was considered that although difficult to apply more generally, the intent behind "de minimis" should be supported. On this advice the draft NEPM now incorporates the concept that occupiers would not be considered in breach of reporting obligations in cases where they could not be reasonably expected to know that a substance was contained in a proprietary mixture or was a contaminant of feedstocks.
 Emission-based thresholds: Emission thresholds should be excluded from the NPI (A84). Reporting should not be required where emissions are negligible (A48). An exemption from reporting could be granted on the basis of emissions being below a threshold level (A77). 	The reporting thresholds are designed to minimise the need to estimate emissions unless significant quantities of a substance are being handled or produced. This is because in most cases, assessment of the need to report is more easily and cheaply assessed on the basis of use thresholds. Only one threshold category relies on an emissions threshold. Category 3 applies to total nitrogen and phosphorus and relates to a certain amount, 15 and 3 tonnes respectively, of that substance being directly emitted to surface water. TAP recommended that this particular threshold was the best method for determining whether a facility should report on its emissions of total nitrogen or phosphorus. Accordingly, an emissions threshold has been retained in category 3.

COMMENT	RESPONSE
 Category 1 thresholds: Category 1 thresholds are set high and will exclude many small emissions (A60, A74). The level of the threshold category 1 (ie 10 tonnes used per year) is too low. 20 or 100 tonnes were suggested as alternatives (A57, A73, A48, A51, A111). 	Emissions from sources below the thresholds (ie. small businesses) will be as aggregated emissions. This allows estimates of the total emissions to the environment to be produced, but avoids the expensive and inequitable alternative of requiring small businesses and other small sources of emissions to report. Consideration was given to raising the threshold for category 1. Several independent analyses were undertaken on the number of reporting facilities and it was concluded that the threshold level did not, in general, require excessive numbers of facilities to report and nor did it require small business to report. Exceptions have been handled by exempting certain activities (see Clause 9). For these reasons the category 1 threshold was not changed.
 Combustion thresholds (category 2): The combustion thresholds (2a and 2b) are too low (A100, A106 and A52). Category 2 combustion related thresholds have been reduced from those previously agreed (A109). The combustion thresholds (2a and 2b) are too high as domestic wood heaters will not be required to report (A11). The key stakeholder version of the Measure appeared to incorrectly set an energy use threshold of "20,000 megawatts per year", rather than "20,000 megawatt-hours per year" (B14, B22). 	The combustion threshold 2a has been amended to raise the peak hourly rate to one tonne. Thresholds were amended on the basis of experience gained from the Air Emissions Trials conducted in 1996. As discussed above, it is considered that it would expensive and inequitable to require small emissions sources to report under the NPI. Emissions from domestic wood heaters will be included in aggregated emissions estimates. The drafting error has been rectified in the final Measure, which refers to megawatt-hours per year.
Many pulp and paper sites will meet the energy consumption thresholds and will therefore have to report their emissions of substances such as metals despite the fact that these emissions will be far below the thresholds for those particular substances (B4).	This comment reflects a misunderstanding of the way in which the NPI's thresholds operate. If a facility meets the energy consumption thresholds and no others, then it is only required to report emissions of those substances to which the energy consumption thresholds relate.

COMMENT	RESPONSE
	Other substances such as metals are only reportable if the 'use' of those metals exceeds the thresholds for those particular substances.
The inclusion of emissions of nitrates to groundwater cannot be readily quantified and should be excluded (A108, A10).	Category 3 thresholds now exclude emissions to groundwater.
Why is the threshold for hydrogen sulfide as high as 10 tonnes per annum (B21).	The 10 Tonne threshold is considered by TAP to represent the appropriate amount, in the generic sense, above which significant emissions could occur. Tap considered varying the tonnage handled thresholds to reflect the hazard of each specific substance but noted that this would overly complicate the threshold system (which is designed to be simple and easy to use). TAP notes that the relationship between the thresholds and the emission for a given substance could be explored once the NPI has been in operation for several years.
Why is the threshold for nitrate 15 tonnes per annum (B21).	The 15 tonne threshold for total nitrogen was considered to represent a significant emission to water (eg from a sewage treat-ment plant). Emissions of total nitrogen below the threshold will be estimated by governments as aggregated emissions.
Reporting facilities should be selected on the basis of an type of emission source (along the lines of Victoria's Scheduled Premises Regulation which specify industry types subject to licensing) (A77, B7). This could be used in conjunction with a Measure of existing environmental quality (B7).	It is believed that the use of thresholds will more accurately target those facilities likely to emit substantial volumes of the substances on the reporting list. Assessment of the existing environmental quality at each facility would be extremely difficult.
The Measure presumes that if a facility uses a substance, then it must be emitted. This is incorrect (A77). Reporting should commence before a	The Measure does not make this assumption. It is expected that there will be facilities which exceed the thresholds and put in a nil report because there are no emissions of substances from their facility. This would introduce a form of 'pre-

COMMENT	RESPONSE
threshold has been triggered and once an agreed proportion of the threshold has been reached (A110).	threshold' threshold which would increase the complexity of the reporting process.
General Composition of the list	
The list of reportable substances for industry should comprise those industrial emissions of substances on the full reporting list identified by jurisdictions as the most important pollution priorities for industry (A106).	While larger jurisdictions may be able to identify priority substances as suggested, the smaller jurisdictions may not be able to. Furthermore, the Technical Advisory Panel selected substance for the reporting list based on consideration of a wide range of environmental and health factors, rather than jurisdictional pollution priorities.
The NPI should include Greenhouse gases such as carbon dioxide (A7).	TAP considered recommending the inclusion of greenhouse gases in the NPI. However, given the existence of the Greenhouse Gas Emissions Inventory, it recommended that the NPI not duplicate that Inventory. Accordingly they have not been included as a separate category. However, some greenhouse gases are included on the NPI, but only where they have hazardous effects in their own right.
The reporting list should include more classes of chemicals rather than individual species. This would enable a broader base of potentially toxic compounds to be included (A74).	TAP has recommended inclusion of generic groups in some cases, eg xylenes, PAHs etc, where substances tend to occur together, or are normally measured or reported as a group, and where hazard or risk data is normally available for the group. Many substances within groups have their own specific effects and it these that the TAP evaluated and considered important.
Measures such as Biological Oxygen Demand (BOD) or factors such as pathogens should be included in the NPI (A7, A77).	TAP has considered the inclusion of these measures. BOD is a surrogate for many other substances of concern which are already included on the reporting list. The second order effects category for nitrogen and phosphorus will address BOD to some degree.Other similar measures (such as <i>E. coli</i> counts or turbidity and temperature) depend on the conditions in the environment and are not useful measures of emissions. On

COMMENT	RESPONSE
	advice from the TAP, these parameters have not been included in the Measure.
Acids should not be included on the Inventory and the use of a pH cut-off is not appropriate (A52, A64).	Acidic emissions would normally be in the form of a solution of the acidic compound. The TAP has amended the reporting list to include specific acid compounds (such as hydrogen chloride) so that quantities of these compounds are reported rather than the total quantity of acidic solution. Reference to pH has been deleted from the Measure.
Substances should only be listed as specific chemical entities as the effects of various substances can be variable eg. zinc and compounds (A66, A69, A73).	When the TAP has listed a substance as a generic group (eg. zinc and compounds or PAHs) it is because the generic group or specific metal is of sufficient hazard and exposure. This is ameliorated by the 'bioavailability' criterion in the TAP score process which accounts for the variable effects. In addition, metal and compounds entries only require the reporting of the metal component. For example, where a facility is reporting on emissions of zinc and compounds it would only need to consider its use of total zinc.
Particulate matter should be removed as a category 1 substance (A84, A105, A52, B28).	Fine particles from both combustion processes and other sources are known and proven hazardous pollutants. While those arising from non-combustion sources should be captured in the NPI, they are difficult to quantify, particularly fugitive emissions. Accordingly they have been removed from category 1 in the Measure and will be considered during the 1999 review.
Specific Substances/Compounds	
Trivalent chromium compounds (chromium III) should not be included (A8, A57).	TAP has considered whether chromium III and compounds should be included on the reporting list. After reviewing its scores, TAP concluded that the weight of information available suggests that chromium III is of sufficient hazard and widespread release to remain on the reporting list. Therefore chromium III

COMMENT	RESPONSE
	has been retained.
Inclusion of several substances questioned on the basis of rapid degradation in the environment or low toxicity at levels typically emitted, including acetone (A66, A76), ammonia, chlorine, glutaraldehyde, ethylene glycol and other glycols, some alcohols, some alkanes, hydrogen sulfide, hydrochloric, hydrofluoric, nitric and sulfuric acids (A64), hydrocarbons (A111) and lead (B4). Need to review risks for sodium fluoride, manganese salts, glutaraldehyde, boric acid, ammonia and acids at pH 6.5 (A57).	TAP reviewed the substances in question. In general, the TAP notes that substances which degrade quickly can still have a detrimental impact on the environment. In addition, the question of longevity in the environment is addressed by the criteria of persistence and biodegradation. As the substances in question are of sufficient hazard and are commonly used, their presence on the reporting list is warranted. In the case of lead, there are some parts of the Australian population which are exposed to significant lead levels (eg. Port Pirie). It is also important to note that the NPI involves reporting of
Glutaraldehyde should also be de-listed because its concentrations are normally much lower in Australia than those assessed by the TAP (A57, A91).	emissions and this is not easily related to concentration standards in the environment. The TAP reviewed glutaraldehyde and upheld its inclusion on the reporting list. Glutaraldehyde is of sufficient hazard, even at lower concentrations, and is used widely enough to score over the risk number of '3'. TAP notes the NICNAS PEC Report No. 3. Like all substances on the reporting list this substance will be subject to review. On this advice, glutaraldehyde has been retained.
Listing fluoride emissions is ambiguous as it includes hydrogen fluoride and a range of inorganic fluorides (A7, A54).	TAP recommended that Hydrogen Fluoride be merged with other fluorides under category 1 and 2b. The Measure has been amended to reflect this change. Note that "fluoride compounds" continues to exclude HFCs, CFCs and BFCs.
Question the omission of hydrogen peroxide and formic acid from the list (A66).	TAP advised that there are no existing data which justify the inclusion of hydrogen peroxide. TAP considers that Formic acid has an insufficient hazard rating to be included.
Phosphates:should be removed from the list	TAP considered that the second-order effects of phosphates warrant their

REPORTING LIST: SUBSTANCES AND TH	
COMMENT	RESPONSE
(A100, B25, B7).	inclusion.
 if retained, should be presented in context with the full picture of other sources, including fertiliser run-off, decay of vegetation, animal excretions, and natural leachate from phosphate rock (A100), or only included in reporting in the third year (B25). 	It is important to note that the Measure proposes gathering information on the 'full picture' of pollution sources through aggregated emissions and information on estimation from all anthropogenic and biogenic sources where available (see discussion of aggregated emissions data).
 the inclusion of total phosphorus rather than phosphates is supported (B19). 	On advice from TAP, the listing for "total phosphate" in Schedule B is qualified, limiting phosphate to compounds which give rise to phosphate ions. TAP further
• Some forms of phosphorus may have a greater impact than the phosphates listed. Similarly, some other species containing listed substances may be inappropriate (A77).	notes that, in general, few facilities report anything other than total phosphate.
Phosphoric acid should be included under "phosphates" rather than as an acid (A54).	TAP recommended that phosphoric acid be reported separately from phosphates, because acidity itself is of concern. On this advice, phosphoric acid has been retained as a separate listing.
Liquid and solid by-products, including manure, spilt feed, sludges and other organic materials must be considered a resource, not a waste (A10).	The Measure only requires reporting of emissions to the environment. Transfers of waste are not within the scope of the NPI. Therefore "resources" need not be reported.
Those substances which are bound in stable silicates (eg chromite sand) and organic arsenic compounds are insoluble and should not be included, as they have no adverse environmental impact. (A28, A51, A80). As most trace metals listed as 2b substances are bound up in silicates, reporting as total metals would be misleading (A48).	The TAP will consider speciation of any substance when more detail on environmental chemistry is provided. TAP also notes that organic arsenic compounds are not insoluble but are often of low toxicity.
Does "phenol" refer to just the pure phenol itself or does it include other phenolics? (A54).	On advice from TAP the Measure allows reporting as either total phenolics or speciated phenols.
Distillates, solvent naphtha or similar products are available from several sources. Suggest developing a generic definition based on "hydrocarbon	On advice from TAP, 'distillates' and 'solvent naphtha' have been removed from the reporting list because they are mixtures of substances, many of which

COMMENT	RESPONSE
solvent", with a specific boiling range (A54).	are already on the reporting list and are therefore captured by the NPI.
Polychlorinated dioxins and furans and polyaromatic hydrocarbons should be included (s A37, A81, A60, A61, A77). However, there is little data available on these (A28). Question why these are not included in category 3 and how they will be captured (A61).	The Measure includes these substances, which are emitted to air as products of incomplete combustion. TAP acknowledged that hot chemical synthesis processes could emit dioxins without combustion and a non- combustion threshold is appropriate for such processes. It is TAP's wish to develop thresholds for emissions to land and water in future.
Polyaromatic compounds, polychlorinated dioxins and furans, fluoride compounds and hydrochloric acid are mis-characterised as 2a substances (A77, A81).	These substances remain on the reporting list because the TAP could not determine any technical reason for their exclusion. As they are often by-products of combustion, the 10 tonne threshold of Category 1 would never be reached for many of these substances. Category 2a is therefore appropriate.
1,2-dibromoethane, carbon disulfide and ethylene oxide should be deleted from the list (A110).	TAP notes that the hazard and exposure scores of these substances are such that they warrant their inclusion.
 Both PM₁₀ and PM_{2.5} should be included on the list for reporting and aggregated estimations (A30, A47). There should not be a listing for PM_{2.5} as the Air Measure decided that there is insufficient data to set a PM_{2.5} standard (B6). 	A standard for PM_{10} is currently proposed in the draft NEPM for ambient air quality, as most existing data on health impacts and from monitoring relates to PM_{10} . The status of $PM_{2.5}$ will be considered further in the future.
 Vinyl chloride monomer (VCM): The reporting list should include VCM (A47, A50 and A70). VCM should not be listed, although is satisfied that it will not need to be reported until after 2000/01 and after the 1999 review (B27). 	Emissions of VCM from point sources in Australia are extremely low and diffuse sources do not exist. However, TAP has re-evaluated the hazard score for VCM and recommends a change from 1.5 to 2.0. VCM is now listed in table two of the reporting list, adoption of which will be subject to review in 1999. If approved, VCM emissions will become reportable where more than 10 tonnes are handled by a facility per year.
2-Butoxyethanol should be removed	TAP has reviewed the score 2- Butoxyethanol. This has shown it to be

COMMENT	RESPONSE
from the list (A41).2-Butoxyethanol should not have been removed from the list (B3).	less toxic than its methoxy and ethoxy- analogues. On this advice it has been removed from the reporting list.
Only inorganic arsenic and its compounds should be included on the reporting list, as organic arsenic is not of concern (A80).	Arsenic toxins of biological origin are of low toxicity, but this is not true of all organic arsenic compounds. Therefore the Measure retains the original wording of "arsenic and its compounds".
Dibutyl Phthalate should be called Phthalate Esters. Other Phthalate Esters (eg di-iso-octyl phthalate) are also used to plasticise PVC to produce soft vinyl film, and this process gives off an odorous misty white fume causing a severe local environmental problem (B10).	Dibutyl phthalate is included on the reporting list because of its specific hazard characteristics. TAP recommended against extending this entry to include a broader range of phthalate esters, as they did not necessarily have the same effects. The issue of potential exposure will be revisited in the review in 1999.
Agricultural and Veterinary Substances	
The entries for various metals and metalloids and compounds should be either deleted or modified to exclude any agricultural and veterinary chemicals (A110).	TAP considers such substances to pose hazard to the environment and so their inclusion of the list is warranted. However, agricultural production is exempted under the definition of "reporting facilities" in the Measure. It is important to note this exemption does not apply to facilities such as abattoirs, agricultural and veterinary chemical manufacturing facilities and feedlots.
 Agricultural and veterinary chemicals: Should be included (A9, A14, A15, A16, A17, A18, A19, A20, A22, A23, A24, A25, A26, A31, A46, A47, A58, A60, A61, A62, A70, A75, A77, A81, B11, B29). Should not be included (A33, A52, A78, A110). 	The TAP considered the issue of including agricultural and veterinary substances within the system used to arrive at a reporting list. Chapter 4 of the 21 May 1997 TAP report to NEPC discusses this issue in detail. In its report the TAP recommended that, for a variety of reasons, a separate program would deal with agricultural and veterinary substances more effectively. As noted above, a SCEP/SCARM working group is examining this.
Persistence and Bioaccumulation	
 Persistence has not been given appropriate weighting in developing the criteria. Those materials with 	TAP considers that persistence has been given the appropriate weighting. Substances with a lower persistence

COMMENT	RESPONSE
 lower persistence should be effectively "scored down" (A86, A111). Need to review the "persistence factor" in the chronic environmental toxicity formula, to account for degradable and truly persistent materials, eg include a scale of half lives (A4). Exposure criteria should be modified to incorporate persistence, rather than have it included as a component of toxicity (A107). The present criteria do not adequately differentiate between those chemicals which, once emitted, remain in their 	should not be effectively 'scored down', but even a short-lived substance can have a serious effect, and some remain on the list. Currently a high persistence 'scores up' a substance's risk number. TAP considers that the inclusion of persistence as a function of the environmental effects of a substance is appropriate. The persistence scores are based essentially on half lives. Exposure is dependent on the use of the substances which does not necessarily depend on the hazard attributes of the substance. TAP notes that persistence is generally an attribute of the specific substance. It is therefore appropriate
which, once emitted, remain in their original form in the environment, and those which are readily broken down into innocuous materials (B6). Risk Basis of List	that it is included in the assessment of the substance's hazard.
The critical issue is to ensure that the list	The reporting list will be nationally
is nationally consistent, that it contains all substances released with known adverse effects and that it is reviewed as new information becomes available (A60).	consistent, the Measure will be implemented by all jurisdictions, and reviewed as new information becomes available. The first review is proposed in late 1999.
The reporting list should be presented in its risk prioritised order or with references to convey the risk of the substances (A4, A71, A86, A100, B6, B8).	The list is presented in alphabetical order for ease of reference. However, the derivation of the list is now referenced in Schedule A. In addition, information regarding the risk of substances will be conveyed in the database.
The process for developing the list focused too heavily on toxicity rather than ecological issues and the scoring did not adequately differentiate extremely hazardous and less hazardous substances (A61, A75, A77, A111).	The TAP has addressed ecological issues with the introduction of 'second order effect' criteria (see below). The scoring system does differentiate low and high toxicity and also accounts for the likely exposure of the substance which can alter the potential risk a substance might pose.
The use of risk phrases was flawed and the references used were criticised, including the citation of data relating to various organisms in the TAP report,	Compilations of European, US and Australian data were used , particularly the European Community Risk Phrase Categorisations and Pacific Air and

COMMENT	RESPONSE
without specifying the organisms (A13, A28, A77, A84, A87, A100, A106, A110).	Noise reports (which utilised a wider range of references than the risk phrases). Various data used to arrive at a score were always comparable to the extent provided for by the very coarse scoring system. TAP provided the EU risk phrases in its report of May 1997. In addition, TAP has corrected several errors in the scoring system which arose due to data transposition problems. Further information of this issue can be found in the revised report.
The process of risk calculation need to be subjected to expert assessment. It is not possible to reduce the complex phenomenon of risk (as expressed in LC etc) to simple scores (A110, A100, A84, A106, A77, A28, A87, A73, A74, A60).	The model used is not a definitive mathematical model of risk. However, the TAP included members with appropriate expertise and although other methods were considered, the TAP found that they resulted in essentially similar lists. The TAP is not suggesting that the process adopted provides a definitive assessment of risk, but that it is intended to provide a transparent and comparative process.
The NPI should address multiple toxicity, toxic intermediates and synergistic effects (A74, A1,).	TAP considers that intermediates are rarely emitted, as they are normally consumed within an industrial process and therefore exposure scores for such substances are likely to be low. Further, no specific intermediates have been brought to its attention. TAP advises that the current body of evidence is not sufficient to allow incorporation of multiple toxicity and synergism into the criteria. Accordingly, the Measure has not been modified to accommodate them. However, TAP does not dismiss the concerns and recommends that they be examined in future reviews of the list.
Size of List and Criteria	
Various alternatives were proposed for the size of the list, including 20, 113, 200 or 400. Submissions in support of an expanded list were (A9, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A30, A31, A34, A46, A47, A50,	The size of the list is not only a technical decision. TAP ranked and scored over 400 substances and advised that those with a "risk number" of 3 or greater posed sufficient risk to be of concern. On advice from the Project Team, NEPC

COMMENT	RESPONSE
A58, A70, A74, A75, A83, B2, B3, B29). Submissions in support of a reduced list were (A28, A37, A48, A54, A64, A95, B15).	Committee, TAP and jurisdictional governments, NEPC decided to base the reporting list on those substances, as representing a reasonable risk to Australia.
The TAP's decision to apply a cut-off at a score of 3 is a matter of judgement. However, as each score has three components, it may be skewed if, for example, two components have values of zero, and this may allow substances which pose real human risk to escape capture (A110).	To test whether the present scoring system excluded substances with a single highly hazardous effect, TAP developed an alternate list of substances which scored 3 or greater in only one hazard characteristic. The resulting list was found to be similar to the original. However the alternate method did not allow ranking and the original list was retained.
Second Order Effects	
Toxicity based selection criteria do not capture elements such as nitrogen and phosphorous, which cause widespread health and environmental effects through eutrophication of water bodies and algal blooms. The criteria need to give due priority to non-toxic elements such as nutrients and salt (A52, A111).	The TAP acknowledged this concern by developing and applying criteria to allow substances not normally regarded as pollutants to be scored on the basis of second order effects on the environment. Accordingly, nitrogen and phosphorus have been included under a separate category 3 in the Measure. These replace the draft proposal to include nitrate and phosphate only.
Pre-cursors should be included on the reporting list (A52).	In order to take account of their significant secondary effect through the development of photochemical smog, total Volatile Organic Compounds (VOCs) has been included in the full reporting list. This means that emissions of total VOCs will be reported by firms which exceed the reporting thresholds beginning in the third year of the Measure's operation. Voluntary reporting on emissions of total VOCs will be encouraged in the first two years of the Measure's operation, and is expected to be included in aggregated emissions estimations for air sheds in the first two years.

AMENDING THE REPORTING LIST

COMMENT	RESPONSE
 Review of the reporting list: The NEPC should review the reporting list at anytime (A62) or least every 2 years (A81, A84, A85, B18). The list should be subject to constant and ongoing assessment initially (A34). There must be a means of removing non hazardous materials from the list (A51) All amendments should be made available for public comment (A102). Industry consultation should be part of any review of the reporting list (B13). The public must be given a role in identifying substances that should be added to or deleted from the reporting list (B17, B29). The review mechanism for thresholds should be the same as proposed for amending the reporting list (A109). There should be a standing technical working group to advise on and review the list. The group should have the approval of all key stakeholders and could play a role in reviewing the development of contextual information (A36, A50, B29). The Measure must contain an agreed transparent procedure by which new substances can be scientifically assessed (A36, A100, A109, A110, B7). 	The specific requirement that the NEPC review the reporting list every 2 years has been deleted. However, there is now provision for a general review of the Measure to commence in October 1999. This review will consider, among other things, whether substances should be added to or deleted from the reporting list. In addition, clause 22 sets out elements of the processes which must be used when amendments to the reporting list are being considered. These include transparency, ability to make public submissions, use of a technical advisory panel and consideration of relevant overseas risk assessment processes. Any subsequent amendments to the Measure arising from the review must be subject to the full NEPM amendment process as set out in the NEPC Acts. This makes continual amendment to the list impractical.
There should be a mechanism to prevent frivolous submissions for list amendment (A36).	It is envisaged that the process established by the Measure outlined above, should prevent consideration of frivolous claims for list amendment.
When a new substance is added to the list there should be no enforcement action taken for breach of reporting requirements for the first year (A84).	How reporting for newly listed substances is to be enforced will be considered as part of any proposed revision of the Measure.
Industry should be represented on any technical advisory panel so that	The make-up of any furture TAP will be considered by NEPC when it is established,

AMENDING THE REPORTING LIST

COMMENT	RESPONSE
amendments to the list are justified after consideration of the cost impacts of reporting (A108). Consumer and environment groups should be represented on the TAP (A3).	however it is considered that selection of members on the basis of their appropriate expertise would provide a more balanced outcome that appointing representatives of sectoral interests to such a group.
The emphasis is on tightening of thresholds with no mention of the possibility of relaxation of thresholds based on new scientific evidence (A36).	This clause has been deleted as amendment of thresholds will be considered as part of the general review to commence in October 1999.
TAP should focus attention on establishing sound criteria for the accurate inclusion of non point source emissions (A110).	Subject to some class exclusions, the role of the TAP is to provide expert technical advice on health and environmental risk of substances irrespective of whether they are emitted from point or non point sources. Handbooks will be developed to provide guidance to jurisdictions for estimation of non-point source emissions to ensure consistency.

MEASURE DEVELOPMENT PROCESS

COMMENT	RESPONSE
 COMMENT Concerns regarding the Measure development process, including: Lack of time and openness to allow policy and technical matters to be resolved (A75, A85, A96, A97, A98). Much of the effort invested in NPI prior to the Measure development seems to have been abandoned (A87). Recommended that a simple plain 	RESPONSE The Measure development process has been an extensive and open consultative process. Since the release of the draft Measure, a revised draft was released for comment to key stakeholders (including those who made submissions on the draft Measure) and an ongoing commitment to consultation during the development of industry handbooks, etc. The NEPC has endeavoured to ensure
 English summary document be prepared and submitted for comment to all stakeholders (A67). Submissions and consultation dates should be advertised in industrial 	that all documents are as easily understood and accessible as possible, despite the complexity of the issues under consideration. The work on the NPI prior to the commencement of the Measure
 regional centres (eg Geelong, Newcastle) (A93). Consultation has been inadequate and that many firms which will be affected are not aware of the NPI proposal (A85). 	development process provided a strong basis for the development of the draft Measure. The fact that all options considered in that process were not specifically recommended in the draft Measure does not imply that they were
• It is important that Measure be developed by a robust and transparent process, based on both sound scientific method and sustainable development principles (A4, A71).	not considered and that the process was not useful. While resources have been unable to fund advertisements in all regional newspapers, NEPC has attempted to
 The opportunities given to Local Government to be involved in the development of the Measure have been inadequate (A67). 	ensure that all stakeholders are aware of the development of the Measure. The scientific basis of the Measure is obviously extremely important, and extensive resources have been invested into scientific research to underpin the Measure, particularly the selection of the reporting list. While Local Government representatives have not been members of the Measure development project team, Local Government has had significant opportunity to be involved in the development process through providing
	comment on the draft documents made available for public comment. Jurisdictions will work directly with

MEASURE DEVELOPMENT PROCESS

COMMENT	RESPONSE
	Local Government regarding the appropriate roles they can play in implementation of the Measure.
Time frame (already 6 years) for development and implementation of the NPI is too long. No other country has found the need for such a protracted lead time (A62).	The Measure development processes was initiated only in November 1996 and time frames need to incorporate adequate consultation with stakeholders. The time taken in development of the NPI concept has meant that the system developed will be more effective and will attract higher levels of industry and community awareness and support than would have been the case otherwise.

COMMENT	RESPONSE
 Role of the impact statement: The impact statement should identify and assess the economic and social effects of not making the proposed Measure (A79). 	The impact statement assesses the implications of making the Measure against a base case of not making a Measure.
 Cost-benefit analysis: The use of rigorous cost-benefit analysis is integral to the development of Measures (A71). The impact statement lacks adequate cost-benefit analysis (A87). Economic and social effects need to be recognised (A79). 	The importance of an effective and balanced assessment of the costs and benefits (environmental, social and economic impacts) of the Measure is clearly recognised in the NEPC legislation. It is important to note that this legislation does not require a narrowly quantified financial cost- benefit analysis, but a broad-based assessment of the range of environmental, social and economic impacts. While the impact statement provides such an analysis, suggestions for practical improvements from stakeholders would be welcome.
The impact statement does not adequately describe the role of the NPI in the context of regulatory and non- regulatory initiatives to achieve environmental improvement goals (A60).	The impact statement makes clear the intent that NPI provide a range of information to both the community and governments to assist in identifying sources of environmental degradation, helping to both improve the information available to consumers and assist in the development of environment protection

COMMENT	RESPONSE
	programs. It was not possible for the impact statement to provide a detailed description of the role of the NPI in the context of environmental policy in each jurisdiction.
 Estimate of number of reporting facilities: The estimated number of reporting facilities is too low (A36, A52, A77). The assumptions used to calculate the likely number of reporting facilities are of concern. In particular, the American industry base should not be used to estimate the number of reporting facilities (A110). Thresholds will trigger reporting by many more facilities than indicated (A109). 	It is recognised that the estimates of the number of reporting facilities were not perfect. The estimates produced made use of the best information available at the time the impact statement was produced. Work conducted since that period has indicated that this estimate was slightly conservative, with current estimates (taking into account modifications in the thresholds and substance list) suggesting approximately 3,300 reporting facilities in total. Thresholds have been designed to ensure that small businesses are not captured by the Measure.
 Costs to reporting facilities: Have been underestimated (A4, A29, A49, A52, A57, A64, A73, A77, A84, A85, A86, A95, A100, A110, A111, A113, B6). Will be very high (A27, A32, A96, A97, A98), particularly for the electricity 	The cost estimates included in the impact statement were based on the NPI Air trials and overseas experience. These provided a firm basis for estimating the likely cost of producing NPI reports. It is important to note that the NPI will not require direct monitoring or sampling in any circumstances, with industry
 industry (A28, A37). The phase-in period should be used to accurately assess industry costs prior to full implementation of the Measure (B6). Cost effectiveness does not seem to have been a high priority in the draft Measure (A79). 	handbooks requiring the use of 'desk top' emission estimation techniques (see discussion of industry handbooks). The cost estimates provided in the impact statement took into consideration time and resources required to apply emission estimation techniques and complete reporting forms.
 This section of the impact statement does not address the costs to a facility of applying emission estimation techniques or direct measurement to emissions (A36). Will be higher than during the Air trials because of reduced assistance to industry from the NPI program (A77, 	While the cost estimates in the impact statement are presented as an average cost per firm, this was based on an assumption of an average of four returns (ie. four substances) per facility. Thus the estimated average reporting cost per substance was \$500 per annum. Government agencies will be able to assist industry in both assessing whether

COMMENT	RESPONSE
 A84). Are underestimated for the first year & don't seem to take into account overhead costs of setting up systems (A29). 	or not they exceed the reporting thresholds, and in applying the industry handbooks developed. Costs to industry will be constantly reviewed during implementation of the
 Submission authors were concerned about the cost that may be incurred in reporting on the large number of substances involved (A94, A99). 	Measure, and will certainly be considered as part of the 1999 review of the Measure. At this stage, no information is available which necessitates a revision of the
 Will depend on the emission estimation techniques (A29, A85). 	impact statement's estimated average annual reporting costs of \$2,000 per firm
• Monitoring and sampling costs will be much larger than the cost estimate per facility in the impact statement (A36, A102).	once the full reporting list has been implemented. The revised estimate of approximately 3,300 reporting facilities gives a revised total reporting cost to
 Are reported as average costs per facility and do not allow a calculation of the cost per substance reported (A49). 	industry of approximately \$6.6 million in each year following commencement of reporting on the full reporting list. However, as the reporting list in the first
 The impact statement does not adequately clarify the obligations of reporting facilities (A94, A96, A97, A98, A99). 	two years of the NPI will be limited to 36 substances, it is now conservatively estimated that approximately 3,000 facilities will be subject to initial NPI reporting requirements. The relatively
 Have been given insufficient attention during the development of the NPI (A88). 	small reduction in the number of reporting facilities for the initial reporting list is due to the fact that the
 Will be considerable and will not be justified (A57). 	initial 36 substances are the most commonly used. It is also estimated that under the initial reporting list, reporting facilities will report on an average of three substances each year (rather than the average of four anticipated for the full reporting list).
	Based on these assumptions, the average reporting costs for firms are expected to be \$1,690 in the first year, and \$1,500 in the second year. The higher first-year costs reflect the additional costs of familiarisation with, and establishment of systems for, NPI reporting obligations. This gives a total estimated cost to industry of \$5.07 million in the first year, \$4.5 million in the second year,

COMMENT	RESPONSE
	and \$6.6 million in subsequent years.
Impact statement incorrectly argues that NPI reporting costs are negligible and unlikely to have any impact on product prices. NPI costs will erode Australian firm's international competitiveness (A49)	While some small impacts on product prices could result from the NPI program, it is believed that there is a significant net social benefit from the provision of the NPI information, and that any such cost increases are warranted. Many international competitors to Australian firms will also currently be reporting to a number of international systems similar to the NPI proposal.
 Costs to governments: Have been underestimated (A4, A77, A95, A100). May have been underestimated (A52). 	The Commonwealth, States and Territories believe that adequate funding has been allocated to this program to fulfil their responsibilities under the Measure.
Benefits of the NPI:	International experience has clearly
• Have been overstated (A4, A86, A111).	demonstrated that programs similar to the NPI proposal have played a key role
 Some of the benefits predicted are questioned, particularly noting that reporting industries are likely to be misjudged by the community despite the inclusion of contextual data (A57). Have been given insufficient attention during the development of the NPI (A88). The impact statement should recognise that the benefits are potential, not actual benefits (A104). 	in focussing industry, governments and the community on sources of environmental degradation and opportunities for emissions reductions. It is not believed that the impact statement overplays the significance of the benefits which will arise from adoption of the Measure. The impact statement instead identifies the range of benefits which are expected to accrue, however, because of the uncertainty as to the degree to which those benefits will be achieved in Australia, is unable to quantify the extent of benefits to be
Incomposition of an incomposition to	achieved with any certainty.
 Incorporation of environment into markets: It is difficult to ensure that environmental concerns are taken into account within markets, and it does not seem entirely appropriate for a Measure to work from this basis (A13). The impact statement focuses on market failure where property rights 	It is widely recognised that a lack of information about the environmental impacts of market decisions leads to an sub-optimal distribution of goods and services. This Measure is an important tool in addressing that lack of market information. The impact statement attempts to identify the range of community benefits which will be derived from improved market

COMMENT	RESPONSE
 are attenuated, and should reflect the wider concerns of the community and industry (A13). There appears to be confusion regarding the definition of market failure, information will not by itself address the main cause of the market failure which comes about because of a lack of property rights of those affected by pollution (A79). 	information. This Measure does not and cannot address issues of private property rights over environmental media such as air, land and water. The impact statement notes, however, that the NPI program will assist in making the community aware of adverse environmental impacts resulting from particular activities.

IMPLEMENTATION ISSUES / MEMORANDUM OF UNDERSTANDING

COMMENT	RESPONSE
 Legislative basis of the NPI: Legislation is required to create a solid reputable NPI (A61, A70). The NPI needs to be a uniform, legally binding program (A2, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A29, A31, A50, A55, A58, A83). 	The Measure is a legal instrument which is binding on all Australian governments. It is the intention of the NEPC Act that all jurisdictions will implement NEPMs using appropriate laws and/or other arrangements within each jurisdiction.
 Memorandum of Understanding: The draft Measure requires jurisdictions to agree on a number of implementation issues (eg. contextual data, confidentiality, etc). There must be provision for comment on these issues and they should be resolved before the Measure is finalised (A47, A49). Proposed approaches to confidentiality, legal status of data and security of data should be mandatory, not guidelines (A2). To date inadequate information has been provided about reporting formats, data transfers, validation procedures, etc. (A89). 	These issues have been discussed with stakeholders throughout the consultative process, and have been further developed since the release of the draft Measure. The use of guidelines and an MoU to set out approaches to many of these implementation issues is necessary to allow flexibility and to ensure that there is no conflict with existing legislation for managing confidential information, third party rights, etc in the various jurisdictions. See further discussion of the particular issues raised in the sections of this document relating to those issues.
Consistent implementation of the Measure must be ensured (A47, A49, A51, A81, A87).	The MoU and Measure work together to provide for consistent outcomes which are achieved in different ways in each jurisdiction to allow effective

COMMENT	RESPONSE
	implementation which fits in with the existing environment protection frameworks in each jurisdiction.
It is essential that the whole NPI program be transparent and open to ensure community confidence in the information (A13, B6).	The intention is that the program implementation will be transparent and open.
 Reporting requirements for licensed firms: For consistency, facility reporting obligations should be given effect through amendment of State and Territory environmental legislation rather than through licence conditions (A113). Jurisdictions should consult with all licensees regarding the impact of the NPI on those firms (B9). Concern that jurisdictions could require facilities which do not meet the reporting thresholds to report emissions through annual licence returns (B13). 	The approach taken to implementation in each jurisdiction will vary depending upon existing systems and the most efficient mechanism available to that jurisdiction. As part of the development of those reporting mechanisms in each jurisdictions, it is expected that licensees and other potential reporting facilities will be consulted regarding the mechanism to be used for collection of NPI reports. It is not the intention that the NPI would be used as a justification for requiring non-reporting facilities to provide NPI type data in licence reports. NPI should have no impact on licence reports for those facilities which do not exceed NPI thresholds.
The Measure should clearly indicate the roles of and the sharing of costs between governments (A79).	The Measure sets out the responsibilities of each level of government. The MoU which will accompany the final Measure will set out the agreed funding arrangements.
 Revenue raising to fund the NPI: There is no direct mention of how the NPI will be funded following the first years of operation. There is no assurance that industries will not have to pay for the program through levies or increased licence fees (A6, A66). 	The MoU sets out a funding agreement for the period to end 1999/00. Following this period a new funding arrangement will need to be agreed between government. The possibility of using levies or licence fees to fund this program has not been considered.
 There should be no additional taxes on the public (A34, A100). Polluters should pay the costs of collecting, analysing and reporting information under the NPI (A112). 	

IMPLEMENTATION ISSUES / MEMORANDUM OF UNDERSTANDING

COMMENT	RESPONSE
Introduction of the NPI needs to be carefully managed, and should seek the help of industry associations (A7).	The need for careful implementation and a cooperative approach with industry and community stakeholders is recognised as an important prerequisite for developing and implementing an effective NPI program.

IMPLEMENTATION ISSUES / MEMORANDUM OF UNDERSTANDING

APPENDIX A SUBMISSIONS - PUBLIC CONSULTATION

Submission No. Organisation/Individual

- A1 Ms Dianne Wiesner, NSW
- A2 Solvay Interox Pty Ltd, NSW
- A3 Total Environment Centre Inc., NSW
- A4 Australian Institute of Petroleum, Victoria
- A5 Healthy Cities Illawarra Inc., NSW
- A6 Australian Paint Manufacturers Federation Inc., NSW
- A7 Mr Hugh Evans, Victoria
- A8 Packer Environmental Services Pty Ltd, Qld
- A9 Friends of Steele Creek, Victoria
- A10 Australian Meat Holdings, Qld
- A11 Tasmanian Conservation Trust
- A12 Ms Joan Mom, Qld
- A13 Professor Jeffrey T. Spickett, WA
- A14 Ms Robyn Davies, Victoria
- A15 Ms Robyn Dunn, Victoria
- A16 Mr John Harte, Victoria
- A17 Ms Danielle Freeman, Victoria
- A18 Mr Roger & Ms Esme Trewenack, Victoria
- A19 Mr Richard Frost, Victoria
- A20 Mr Mark Betros, Victoria
- A21 Ms Marina Zivanic, Victoria
- A22 Ms Louise Webster, Victoria
- A23 Ms Marina Dobrijevic, Victoria
- A24 Ms Lillian Harris, Victoria
- A25 Ms Michelle Weaver, Victoria
- A26 Ms Kristine Starnawski, Victoria
- A27 Mr Douglas K. Grant, Victoria
- A28 Electricity Supply Association of Australia Ltd (ESAA)
- A29 BOC Gases, NSW
- A30 Queensland Conservation Council
- A31 Byron Environment Centre Inc., NSW
- A32 Queensland Alumina Ltd
- A33 Incitec Ltd, Qld
- A34 Mr Stephen Tsousis, NSW
- A35 North Forest Products, Tas
- A36 Rio Tinto, Victoria
- A37 Stanwell Corporation Ltd, Qld
- A38 Boyne Smelters Ltd, Qld
- A39 Wattleup Citizens Association (Inc.),
- A40 Koppers Australia Pty Ltd, NSW

Submission No.	Organisation/Individual (cont.)
A41	Union Carbide Chemicals (Aust) Pty Ltd,
A42	Capral Aluminium Ltd, NSW
A43	City West Water Ltd, Victoria
A44	Henty Gold Mine, Goldfields (Tas) Ltd, Tas
A45	Frances Robertson, Victoria
A46	Environment Victoria Inc.
A47	National Toxics Network
A48	Aust. Petroleum Production & Exploration Association (APPEA)
A49	Huntsman Chemical Company Pty Ltd, Victoria
A50	Greenpeace
A51	ANI Bradken, Qld
A52	Department of Environment and Land Management, Tas
A53	Minerals Policy Institute, NSW
A54	Chem-trol Pty Ltd, NSW
A55	Sustainable Strategies, NSW
A56	Environmental Defenders Office, NT
A57	Leather Research Centre, Victoria
A58	Sunshine Coast Environmental Council Inc., Qld
A59	Toowoomba & Region Environment Council, Qld
A60	Ms Esther Kay, Victoria
A61	Conservation Council of Western Australia, WA
A62	No-Lead, SA
A63	Royal Automobile Club of Queensland Ltd
A64	Pulp & Paper Manufacturers Federation of Aust, ACT
A65	Johnsons Creek Conservation Committee Inc., NSW
A66	Redox Chemicals Pty Ltd, NSW
A67	Local Government & Shires Association of NSW
A68	Queensland Rail
A69 A70	Queensland Department of Environment Mrs L. Said & Ms Glenda Broklin, Victoria
A70 A71	Minerals Council of Australia, ACT
A71 A72	Energy Developments, Qld
A72	MIM Holdings Ltd, Qld
A73 A74	Alice Springs Town Council, NT
A75	Chamber of Commerce & Industry, WA
A75 A76	Sutherland Shire Environment Centre, NSW
A70 A77	Department of Environmental Protection, WA (NGO views)
A78	Avcare
A79	Queensland Treasury
A80	Gladstone Area Industry Network
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Submission No.	Organisation/Individual (cont.)
A81	Australian Council of Trade Unions, Victoria
A82	Australian Chamber of Manufactures, Victoria
A83	Ms Ellie Peek, Victoria
A84	Australian Business Chamber, NSW
A85	SA Employers' Chamber of Commerce & Industry/Engineers Employers Association of SA
A86	BP, Victoria
A87	Metal Trades Industry Association of Australia
A88	Shell Company of Australia, Victoria
A89	Nabalco Pty Ltd, NT
A90	Ms June Ryan, Victoria
A91	Union Carbide Chemicals (Aust) Pty Ltd
A92	South East Water Limited, Victoria
A93	Ms Franceska Dezelak, Victoria
A94	Energy Brix Australia Corporation Pty Ltd, Victoria
A95	Australian Aluminium Council, ACT
A96	Yallourn Energy Pty Ltd, Victoria
A97	Loy Yang Power, Victoria
A98	Hazelwood Power, Victoria
A99	Loy Yang, B Power Station, Victoria
A100	Australian Chemical Specialties Manufacturers Assoc, Victoria
A101	Tasmanian Minerals Council Limited
A102	BHP, Victoria
A103	SA Water Corporation
A104	Economic Development Authority, SA
A105	Environment Protection Authority, SA
A106	Environment Protection Authority, NSW
A107	Alcoa of Australia Ltd
A108	Ampol Refineries (Queensland) Ltd
A109	NPI Industry Network, Victoria
A110	Commonwealth Dept. of Primary Industries & Energy, ACT
A111	BP Refinery, Kwinana, WA
A112	Melbourne Water Corporation
A113	Plastics and Chemicals Industry Association, Victoria
A114	Chamber of Minerals & Energy of Western Australia Inc.
A115	Baron Region Water Authority, Victoria
A116	Commonwealth Consultative Forum, ACT
A117	Spencer Gulf Environmental Alliance
A118	South Australian Chamber of Mines and Energy

APPENDIX B SUBMISSIONS - KEY STAKEHOLDER

Submission No.	Organisation/Individual
B1	Western Australian Chamber of Commerce & Industry
B2	National Environment Consultative Forum
B3	Australian Council of Trade Unions
B4	Pulp & Paper Manufacturers' Federation of Australia
B5	Australian Chamber of Manufactures, Victoria
B6	Australian Institute of Petroleum
B7	Australian Chamber of Commerce & Industry
B8	Minerals Council of Australia
B9	South Australian Water Corporation
B10	Mr Hugh Evans, Victoria
B11	Mr Stephen Tsousis, New South Wales
B12	National Farmers' Federation Australia
B13	Metal Trades Industry Association of Australia
B14	Yallourn, Victoria
B15	Stanwell Corporation Limited, Queensland
B16	Energy Brix Australia
B17	Environmental Defender's Office, New South Wales
B18	Australian Aluminium Council
B19	Melbourne Water Company
B20	BHP, Victoria
B21	Mr Douglas Grant, Victoria
B22	Electricity Supply Association of Australia
B23	Department of Industry and Trade, South Australia
B24	Plastics and Chemicals Industries Association, Victoria
B25	Australian Chemical Specialties Manufacturers Association
B26	Department of Primary Industries and Energy, Commonwealth
B27	Australian Vinyls Corporation Limited
B28	Australian Business Limited
B29	Greenpeace Australia
B30	Incitec, Queensland
B31	Chamber of Minerals and Energy, Western Australia
B32	Australian Marine Conservation Society

APPENDIX C GLOSSARY

ACTU	Australian Council of Trade Unions	
ANZECC	Australia and New Zealand Environment and Conservation Council	
ARMCANZ	Agricultural Resource Management Council of Australia and New Zealand	
Council	National Environment Protection Council	
JRN	Jurisdictional Reference Network	
Measure	National Environment Protection Measure	
MOU	Memorandum of Understanding	
MOWG	Management Options Working Group	
NECF	National Environment Consultative Forum	
NEPC	National Environment Protection Council	
NGO	Non-Government Organisation	
NPI	National Pollutant Inventory	
SCARM	Standing Committee on Agricultural Resource Management (under ARMCANZ)	
SCEP	Standing Committee on Environment Protection (under ANZECC)	
ТАР	Technical Advisory Panel	

APPENDIX D PROTOCOL FOR CONSULTATION

PROTOCOL FOR CONSULTATION BY NATIONAL ENVIRONMENT PROTECTION COUNCIL

Complementary National Environment Protection Council legislation has been passed by all jurisdictions in Australia. This legislation enables the National Environment Protection Council (NEPC) to develop national environment protection measures (Measures).

The legislation requires that prior to a Measure being made, notice of the intention to prepare a draft Measure must be given (Section 16)¹. The legislation also requires that a draft Measure and its accompanying impact statement must be made available for public comment (Section 18).

The NEPC recognises that effective consultation will contribute to the making of informed decisions for the increased effectiveness of Measures. This Protocol describes the approach to be adopted by the NEPC to ensuring productive and transparent consultation processes.

This Protocol for consultation incorporates objectives, principles and strategies.

CONSULTATION OBJECTIVES

The NEPC, in accordance with the Principles of Consultation, seeks to achieve the following objectives:

- 1. To ensure the development and implementation of National Environment Protection Measures though effective consultation.
- 2. To ensure that the NEPC obtains useful information from stakeholders.
- 3. To maximise the understanding and involvement of stakeholders in consultation leading to the development of Measures.
- 4. To encourage an appropriate level of community and stakeholder ownership of Measures.

¹ Note that throughout this document reference is made to sections of the NEPC legislation. The section numbers

PRINCIPLES OF CONSULTATION

The National Environment Protection Council, in accordance with the Consultation Objectives:

- 1. recognises that relevant consultation is an essential component of public policy development, implementation and review and that effective consultation will lead to more informed decisions and increase the effectiveness of environmental outcomes.
- 2. will conduct consultation in a transparent and accountable manner, encouraging input from all interested parties and will commence consultation as soon as practicable after the publication of the Notice of Intention.
- 3. will provide comprehensive and timely information, ensuring that there are clearly defined lines of communication.
- 4. will ensure that material is written in plain English and is accessible to all stakeholders.
- 5. will have regard to the differing resources of interested parties and use appropriate means of disseminating information.
- 6. will provide feedback to those providing comment and submissions.
- 7. will monitor and review the effectiveness of consultation.
- 8. assumes effective management of the chosen methods and techniques which promote the ease of understanding of material.

STRATEGIES FOR CONSULTATION

The elements of a consultation strategy are outlined with reference to the four key stages of MEASURE development. In each stage, there will be identified actions, roles and responsibilities.

Stage 1: NEPC work program

It is recognised that the environmental priorities are identified by NEPC and the NEPC Committee and proposed for the work program are not developed in a vacuum. They result from issues raised over a period of time in many different ways - from submissions, research, complaints, other fora (e.g. ANZECC) and environment policy development processes.

NGOs and other stakeholders have many opportunities to contribute to the proposed work program of NEPC such as through member agencies or directly to Commonwealth, state or territory governments. NEPC will, therefore, not establish new and duplicative formal processes for obtaining input to its work program decisions, but instead encourages NGOs to continue to put forward their views through existing mechanisms.

The NEPC legislation states the scope of potential Measures (Section 14). Matters which come before Council must be consistent with the legislation.

Stage 2: Public notification of the intention to prepare a measure

Once Council has decided to undertake development of a draft Measure, a Notice of Intention will be published in accordance with the legislation (Section 16); that is, twice in a newspaper circulating in each jurisdiction and the Commonwealth Government Gazette.

The Notice will specify the nature of the proposed measure and state that Council intends to proceed with the development of a draft. It will also describe how stakeholders can register their interest in the development of a Measure and will call for preliminary submissions on the proposal.

An information bulletin will be available as soon as possible after the Notice of Intention has been published. This will contain preliminary information explaining the reasons for proposing the development of a draft Measure, details of where information held by the NEPC can be accessed and where submissions can be forwarded.

A consultation plan which outlines methods and tasks that will be used to achieve participation and maximise understanding among stakeholders and the general public will be developed.

The legislation specifies a minimum of 30 days for comment before a draft Measure is prepared. However, in most cases, there will be significantly more time between the NEPC announcing its intention to prepare a draft Measure and the preparation of the draft. During this time, submissions will be considered and, where appropriate, input on specific issues or aspects of the draft Measure and impact statement will be sought from stakeholders.

Stage 3: Drafting the measure and making the draft available

For each Measure, there will be a Project Chair who will be a member of the NEPC Committee. The Project Chair shall guide the development of the Measure. A Project Manager from the Service Corporation and a Project Team will be established to prepare the draft Measure and associated impact statement. In addition, other approaches could be adopted to facilitate consultation such as establishing:

• mechanisms for ensuring appropriate consultation within each jurisdiction. For example, a Jurisdictional Reference Group may be established involving a nominated environment agency representative from each jurisdiction. These representatives should provide a link between the Project Team and their jurisdiction.

- mechanisms for ensuring peak NGO input to the Measure development process. This may occur via the Jurisdictional Reference Groups or it might occur through other mechanism such as some form of NGO advisory group.
- mechanisms for ensuring input from other sections of the community. Again, this
 might occur, at least partly, through the Jurisdictional Reference Groups or other
 mechanisms might be used. For example, focus groups of community,
 professionals and industry representatives may be established. These might be
 established by the associations themselves to provide information and input to
 the Measure development process.

During the development of the draft Measure and impact statement, the Project Team, through the NEPC Service Corporation, will provide regular information to stakeholders. The NEPC Service Corporation will also maintain a register of stakeholders and will actively solicit submissions where appropriate.

Once the draft Measure and impact statement are prepared and made available for public comment, submissions will be sought in accordance with the legislation, principles and objectives. This requires a minimum period of two months.

Stage 4: Adoption and Implementation in the Legislation, Principles and Objectives

All comments will be recorded, acknowledged and considered by the Project Team in finalising the proposed Measure. Feedback will be provided to people who have made submissions.

Having allowed at least two months for submissions, Council may vote on the measure in accordance with Section 19.

Once Council has made a decision, this decision will be promptly communicated to stakeholders and the broader community.

APPENDIX E LIST OF CONSULTATION MEETINGS HELD

Commonwealth

29 July 1997	Industry, environment, union, government (Canberra)
23 October 1997	Industry, environment, union, government (Canberra)

Australian Capital Territory

21 July 1997	Public (Canberra)
24 October 1997	Key stakeholder (Canberra)

New South Wales

Peak industry groups (Sydney)
Government (Sydney)
Peak environment groups (Sydney)
Peak industry groups - Technical (Sydney)
Peak local government groups (Sydney)
Public (Sydney)
Public (Wollongong)
Public (Newcastle)
Public (Penrith)
Industry (Sydney)
Public (Sydney)

Northern Territory

16 July 1997	Industry, environment	and	government	(Darwin)	-	2
meetings						
17 July 1997	Public (Darwin)					
18 July 1997	Public (Alice Springs)					

Queensland

Public (Brisbane)
Public (Cairns)
Public (Townsville)
Public, industry, environment and government (Brisbane)
2 meetings
Public (Toowoomba)
Public (Gladstone)
Public (Brisbane)
Public (Brisbane)

South Australia

7 August 1997	Public, industry, environment, government (Adelaide)
14 August 1997	Public, industry, environment, government (Port Pirie)
18 August 1997	Public, industry, environment, government (Mt Gambier)
22 October 1997	Key stakeholder (Adelaide)

Tasmania

29 July 1997	Public (Hobart)
30 July 1997	Public (Burnie)
31 July 1997	Public (Launceston)
22 October 1997	Key stakeholder (Hobart)

Victoria

3 July 1997	Government (Melbourne)
7 July 1997	Public (Melbourne)
14 August 1997	Australian Chamber of Manufactures workshop (Melbourne)
14 August 1997	Water industry workshop (Melbourne)
19 August 1997	Government (Melbourne)
28 October 1997	Public (Melbourne) - 2 meetings

Western Australia

24 July 1997	Public (Perth)
25 July 1997	Key Stakeholder (Kalgoorlie)
28 July 1997	Key Stakeholder (Karratha)

NGO Advisory Group Meetings

21 March 1997	Melbourne
23 April 1997	Canberra
9 July 1997	Canberra
3 September 1997	Canberra
16 October 1997	Canberra

APPENDIX F PRESS RELEASE



12 June 1997

Press Release

NATIONAL ENVIRONMENT PROTECTION MEASURE A STEP CLOSER

A major step was taken today towards providing all Australians with accurate information about pollutants in their environment.

Australia's Environment Ministers, meeting in Cairns as the National Environment Protection Council have agreed to release for public comment a draft National Environment Protection Measure (MEASURE) for a National Pollutant Inventory (NPI) for consultation with stakeholders.

National Environment Protection Measures are designed to give all Australians a cleaner environment and provide industry with consistent national standards.

The NPI will provide individuals, communities and business with detailed information about pollution emitted into the environment.

The Chairman of the National Environment Protection Council, Federal Environment Minister Robert Hill said that:

"It's appropriate that the first draft Measure should deal with the fundamental question of pollutants in our everyday environment."

"When the NPI is in place the public will have easy access to information about pollutants whether they are from a nearby industry or passing traffic."

"We have now reached the stage where we need key stakeholder and community input into the NPI process. We will be seeking comment on the NPI draft Measure beginning later this month. This consultation phase is an essential element in contributing toward the development of the National Measure."

"The Council aims to finalise the NPI early next year." Senator Hill said.

Supporting the development of the draft NPI Measure are several new initiatives:

- Following an approach from Western Mining Corporation (WMC) Resources and the Western Australian Government, they and Environment Australia will begin a trial in Western Australia on aspects of the NPI;
- The NSW EPA is taking the lead in developing emission estimation techniques which will assist industry to implement the NPI and will link with State reporting requirements such as the proposed load-based licensing scheme in NSW; and
- The Queensland Government, in partnership with Environment Australia, is planning an integrated trial of the NPI in South East Queensland.

Senator Hill said that implementing the NPI on the ground would help resolve many of the issues that arise from a new programme of this complexity.

"It's good to see industries such as WMC Resources and our respective Governments taking the initiative and working together," the NEPC Chairman said.

Today's meeting of the Council, its fourth since its formation, also agreed to release an officials' discussion paper on a national Measure for ambient air quality.

Senator Hill says, "the early release of the air quality discussion paper is designed to enable consultation with key stakeholders". It provides an opportunity for stakeholder input into the development of the draft Measure prior to its formal release for public consultation, as required by legislation.

"Air quality is of fundamental concern to all Australians particularly in Australia's major urban areas and regional towns."

"This is the beginning of a consultative process which will include broad community consultation prior to the release of the formal draft Measure later this year," the Senator said.

The Council is also developing other measures covering issues such as the assessment of contaminated land and the regulation of the movement of hazardous wastes across State and Territory boundaries.

In the future, the Council will consider proposals for national Measures on diesel emissions, ambient water quality and waste minimisation. Scoping papers on these matters will be developed as a basis for early consultation before Council initiates any formal MEASURE development processes.

The full text of the NPI draft Measure and the discussion paper on a National Measure for Ambient Air Quality will be available within a week on the internet at the NEPC web site www.nepc.gov.au.

For further information:

Matt Brown 0419 693 515 Dr Bruce Kennedy 08 8419 1200

12 June 1997

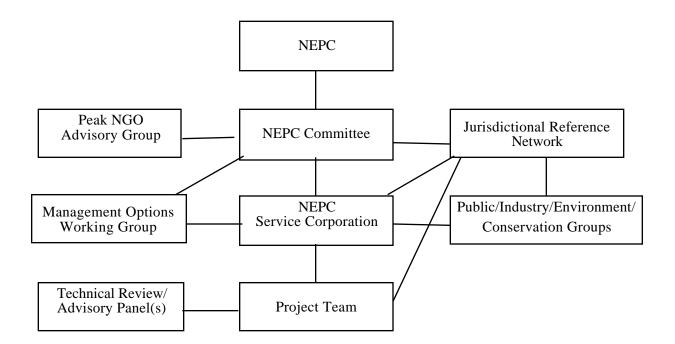
Members of the National Environment Protection Council:

Chair: Federal Environment Minister, Robert Hill

State and Territory Ministers: Pam Allan, NSW; Marie Tehan, Vic; Brian Littleproud, Qld; Cheryl Edwardes, WA; David Wotton, SA; Peter Hodgman, Tas; Gary Humphries, ACT; and Mike Reed, NT.

APPENDIX G REPORTING AND CONSULTATION ARRANGEMENTS

In the development of each National Environment Protection Measure (Measure), a working structure is established as displayed in the following diagram.



The roles of these groups in Measure development can be characterised in the following manner:

NEPC

- initiates the development of the draft Measure
- approves the release of the draft Measure and Impact Statement for public consultation
- makes the Measure

SENATOR THE HON ROBERT HILL (CHAIR) Minister for the Environment Commonwealth

THE HON MARIE TEHAN MP Minister for Conservation and Land Management Victoria

THE HON DAVID WOTTON MP Minister for the Environment and Natural Resources South Australia

MR GARY HUMPHRIES MLA Minister for the Environment, Land and Planning Australian Capital Territory THE HON PAM ALLAN MP

Minister for the Environment New South Wales

THE HON BRIAN LITTLEPROUD MLA

Minister for the Environment Queensland

THE HON PETER HODGMAN MHA

Minister for the Environment and Land Management Tasmania

THE HON MIKE REED MLA/THE HON MICK PALMER MLA Minister for Lands, Planning and Environment Northern Territory

THE HON PETER FOSS MLC/THE HON CHERYL EDWARDES MLA Minister for the Environment Western Australia

NEPC COMMITTEE

- appoints a Project Chair from the NEPC Committee
- · appoints Project Team experts from jurisdictions
- develops the proposal for the Measure
- oversees the development of the draft Measure
- members of NEPC Committee are responsible for consultation in their respective jurisdictions

MR ROGER BEALE (CHAIR) Secretary Environment Australia Commonwealth Commonwealth

DR NEIL SHEPHERD Director General Assistant Director General Environment Protection Authority New South Wales

DR BRIAN ROBINSON

Chairman Environment Protection Authority Victoria

MR JOHN GILMOUR Executive Director (Environment) Department of Environment Queensland

DR BRYAN JENKINS Chief Executive Officer Department of Environmental Protection Western Australia

MR ROB THOMAS Executive Director Environment Protection Authority South Australia South Australia

DR FRANK CATTELL Manager, Operations Department of Environment and Land Management Tasmania

MR BARRY CHAMBERS Secretary Department of Lands Planning and Environment Northern Territory

MR PETER BURNETT Director Environment Protection Environment ACT

DR BRUCE KENNEDY Executive Officer NEPC Service Corporation

MR GRAHAM SANSOM (OBSERVER) Australian Local Government Association (ALGA) **MS ANTHEA TINNEY** Alternate Member Head Environment Protection Group Environment Australia

MS LISA CORBYN Alternate Member

Environment Protection Authority New South Wales

MS LEANNE BURCH Alternate Member Manager Policy and Planning Environment Protection Authority

MS BARB SINGER Alternate Member Assistant Secretary Department of Lands Planning and Environment Northern Territory

PROJECT CHAIR

• responsible to NEPC and NEPC Committee for overall development of the NPI Measure MR ROGER BEALE Commonwealth

PROJECT MANAGER

• responsible for managing the development of the Measure and Impact Statement. The Project Manager is also the Executive Officer for the NGO Advisory Group and Jurisdictional Reference Network

MS MARY MERTIN NEPC Service Corporation

PROJECT ASSISTANCE

- provide administrative support and assist the Project Manager and Project Team
- MS LISA DAVIES NEPC Service Corporation MS MONINA GILBEY NEPC Service Corporation

PROJECT TEAM

- develops draft Measure and Impact Statement under the guidance of the Project Chair and Project Manager
 - MS JILL PATTISON New South Wales MS ANNIE GABRIEL/MR JAMES SHEVLIN Commonwealth

MR KELVYN STEER South Australia MR JOHN WOODLAND/MR JOHN OTTAWAY QLD/WA

MR ANTHONY BURNELL/MR WAYNE ROBINS Victoria

TECHNICAL ADVISORY PANEL

• provides expert technical advice to the Project Team

PROFESSOR IAN RAE (CHAIR)	Mr Andrew Baker Ü
Dr Peter DiMarco Ü	DR PETER GLAZEBROOK
PROFESSOR BARRY HART	Dr Bob Humphries Ü
DR JOZEF LATTEN	DR GREG MILLER
DR BRIAN PRIESTLY	DR SUSANNE TEPE

ASSOCIATE PROFESSOR CHRIS WINDER

Ü NEPC agreed to these members of the Technical Advisory Panel in June 1997.

PEAK NGO ADVISORY GROUP

- comprises senior executives from Non-Government Organisation (NGO) groups (conservation, industry, professional)
- is chaired by Project Chair
- provides policy advice to NEPC Committee

MR CRAIG BROCK Avcare Limited	MS MARIANN LLOYD-SMITH NECF	
MR VOLKER MAIER NPI Industry Network	MS SUSAN PENNICUIK ACTU	
MR MATT POLLARD Minerals Council of Australia MS ANITA ROPER NPI Industry Network		
MR MATT RUCHEL NECF	MR JIM STARKEY Australian Institute of Petroleum	
MR JAMES WHELAN NECF		

JURISDICTIONAL REFERENCE NETWORK

- comprises one government officer from each jurisdiction
- conducts whole-of-government consultation
- usually conducts public consultation
- provides policy advice and feedback to Project Team through the NEPC Service Corporation on issues
- supplies appropriate data and information to Project Team to assist Measure development

MR MARK HYMAN/MR JAMES SHEVLIN (CHAIR) Commonwealth	MR ANDREW BAKER Western Australia
MR ANDREW BUICK Northern Territory	DR TONY HODGSON Australian Capital Territory
MR WARREN JONES Tasmania	MR SCOTT MCDOWALL Queensland
MS HELEN HOFMAN/MS JILL PATTISON NSW	MR WAYNE ROBINS Victoria
MR WIL VAN DEUR South Australia	

MANAGEMENT OPTIONS WORKING GROUP

• develop coordinated arrangements, in the form of a Memorandum of Understanding, for the implementation approaches to be adopted for the NPI

MR MARK HYMAN/MR JAMES SHEVLIN (CHAIR) Commonwealth	MR ANDREW BAKER Western Australia
MR ANDREW BUICK Northern Territory	DR FRANK CARNOVALE Tasmania
MR IAN ESKDALE Queensland	DR TONY HODGSON Australian Capital Territory
MS HELEN HOFMAN/MS JILL PATTISON NSW	MR WAYNE ROBINS Victoria
MR KELVYN STEER South Australia	