



**National Environment Protection
(National Pollutant Inventory) Measure**

**Summary of Submissions
received in relation to the
Draft Variation to the
National Environment Protection
(National Pollutant Inventory) Measure
and
National Environment Protection Council's
Responses to those Submissions**

APRIL 2007

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	REPORTING OF TRANSFERS IN THE NPI.....	1
2.1	Environmental Case for Reporting of Transfers	3
2.2	Voluntary Reporting of Transfers for Reuse and Recycling.....	3
2.2.1	Total Nitrogen and Total Phosphorus for Beneficial Reuse	4
2.3	Reporting of Transfers to Final Destination	5
2.4	Development of Guidance Materials for Reporting of Transfers	5
2.5	Costs of Reporting Transfers	6
	Transfers consultancy	6
	Estimated costs	6
	Extrapolated costs	7
2.7	Jurisdictional Aggregate Transfers Reporting.....	9
3.	OTHER PROPOSED NEPM AMENDMENTS.....	9
3.1	Aquaculture	9
3.2	Change of Title of the Program from NPI to NEI	11
3.3	Additions/Deletions to the Substance List.....	11
3.4	Change to Publication Date	11
3.5	Other Changes to the NEPM	12
	APPENDIX A - DETAILED SUBMISSIONS AND RESPONSES.....	12
	Environmental case for transfers.....	14
	Reporting of transfers to final disposal	22
	Reporting of transfers for reuse and recycling	29
	TN/TP beneficial reuse.....	33
	Jurisdictional aggregate transfer reporting	37
	Development of guidance materials	37
	Costs	43
	Additions/deletions to substance list.....	49
	Aquaculture.....	52
	Change in Category 3 threshold	55
	Name change.....	55
	Publication requirements.....	56
	Role of NPI	58
	Emissions	60
	Thresholds	63
	PM _{2.5}	67
	Other comments.....	69
	Greenhouse Gas Emissions	78
	Submissions received.....	78

1. INTRODUCTION

In December 2004, the Environment Protection and Heritage Council (EPHC) agreed to review the National Pollutant Inventory (NPI) to assess whether any improvements could be made to the program to make it more useful for stakeholders. The review was completed in April 2005 and, in July 2005, the National Environment Protection Council (NEPC) agreed to initiate a variation to the National Environment Protection (National Pollutant Inventory) Measure (NPI NEPM). In June 2006, NEPC released a draft NEPM variation, impact statement and other supporting documents for public consultation.

Major changes proposed to the NPI NEPM in the consultation documentation included:

- name change
- inclusion of transfers
- substance and threshold changes
- removing the exemption for aquaculture reporting, and
- changes to publication requirements.

The variation also addresses other matters identified in the 2005 NPI Review Report.

The consultation documentation addressed the inclusion of greenhouse gas emissions reporting in the NPI, however, following the July 2006 decision of the Council of Australian Governments (COAG), no formal presentations on the greenhouse gas component of the proposed NEPM variation were given in the public consultation forums (apart from informing attendees about the proposed COAG work). Inevitably, issues relating to greenhouse gas emissions reporting were raised from the floor in a number of forums and comments were included in many of the submissions. A summary of the greenhouse-related comments contained in the NPI submissions was made available to the COAG process. No analysis of these comments was made by the NEPM variation project team.

Public consultation forums were held in all Australian capital cities. A total of 356 individuals attended these meetings. Seventy-seven written submissions were received in response to the release of the draft NEPM variation and impact statement – 53 submissions from industry groups or individual businesses, 10 from community groups, four from individuals, six government submissions and four from consultants and academia. A list of submitters is provided in Appendix A.

Appendix A presents a detailed summary of issues raised in submissions and responses to those issues (greenhouse-related comments from submitters are included in the interests of transparency but, as indicated above, no responses have been provided).

A full range of views was expressed in the submissions, with some submitters supporting the proposed changes and others arguing against specific changes. In light of the submissions, modifications to the NEPM variation have been made, particularly in relation to transfers. The sections below address those areas in which modifications have been made, and outline the reasons why no changes have been made in other instances.

2. REPORTING OF TRANSFERS IN THE NPI

The majority of respondents offered comment on the introduction of transfers reporting, with significant discussion on environmental benefits that may be achieved, the cost of reporting, and reasoning behind the requirement to report transfers of substances which were destined for subsequent beneficial reuse.

Submissions from industry generally opposed the inclusion of transfers in NPI reporting, with the major objections relating to reporting of NPI substances destined for recycling, reuse or treatment for reuse. Points of objection were as follows:

- absence of a uniform definition of 'waste' across jurisdictions, and confusion surrounding definition of products and by-products, particularly those with commercial value
- justification for reporting of substances destined for beneficial reuse, as opposed to those for final destination
- excessive cost and, in some cases, difficulty of analysis
- duplication of existing waste tracking systems
- creation of additional red tape, unwarranted paperwork and compliance costs
- the possibility of community pressure restricting reuse, even though substances transferred could be benign and no threat to the environment
- an absence of significant environmental benefit (eg substances have not been released to the environment)
- confusion over interpretation of data, including potential for double counting
- lack of contextual information
- lack of transfer estimation techniques and cost to develop
- lack of nexus between transfers and environmental protection measures
- no improvement in the knowledge base
- community perception that industry is a large generator of waste, and
- concern that the database showing substances transferred rather than materials transferred will be misleading.

Industry also questioned the reasoning for the exclusion of waste rock but the inclusion of tailings materials and sediments.

Points raised by supporters of inclusion of transfers were as follows:

- encourages better corporate environmental behaviour
- attains Organisation of Economic Co-operation and Development (OECD) status as a pollutant release and transfers register (PRTR), and
- provides the community with information on fate of potential pollutants.

To address the majority of these concerns, it is proposed that reporting of transfers of NPI substances to a destination for reuse, recycling, reprocessing, purification, partial purification, immobilisation, remediation or energy recovery should be voluntary rather than mandatory.

Mandatory reporting will only apply to NPI substances transferred to a destination for containment including:

- landfill
- tailings storage facility
- underground injection, or
- other long term purpose-built waste storage structure,

or to:

- a destination for destruction
- a sewerage system, or
- an off-site treatment facility which leads solely to one or more of the above.

For convenience these destinations are considered to be 'final destinations', although this may not be the case in all situations.

Reporting of transfers of substances to other than final destination (eg for recycling, energy recovery) will be possible (and encouraged) on a voluntary basis, and the database will be designed to make such data publicly available. Voluntary reporting will provide an avenue for a facility to illustrate good management of materials containing NPI substances which are destined for recycling off-site or treatment leading to beneficial use.

The website display of transfer data (both mandatory and voluntary) will be designed to minimise misinterpretation and will be separate from the display of emissions data. Display of voluntary data could be additional and complementary to any information shown on a facility's own company website.

2.1 ENVIRONMENTAL CASE FOR REPORTING OF TRANSFERS

The following points summarise the environmental case for reporting of transfers to final destination in the NPI.

- **Helps track the generation, release, management and fate of a substance over time.** The NPI currently provides the public with information on the types and amounts of pollutants released to the environment. The inclusion of transfers will provide a further element of disclosure to the public on the movement and final disposal of substances with potential to harm to the environment, and will provide a more complete picture of the fate of a substance over time.
- **Provides long term information on substances held in landfills.** The reporting of transfers will result in improved knowledge of substances resident at points of final disposal such as landfills and tailings storage facilities. Such information will prove useful following closure of this type of facility.
- **Identifies potential environmental problems so that early action can be taken.** Public disclosure of transfers of waste can also encourage companies to be more proactive in taking critical action before an event occurs putting the environment at potential risk.
- **Improves the sustainable use of resources by expanding the reuse, recycling and reprocessing of materials.** By reporting transfers, industry will become more aware of the amount of substances in waste going to final disposal. This has the potential for industry to implement new solutions to manage their waste – for example expand on their current reuse and recycle techniques – leading to cleaner production and overall waste minimisation and prevention. This may also have an effect on the capacity of landfills, tailing dams and wastewater treatment plans which will eventually reach their peak. By having these solutions of waste minimisation/prevention in place, industry can lessen the impact on these disposal options.

2.2 VOLUNTARY REPORTING OF TRANSFERS FOR REUSE AND RECYCLING

Removing the mandatory reporting of substances destined for recycling or reuse eliminates the necessity for a cross-jurisdictional definition of 'waste', or the requirement to operate under various jurisdictional definitions, since it can be assumed that materials disposed of to final destination have no commercial value and would comply with any definitions of waste currently in force. Objections to the reporting of transfers based on the uncertainty surrounding definitions of 'product', 'by-product' or material with 'commercial value' would also no longer be of concern.

It is considered that this will result in a considerable reduction in the complexity and cost of reporting by industry. This approach was tested in the case studies which formed part of the report by EECO Pty Ltd, *Further Investigation of the Cost of Transfers Reporting to Industry*, and was found to substantially reduce the cost of reporting.

Some submissions raised the issue that mandatory public disclosure of substances in transferred materials could counter the drive for their beneficial reuse. For example, it was purported that the inclusion of NPI substances in power station fly-ash to be incorporated in road-base material could unduly raise issues within the general community which could hinder its reuse. As a further example, it was purported that reporting of heavy metals encapsulated in power station ash which is subsequently used in the cement industry could cause undue alarm with the general public even though the metal content is benign and there is no environmental threat in its end use. Negative community perception could result in the cessation or reduction of such beneficial reuse.

With the exclusion of mandatory reporting of transfers for reuse, the amount of information on transfers is likely to be reduced, although it is likely that many industries will recognise the benefits of reporting the information on a voluntary basis. However, it was considered that the practical difficulties of reporting to other than the 'final destinations' would increase the complexity and cost of reporting beyond what is considered reasonable for the information gained. Expanding the mandatory requirement to include the voluntary aspects may be considered at some point in the future should these practical difficulties be resolved.

2.2.1 Total Nitrogen and Total Phosphorus for Beneficial Reuse

Land treatment resulting in benefit to agriculture or ecological restoration is commonly referred to as 'beneficial reuse' where benefit is derived from the nutrient value of the material to be applied. Three types of practices have been mentioned in submissions to the variation:

1. wastewater irrigation
2. application of biosolids, and
3. composting, in terms of the material sent to a composting facility or the application to land of composted material (analogous to '2' above).

The irrigation of wastewater is often a desirable alternative to discharging into surface waters. Not only can the water body be protected, but also components of the wastewater can be beneficially used by the soil to promote improved growth of vegetation such as crops, grasses and trees. Similarly, biosolids (such as appropriately treated sewage sludge) can make an important contribution to sustainable environmental management, through the return of organic material, trace elements, moisture and nutrients to soils. Composting also provides an important way to meet landfill reduction, waste recycling and resource conservation policy targets. Such targets are essential in the pursuit of sustainable development and need to be increasingly adopted to drive changes in the management of municipal, industrial, agricultural and sewage sludge wastes.

It is recognised that the changes imposed on the land due to the above practices can be either beneficial or detrimental. The latter can occur due to imbalances created by mismatching waste quality or irrigation methods to land capability. However, relevant state and territory agencies currently manage these land application practices through guidelines, licensing tools and approvals, and indeed promote 'fit for purpose' reuse strongly, as part of better approaches to waste management through resource efficiency.

Submissions received generally opposed the inclusion of beneficial reuse as a reportable transfer to land. Reasons put forward were:

- definitional issues, particularly whether these materials were viewed as wastes or products
- lack of recognition of life cycle considerations, given the quantities of Total N and Total P inputs and land take-up rates at a facility
- equity issues between the reporting of transfers such as Total N and Total P in applied manure while treating synthetic fertilisers as products not captured in reporting, and

- the potential to hinder growth of the industry for these environmentally-preferred practices and stifle legitimate resource efficiency projects, due to the highlighting of 'pollutant' levels in the applied materials.

The amendment to the transfers definition, to require reporting to final destinations only, successfully addresses the above concerns. In addition, the proposal to encourage voluntary reporting of transfers of NPI substances to a facility for reuse, recycling, reprocessing, purification, partial purification, immobilisation, remediation or energy recovery retains the ability to report if a facility wishes to showcase good practice.

As a result of the change to the transfers definition, the application to land of effluent and other material, such as from intensive livestock or composting, is classified as a reuse and is no longer captured by the definition of a 'mandatory' transfer. Transfers of NPI substances (such as Total N and Total P) contained in this material may, however, be reported on a voluntary basis.

2.3 REPORTING OF TRANSFERS TO FINAL DESTINATION

The retention of mandatory reporting of NPI substances transferred to final destination satisfies one of the OECD Guiding Principles:

PRTR systems should provide data to support the identification and assessment of possible risks to humans and the environment by identifying sources and amounts of potentially harmful releases and transfers to all environmental media.

The retention of reporting of transfers to final destination will:

- provide documented evidence of NPI substances which have the potential, however slight, of release to the environment from final disposal sites
- provide documented evidence of amounts of NPI substances present in containment structures following facility closure (eg a mining facility's tailings dam), and
- act as a driver for minimising production of waste materials containing NPI substances.

The Technical Advisory Panel previously addressed the differences between tailings storage facilities and waste rock dumps and, although some submissions advocated that two be treated similarly, no additional compelling argument was made to change the position that transfers to tailing storage facilities should be reportable while transfers to waste rock dumps should not be. In its considerations, the TAP carefully weighed the science around the issues of transfers reporting for both waste rock and tailings materials. The focus of the TAP was on science-based risk assessment related to differing exposures. The TAP concluded that most tailings pose a greater risk than soils and waste rock because of possible exposure to added processing reagents. In addition, in waste rock/soils, the concentrations of any substances of concern are low. The risk differences between waste rock and tailings go beyond particle size though the smaller particle size of tailings materials also makes for higher exposures and therefore higher risk.

2.4 DEVELOPMENT OF GUIDANCE MATERIALS FOR REPORTING OF TRANSFERS

Industry reporting materials attracted comments from a number of submissions. Most of these submissions urged improvements to existing reporting materials and stressed the need for government to provide high quality guidance materials for any new reporting requirements, especially transfers reporting. Concern was expressed by some submissions that existing reporting materials were outdated or inappropriate - they suggested that any changes to the NPI be delayed until existing reporting materials are improved. The proposed change from 'Industry Handbooks' to 'Industry Reporting Materials' attracted limited comment and this tended to be cautiously supportive.

Some stakeholders raised the issue of reporting Total Volatile Organic Compounds (TVOCs) as a transfer to a sewerage system. The Technical Advisory Panel (1999) stated that the reason for including TVOCs was because of the role this group of substances has in atmospheric ozone-forming reactions. That being the case, reporting of TVOCs to a destination other than air is inappropriate. This issue can be dealt with administratively in the same way used for other substances (such as oxides of nitrogen and particulate matter) with reporting materials disallowing reporting to an inappropriate destination.

The issues raised regarding reporting materials are mainly operational and are unable to be influenced to any great degree by changes to the NEPM. It is, however, considered that the change from 'Industry Handbooks' to 'Industry Reporting Materials' will enhance improvements and lead to faster updating of reporting materials. Implementation of new requirements, especially transfers, will need to be supported by industry reporting materials.

Further investigation of the amended definition of transfers has shown that generic transfer factors may not be relevant to some industry sectors. In such cases site specific analyses may need to be undertaken, at least initially.

It is envisaged that additional industry reporting materials can be produced and distributed prior to the commencement of new reporting requirements.

2.5 COSTS OF REPORTING TRANSFERS

Transfers consultancy

Many respondents commented on the costs associated with reporting transfers to the NPI. Most felt the increased costs of reporting would not result in a proportionate increase in useful NPI data and 15 stated that transfers reporting would be generally opposed by industry. It was suggested that a more robust financial assessment be undertaken to further estimate the overall costs to industry.

A consultancy by EECO Pty Ltd - who undertook the initial financial analysis of transfers - was commissioned to re-examine the costs through a case study approach, based on the new definition of transfers. In collaboration with the NEPM project team, a total of eleven case studies were undertaken, involving a range of different industries including power generation, food manufacture, galvanising and intensive livestock production. The case studies determined the extent of transfers reporting for each industry type and examined the costs of developing and implementing estimation methodologies.

The final report provides a good indication of the range of costs, analyses required, and the basis for developing emission factors and the information required for transfers reporting materials. This report titled *Cost analysis of reporting National Pollutant Inventory transfers: Case studies using the amended NPI NEPM variation* is available at <www.ephc.gov.au>.

Estimated costs

A range of industry sectors participated in the case studies and a summary of estimated costs of mandatory transfers reporting from these industries is shown in the table below (some of the participating companies have more than one reporting facility and therefore comparative costs are also provided on a per facility basis).

Case study cost summary

	Total company costs for the first year	Total company costs for each subsequent year	Total costs per facility for the first year	Total costs per facility for each subsequent year
Sewage treatment	\$ 5,700	\$ 2,200	\$ 700	\$ 300
Automobile manufacturing	\$ 16,000	\$3,700	\$ 16,000	\$3,700
Galvanizing	\$ 6,300	\$ 2,300	<\$ 1,000	<\$ 500
Cement manufacturing	\$ 990	\$ 500	\$ 500	\$ 250
Electricity generating A	\$ 8,500	\$ 2,700	\$ 8,500	\$2,700
Electricity generating B	\$ 8,500	\$ 2,500	\$4,300	\$1,200
Petroleum refining	\$ 18,000	\$5,600	\$ 18,000	\$5,600
Pig / Poultry farming	\$ 100	\$ 0	\$ 100	\$ 0
Sugar milling & refining	\$ 990	\$ 220	\$ 160	\$40
Oil & gas extracting	\$ 14,000	\$6,000	\$ 4,800	\$ 2,000
Timber product manufacturing	\$ 100	\$ 0	\$ 100	\$ 0

Note: The costs shown above have been endorsed by the facilities concerned

The findings from this consultancy revealed that in some cases, for example, reporting for the sewage treatment plant, staff are already proficient at reporting substance emissions to the NPI, and therefore are fully aware of the NPI program and the structure, calculations and reporting tasks. In this example, monitoring and analytical tests are already undertaken on wastewater and biosolids and regulated waste tracking certificates are kept for all biosolids transferred offsite. Therefore, the major initial costs will be incurred in the first year and will mostly involve performing calculations, measurements and estimates and understanding the regulatory requirements. However, overall costs will reduce significantly in subsequent years.

Discussions with representatives of the poultry and pig farming sectors, together with desktop research, indicate that wastes from the two industries are beneficially re-used and would not be subject to transfers reporting. Any costs to a facility would relate only to becoming informed about the provisions in the varied NEPM, and would be expected to be less than \$100 per facility. There would be no ongoing costs. Such costs also apply to the timber product manufacturer, who currently disposes of waste via landfill. The facility pays the landfill operator per tonne of waste, therefore calculations are already undertaken for the facility. The introduction of transfers reporting would not therefore create any additional cost.

Extrapolated costs

These case study cost estimates have been extrapolated to weigh the cost per industry sector to the number of NPI reporters in each sector for the 2005/06 reporting year. For example, there are about 190 reporters under the ANZSIC Class Poultry Farming - Meat (lower cost) and only ten under Petroleum Refining (higher cost). It should be noted that the case studies are snapshots of a particular situation and the extrapolated average costs in the table below are indicative only.

Extrapolation of case study costs

	ANZSIC code	Total NPI reporters 2005/06	Total costs per industry sector for the first year	Total costs per industry sector for each subsequent year
Sewerage and drainage services	3702	254	\$180,000	\$76,000
Motor vehicle manufacturing	2811	10	\$160,000	\$37,000
Metal coating and finishing	2764	35	<\$35,000*	<\$18,000
Cement and lime manufacturing	2631	26	\$13,000	\$6,500
Electricity supply	3610	90**	\$580,000	\$180,000
Petroleum refining	2510	10	\$180,000	\$56,000
Farming (pig, poultry-meat, poultry-eggs)	0151, 0141, 0142	322	\$32,000	\$ 0
Sugar manufacturing	2171	29	\$4,600	\$1,200
Oil & gas extraction	1200	99	\$480,000	\$200,000
Wood product manufacturing not elsewhere classified	2329	30	\$3,000	\$ 0
Total facilities represented		905		
Total NPI reporting facilities		3835		
Weighted average costs for the facilities represented			\$1,800	\$630
Previous national estimate made prior to variation amendment			\$2,800	\$1,400
Previous estimate by industry respondents prior to variation amendment			\$10,500	\$8,300

The table above indicates that averaged across the participating sectors, the estimated additional costs for existing reporters have been reduced from the costs estimated for the original transfers definition. The average first year costs are extrapolated to be \$1,800 for the facilities represented, with on-going costs of \$630 per annum per facility. The amended cost estimates are also significantly reduced from the industry estimate of an \$8,300 on-going cost provided in the Impact Statement.

Transfers reporting methodology

While each case study is unique, there are transfers reporting components that are relevant to several, if not most, industry sectors. To properly self-assess the need to report transfers, a facility needs to:

- review regulatory requirements
- review the NPI substances for which the reporting threshold is exceeded
- identify the waste streams that may contain these NPI substances
- review existing data, including waste stream analyses, and
- identify any data gaps and, if necessary, obtain the required data.

Where significant data gaps exist, laboratory analyses may be required. Analytical costs are mostly incurred in the first year as transfers factors based on the analyses may be developed for subsequent years. On-going analyses are only needed for highly variable waste streams or to modify transfers factors to account for significant process changes.

The case studies also illustrate that there are some typical factors available to help reduce the transfers reporting cost per facility including:

- personnel experienced in reporting NPI emissions
- established systems and spreadsheets for reporting NPI emissions

- existing analytical programs (eg for trade waste, production quality, licensing), and
- multiple facilities to share reporting costs.

2.6 Benefits of Changed Transfers Definition

In summary, the amendment to the definition of transfers to require mandatory reporting of transfers to final destination will:

- substantially reduce analysis costs for a facility
- reduce costs associated with the tracking of the materials
- remove confusion over definitions of waste
- remove problems associated with defining products and by-products as applied to transfers reporting
- simplify the NPI website and reduce misinterpretation by stakeholders
- have limited effect on the drive to cleaner production, as facilities directing materials to reuse are already pursuing this objective
- reduce the additional cost (regulatory burden) in the supply chain if using secondary materials as compared to use of virgin materials, and
- reduce community perception that industry is a large generator of waste when certain sectors are committed to greater efficiencies.

2.7 JURISDICTIONAL AGGREGATE TRANSFERS REPORTING

Aggregate emissions data provides emission estimates from diffuse sources, natural sources and non-reporting facilities (ie facilities that are exempt or do not exceed reporting thresholds). Similarly, aggregate transfers data would provide transfers data from diffuse sources and non-reporting facilities (natural sources do not transfer substances, they can only emit them). The scope of aggregate transfers reporting may include transfers of substances from small businesses and households to sewer and to kerbside waste.

A number of submissions commented that estimates of aggregate transfers should be included in the NPI since it may lead to a better understanding of overall transfer levels and provide context to the transfers from industry.

The preparation of aggregate emissions data for catchments and airsheds has previously been agreed between the Australian Government and the relevant jurisdiction subject to the availability of resources. Similarly, it is considered that estimation of aggregate transfers data would follow this process. There is no requirement to amend the NEPM to allow this process to occur.

3. OTHER PROPOSED NEPM AMENDMENTS

3.1 AQUACULTURE

Nineteen submissions specifically addressed the proposal to remove the reporting exemption for aquaculture – five submissions were against removing the exemption (four of these from industry associations) while 12 submissions supported removing the exemption. Arguments against removing the reporting exemption for aquaculture focused on the perceived over-regulation of the industry sector and the financial impost of the requirements.

Those submissions supporting the removal of the exemption noted:

- the lack of publicly available emissions data from aquaculture facilities particularly given that aquaculture is largely a private sector initiative, though some of the activity in aquaculture is conducted using public resources

- that all significant sources of emissions, whether natural, diffuse or industrial, should be included to ensure the integrity of the reporting system and to provide the most accurate information and context to the community
- a requirement for the aquaculture industry to report emissions allows governments and the public to quantify the environmental impact of these activities in relation to other sources in the catchment, and
- the need to gain a better understanding of the nutrient loads being emitted to receiving waters and the potential harm to waterway health.

Comments on the major issues raised are provided below. It should be emphasised that the NEPM variation involves removing the *reporting exemption* for aquaculture which does not immediately place reporting requirements on the industry. The amendment would allow for the preparation of industry reporting guidance materials to be developed for this industry sector. It is only when these guidance documents are published that mandatory reporting requirements come into force.

Industry Regulation

Some respondents stated that the aquaculture industry was heavily regulated and inclusion in additional programs was burdensome. However, other industry sectors reporting to the NPI are also subject to a broad range of jurisdictional regulatory requirements. Equity considerations alone suggest that removal of the reporting exemption for aquaculture would provide a fairer program that covers industry sectors with the potential to emit significant quantities of substances. It should be noted that thresholds apply to all NPI reporting industries and no report is required unless a threshold is exceeded.

Risk Assessment

Some submissions were critical of the lack of rigorous assessment of environmental risk from the aquaculture sector. This comment fails to recognise that assessment of risk is inherent in the substance thresholds that are applied to facilities before they are required to report to the NPI. It is considered that the nutrients Total Nitrogen and Total Phosphorus are the most likely NPI substances for which aquaculture facilities may have to report emissions. These substances have emission-based thresholds of fifteen tonnes and three tonnes respectively that must be exceeded before reporting is required - thereby applying a risk-based assessment of the likely impact of the emission.

In a risk assessment of 400 substances based on human and environmental health hazard and likelihood of exposure, the Technical Advisory Panel (1999) ranked Total Nitrogen as number 17 and Total Phosphorus as number 27 in their priority list of substances. The Panel noted that the thresholds were set at a level that “will capture medium to large wastewater treatment plants, medium to large intensive livestock facilities, and larger facilities involved in food and beverage manufacture and processing” and that it was “important for point sources to be reporting their emissions”. Hence, any aquaculture facilities that would trip these thresholds are emitting nutrients at an equivalent level to other medium to large industries. For example, in New South Wales, about 165 sewage treatment plants hold environment protection licences while only half of these facilities report to the NPI because their emissions are above the reporting thresholds for Total Nitrogen and Total Phosphorus. This illustrates that only facilities emitting significant quantities of nutrients are required to report these emissions.

In summary, the NPI program clearly involves an assessment of environmental risk through the development of the substance reporting list and the application of substance thresholds, and these risks would be fundamental to the application of the NPI program to the aquaculture industry.

Catchment Nutrient Data

Currently, jurisdictions provide nutrient emissions data for diffuse sources for all major catchments across Australia. Any significant sources of nutrient emissions should be required to report to the NPI to ensure the integrity of the database through providing a comprehensive dataset of major point sources and diffuse emissions. If aquaculture facilities emit nutrient quantities exceeding the NPI reporting thresholds then they should report these emissions to the NPI to ensure the dataset is complete and to ensure the program is equitably applied to all intensive agricultural industries.

3.2 CHANGE OF TITLE OF THE PROGRAM FROM NPI TO NEI

The major reason behind the proposal to change the name of the NPI to the National Emissions Inventory (NEI) was to acknowledge the concerns of many stakeholders that, with the introduction of greenhouse gases into the NPI, the term pollutant should be removed since it could lead to restrictions in commercial opportunities and conflicts with environmental licensing conditions. Should the COAG proposal to prepare new legislation for greenhouse gas and energy reporting proceed, this scenario no longer exists.

Further, a shift to the name NEI whilst also enhancing the program to include the reporting of transfers is likely to cause confusion since transfers are clearly not emissions.

Given these points, it is proposed that the name change from NPI to NEI not proceed. Continuing with the current name also removes any loss of program recognition that may have accompanied a new name.

3.3 ADDITIONS/DELETIONS TO THE SUBSTANCE LIST

Some respondents noted that due to time constraints, the Technical Advisory Panel did not undertake a comprehensive review of the substance list, leading to a situation where they commented only on specific substances that were raised in the 2005 NPI Review and subsequent consultation. The Panel acknowledged this and recommended that a full reassessment of the criteria used to create the original NPI substance list should be undertaken to take into account updated information on all substances.

Given these comments, and in the absence of a comprehensive substance review and research on the use of the substances in Australia, a cautious approach to the removal of substances should be pursued. It is therefore proposed that no substances be removed from the NPI reporting list.

This cautious approach is unlikely to affect costs to industry since the substances proposed for removal (Aniline, 2-Ethoxyethanol, Ethyl butyl ketone, 2-Methoxyethanol, 2-Methoxyethanol acetate, 4,4-Methylene Bis 2,4-Aniline and Nickel carbonyl) are already in the NPI program and were proposed for removal from the NPI because no facilities were reporting emissions of the substances (note that Acrylamide was incorrectly included on this list as it is reported each year). Therefore, taking a precautionary approach by not deleting substances from the NPI reporting list allows for future reporting of these substances should a facility use any of these substances in amounts that exceed the appropriate threshold.

3.4 CHANGE TO PUBLICATION DATE

The proposal to extend the publication date from 31 January to 31 March is still considered valid, however the process for this period should be clarified. Facilities will still be required to submit their NPI reports within three months of the end of their reporting period (ie 30 September for financial year reporters). An extra two months before publication will allow jurisdictions more time to query and verify data and similarly, will allow facilities more time to respond to jurisdictional queries about the information that they have submitted.

It is not proposed to introduce a 'pre-release database' where facilities could log-on and check their data. This would be administratively cumbersome, given the need to ensure that the data provided by other facilities could not be accessed since that would be a breach of confidentiality.

3.5 OTHER CHANGES TO THE NEPM

A number of other changes to the NEPM were included in the consultation documents (such as changes to reporting commencement; changed requirements for reporting fuel and waste for the purpose of emissions data verification; minor change to enforcement provisions; changes to the provisions for reviewing the NEPM). These changes did not attract comment in submissions and it is therefore considered that no significant issues exist for stakeholders.

APPENDIX A - DETAILED SUBMISSIONS AND RESPONSES

Submitter No	Organisation/Individual
1	Ms Robyn McIntosh
2	Horizon Power
3	Australian Industry Greenhouse Network
4	New South Wales Minerals Council
5	Peter Hutchison Consultancy
6	EECO Pty Ltd
7	Flinders Power
8	Mr Bevan Delaney
9	Rio Tinto Aluminium
10	Solvay Interlox Pty Ltd
11	Australian Vinyls Corporation Ltd
12	BP Australia
13	Ash Development Association of Australia
14	Australasian Slag Association
15	Conservation Council of South Australia
16	Whale and Dolphin Conservation Society
17	Hazelwood Power
18	Clean Air Society of Australia and New Zealand (Vic/Tas Branch)
19	Biosecurity Victoria (Department of Primary Industries)
20	Western Australia Department of Industry and Resources
21	Aluna (Marine Education and Experience)
22	Australian Sugar Milling Council
23	Moreland Energy Foundation
24	Australian Business Ltd (New South Wales State Chamber)
25	Australian Plantation Products and Paper Industry Council
26	Northern Alliance for Greenhouse Action
27	Verve Energy
28	Western Australia Chamber of Commerce and Industry
29	Shell Company of Australia
30	QAF Meat Industries Pty Ltd
31	Kimberly-Clark
32	Western Australia Chamber of Minerals and Energy
33	Northern Territory Seafood Council

Submitter No	Organisation/Individual
34	Plastics and Chemicals Industry Association
35	NuFarm Australia Ltd
36	Gecko (Gold Coast and Hinterland Environment Council)
37	Ecocem Pty
38	Australian Steel Mill Service Pty
39	Advocate for the Consumer, Cosmetic, Hygiene and Specialty Products Industry
40	Stanwell Corporation
41	Business Council for Sustainable Energy
42	West Australian Lot Feeders Association
43	Australian Aluminium Council
44	Department of Defence
45	Queensland Resources Council
46	Australian Prawn Farmers Association
47	National Aquaculture Council
48	Cement Industry Federation
49	Australian Lot Feeders Association
50	Mr Errol Craig
51	Greenbase Pty Ltd
52	University of Sydney (Department of Chemical Engineering)
53	Gelita Australia Pty Ltd
54	Aquaculture Council of Western Australia
55	Nature Conservation Council of New South Wales
56	Australian Chicken Growers Council Ltd
57	SA Water
58	Mr Keith McGuigan
59	Department of Agriculture, Fisheries and Forestry
60	Australian Network of Environmental Defender's Offices
61	Coogee Chemicals Pty Ltd
62	Australian Pork Limited
63	Minerals Council of Australia
64	Confidentiality requested
65	South Australian Wine Industry Association
66	Western Australia Department of Environment
67	Australian Environment Business Network
68	Sunfish North Moreton
69	Confidentiality requested
70	Australian Industry Group
71	Nature Conservation Council of New South Wales
72	Australian Petroleum Production and Exploration Association
73	Submission withdrawn
74	Department of Fisheries
75	Exxon Mobil
76	New South Wales Farmers Association
77	Australian Chamber of Commerce and Industry
78	BHP Billiton Olympic Dam

PREAMBLE

This appendix presents a summary of public input so that stakeholders have an understanding of the views being presented to NEPC, and can trace their input into the development of this variation.

Many issues and comments were raised in more than one submission, and in different forms. Style and expression 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 that would give cause to elevate the importance of any submission above another.

ENVIRONMENTAL CASE FOR TRANSFERS
<p>Issue Community right to know is a vital element in our society today. A critical element in this is the understanding and clarity of the information – it should be presented so as to be unbiased. The addition of transfers into the NEI scheme serves to present the same information in a duplicate manner without any explanation of how effective or beneficial the downstream treatment may be. This sends the wrong message to the community and may have an unjustified negative impact on some industries. 11 - Australian Vinyls Corporation Ltd</p> <p>Response With the amended definition of transfers, there will be no duplication of data since only final disposal will be reported. Industry may voluntarily provide information on recycling, reuse and reprocessing to illustrate beneficial reuse. Waste tracking systems report waste types as opposed to substances and do not report this information publicly, hence there is no duplication between the NPI and waste tracking systems. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.</p>
<p>Issue I support the inclusion of transfers into the NPI and the expansion of the NPI to include additional pollutants and additional facilities. 52 - Don White, University of Sydney</p> <p>Response Noted</p>
<p>Issue Given that the document is produced as a National Environment Protection Measure we find it difficult to see how some of the proposed changes can be regarded as "environment protection measures". 27 - Verve Energy</p> <p>Response Public release of information on emissions has shown to be a valuable tool for reducing the emissions of pollutants to the environment. Including transfers in the NPI will assist meeting the NEPM goals.</p>
<p>Issue The inclusion of reportable substances encapsulated in power station ash does not increase environmental risks per se nor does it increase the amount of "hazardous wastes" entering the environment. These substances are effectively bound within the ash matrix. 40 - Stanwell Corporation</p> <p>Response An assessment of bioavailability would unnecessarily increase the complexity and cost to industry of reporting to the NPI.</p>

ENVIRONMENTAL CASE FOR TRANSFERS
<p>Issue</p> <p>The “desired environmental outcomes of the measure” stated in Clause 5 would be achieved without the inclusion of transfers. Emissions and transfers (if included) should be reported in separate databases or, at least, separate sections of the database.</p> <p>10 -Solvay Interrox Pty Ltd, 34 - PACIA, 61 - Coogee Chemicals Pty Ltd</p> <p>Response</p> <p>Including transfers will specifically provide information that can be used to achieve the NEPM goal of minimising hazardous waste allowing for the reduction of the waste at the source. Emissions and transfers will be reported separately on the database.</p>
<p>Issue</p> <p>Clause 9(1)(e) – we submit that the introduction of the ‘transfer’ element in the NEPM be deferred until a more robust financial assessment is conducted on the impact of this proposed requirement to industry.</p> <p>64 - Confidentiality requested</p> <p>Response</p> <p>The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers, as demonstrated by the study <i>Further Investigation of the Cost of Transfers Reporting to Industry</i> (EECO 2007).</p>
<p>Issue</p> <p>Stanwell does not support the inclusion of “transfers” within the reporting structure. Stanwell considers the inclusion of transfers will be detrimental to the long term aim of re using power station ash as a product.</p> <p>40 - Stanwell Corporation</p> <p>Response</p> <p>Under the amended definition of transfers, substances within ash that are reused will not need to be reported to the NPI.</p>
<p>Issue</p> <p>The benefits to business are overstated. Credibility and trust with the community will not be achieved by the NPI system. The impact on government to a small business operator is simply bewildering. To pass off increased government costs of \$400,000 per year as nothing to be concerned about is incomprehensible. If the report said that the existing staff would absorb the increased workload then small business would feel more comfortable. Benefits to the community will be negligible. The only part of the community that engages in “informed” debate is the pressure groups. 99% plus of the community have never heard of NPI. The community in Australia will not change their purchasing choices in the supermarkets due to NPI reporting – they do not at present identify Australian manufacturers on the shelf.</p> <p>5 - Peter Hutchison Consultancy</p> <p>Response</p> <p>Public disclosure has been demonstrated to lead to reductions in emissions. Industry groups advocate public disclosure as a method of developing trust with the community (World Business Council for Sustainable Development). Impacts on small businesses are minimised by program design elements such as thresholds and exemptions.</p>
<p>Issue</p> <p>The [section 2: Statement of the Problem, impact statement] heading is misleading in that this section merely states the role of the NPI and indicates that a decision has been made to review the NEPM. No problem has been described. It is contended that the desired environmental outcomes as stated in Clause 5 of the NEPM are currently being met.</p> <p>10 - Solvay Interrox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd</p> <p>Response</p> <p>The NPI review identified a series of shortcomings with the current program that are being rectified by this variation process. Including transfers will specifically provide information that can be used to achieve the NEPM goal of minimising hazardous waste allowing for the reduction of the waste at the source.</p>
<p>Issue</p> <p>Section 2.1 outlines the role of the NPI, to satisfy community demand for information and to assist environmental planning and management. Further evidence of this would be beneficial in terms of numbers of the community utilising the data and examples of how the information is being used to assist environmental planning and management. This will give clearer understanding of the reasons as to why transfers have been incorporated into the “draft variation” in particular..... Section 2.2.2 lists the environmental outcomes, however, again these are not consistent with Part 2 Clause 5 in the “draft variation”.</p> <p>29 -Shell Company of Australia</p> <p>Response</p> <p>The way in which the NPI is used within community groups in Australia is not well characterised, however there is</p>

ENVIRONMENTAL CASE FOR TRANSFERS

considerable evidence that there are groups using it (eg surveys and market research conducted by government indicate significant interest, as does the range of community groups that have made submissions as part of the variation consultation). Government, businesses, the finance sector, the education sector and the media are all consistent users of NPI data.

Including transfers in the NPI will specifically provide information that can be used to achieve the NEPM goal of minimising hazardous waste allowing for the reduction of the waste at the source.

Issue

The impact statement indicates that the main disadvantage of the Do Nothing Option with respect to transfers is that it does not meet the objective of public disclosure of substances in transferred waste. It cites references that imply that forced public disclosure is required to check the effectiveness of waste reduction programs and that voluntary disclosure programs are largely ineffective. This justification is flawed as the substances disclosed will only comprise a small portion of the waste stream, will not characterise the waste stream to any useful extent, do not assist the public understanding of whether there is a significant environmental issue or not, unless disclosed in the context of waste stream characteristics; the characteristics of all significant waste streams are already available to regulatory bodies under existing licensing arrangements; publicly available information will not be in a form which will provide any benefit as they will not have access to the form of that material or other details on the waste stream in which it appears. In the case of coal ash materials, reporting transfers to the NPI will not lead to improved waste minimisation, cleaner production or recycling outcomes.....The Impact Statement justifications or listing of advantages and disadvantages continually discuss the merits or otherwise of reporting waste when in actual fact the NPI will only contain substances not waste. Unless the NPI is redesigned to include further details on the waste stream besides the substances it will be unlikely that the NPI as proposed will deliver the advantages claimed.

7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services

Response

Public release of information has been shown to be a valuable tool to improve environmental performance by facilities. The exact mechanism of the improvement varies depending on the specific issues that arise. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures. This will enable industry to provide further information to the public on the characteristics of their waste stream.

Issue

We remain fundamentally opposed to the inclusion of waste transfers in the NPI, because they are not emissions to the environment. They are different from the other emissions reported, and although they would be reported separately, there is real danger that the public may choose to add emissions and transfer numbers. This error would be particularly significant for a mining or mineral processing industry due to the large volumes moved. Including transfers makes no contribution towards the maintenance or improvement of air and water quality, nor would it help reduce the environmental impacts associated with emissions. Transfers do not represent pollutants or pollution that is exposed to the environment or community, rather they represent materials management and handling processes, which are designed and monitored to manage any risks they may pose to the environment or community health.

9 - Rio Tinto Aluminium (RTA)

Response

The NPI is classified as a Pollutant Release and Transfer Register (PRTR). It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of substances. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a substance over time.

Substances within a waste that are transferred can pose an environmental risk (eg spillage).

The definition of transfers indicates that substances within waste rock and overburden are not reportable.

The display of emissions and transfers separately on the database will be designed to minimise misinterpretation.

Issue

Support for option 3 - do nothing.

11 - Australian Vinyls Corporation Ltd

Response

Noted.

ENVIRONMENTAL CASE FOR TRANSFERS

Issue

The proposal to include transfers in the reporting requirements for the NPI is strongly opposed on the grounds that it will incur significant costs to industry and government and will not contribute meaningful information to the knowledge base and may result in confusion due to lack of understanding by users of the data. Substances from the reporting list which are included in the transfers do not enter the environment in the transfer process and depending on the purpose of the transfer may never enter the environment. If transfers are included, separate databases should be prepared for the emissions and transfers or, if this is not accepted, the NEI database should contain separate sections for emissions and transfers and the emissions section must clearly state that the substances reported in that part are not emitted to the environment.

10 - Solvay Intertox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd, 77 - Australian Chamber of Commerce & Industry

Response

It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time.

The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.

Substances within waste that are transferred can pose an environmental risk.

The display of emissions and transfers on the database will be designed to minimise misinterpretation.

Issue

We are concerned about the inclusion of waste transfers due to substantial cost to industry and no meaningful data will be collected. This information could be misused because some substances on the proposed transfer list may not reach the environment.....We suggest that waste transfers be removed from the current proposal until further work is done to improve waste estimation techniques to reduce cost to industry of tracking transfers, better define a list of transfer substances that actually enter the environment and cause harm and clarify what constitutes a waste transfer.

24 - Australian Business Ltd/State Chamber (NSW)

Response

As above. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.

Issue

Verve Energy cannot see why transfers, especially if they are to an appropriately licensed facility with strict measures to prevent impact to the environment, should come under the umbrella of an "environment protection measure". As most transfers do not impact the environment or the public we cannot see any environmental or public benefit that will arise from the reporting of transfers. Only where a transfer impacts human health or the environment, that is, it is an emission, should it be reported.

27 - Verve Energy

Response

It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time.

Issue

We oppose the inclusion of transfers in the NPI for several reasons. The logic applied to the various substances considered for reporting as transfers is inconsistent. For instance products used for energy combustion are excluded whilst substances transferred for energy recovery should be reported. The recommendation that wastes used in recycling and energy recovery be reported conflicts with the variation's objective of expanding the re-use and recycling of used materials. The proposed variation does not make clear the net environmental benefit that will arise from the reporting of transfers. As stated in the TAP report, the "critical issue...is not one of location, but of the ultimate fate of the material". The proposal states that reported transfers would be published in a database separate from emissions, but what form this would take is not clear. We are concerned that transfers may be confused with emissions or pollutants, an outcome that, particularly in the case of substances transferred for treatment or energy recovery, could cause erroneous and unnecessarily negative community perceptions of the reporting organisations. A requirement to report transfers will add to the administrative and cost burdens on industry without contributing anything meaningful to the understanding of NPI users.

28 - Chamber of Commerce & Industry WA

ENVIRONMENTAL CASE FOR TRANSFERS
<p>Response</p> <p>The amended definition of transfers simplifies the mandatory reporting requirements for industry. Industry may voluntarily provide information on recycling, reuse and reprocessing to illustrate beneficial reuse. The display of emissions and transfers on the database will be designed to minimise misinterpretation.</p>
<p>Issue</p> <p>We oppose the proposal to fundamentally alter the scope and coverage of the NPI (away from its widely accepted and supported focus on emissions to the environment) to now include transfers, including transfers that occur within a single enterprise facility.... If there is a concern to broaden the coverage of existing emissions to include discharge to sewer, then why not just address this directly. If there is a concern about NPI reportable substances in wastes being emitted to air, land or water, then is this not already covered by a reporter's obligation to estimate and report all emissions from their facility?</p> <p>39 - Advocate for the Consumer, Cosmetic, Hygiene & Specialty Products Industry</p>
<p>Response</p> <p>It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time.</p>
<p>Issue</p> <p>The justification for inclusion of transfers appears, from the review documents, to be based on a model of international consistency rather than a specific need for Australian conditions. International comparison of emissions has limited meaning and the NPI review should concentrate of delivering a specific and necessary outcome for Australian conditions..... Stanwell does not support the inclusion of transfers within the NEPM NPI. Inclusion of parameters or emissions within the data base should be related to environmental risks and not just materials handling. In its currently proposed format, the proposal to include transfers is not a risk based approach. For this reason it may collect and present data of naturally occurring compounds that are unlikely to be released into the environment, or cause a risk to human health.</p> <p>40 - Stanwell Corporation</p>
<p>Response</p> <p>As above. Industrial processes and their inherent environmental risks in Australia are similar to those encountered in other countries. Therefore, management and reporting systems that have been successful in those countries are considered to be appropriate for Australia.</p>
<p>Issue</p> <p>We support Option 3 - including transfers in the NPI. Most data required is already collected by our clients for waste management, the process to produce the numbers is identical and in many cases already being done to determine NPI reporting thresholds, and the methodologies are more straight forward than for most emissions. We do advocate that public access be distinct so as not to confuse emission and waste management issues. However, we cannot see that the inclusion of transfers will increase reporting overheads in any significant way.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>We ask also as to why transfers of NPI substances onto facilities is not included. This would fulfil a demonstrable emergency planning and community right to know obligation that fits well within the NPI framework and would require no additional data collection or calculation overheads as this information is already collected and calculated to determine NPI usage thresholds for emissions. The arguments against keeping these separate due to public reporting under other regulations is the same as for greenhouse gases. From a policy level these reported numbers can be treated differently, but on a procedural introduces unnecessary duplication and overheads.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Response</p> <p>While this additional information may be valuable, it would unnecessarily increase the complexity of the reporting requirements for industry.</p>

ENVIRONMENTAL CASE FOR TRANSFERS

Issue

We see little value in the inclusion of waste transfers as a reporting area. The movement of material containing substances from one location to another does not in itself represent a release to the environment, and should not be included in a scheme aimed primarily at reporting pollutant emissions. We note that emissions arising from the transport and storage of materials are within the scope of the existing scheme.

4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia

Response

It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time. The amended definition of transfers simplifies the reporting requirements for industry. Substances within waste that are transferred can pose an environmental risk.

Issue

We also wish to highlight that although a few countries (maybe up to 14) have release registers, only one country (USA), includes external transfers plus estimates of on-site treatment, recycling and energy recovery. Two others (Canada, UK) include external transfers only, the rest do not include transfers. The UK obtains the information only as summary data for classes of wastes. This information was not included in the presentations and we believe it is important to let all stakeholders be aware in the international forum regarding 'transfers'.

61 - Coogee Chemicals Pty Ltd

Response

Transfer registers exist in the USA, Canada, Czech Republic, Belgium, Denmark, Ireland, Italy, Japan, South Korea, The Netherlands, Norway, Slovakia, Sweden and United Kingdom (under development). The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.

Issue

Previous reviews have shown that there is a low level of awareness and understanding of the NPI in the community. The inclusion of transfers will add an additional level of complexity to the NPI. We support the intention to clearly differentiate emissions and transfers. Transfers have very different environmental outcomes to emissions and this must be explained through the provision of effective contextual information. Despite repeated industry requests for improved contextual information, the NPI continues to have insufficient information of this nature and limited opportunities for reporters to provide this information. It is imperative that advances are made in improving the provision of contextual information, and the re-branding to the NEI provides an opportunity to do so.

22 - Australian Sugar Milling Council (Brisbane)

Response

The way in which the NPI is used within community groups in Australia is not well characterised, however there is considerable evidence that there are groups using it (eg surveys and market research conducted by government indicate significant interest, as does the range of community groups that have made submissions as part of the variation consultation). Government, businesses, the finance sector, the education sector and the media are all consistent users of NPI data. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.

Issue

How would the (limited) information provided by the NPI be of use in reporting under international conventions?

66 - Department of Environment WA

Response

The changes to the NPI will provide better background data that will enable the Australian Government to report information under the Basel Convention on the Control of Trans-Boundary Movements of Hazardous Wastes and their Disposal and the Rotterdam Convention on Prior Informed Consent.

Issue

We question the strength of the case for including transfers in the NPI. Most of the justification provided in the impact statement relates to the inclusion of transfers in overseas PRTRs. This emphasises the lack of compelling arguments about who would use the data, what it would be used for and whether there is any reason to insist that such data be provided – in an Australian context. Transfers should not be included at all in the NPI. If they are to be included they should be restricted to only off-site transfers, consistent with most overseas examples.

25 - Australian Plantation Products & Paper Industry Council

ENVIRONMENTAL CASE FOR TRANSFERS
<p>Response</p> <p>Industrial processes and their inherent environmental risks in Australia are similar to those encountered in other countries. Therefore, management and reporting systems that have been successful in those countries are considered to be appropriate for Australia. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>The problem of definition create enormous uncertainty and regulatory inconsistency, it also potentially undermines the integrity of the NPI itself if there is a lack of consistency in what is reported. There is concern that along with the view that all transfers will be regarded as emissions there will be a general public perception that industry is involved in waste generation rather than waste minimisation or cleaner production.</p> <p>70 - Australian Industry Group</p>
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>Internationally, few countries have a PRTR and only the USA, includes external transfers plus estimates of on-site treatment, recycling and energy recovery. Two other countries (Canada, UK) include external transfers only, whereas the remainder do not include transfers. The proposal for transfer data in the NEPM is far more detailed and costly than those in any other country with the possible exception of the USA. Given the size of Australia's industry sector, the changes proposed in the NEPM variation could constitute an unfair and inappropriate reporting requirement.</p> <p>35 - NuFarm Australia Ltd, 70 - Australian Industry Group</p>
<p>Response</p> <p>Transfer registers exist in the USA, Canada, Czech Republic, Belgium, Denmark, Ireland, Italy, Japan, South Korea, The Netherlands, Norway, Slovakia, Sweden and United Kingdom (under development). The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>We do not support the inclusion of waste transfers, as this will not further the NPI's objective. Including waste transfers would require the reporting of many substances that are not direct emissions to the environment and are not likely to undergo transformation (for example, the treatment of wastewater to sewer) prior to any emission to the environment. Inclusion of waste transfers will not promote the more efficient use of resources via waste minimisation and cleaner production. The proposed framework is currently problematic, and if transfers are to be included, a joint working group including industry, federal and state regulators should be established to review the issues and develop a framework that is effective, inexpensive, and workable for industry, regulators and the community.</p> <p>72 - Australian Petroleum Production & Exploration Association, 75 - Exxon Mobil</p>
<p>Response</p> <p>It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>The inclusion of waste transfers may give an incorrect assessment, as any emissions from burning 'waste streams' as fuel and from sites receiving wastes (in excess of the defined thresholds) are currently being reported. Further reporting to the NPI will result in an additional reporting burden on the industry, as information on hazardous wastes is reported through other agencies and regulations. Determining levels of NPI NEPM substances will also impose a significant cost on industry, as testing for these substances will require significant time, equipment and costs, which may not be accurately reflected in the RIS. Differences in definitions of wastes between jurisdictions, as proposed, will also result in a higher cost burden on industry, and lead to inconsistent reporting and inaccurate conclusions.</p> <p>72 - Australian Petroleum Production & Exploration Association, 75 - Exxon Mobil</p>
<p>Response</p> <p>The amended definition of transfers requires mandatory reporting of transfers only. This will likely result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study.</p>

ENVIRONMENTAL CASE FOR TRANSFERS
<p>Issue</p> <p>We support the inclusion of transfers in the NPI NEPM. The reporting of transfers is considered important for the NPI NEPM to meet its objectives of providing the community with information on the fate of chemicals produced or used by industry, and encouraging better corporate environmental behaviour, including waste minimisation, cleaner production and an expansion in the re-use and recycling of materials. The inclusion of transfers will enable the NPI to achieve the status of a PRTR as recommended by the OECD. A review by the OECD in 2001 indicated that the majority of PRTRs around the world require reporting of transfers.</p> <p>60 - Australian Network of Environmental Defender's Offices</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>It is encouraging to see the requirement to report transfers. This will prove an invaluable tool in meeting not only the objectives of the NEPM – but also our international obligations under the Ramsar, Camba and Jamba agreements.</p> <p>68 - Rob King, Sunfish North Moreton</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>It is not clear how transfers could “promote waste minimisation, cleaner production and energy and resource efficiency”. These objectives would appear to be addressed, either partly or wholly, by other regulations. Furthermore, it is not the benefit of including transfers on the NPI to the above objectives but the marginal or incremental benefits ie above and beyond those programs already being adhered to by business. The impact statement is totally silent on pre-existing legislation whose aims are mirrored by that of the NPI. The impact statement therefore overestimates the benefits of such as program. Regulation cannot be viewed in isolation but must be measured against the existing level of regulation. We believe that the benefit of introducing transfers into the NPI, when viewed in this light, does not outweigh the costs. Information regarding environmental planning and management provided to governments does not have to come from one source before the type or specifics of the information required are known. This is ‘putting the cart before the horse’. Information can be sought on an ad hoc basis rather than having a pool of potentially useful (or un-useful) information lying around. We agree that industry will use information for environmental planning and management purposes but not at any cost.</p> <p>77 - Australian Chamber of Commerce & Industry</p> <p>Response</p> <p>The aims of the NPI are consistent with other environmental programs that contribute to the achievement of these goals. The NPI is a unique national public disclosure tool.</p>
<p>Issue</p> <p>We support the other proposed NPI amendments, specifically clarifying the intent of the NEPM, by including a desired outcome being "expanding the re-use and recycling of used materials". While we support this addition in principle, the effectiveness of the NPI delivering this outcome is questionable. Unless further consideration is given to the intent and definitions proposed, the NPI will simply add to the regulatory burden already faced by secondary materials further increasing the level of inequity with virgin materials and making it more difficult for them to compete. Further the NPI will only represent transfers as NPI substances, making it very difficult for the general public to visualise what is actually being transferred, recycled or somehow saved.</p> <p>48 - Cement Industry Federation</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>

REPORTING OF TRANSFERS TO FINAL DISPOSAL	
Issue	The inclusion of transfers in the NEI scheme would result in potential double counting of substances which provides a distorted picture of the state of the environment and the performance of a company. If the transfers are included, much more work needs to be done about the definition of a waste and a transfer. In the draft NEPM, transferring any type of effluent to a water treatment plant within the same facility would need to be counted, as would the final disposal to trade waste sewer, for no additional value. It may also be difficult to determine the substances in all internal transfers without substantial analytical work. A sensible approach may be to require reporting of internal transfers to final disposal (not to recycling/treatment options), eg land fill on site, as this is its final transfer. External transfers could cover the final movement off site. 11 - Australian Vinyls Corporation Ltd
Response	The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.
Issue	The inclusion of transfers in the NEI is strongly opposed. However if transfers are to be reported, they should be limited of "off-site" transfers. The current definition and wording in other parts of the proposed NEPM would require every transfer to be reported. 10 - Solvay Intertox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd
Response	The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.
Issue	This section would benefit from an additional definition for the term 'containment' (that references the term landfill). 12 - BP Australia (Melbourne)
Response	The amended transfers definition clarifies the term 'containment'.
Issue	In some situations material may be moved from one Shell site to another and then back to the original site, in such circumstances would this transfer be classified as an "on-site" or "off-site" transfer? 29 -Shell Company of Australia
Response	The movement of material from one site to another is classified as an off-site transfer. Only transfers to final disposal are reportable.
Issue	Stanwell does not support the inclusion of the collection of transfer data. In some instances the reporting entity may not be aware of the transfer endpoint. An example of this occurs when material may be sent to a transfer station for disposal (and reported as such), but then aggregated and trans-shipped for another process meaning that is not accurately described on the NPI. Should reporting of transfer data be required, then this should be limited to a few classes of destinations (eg secure landfill, trade waste sewer). Collection of other information in relation to any transfer facility should not be required (such as whether the facility meets best practice - due to the highly dynamic nature of best practice). 40 - Stanwell Corporation
Response	The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.
Issue	The definition of waste should be consistent for the purposes of the NPI. The definition proposed "...waste has the meaning defined in the legislation of the participating jurisdiction..." does not lead to consistency within NPI reporting. Variations in definitions between reporting jurisdictions could lead to poor data quality associated with transfers reporting. The definition of waste should be defined within the NPI document. 40 - Stanwell Corporation
Response	The amended definition of transfers no longer requires a definition of 'waste'.

REPORTING OF TRANSFERS TO FINAL DISPOSAL
<p>Issue</p> <p>We consider the delegation, within the proposed definition of “waste”, to already problematic jurisdictional definitions of waste to be an unnecessary deficiency within the draft variation. We note also that the Technical Advisory Panel Final Report did not include a recommendation to delegate to jurisdictions but provided its own simple definition of waste to be read in conjunction with the proposed definition which has not been included within the draft variation. We note that the OECD Guidance Manual for Governments on PRTRs refers to the purpose of PRTRs as providing information about “releases or transfers to air, water and soil as well as about wastes transported to treatment or disposal sites”. Our interpretation of the variation impact statement is that the intent of including transfers appears to align well with this OECD purpose, as determined by the context of the various references to “waste” therein.</p> <p>48 - Cement Industry Federation</p>
<p>Response</p> <p>The amended definition of transfers no longer requires a definition of ‘waste’.</p>
<p>Issue</p> <p>We note that the definition of “waste” differs in various jurisdictions, and this would be a source of inconsistency in the application of transfer reporting, and hence inconsistency and uncertainty of transfer data. For companies operating across jurisdictions, this would add unforeseen complexity and cost for reporting transfers.</p> <p>66 - Department of Environment WA</p>
<p>Response</p> <p>The amended definition of transfers no longer requires a definition of ‘waste’.</p>
<p>Issue</p> <p>Emissions and transfers (if included) should be included in separate databases or in separate parts of a combined database. The requirement in 31(1)(g) to ‘clearly differentiate transfer data from emission data’ is not considered to provide adequate assurance that all possibility of confusion will be eliminated.</p> <p>10 - Solvay Interlox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd</p>
<p>Response</p> <p>It is not considered that having two separate databases will lead to better outcomes beyond separation of emissions and transfers information within the existing database. The display of emissions and transfers on the database will be designed to minimise misinterpretation.</p>
<p>Issue</p> <p>I believe that inclusion of transfers is a good idea. Depending on work practices at a site and/or seasonal weather pattern, triple interceptor waste could be almost pure water, or comprise a high percentage of oils and other contaminants. Waste oils would be more uniform than interceptor wastes, but not strictly consistent in their composition. It will quite easy to collect information relating to the volume of these wastes. Determining the levels of reportable substances will be more difficult. Obviously, it would be unreasonable to sample each shipment and it could be inaccurate to apply a blanket “transfer factor”. Has this been considered?</p> <p>2 - Horizon Power</p>
<p>Response</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>The justification for including the type of receiving facility is that it will enable the user to “determine the veracity/suitability of the final destination”. The use of the word veracity in this context adds nothing to the justification and, as previously stated, neither does the information provided permit any assessment of the suitability of the final destination. Overall this statement adds little to the justification.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p>
<p>Response</p> <p>Information about the type of containment or treatment does assist the database user in broadly identifying whether the transfer destination is appropriate. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.</p>
<p>Issue</p> <p>We approve of the decision to exclude waste rock from reporting as the resources sector has already developed many processes in terms of the handling of such materials to ensure environmental best practice. However, the proposed variation to include transfers from tailings storage facilities is not supported. We remain opposed to the inclusion of waste transfers in the NPI arguing that the variation would not contribute to the improvement of land, air and water quality nor</p>

REPORTING OF TRANSFERS TO FINAL DISPOSAL

aid to reduce environmental impacts associated with waste transfer. We also have concerns that the availability of such data may present a distorted view to the public. This is especially of concern if transfer and emissions data is combined, giving misleading figures, as emissions are already reported within the NPI. How the proposed variation will separate transfers from emissions is not made clear...Another concern is the development of techniques to estimate the quantities of substances within the waste. Associated with this are costs required to accurately analyse the substances contained in the waste transfers, and compliance costs.

32 - The Chamber of Minerals & Energy (WA)

Response

It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time. Including transfers will specifically provide information that can be used to achieve the NEPM goal of minimising hazardous waste allowing for the reduction of the waste at the source.

The display of emissions and transfers on the database will be designed to minimise misinterpretation.

Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.

The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study.

Issue

We support the proposed variation that defines transfers as not including the transport or movement of substances contained in overburden and waste rock. We believe this strengthens the emission data provided in the NPI as the large volumes of this material would otherwise skew results. It is important to note that this does not reduce the community's right to know, as these movements are already provided in other publicly available reports through the NSW Department of Primary Industries - Mineral Resources Annual Environmental Management Report. We believe this also supports one of the key goals of the NPI which is to expand re-use and recycling of used materials.

4 - NSW Minerals Council

Response

Noted.

Issue

We reject any proposal to include transfers to tailings storage facilities in the NPI since transfers, by their definition, are not an emission to the environment and would therefore distort the true reporting of pollutants that the NPI is intended to provide. The inclusion of transfers to tailings storage facilities in the NPI would impose significant additional costs on the minerals industry with little scope for reducing this over time.

4 - NSW Minerals Council

Response

It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry. It is understood the mining industry generally has a reasonable understanding of the NPI substances contained in its tailings.

Issue

The variation says little about how a transfer database would be managed, although the impact statement states that either "a database expansion would be required to accommodate transfers" or transfers would be incorporated in a different register or the NEPC would do nothing. We are not happy with this lack of information. We feel that, however the data is published, transfers may be confused with emissions or pollutants.

27 - Verve Energy

Response

It is not considered that having two separate databases will lead to better outcomes beyond separation of emissions and transfers information within the existing database. The display of emissions and transfers on the database will be designed to minimise misinterpretation.

REPORTING OF TRANSFERS TO FINAL DISPOSAL

Issue

We accept that transfers of material off-site should be included in the register of transfers as proposed in the draft impact statement, although we are concerned over the risk of excessive bureaucracy being created to manage this complex area. However, we are opposed to the inclusion of on-site transfers to landfill and storage facilities. We agree that, if transfers are to be included, that a separate transfers section should be included within the facility report, and that the resulting publicly available information on transfers be made available via the website separately from existing facility emissions. Transfers, if included, should be reportable by type rather than substance to align with current reporting, and to avoid significant expense (estimated at tens of thousands of dollars per facility) that would be incurred to analyse waste material).

43 - Australian Aluminium Council

Response

The display of emissions and transfers on the database will be designed to minimise misinterpretation. The TAP recommended that both waste type and NPI substance be part of transfers reporting. In keeping with the current reporting of emissions on a substance basis and the desire to minimise complexity for both reporters and data users, it was decided to restrict reporting to substances only. The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.

Issue

It is clear from the impact statement that the movement of bauxite residue from an alumina refinery to a residue area would be classed as a transfer. Bauxite residue disposal areas and the way they are managed differ from site to site. In some cases water and/or liquor (reducing refinery purchases of caustic soda) are recovered and reused in the alumina refining process. It is unclear how this would be treated in a transfers register. If reporting of the various transfers associated with bauxite residue is required then an extensive initial analysis would have to be carried out and continuous monitoring programs put in place at significant cost to the industry.

43 - Australian Aluminium Council

Response

The intent is to include net annual quantities of NPI substances transferred. The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers, as demonstrated by the EECO 2007 study. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.

Issue

We would like clarification as to whether sewage would be classified as a transfer.

43 - Australian Aluminium Council

Response

The intent is that sewage discharge from onsite amenities such as toilets would not be reportable, but process discharges to sewer (where a threshold is exceeded) would be reported as transfers. Aggregated transfer estimates may include information from onsite amenities within the category of domestic sewage. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.

Issue

It is noted that section 3.3.5 refers to "inclusion of the type of reporting facility" whereas this should be "inclusion of the type of receiving facility". Inclusion of the suitability of the final destination is considered by Stanwell not to be an issue for the user of the database, and should not be a part of any transfer information..... We support the exclusion of the receiving facility name and location details. This level of information is unnecessary and increases the complexity of reporting.

40 - Stanwell Corporation

Response

Agreed and noted - notification of drafting error is appreciated. Information about the type of containment or treatment does assist the database user in broadly identifying whether the transfer destination is appropriate. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.

Issue

We endorse the exclusion of mine site waste dumps as environmental impacts from these are already covered in the dust and acid mine drainage sections of the NPI. We are curious why a similar policy does not apply to tailings storage facilities.

51 - Greenbase Pty Ltd

REPORTING OF TRANSFERS TO FINAL DISPOSAL
<p>Response The general distinction between waste rock and tailings facilities has been made by the TAP on the basis of the degree of risk posed.</p>
<p>Issue If transfers are to be included, then ONLY those transfers that end up directly in the environment – air, land or water (eg direct to land-fills, rivers, sea) should be reported. 70 - Australian Industry Group</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue If transfers are to be included, then ONLY those transfers that end up directly in the environment – air, land or water (eg direct to land-fills, rivers, sea) should be reported. In many cases, data is already being gathered for reporting to various jurisdictions, however, additional costs for analyses would most likely be needed. Nufarm strongly urges the removal of the requirement for reporting on transfers. If some transfers needs to be reported, that reporting should be limited to those transfers that are emitted to the environment. 35 - NuFarm Australia Ltd</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time.</p>
<p>Issue Should transfers reporting be included within the scope of the NPI, it is essential that this be accompanied by a significant injection of resources to ensure that there is adequate contextual data on both emissions and transfers data. The name of the NPI should also be changed to reflect the broader scope of the scheme, as is proposed in the current draft variation. In addition to the need to provide enhanced contextual data on transfers, a robust, agreed definition of what actually constitutes a waste transfer has not been developed. The lack of a clear definition for key terms is currently undermining the quality of discussions on whether or not to include this reporting area, as well as the estimation of reporting costs. 4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Response Operational changes to the NPI to support the variation, including enhancements to the website, are envisaged to include additional opportunities to provide context to the reported data. It is considered that the term ‘pollutant’ covers both the emission and transfer of listed substances. The majority of PRTRs around the world use the term ‘pollutant’ in their name but not ‘transfer’, despite the fact that transfers are often included. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared to the original proposal. It is also likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry. Any additional resourcing needs of government identified from this work will be assessed.</p>
<p>Issue We note that the TAP recommended that when reporting transfers to a receiving facility, the reporting of the type and purpose (recycling, reprocessing etc) of the facility should be mandatory. In addition, the panel recommended that there should also be some capacity to provide voluntary information on the nature and management of the receiving facility to provide acknowledgement of leading practice. We support this proposal. 4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Response Agreed, noting that the amended definition of transfers simplifies the reporting requirements for industry by focusing only on transfers to final destination. Industry may voluntarily provide further information.</p>

REPORTING OF TRANSFERS TO FINAL DISPOSAL
<p>Issue</p> <p>We recommend that should transfers reporting be included in the NPI, that a voluntary system for the classification of tailings storage facilities be established in consultation with industry to encourage the adoption of leading practice.</p> <p>4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p> <p>Response</p> <p>It is not the role of the NPI to classify best practice, however reporters are encouraged to voluntarily provide further contextual information of this type.</p>
<p>Issue</p> <p>Due to the fact that the actual destination of the waste will not be specified, the amount of available information will be limited and of limited value. However, if that waste is being tracked under another jurisdictional system, it is recognised that specification of a destination would be seen as a duplication of waste tracking systems already used by jurisdictions, and would likely be challenged by jurisdictions and industry.</p> <p>66 - Department of Environment WA</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Reporting of the transfer of sediments from dredging operations may be of no apparent benefit. In many ways it is akin to the placement of materials on waste rock dumps, and this activity is proposed to be exempt from reporting. The sediments have not been chemically modified, and it is highly likely they are chemically benign. Some assessment systems would have already provided the state with the information, so it may be already available.</p> <p>66 - Department of Environment WA</p> <p>Response</p> <p>Agreed. Reporting of sediments from dredging is envisaged to be limited to 'contaminated' sediments transferred to final disposal.</p>
<p>Issue</p> <p>We support the definition of on-site transfers contained in the impact statement and the report TAP. However, there appears to be a discrepancy between the intent of the TAP and the actual definition proposed in the draft variation to the NEPM. Specifically, there does not appear to be anything in the draft variation to the NEPM to restrict the definition of on-site transfers to only those that do not involve subsequent movement of the material.</p> <p>25 - Australian Plantation Products & Paper Industry Council</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>We understand that it is not intended to require monitoring and measurement of substances that are permanently incorporated in a waste stream in a way that does not lead to the emission of the substance to the environment. We seek written confirmation of this interpretation to guide future reporting. The costs of reporting will be substantially higher if this interpretation is not applied.</p> <p>25 - Australian Plantation Products & Paper Industry Council</p> <p>Response</p> <p>Monitoring and measurement of substances in waste streams may be required to determine the amount of NPI substances being transferred. With exception of Total Nitrogen and Total Phosphorus, NPI substances in a waste stream, whether permanently incorporated or not, would be reportable, however, the amended transfers definition requires mandatory reporting of transfers to final disposal only (which places simpler requirements on industry compared to the original proposal). This is likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry. For transfers reporting, the definitions of 'Total Nitrogen' and 'Total Phosphorus' refer only to the amounts of soluble compounds of Nitrogen and Phosphorus that are in materials that readily permit the dissolution of these substances.</p>
<p>Issue</p> <p>The proposed inclusion of transfers would appear to require reporting of emissions in general waste sent to landfill. We understand that standard emission factors for the presence of substances in general waste will be provided to avoid the unnecessary cost of monitoring and measurement of insignificant quantities of substances in general waste. We seek written confirmation of this interpretation to guide future reporting. The costs of reporting will be substantially higher if this interpretation is not applied.</p>

REPORTING OF TRANSFERS TO FINAL DISPOSAL
<p>25 - Australian Plantation Products & Paper Industry Council</p> <p>Response</p> <p>The amended definition of transfers is likely to result in reduction in the estimated costs for industry of reporting transfers as demonstrated by the EECO 2007 study. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>We are generally satisfied with the proposed scope of transfers reporting. We agree that transfers should be reported separately to emissions; that the transfer of products should be excluded; and that only on site transfers where no future movement of materials will occur should be reported. We agree that the substance list and thresholds for reporting transfers should be consistent with those for reporting emissions, and that waste rock and associated overburden (assuming it has not been chemically modified) should be excluded from transfers reporting. We support the proposed reporting of the type of transfer (for example, containment, destruction, reuse, recycling) and the type of containment or destruction. Whilst it is understood that reporting on the nature and management of the receiving facility is a good way to encourage best practice, we are of the opinion that this would need to be closely monitored and reviewed to ensure good quality data is reported to the public.</p> <p>60 - Australian Network of Environmental Defender's Offices</p> <p>Response</p> <p>The definition of transfers has been simplified to require only transfers to final disposal. Industry may also voluntarily provide information on recycling, reuse, reprocessing and energy recovery. This change has been made to deal with the practical difficulties of defining wastes, products and by-products. Expanding the mandatory requirement to include these voluntary aspects may be considered in the future should the practicalities be resolved. Voluntarily supplied contextual information from industry, like all reported information, is currently subject to a due diligence sign-off.</p>
<p>Issue</p> <p>There could be a perception that a transfer of solids to land is also a release and that releases are uncontrolled. The term release needs to be carefully used when it is used to describe a substance that is emitted/released from a designed discharge point or from a treatment plant/process. There may be a connotation that substances released to the environment are not being managed/controlled.</p> <p>17 - Hazelwood Power</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Emissions of NPI substances to land remain reportable.</p>
<p>Issue</p> <p>The inclusion of transfers is likely to lead to double counting as any emissions from "waste streams" as fuel is already reported, as are emissions from the sites receiving the waste. The inclusion of transfers will not encourage industries to pursue cleaner production initiatives. This is already being achieved via other jurisdictional programs..... If on-site transfers are included, on-site transfers should be limited to "final" disposal eg landfill, tailings dams etc as per the discussion in the RIS. However, onsite disposal to land should already be covered by emissions to land.</p> <p>75 - Exxon Mobil</p> <p>Response</p> <p>Public release of information has been shown to be a valuable tool to improve environmental performance by facilities. The exact mechanism of the improvement varies depending on the specific issues that arise. The aims of the NPI are consistent with other environmental programs that contribute to the achievement of these goals. The NPI's unique feature as a national public disclosure tool would be expected to complement these other programs in the minimisation of waste. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>The justification for excluding transfers of substances in waste rock from reporting but including transfers of substances in tailings in reporting is uncertain. The key justification is that emissions from waste rock are already reportable under the NPI, most notably, acid discharge. Under the NPI, emissions from seepage of tailings liquor and erosion of material from exposed surfaces of tailings facilities are also reportable. In addition to this, the impact statement proposes that reporting of transfers in waste rock would not likely lead to cleaner production since the nature of this material is largely fixed based on economic factors. The same reasoning is relevant also to tailings material, since there are technological limitations that govern reducing the quantity of waste material produced from processing operations. It appears as though waste rock is being excluded chiefly on the basis of risk and the limited opportunity for associated cleaner production activities to be undertaken. The impact statement briefly describes the effect of acid mine drainage associated with storage of waste rock. The impact statement focuses on the shorter-term impacts and may underestimate the long-term environmental impacts associated with storage and handling of waste rock. It is recommended that with regard to waste transfers, waste rock and</p>

<p>REPORTING OF TRANSFERS TO FINAL DISPOSAL</p> <p>tailings should be treated similarly – either both included or both excluded. 78 - BHP Billiton – Olympic Dam</p> <p>Response</p> <p>The general distinction between waste rock and tailings facilities has been made by the TAP on the basis of the degree of risk posed, given the greater degree of treatment (especially chemical) usually associated with tailings.</p>

<p>REPORTING OF TRANSFERS FOR REUSE AND RECYCLING</p> <p>Issue</p> <p>We concede that the reporting of ash constituents in ash ponds as transfers may be a role for the NPI. Should the variation proceed so that substances in ash disposed of on site are captured by the NPI (irrespective of their real environmental implications), we believe that time should be allowed for the coal fired power generation industry to develop a common approach to reporting substances in ash. Reporting of these substances in the NPI is extremely unlikely to stimulate further use of these materials beyond that already achieved by the industry under the auspices of the Ash Development Association of Australia...(Cement Industry Action Agenda Report). Utilisation of these materials. 7 - Flinders Power</p> <p>Response</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>

<p>Issue</p> <p>This industry should be exempted from reporting where spent litter is used as a fertiliser either on or off farm. 56 - Australian Chicken Growers Council Ltd</p> <p>Response</p> <p>Transfer of nutrients to land is considered to be a reuse and therefore may be voluntarily reported.</p>

<p>Issue</p> <p>The definition of waste, we consider inappropriately, allows for different definitions of waste in each state. In the interests of consistency, for those organisations operating facilities in several states and those transferring and trading materials across state borders, any state based definition of waste should only replicate a national definition. The definition as it currently stands attempts to capture all waste whether it “... May or may not have value”. The addition of this provision is a significant departure from the relevant TAP recommendation and rather than add clarity it has in fact obscured the clear intention of the TAP to exclude all bona fide products from the transfers register. The Variation currently provides no useful guidance to differentiate between a “waste with value” which must be reported as a transfer and a “product” which does not require reporting. The draft variation definitions with respect to the list of destinations in each of the transfers and transfer data definitions brings some additional uncertainty. In one the destinations are listed as if they are contained in an exclusive list of destinations whilst in the other they are listed as examples. The definitions as they stand do not confirm whether simply blending a waste with other raw materials comprises treatment for reuse or not. Some materials can be used directly with no treatment, classified by size separation, mixed with other raw materials, ground to change their size distribution or chemically processed. The definition needs to consider whether each of these individually are defined as processing or not. 7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The term ‘waste’ is not included in the definition.</p>
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<p>Issue</p> <p>The definition of “waste” has the meaning defined in the legislation of the participating jurisdiction or, where not defined, means any material that is not a product or article, and....There is currently no definition of “product”. We may produce many by-products as part of our processes, many of which have a use either within our company or to other businesses but how these fit into the definitions is not clear. We believe that the manufacturing of by-products that have a commercial or productive use should not be classified as waste. Products that are not being disposed of directly to a waste stream eg landfill or sewer should not be included. 29 - Shell Company of Australia</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The term ‘waste’ is not included in the definition.</p>

REPORTING OF TRANSFERS FOR REUSE AND RECYCLING
<p>Issue</p> <p>The inclusion within the proposed definition of transfer of the phrase “treatments leading to reuse, recycling, or reprocessing, purification or partial purification, remediation or immobilisation” would appear to go well beyond the OECD intent as such intermediate fates do not constitute a transfer or release to the environment nor are they an end-use fate. Any emissions or subsequent transfers to the environment arising from such treatments will already be captured via the existing emissions reporting measures. The current definition of transfers, by including treatments to non end-use fates, suggests a de-facto waste-tracking mechanism as distinct to obtaining information in relation to transfers/releases to the environment, as per the OECD guidelines. We would suggest that it is unnecessary to have such a dual-level definition for waste and indeed, that a definition of waste may not be necessary at all, particularly if “transfer” was redefined to explicitly address transfers to the environment (or end fates).</p> <p>48 - Cement Industry Federation</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared to the original proposal.</p>
<p>Issue</p> <p>We have concerns about classifying substances which are being or proposed to be re-used, recycled or recovered as a “waste”, since this sends a message which is inconsistent with one of the stated NPI NEPM environmental outcomes (improvement in the sustainable use of resources). Reporting to the NPI of material in waste which is being re-used, recovered or recycled could be counter-productive to efforts to reduce waste materials (eg the inclusion of NPI substances in power station fly-ash to be used as road-base material could unduly raise issues within the community which could hinder its re-use).</p> <p>66 - Department of Environment WA</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Substances being transferred for recycling, reuse and reprocessing may be reported voluntarily.</p>
<p>Issue</p> <p>In determining if a material is “used” the substance is taken not to be used if it is incorporated in an article for sale or use that is handled in a way that does not lead to emission of the substance to the environment (clause 10(5)(a)). The NEPM makes no provision for commodity materials that are transported in sealed tankers in bulk as is the case for coal combustion products destined for use in cement and concrete manufacture. This leads to a lack of clarity with respect to the intent of this provision.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The NPI defines use of a substance as “the handling, manufacture, import, processing, coincidental production or other use of a substance”.</p>
<p>Issue</p> <p>The impact statement and the intent of the draft variation, with respect to transfers, and depending on interpretation of intent and meaning, ignores the impact on those industries which are already taking by-products from some industries which would otherwise appear in a waste stream and put them to a beneficial use with positive environmental and resource conservation and recovery outcomes.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>Amongst the desired outcomes is expanding the re-use and recycling of used materials. Since the NPI only reports substances and not materials it is not likely to achieve this outcome as materials are not proposed for disclosure. With respect our products there are already substantial drivers for the identification of further use and application for example as agreed with the Australian Government via the Cement Industry Action Agenda. The NPI variation, if it requires reporting with respect to bona fide products, is likely to detract from these drivers by introducing unnecessary costs to the supply chain.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel),</p>

REPORTING OF TRANSFERS FOR REUSE AND RECYCLING
<p>37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue Transfers should be included. Facilities that treat material for on-site reuse or recycling should not need to report this aspect. 6 - EECO Pty Ltd</p> <p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue Two of the objectives of including transfers in the NPI NEPM are to provide more useful and complete information about the movement and treatment of potentially harmful substances and be a driver for waste minimisation, recycling and cleaner production. Once an otherwise waste material is designated for beneficial end use (ie it becomes a waste with value, and hence is in actual fact a product) it should no longer be considered a part of the waste stream. It will not be released to the environment and hence should not be placed on a Pollutant Release and Transfer Register as the data collated does not contribute to the stated objectives. 7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue The impact statement states that the shipment of marketable goods from a facility should not be reported and cites examples of virgin materials, chemical intermediates and mineral products. It would seem reasonable to assume that this exclusion is intended to carry through to coal materials such as coal combustion products destined for or sold for use in cement and concrete manufacture. The variation should be clarified to ensure that the exclusion is carried through as suggested. To a certain extent this also seems to be at odds with the current definition of waste. The industry perspective is that once coal combustion products have been separated from the waste stream for beneficial use they should be incorporated in a definition of product which is also incorporated in Clause 10(5) of the Draft Variation and excused from the transfers reporting obligations. 7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue Many facilities transfer re-usable "waste", such as waste oil, to an on-site holding facility before using it in their processes at a later date. Reporting such transfers is inviting confusion and, in some cases, double counting when substances are firstly transferred to on-site storage and later used, perhaps in the next reporting period. Many facilities store waste in on-site silos or ponds for some time before the waste is taken off-site, either to another, more permanent storage facility or to be re-used. This situation is also likely to cause confusion and double counting. 27 Verve Energy</p> <p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue The definition of transfers requires further refinement. For example, if a company is reusing, recycling or reprocessing materials on-site, this should not have to be reported as a transfer, nor defined as a waste. It is recommended that this definition is further developed, via a small working group, with representatives from government and industry. Reporting of transfers will be an unnecessary administrative burden on industry.... Our preference is Option 3, and utilise the state based waste tracking mechanisms more effectively. Legislated incentives in state jurisdictions will achieve the objective of government to pursue cleaner production initiatives..... Currently some states have waste tracking systems in</p>

REPORTING OF TRANSFERS FOR REUSE AND RECYCLING
<p>place. How will these complement the NPI transfer reporting and ensure there is only one system of reporting? Is there an opportunity to exclude transfers from the NPI and for state jurisdictions to estimate the transfers based on the estimation techniques.</p> <p>29 - Shell Company of Australia</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Waste tracking systems report waste types as opposed to the NPI which is substance-based.</p>
<p>Issue</p> <p>There is the potential to double count transfers. For example, if a transfer is sent off-site for recycling it would be counted by the producer. If the receiver of the waste recycles the same waste, but has further waste as a result of the recycling process, this waste has now been counted twice. Is this correct and is this the intention?</p> <p>29 - Shell Company of Australia</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>In relation to waste it appears that overburden and waste rock dumps are excluded from reporting as transfers. There are similar issues with properly constructed power station ash containment facilities and in some cases these will be located within overburden dumps or even within the mine itself (likely to be a worked out area of a mine). In power station ash facilities leachate/runoff collection is controlled and captured and usually returned back into the ash system process water for reuse. Reporting the transfer of substances in ash to a properly constructed EPA approved facility on site and then reintroducing the leachate which may contain these substances back into the process would result in duplication of amounts of substances and complex accounting of substance amounts.</p> <p>17 - Hazelwood Power</p> <p>Response</p> <p>Transfers to a tailings storage facility are required to be reported under the proposed definition of transfers. Emissions from these facilities are currently reportable to the NPI. The net amount of the substance being transferred (that is to a final destination minus the amount being recycled) would be required to be reported.</p>
<p>Issue</p> <p>We oppose inclusion of transfers at this time, given the creation of disincentives to proper and effective integrated waste management (particularly manure as fertilizer) by creation of unwarranted paperwork, red tape and compliance costs. If transfers are included then for feedlot waste transfer reporting should be on material (not substance) basis, again to reduce unnecessary compliance costs.</p> <p>49 - Australian Lot Feeders Association</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Waste tracking systems report waste types as opposed to the NPI which is substance-based.</p>
<p>Issue</p> <p>Transfers are often part of cleaner production processes such as recycling and reprocessing. If one adopts the inclusion of transfers on-site, they would include the following waste/by-product movements – temporary containment, reprocessing, destruction or treatment. In many cases internal transfers could lead to reuse, recycling or reprocessing through purification or partial purification, remediation, immobilisation or energy recovery. Including transfers may discourage cleaner production and product stewardship programs.</p> <p>35 - NuFarm Australia Ltd, 70 - Australian Industry Group</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Beneficial reuse of materials may be reported voluntarily.</p>
<p>Issue</p> <p>The scope of reportable transfers proposed is too broad. Of primary concern is the proposal to include the reporting of waste transfers for treatment that leads to reuse, recycling and energy recovery. As large volumes of waste are typically associated with reuse and recovery activities, there is potential for community misconception of industry as a large generator of waste when it is in fact committed to achieving greater efficiencies in waste generation and energy and material consumption. Of particular concern is industry participating in regional synergies whereby participant companies use each other's waste and secondary products locally within an industry cluster to maximise the cluster's</p>

REPORTING OF TRANSFERS FOR REUSE AND RECYCLING
<p>range of products and services while minimising input resources..... We are concerned that the definition of a 'waste' is also unclear and could lead to inconsistencies in its application between jurisdictions.</p> <p>20 -Department of Industry Resources (WA)</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The term 'waste' is not included in the definition.</p>
<p>Issue</p> <p>There is often considerable disagreement between industry and the EPA over whether or not by-products of processing operations are wastes. The same by-product may or may not be a waste depending upon its ultimate fate. If the decision is made to include transfers in the NPI, this could provide an opportunity for the EPA and industry to develop an improved understanding of what constitutes a waste from industrial operations. Without such an understanding there will be continued confusion and disagreement over the transfer reporting requirements for the NPI.</p> <p>22 - Australian Sugar Milling Council (Brisbane)</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The term 'waste' is not included in the amended definition.</p>
<p>Issue</p> <p>Commonly intensively produced animal excrement is contained in dams or composting piles yet is intended for future recycling as fertilizer either as an all in all out system or as a continuous flow system. Given the pace in which the aerobic processes act to allow the reuse of the waste, the transfer type "containment", when for future reuse, should not be reported on. The more complicated the reporting process through partition calculations, the more inequitable the application of protocols and the less justifiable the rationale for reporting, then the greater the disincentive to conduct environmentally sound practices. Having to report on recycling or for that matter containment for future use as fertilizer or sale off site for fertilizer should be considered equivalent to buying fertilizer in for on site use or extensive grazing systems and therefore exempt from reporting. There seems little benefit to environmental protection goals by requiring the reporting of on farm reuse of nitrogen and phosphorous in organic waste.....It is assumed in this submission that sale off farm of livestock excrement with or without used bedding materials (litter) for use as organic fertilizer, does not qualify for an exclusion from reporting as a marketable good or product.</p> <p>76 - NSW Farmers' Association</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material from intensive livestock practices is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>
<p>Issue</p> <p>There are many grey areas yet to be addressed. A system for policy decisions (incl. practical process-specific criteria and definitions) needs to be formulated. For example, there may be a blurred distinction between composting (recycling) and land disposal of organic waste. They need to be mutually exclusive and clear definitions available for describing suitable and unsuitable operations. Waste disposers should not be allowed to call their process recycling or composting. Likewise, effluent irrigation can be beneficial or cause great harm.</p> <p>6 - EECO Pty Ltd</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. The management of practices associated with the reuse and recycling of organic matter, such as composting or effluent application to land, is administered by other government programs and policies.</p>

TN/TP BENEFICIAL REUSE
<p>Issue</p> <p>Clarification of the definition of waste is required as current format appears prejudicial to the stated preferred outcomes (eg promoting cleaner production). This has particular relevance to the operation of composting processes. Definition of product is required for consistent interpretation of this document.</p> <p>53 - GELITA Australia Pty Ltd</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material, such as from</p>

TN/TP BENEFICIAL REUSE
intensive livestock and composting practices, is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.
<p>Issue</p> <p>Definition “article” – by this definition it could be argued that compost manufactured to Australian Standards (design) is in effect an “article”.</p> <p>Definition “transfer” – by this definition it can be argued that the movement of raw materials for composting should be excluded as composting does not constitute any of the clause 3 items a-d. Some of these items may occur as result of the composting manufacture, but do not in themselves constitute the purpose of the activity.</p> <p>Definition “waste” – by this definition and the definition of “article” compost does not constitute a waste. The raw materials utilised in composting could therefore be argued, by association not to constitute waste.</p> <p>53 - GELITA Australia Pty Ltd</p> <p>Response</p> <p>As above. The term ‘waste’ is no longer used in the transfer definition.</p>
<p>Issue</p> <p>The draft variation appears to fail to take a holistic approach to dealing with the tracking of nitrogen and phosphorus inputs and outputs on farms. It fails to recognise that these are biological processes and not industrial ones. Nitrogen and phosphorus are being recycled. If reporting does become a requirement then it would be important that industry be consulted to develop reporting data based on indicative nitrogen and phosphorus levels in different litter types. Much of this data is already available following the development of environmental management systems for farms and appropriate management plans which include the sustainable use of litter on farm and records of advice and quantities supplied to end-users off farm.</p> <p>56 - Australian Chicken Growers Council Ltd</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material, such as from intensive livestock and composting practices, is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>
<p>Issue</p> <p>If the “NEI” by requires the detailing of “emissions” from composting it may impact negatively on the growth of this industry. The simple reporting of these emissions does not promote sustainable resource use or cleaner production. If the desired outcomes are to be met some level of approbation for composting would be beneficial.</p> <p>53 - Cameron Smeal, GELITA Australia Pty Ltd</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material from intensive livestock practices is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>
<p>Issue</p> <p>The goal of collecting broad based information on emissions and transfers of substances does not refer to the accuracy of such information....However there are few incentives for intensive farmers to pursue accuracy....Additionally, with the introduction of transfers, the added confusion about which transfer type to report does not encourage producers to adopt various options for their waste given they then have to apportion the nitrogen and phosphorous to each transfer type. The application of the draft variation does not take a holistic approach to the tracking of nitrogen and phosphorous through cycles of input and output. It exempts the inputs of nitrogen and phosphorous onto the farm in the form of feed and fertilizer and exempts the outputs off farm from off site rendering of dead bodies (which can occur en mass in controlled environment production facilities) or even the sale of livestock (both taking large amounts of nitrogen and phosphorous out of the system within the alimentary canal). There is no accuracy in the proposed reporting of transfers for intensive agriculture. One desired outcome in Clause 5 is the improvement in the sustainable use of resources. However, the proposed reporting is not on the nitrogen and phosphorous balance on a farm which actually has meaning for both the environment and the economic sustainability of the enterprise. The requirement to report transfers offers no incentive for sustainable use of resources.</p> <p>76 - NSW Farmers’ Association</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material, such as from intensive livestock or composting practices, is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>

TN/TP BENEFICIAL REUSE
<p>Issue</p> <p>Groundwater should be included when waste water is directed to the ground and not filtered or collected in ponds. Most existing intensive poultry farms rely on groundwater and all shed washing water is directed to the ground and not to effluent ponds. Define “water”.</p> <p>1 - Robyn McIntosh</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>It is essential that the poultry industry be required to report its emissions and waste disposal to the NPI. The data collected by the NPI is essential to permit authorities to properly manage the industry. Many councils with a responsibility for the industry are small and lack resources. By routinely providing reports the NPI would be providing a very useful service to local government and to the community in general. Reports should be made available to local government in a form that is useful, eg nutrient load by catchment. In doing so neighbouring councils sharing a catchment will also be encouraged to deal with problems on the appropriate scale. Reporting by poultry farms should include:</p> <ul style="list-style-type: none"> - farm location; - dust (particulates); - integrator/process report in parallel. <p>50 - Errol Craig</p>
<p>Response</p> <p>Noted. Poultry facilities are required to report emissions to the NPI where they exceed thresholds. The amended transfers requirement means that poultry facilities will also have mandatory reporting of transfers to final disposal. It is not expected that typical poultry farming facilities will have any mandatory transfers reporting requirements. Other government programs and policies may focus on other aspects of their activities.</p>
<p>Issue</p> <p>It is inequitable that facilities engaging in cleaner production processes should be burdened with attempting to determine emissions for composting as a result of reporting triggers being tripped by other aspects of the operation. Where composting comprises the entire nature of a business, these triggers may not be tripped. Substances such as zinc are vital elements for plant health (especially for wheat production) yet are categorised as reportable.</p> <p>53 - GELITA Australia Pty Ltd</p>
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>The Impact Statement describes the driver for requiring reporting of Nitrogen and Phosphorus to water is because nutrient pollution causes significant problems for ecosystems. The justification for extending reporting to transfers ie discharges to sewer systems for nitrogen and phosphorus seems obscure. Sewerage systems are contained engineered networks of piping, which in built-up areas are received by municipal treatment plants for processing. There is no apparent interaction with the ecosystem for nutrient pollution to occur. Discharges of nitrogen and phosphorus into ecosystems from treatment plants are already reported under current NEPM requirements. It is submitted that irrespective of the financial costs of transfers, transfers related to discharges of nitrogen and phosphorus should not be included in reporting requirements.</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>Reporting of nutrient transfers to sewer may encourage a reduction of nutrient levels at the source before sewage treatment. This would save costs at the discharging facility, reduce treatment load at the sewerage treatment plant and reduce ultimate impacts from the treated discharge to the environment.</p>
<p>Issue</p> <p>We are concerned about the proposal to require reporting on transfers of “waste” that contain nitrogen or phosphorus if either exceeds the threshold. The spent litter from shed cleanouts is almost exclusively used as a fertiliser in a range of agricultural operations including horticulture, pasture production tree crops and amenity horticulture. This spent litter may be spread immediately, composted or processed into a pelleted form. In most instances there would be no containment on farm other than that of a temporary nature due seasonal conditions. It is very difficult to see how this differs from the use of synthetic fertilisers or extensive animal production both of which are exempt from any reporting requirements..... The requirement to report the transfer of litter has the potential to add significantly to reporting costs unless indicative chemical composition data developed by the industry can be used in the reporting process.</p> <p>56 - Australian Chicken Growers Council Ltd</p>

TN/TP BENEFICIAL REUSE
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material, such as from intensive livestock or composting practices, is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>
<p>Issue The reuse of biosolids for use as organic fertiliser should be excluded from “waste transfer” definition, particularly when land application of synthetic fertilisers does not have to be reported. 62 - Australian Pork Limited</p>
<p>Response As above.</p>
<p>Issue We are curious if the specific inclusion of TN and TP transfers to sewer and irrigation indicate a policy not to estimate transfers of other NPI substances to sewers. 51 - Greenbase Pty Ltd</p>
<p>Response All substance transfers to sewer must be reported where the threshold for that substance has been exceeded.</p>
<p>Issue We strongly disagree with the inclusion of transfers for Category 3 substances and particularly so for products incorporated into agricultural land. 22 - Australian Sugar Milling Council (Brisbane)</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Application of effluent and other material, such as from intensive livestock or composting practices, is classified as a reuse and therefore transfers of Total Nitrogen and Total Phosphorus contained in this material may be reported voluntarily.</p>
<p>Issue The requirement for facilities to include (as transfers) the deposition of TN and TP to land is supported. Such inclusion would provide additional information on nutrient loadings to land areas and, as a consequence of potential run-off, to rivers and other water bodies. 66 - Department of Environment WA</p>
<p>Response As above.</p>
<p>Issue The application of effluent or biosolids to land as a transfer is at odds with the application of fertilisers to land (which is not reportable). 66 - Department of Environment WA</p>
<p>Response As above.</p>
<p>Issue The reporting threshold for Category 3 substances proposed to be inclusive of transfers to land requires the apportioning between the various types of transfers. In intensive agriculture, nitrogen and phosphorous from excrement will commonly fit into the “recycling” transfer type as fertiliser either on or off site. The reporting of recycling of these substances is of no benefit to the environment protection goals because there is no reporting of fertilizer application that has been purchased off site and applied on site (either synthetic or organic fertilizer). The protocols are written for industrial enterprises, not agricultural, as the whole farming system has not been adequately assessed. It is common for large intensive agricultural industries to either sell excrement as fertilizer or recycle it on their own land for pasture and crops which are then fed to other species or to the species which generated the waste in the first instance. This increases the profit margin of the business as a whole..... Extensive organic livestock farms purchase excrement for pasture improvement in compliance with their organic status. These extensive farms are not required to report on their transfer of nitrogen and phosphorous to the land. 76 - NSW Farmers’ Association</p>
<p>Response As above.</p>

JURISDICTIONAL AGGREGATE TRANSFER REPORTING	
Issue	We agree with the inclusion of “aggregated data” to ensure that proper contextual information is provided to support the provision of transfer data. 48 - Cement Industry Federation
Response	Noted.
Issue	Jurisdictions should consider their ability to provide aggregated transfer data under Clause 20 (1) before agreeing to the inclusion of transfers in the Measure. Jurisdictions should be required to report aggregated data annually not “as agreed between participating jurisdictions”. This will ensure that the relativity between facility and aggregated data is available for all reporting periods and avoid the misconception that facilities are the main source of transfers. If reporting of transfers is included and annual reporting of aggregated transfers by the jurisdictions is not specified, facilities should not be required to report transfers until jurisdictions are required to submit their first report of aggregated transfers to ensure that a complete set of data is included on the first occasion that transfers are included in the database(s). 10 - Solvay Interox Pty Ltd, 34 - PACIA, 61 - Coogee Chemicals Pty Ltd
Response	Noted.
Issue	We support the inclusion of aggregate transfers off-site in the proposed transfers register and would strongly encourage relevant jurisdictions to strive for comprehensive and accurate coverage of aggregate sources. The inclusion of such contextual information in the proposed separate transfers register is considered to be as essential as it is for the current NPI register. 43 - Australian Aluminium Council
Response	Noted.
Issue	With a proposed starting date of July 2007, the jurisdictions should be required to report aggregated transfers (if included) for the first reporting period. 10 - Solvay Interox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd
Response	Noted.

DEVELOPMENT OF GUIDANCE MATERIALS	
Issue	We note that Clause 15 (b) states that, if no estimation technique is set out in the relevant industry reporting materials that industry must apply any estimation techniques which the relevant jurisdiction has agreed are likely to provide emissions or transfer data for that process. We firmly believe that this agreement, if carried out at a State or Territory level, must be agreed or cross-referenced at a national level to ensure consistency across the industry. 12 - BP Australia (Melbourne)
Response	Noted.
Issue	There needs to be suitable processing and endorsement of industry reporting materials in a timely manner to ensure certainty in estimating emissions/transfers information which is supplied to the jurisdiction. 17 - Hazelwood Power
Response	Noted. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.
Issue	Stanwell considers that further industry consultation and agreement be attained prior to the requirement to use any new or revised emission estimation techniques. 40 - Stanwell Corporation

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Response Noted. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue We recommend that the NPI adopt an official numbering protocol for approved methodologies to give occupiers and reporters confidence that they are in compliance with this requirement, and to improve audit-ability. Our company has set up an informal register to provide this service to our clients, but an officially sanctioned number would be preferable. However, we recommend against assigning this number on the level of an emission factor as is done by the US EPA. This approach leaves out non-emission factor methods, emission factors for a given method cover many parameters, and there is never a case where two emission factors apply for a single parameter for the same version of a method given the same conditioning variables (ie boiler type). A central register and numbering system for methods approved for particular facilities or jurisdictions would be useful in determining new methods to add to successive versions of the manuals. 51 - Greenbase Pty Ltd</p>
<p>Response Noted. This is an operational issue that will be considered by the NPI implementation working group.</p>
<p>Issue It is essential that the NPI further focus on improving existing data quality and ensuring the completeness of existing handbooks and tools. Further resources are needed to ensure that the considerable expense that occurs in reporting to the NPI results in the provision of quality data whilst ensuring that reporting costs are kept at a minimum. We strongly support a renewed focus on improving existing data quality prior to implementing an expanded NPI that includes either greenhouse gases or transfers reporting. Implementing an expanded NPI without additional commitment of resources will result in a further deterioration of data quality. Such a result will not deliver the intent of the NEPM, creating on-going frustration and cost for reporters and provide worthless information for community users. A staged program for improving the quality of data and then moving on to waste transfers is recommended. 22 - Australian Sugar Milling Council (Brisbane)</p>
<p>Response Noted.</p>
<p>Issue The greatest impact to us, and the issue requiring the greatest amount of clarification and industry guidance, is the inclusion of waste transfers. Estimation methodologies for engineering calculations will need to be carefully developed and communicated to ensure reporting consistency across the industry. There is also the need for further clarification around on-site movement of waste (ie clear boundaries must be established which define when a waste transfer is actually part of the business process and therefore does not need to be reported). We can foresee the following scenarios that would require further guidance to ensure consistency across industry:</p> <ul style="list-style-type: none"> • off-spec fuels being moved from terminals to refinery for re-processing; • how on-site remediation activities will be handled; • guidance on estimation methodologies for waste transfers to sewer (including required sampling frequency, and whether volumetric monitoring will be required). <p>The above comments are provided under the assumption that retail service stations are exempt from the need to report transfers of NPI substances. 12 - BP Australia (Melbourne)</p>
<p>Response The amended definition of transfers simplifies the reporting requirements for industry since only transfers to final disposal will be required to be reported. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue To what degree must the constituents in the waste stream be determined in accordance with NPI substances. This could result in the need for a waste handbook to enable NPI estimates to be calculated based on the type of waste. This would be sensible and result in a common approach within industry sectors and further aid in the comparison across the nation of substances from industry, further aiding in benchmarking within industry sectors. 17 - Hazelwood Power</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Issue</p> <p>We consider the use of averages, estimation techniques or median values will not give meaningful data on NPI reportable quantities in controlled waste. If a low-cost estimation process is used to measure NPI reportable substances, then the data will be fairly meaningless and undermine community-right-to know information provided. The inclusion of transfers will do little to aid community-right-to-know as only meaningless data can result. We recommend that transfers are not included in the NPI.</p> <p>67 - Australian Environment Business Network</p> <p>Response</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>We consider that if waste transfers are to be included in the NPI it is essential that accurate EETs, industry manuals etc are provided. We also consider that the provision of workshops to assist our industry to adapt to the inclusion of waste transfers is essential.</p> <p>65 - South Australian Wine Industry Association</p> <p>Response</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>One area where the government can help out with transfers is to characterise standard “wastes” in terms of default concentrations of NPI substances. The UK Waste Framework Directive waste codes or US RICRA standard waste profiles could be taken as a logical starting point. This will remove a data collection burden from our clients in keeping with the existing NPI policy of not requiring additional data collection, and this is a cost that will otherwise be unnecessarily repeated by multiple reporters to no addition benefit. Industry associations would not be the appropriate vehicles since this would lead to a fragmenting of standards, and again duplication. The Commonwealth is the party who should maintain this register.</p> <p>51 - Greenbase Pty Ltd</p> <p>Response</p> <p>The amended definition of transfers simplifies the reporting requirements for industry and does not require a definition of waste.</p>
<p>Issue</p> <p>We are not aware of any NPI substance information that may be available for example in relation to general mixed waste streams. The original NPI implementation method where industry specific manuals were required and triggered the commencement of reporting allowed the implementation costs to be shared by government and industry, particularly where industry had little knowledge in relation to certain NPI substances. We believe that there is a case for a similar cooperative approach for such transfer streams as mixed industrial and municipal waste streams. This section appears not to have taken into consideration the significant additional costs, both monetary and market-based, arising from the additional reporting associated with recycling and related pre-treatment reporting.</p> <p>48 - Cement Industry Federation</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>Currently the usability of NPI reporting tools is acceptable for computer literate operators. However the beef industry has, in the main low levels of computer literacy and subsequently any national online reporting tool that included new data set reporting requirements would be highly problematic, if not unattainable. This reinforces the position that only an industry level reporting mechanism is appropriate.</p> <p>49 - Australian Lot Feeders Association</p> <p>Response</p> <p>The on-line reporting system under development is expected to be more user friendly than the current electronic reporting system. Paper reporting forms will continue to be accepted after the new on-line reporting tool has been implemented.</p>
<p>Issue</p> <p>Prior to including any transfers in the NEPM, broad investigation into the types of internal transfers for which there are (or could be) estimation techniques must be done to identify the gaps that would need to be filled and the cost to deliver these realistically evaluated.</p> <p>35 - NuFarm Australia Ltd</p>

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue The inclusion of transfers to sewer will be onerous, especially for those companies running batch processes (many are SMEs). Estimation techniques for batch processes would not be realistically possible. Therefore, regular sampling and analyses will be required. It is not just a matter of being below the discharge concentration limits, but a matter of reporting total mass release. To highlight this, one of the 'materials' on the list is Volatile Organic Compounds (VOC). For NPI, if one triggers one component of 'VOC', then one must report on all. The cost of collecting 'representative' sewer discharge data in a way that preserves VOC composition, and having the samples analysed for VOCs, in a manner that can be verified is extremely difficult. Single sampling of streams that go to sewer would not be representative of an annual input, therefore multiple analyses would be required.</p> <p>35 - NuFarm Australia Ltd, 70 - Australian Industry Group</p>
<p>Response Emissions of total VOCs are only required to be reported to air. Emissions and transfers of individual VOCs that are NPI substances must be reported to all media. Analysis of waste streams is not necessarily required, mass balance or engineering calculations may be suitable estimation techniques.</p>
<p>Issue We recommend that:</p> <ul style="list-style-type: none"> • separate reporting databases to be developed for emissions and transfers with accompanying definitions and warnings that emissions and transfers data is not additive; • methodologies for transfers estimation and monitoring should be developed and agreed with industry; • the provision of data on waste transfers should be expressed as a concentration to further differentiate it from NPI emissions data; and • additional contextual data specifically for waste transfers should be developed before transfers reporting commences. <p>4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Response It is not considered that having two separate databases will lead to better outcomes beyond separation of emissions and transfers information within the existing database. The display of emissions and transfers on the database will be designed to minimise misinterpretation. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry. Reporting transfers as concentrations would not be consistent with the current design of the NPI and may be confusing for users. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures.</p>
<p>Issue While a reporting minima was examined by TAP and because the differences in toxicity etc of substances this was not recommended. However reports have been made in the NPI of ridiculous low emissions. To overcome these types of reporting problem it seems practical to provide advice on reporting minima in EET manuals and other documentation.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Response Noted. Given the variety of industrial processes used nationally it is considered particularly difficult to provide reporting minima for all sectors that report to the NPI.</p>
<p>Issue While we agree with Section 5.5, the removal of the reliability sub clause, we advocate the inclusion of an official "methods register". In this way, the original intent can be maintained by assigning reliability to a method without a complicated reporting requirement. This approach will also assist existing reporters by clarifying their approaches to emissions calculation and giving them more certainty that they are in compliance.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Response Noted.</p>

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Issue Clause 5.29 - are adequate emission factors available from any source to allow the introduction of this form of reporting for PAHs? 66 - Department of Environment WA</p> <p>Response Speciated PAH source data exists for the majority of generic emission factors contained in industry manuals.</p>
<p>Issue A phase-in programme should be developed for the waste transfer provisions, subject to the preparation and release of the relevant industry reporting materials and estimation techniques. 12 - BP Australia (Melbourne)</p> <p>Response Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue A working group for industries (or those required to report) should be established to ensure an understanding of NPI at management, as well as 'environmental reporting practitioner' level. We believe that such a working group would allay many concerns and short circuit many misunderstandings. Six monthly meetings and perhaps an annual event where the IWG and an industry group could meet may be useful. 62 - Australian Pork Limited</p> <p>Response Industry groups and experts are consulted when updating industry reporting materials. The Australian Government has instigated contact to develop material for this sector.</p>
<p>Issue Stanwell supports an implementation timeline that permits industry to review the changes and include, where necessary, amendments to the emissions estimation handbooks. Stanwell considers that amended reporting requirements should be delayed until consultation and agreement with industry has occurred. This is important to ensure the consistency and integrity of the database. 40 - Stanwell Corporation</p> <p>Response Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue We support the change from 'Industry Handbook' to 'Industry Reporting Materials' only if this is done in such a way as to ensure that the industry specific information is clearly displayed and does not place an additional burden on industry in identifying estimation techniques. 75 - Exxon Mobil</p> <p>Response Noted.</p>
<p>Issue We would welcome industry training sessions as part of the NEPM implementation. Due to the importance of industry engagement into this process, we would suggest that you consider having these workshops facilitated by professional communication consultants. 12 - BP Australia (Melbourne)</p> <p>Response Noted.</p>
<p>Issue Emissions Estimation Technique manuals would benefit from a complete review including updating techniques to reflect best available science, standardisation format and style of the manuals. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Issue</p> <p>The change to the use of the term industry reporting material in preference to industry handbook to allow for greater use of electronic information and tools is supported. The NPI is a high valued tool for obtaining data on emissions however through data use it has become apparent that there is a need to ensure credibility, for better quality assurance procedures for diffuse sources including desktop audits, improved data estimation techniques and regular reviews to ensure that the data is up to date and relevant. In addition it is important to users that there is:</p> <ol style="list-style-type: none"> 1) information available on the website about the currency of the diffuse source emissions data - an agreed base year with reporting by all jurisdictions is needed; and 2) consistent reporting of the core set of diffuse sources by jurisdictions is needed. <p>18 - CASANZ - Vic/Tas Branch</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>There is considerable expertise required to understand the emission manuals, and as they often relate to American standards and jargon, the difficulty is further enhanced. These manuals need to be written for Australian conditions, with each industry's manual documenting the production scale required before reporting thresholds are reached.</p> <p>30 - QAF Meat Industries Pty Ltd</p> <p>Response</p> <p>Industry groups and experts are consulted when updating industry reporting materials.</p>
<p>Issue</p> <p>We are concerned about the lack of updating of Emission Estimation Techniques (EET) and other NPI measurement techniques as this undermines the credibility of the inventory. The measurement of dust and particulate matter is particularly problematic and overestimates emissions. The reporting requirements for the NPI should use best practice measurement techniques and be consistent with other local and state reporting requirements. Sub-standard measurement techniques reduce the value of the NPI as a benchmarking tool for industry, as a basis for policy development by government and provides inaccurate and overly conservative information to the public. It can also increase the compliance costs for industry.</p> <p>4 - NSW Minerals Council</p> <p>Response</p> <p>Noted. Government will work closely with industry to improve the accuracy of the estimation techniques.</p>
<p>Issue</p> <p>We recommend that the NPI Mining Manual be reviewed to take into account changes in the techniques for estimating emissions. NSWMC recommends that industry handbooks should be reviewed every three years to ensure that data quality is of a high standard and provides for uniformity in application. A handbook itself does not guarantee good data quality, but an out of date handbook almost certainly does guarantee poor and inconsistent data quality in reporting.</p> <p>4 - NSW Minerals Council</p> <p>Response</p> <p>As above.</p>
<p>Issue</p> <p>We believe NPI regulators should utilise the ABARE survey data to extrapolate emission estimates. Given that the Australian Lot Feeders Association and the Red Meat Industry's R&D and Marketing service provider, Meat and Livestock Australia, conduct a quarterly Feedlot Survey in conjunction with the Australian Bureau of Agricultural and Resource Economics, it seems logical that the NPI regulators should take full advantage of this unique data collection structure. The reporting publication is based on regional and state surveys that are weighted according to feedlot classification (by size) to accurately evaluate numbers of stock on feed for that quarter. Given that data reported for individual feedlots to the NPI is approximately a linear extrapolation of numbers of stock on feed for the quarter (for an individual premises), we believe that the current individual reporting mechanism of the NPI is not the most regionally accurate. Utilising the ABARE/ALFA data would negate the need for costly and inconvenient individual facility reporting, and be far more accurate due to the fact it captures all primary producers, not just those who are accredited lot feeders. Potentially this would allow for quarterly reporting (as opposed to the current annual reporting requirement) which would further improve accuracy of emission calculations, especially in WA where many feedlots operate on a seasonal basis, and for which annual accounting does not accurately reflect emission patterns.</p> <p>42 - West Australian Lot Feeders' Assoc</p> <p>Response</p> <p>The NPI is a facility-based reporting program requiring the annual submission of emission estimates from facilities where specific thresholds are exceeded. ABARE/ALFA data would not meet the requirements of the NPI.</p>

DEVELOPMENT OF GUIDANCE MATERIALS
<p>Issue</p> <p>The current system fails to take into account the many variables in relation to an animal's age, weight, feed intake and ration fed that impacts ammonia emissions. Further, the reporting system makes a range of other assumptions in terms of the lot feeders' understanding of the calculations. For example, in Western Australia, the term Standard Cattle Unit is not described or used in our state's Feedlot Guidelines, which are produced by the WA Department of Agriculture. Thus, to ask the majority of West Australian lot feeders to provide data that include a calculation that requires them to assume what an SCU is, will further reduce the accuracy of this reporting. Further given that the WA industry is largely a seasonal sector, annual accounting provides misleading information and requires the lot feeder to make substantial adjustments to calculations to reflect a non-annual feeding pattern. This further contributes to the inaccuracy of calculations.</p> <p>42 - West Australian Lot Feeders' Assoc</p> <p>Response</p> <p>Government will work closely with industry to improve the accuracy of the estimation techniques.</p>
<p>Issue</p> <p>Information packs were available for participants in, or those who have an association with NPI programs. These packs could provide background on NPI, legislative/regulatory responsibilities, and interchangeable loose fact sheets for specific industry information requirements.</p> <p>62 - Australian Pork Limited</p> <p>Response</p> <p>Industry reporting materials are currently available on the NPI internet site.</p>
<p>Issue</p> <p>The emission estimation techniques (EETs) in the Wine and Spirits Manual need more validation and rigor to ensure realistic emissions calculations. We also consider that efforts should be made by the NPI to obtain an accurate EET for sulfur dioxide and sulphuric acid - currently none exist. It is assumed that all the sulfur dioxide and sulphuric acid is emitted but there is sufficient industry evidence that this is not the case. An urgent review is required.</p> <p>65 - South Australian Wine Industry Association</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Tools such as the Combustion in Boilers Emission Estimation Tool - Access 2000 appear to be incomplete, not containing all of the data from the Combustion in Boilers EET Manual for fuel types and boiler types, making the tool of little value. For example, the combustion tool does not include bagasse as a fuel type (the major fuel combusted by sugar mill boilers) and hence is of little practical use to sugar mills.</p> <p>22 - Australian Sugar Milling Council (Brisbane)</p> <p>Response</p> <p>Emission factors for bagasse are currently included in the Combustion in Boilers Emission Estimation Tool.</p>
<p>Issue</p> <p>We acknowledge that a complete review of all manuals is a significant commitment. We are nonetheless supportive of recommendations 29-31, and 35-36, as they have the potential to lead to nationwide consistency, more certainty for reporters, and an improvement in data quality.</p> <p>60 - Australian Network of Environmental Defender's Offices</p> <p>Response</p> <p>Noted.</p>
COSTS
<p>Issue</p> <p>The funding discussed at the public forum/seminar seems vastly underestimated. I believe that the budgets for assistance should be approximately doubled.....The variation can be a catalyst for overall improvements but not if the government commitment is under funded.....The scale of the assistance program will require far more resources than is currently being considered.</p> <p>6 - EECO Pty Ltd</p> <p>Response</p> <p>Noted.</p>

COSTS
<p>Issue</p> <p>We remain concerned over both the existing level of funding available to this program and funding of an expanded NPI. It is understood that the Commonwealth has identified funds to contribute to an expanded NPI. We are concerned that such funds may be sufficient only for a short-term (eg 3-4 years), with States and Territories left to continue funding the program thereafter. We have not committed funds for any expansion of the NPI.</p> <p>66 - Department of Environment WA</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Clause 9 (d) is ambiguous and could be used to gain any information and depending on its availability and may require additional work, time, costs and effort to supply.</p> <p>17 - Hazelwood Power</p> <p>Response</p> <p>This clause relates solely to information requested to assess the integrity of the emission data and was contained in the original NEPM.</p>
<p>Issue</p> <p>Reporting of transfers (if included) should not be required until suitable estimation techniques have been published to enable the estimation of transfers without incurring excessive costs.</p> <p>10 - Solvay Interlox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd</p> <p>Response</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>The impact statement concludes that the cost of the changes to industry is minimal. It is fair to say that the impact of the costs varies according to the size of the facility – most of the costs are fixed. Consequently small businesses will have to find other means to meet the requirements, particularly those facilities that will now be caught up by the changes that are not large enough to have a regulatory affairs officer on the payroll. Government instrumentalities have a propensity to overstate the benefits of the case in hand. Many are motherhood statements that should be put to more scrutiny than currently. Industry generally accepts that the programme in question will be implemented and as such the claimed benefits are ignored.</p> <p>5 - Peter Hutchison Consultancy</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. This will minimise the additional costs to industry of reporting transfers.</p>
<p>Issue</p> <p>The impact statement has underestimated the financial impact to industry in analysing transfers. Periodic analysis may not be able to predict emission factors to adequately represent transfers. To overcome this analysis of all transfers would be a significant cost.</p> <p>11 - Australian Vinyls Corporation Ltd</p> <p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. This will minimise the additional costs to industry of reporting transfers.</p>
<p>Issue</p> <p>It is noted that costs are able to be estimated in financial terms (although they are probably understated) while benefits are qualitative (ie no financial benefit can be estimated).</p> <p>10 - -Solvay Interlox Pty Ltd</p> <p>Response</p> <p>Noted.</p>

COSTS
<p>Issue</p> <p>It has been estimated that the cost of compliance to comply with NPI reporting is approximately \$10,000 per annum. QAF estimates that its annual cost of NPI reporting would be very close to this figure. The major difficulties QAF experiences in completing these submissions are due in part to the lack of foresight by the NPI in not providing suitable tools to help intensive animal industries conduct their annual reporting (eg in the form of spreadsheets). Broad acre farming is exempt yet this industry uses nitrogen based fertilisers which produce the largest ammonia emissions.</p> <p>30 - QAF Meat Industries Pty Ltd</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>There is substantial concern that the analysis of additional costs imposed by this proposed extension to existing reporting requirements has not been conducted with sufficient rigor to adequately assess the financial impact to large industry reporters. We do not accept costs identified in the Impact Statement. The vehicle manufacturing activity is particularly affected because of the complexity, size and scale of the manufacturing processes involved at its facilities. This means resource and cost required to meet these proposed reporting changes is understated and is many times the "average" first year cost of \$2,800 quoted in the Impact Statement.</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>The average cost of reporting is averaged over all industry sectors. For some facilities, reporting is simple and can be completed at very minor costs, while for complex sites costs are significant. Appendix 2 to the Impact Statement provides information on the number of facilities reporting in a range of costs. Similarly, a range of increased costs for reporting transfers would be expected.</p>
<p>Issue</p> <p>The Impact Statement appears to ignore the not insignificant impacts – both costs and market distortions likely to be associated with the reporting of secondary materials destined for reuse or recycling, as well as the impacts associated with poor definitions used for "wastes" and "transfers", and the resulting confusion with respect to reporting obligations.</p> <p>48 - Cement Industry Federation</p>
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue</p> <p>The basis of this section is an assumption that there is value in recording information about transfers. This is strongly opposed on the basis that the NPI should report only those substances which are emitted to the environment. There is no difference between a "waste" which is transferred for a beneficial use and a "product" or "intermediate". It is contended that the "Do Nothing" case has the advantage of being zero cost. The other options would incur significant cost and have dubious benefit. Use of cost estimates based on comparison with the current costs of reporting emissions is misleading. Because emissions are being discharged to the environment, they are currently regulated by the authorities and facilities generally have background information to facilitate preparation of the reporting data. In the case of transfers, there is likely to be greater costs involved in analysis. It is difficult to comment on government cost estimates except that the \$150,000 provision for industry guidance material appears inadequate unless the guidance material is going to be sparse compared to the available EET Handbooks. It is also noted that a provision of \$400,000 is made for additional staffing just to process data the collection of which will not entail any additional administrative costs to industry.</p> <p>10 - Solvay Interlox Pty Ltd</p>
<p>Response</p> <p>It should be noted that a PRTR is not just an emissions inventory, it is a system that brings together data on releases to all environmental media and transfers of chemicals. The primary advantage of a PRTR over an emissions inventory is that the combination of transfers and emissions data helps track the generation, release, management and fate of a chemical over time.</p> <p>The amended definition of transfers simplifies the reporting requirements for industry since only transfers to final disposal will be required to be reported. This will minimise the additional costs to industry of reporting transfers.</p> <p>The breakdown of estimated costs to industry of providing transfer data contained administrative costs as well as costs for data gathering and calculations.</p>
<p>Issue</p> <p>Reporting of transfers under the NPI will duplicate reporting as our EPA licence report also requires this information. Further consultation is required in order to initiate 'transfers' for intensive animal industries. The introduction of transfers in conjunction with the already poor support structure that is available, is putting an unrealistic economic burden that cannot be justified in environmental terms.</p> <p>30 - QAF Meat Industries Pty Ltd</p>

COSTS
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. This will minimise the additional costs to industry of reporting transfers.</p> <p>Public release of information has been shown to be a valuable tool for reducing the emissions of pollutants to the environment.</p> <p>Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue</p> <p>The estimated costs are considered to be conservative. We believe there will be a significant cost increase to industry which will result from the need to determine the transfer composition and concentration in all waste streams.</p> <p>29 -Shell Company of Australia</p>
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which will place simpler requirements on industry compared with the original proposal. This will minimise the additional costs to industry of reporting transfers. The estimated costs for industry may vary depending on transfer material, amount of material and size of facility. The average reported cost applies across all sites from all industry sectors in Australia reporting to the NPI – reporting costs for many facilities are minor.</p>
<p>Issue</p> <p>Introduction of “transfers” to NPI reporting requirements is expected to impose a substantial increase in reporting costs as methodologies required to monitor and measure reportable materials in solid/liquid waste streams and discharges to sewer will require cost intensive analytical methodologies. Consultation with our parent corporation (which already undertakes reporting of transfers in the US) has confirmed this experience.</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue</p> <p>The EECO report benchmarked other international PRTR programmes and the results suggested that overseas reporting programmes with transfers included were up to 10 times more costly to reporting facilities than the estimate provided by the impact statement. The EECO report also contained an analysis of a survey of Australian facilities that were requested to estimate likely costs of transfers. The survey was deployed with insufficient lead time to respond – only one week was provided for facilities to obtain data and report. The application of statistical measures such as the average cost to a facility is inappropriate and misrepresents the financial impact on larger reporters.</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>Noted. NPI costs are averaged across all facilities. Large facilities with complex sites have significantly higher current costs (and similarly would have higher projected costs for transfers). Appendix 2 to the Impact Statement provides information on the broad range of reported NPI costs.</p>
<p>Issue</p> <p>The impact statement reports that the average cost incurred reporting “transfers” is small compared to an average facilities average overall waste management costs. However this observation ignores the comparison/impact of the additional cost on the businesses profit margin which is often a small fraction of business costs/revenues. The automotive industry is one of the most globalised industries in the world, facing fierce competition from countries that do not impose such costs on their manufacturers. When considering the imposition of additional reporting costs on local manufacturers, the government needs to be sensitive to the ability of Australian automotive manufacturing to remain internationally competitive in the heavily contested, trade exposed automotive market.</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>The estimates of cost to industry for complying with new arrangements underestimate these costs and additionally – in lieu of a compelling justification in favour of inclusion of transfers – any costs associated with this measure are not offset by tangible environmental benefits.</p> <p>39 - Advocate for the Consumer, Cosmetic, Hygiene & Specialty Products Industry</p>

COSTS
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue Based on our current pricing structure, the cost to our clients will be approximately \$1000 per facility per annum regardless of size (for mining, minerals processing, and oil/gas production facilities). The main cost unaccounted for would be waste characterisation, as mentioned before. We do not foresee any substantial data collection increase over what is already required for existing NPI and greenhouse reporting. 51 - Greenbase Pty Ltd</p>
<p>Response Noted.</p>
<p>Issue The proposed NEPM extension to transfers in concert with the extension of NPI reporting to greenhouse gasses will increase the cost and difficulty of reporting. In addition it is clear that such new thresholds and requirements would add to the existing communications failures applying to of those operations crossing the thresholds and reporting NPI. 49 - Australian Lot Feeders Association</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs. Greenhouse gas emissions reporting is being investigated through a COAG process.</p>
<p>Issue Industry will incur significant additional costs in order to characterise their waste streams accurately with a level of confidence for the purpose of external reporting. 35 - NuFarm Australia Ltd</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue We are concerned with the extremely truncated nature of consultation and data collection feeding into the current review, particularly for the estimation of costs of transfers reporting. An analysis of likely costs from transfers reporting was conducted by EECO Environmental Engineering, however this study was done in an unreasonably short time frame, and was only able to survey a very small cross-section of NPI reporters. We were consulted during this review, but were not in a position to support member companies in providing data towards the estimation of costs, largely due to the extremely short timeframe for the request (less than 10 working days), and the current absence of systems to readily collect this data..... We recommend that significant additional work should be undertaken to characterise the likely costs of transfers reporting to industry before any further consideration of including waste transfers as a reporting area within the NPI. 4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Response The amended definition of transfers simplifies the reporting requirements for industry since only transfers to final disposal will be required to be reported. Further investigation into costs of reporting has been undertaken (EECO 2007 study). Estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue We are concerned about the calculation of the costs associated with the reporting of transfers. The economic impact to industry of reporting transfers cannot be determined from the cost estimates provided in the impact statement as they are based on current reporting costs, and as such, only apply to those facilities that currently report emissions data. In addition, estimates obtained via the industry questionnaire and face-to-face interviews are from larger companies that are likely to be better equipped to report transfers. More detailed investigation is required into the costs associated with reporting transfers to ensure appropriate costs are determined. 20 -Department of Industry Resources (WA)</p>

<p>COSTS</p>
<p>Response Reporting of transfers only applies where current NPI thresholds are exceeded (apart from the minor variation to Category 3 substances). Therefore, it is unlikely that new facilities can be required to report to the NPI because of the introduction of transfers. Further investigation into costs of reporting has been undertaken as a result of the amended definition of transfers (EECO 2007 study). Estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue The costs to government detailed in the discussion paper do not take into account costs associated with data verification, validation, and the provision of contextual reporting. In the longer term, funding will also need to be made available to review transfer estimation techniques and handbooks. The lack of adequate funding for validation of data submitted by industry could affect data quality and integrity, thereby undermining the credibility of the NPI as a reliable source of transfer information. Data integrity should be enhanced to ensure the NPI's credibility is maintained. 20 -Department of Industry Resources (WA)</p>
<p>Response The projected costs to government were estimated in the Impact Statement. Updated costs as a result of the amended definition of transfers are included in Chapter 2 of this report.</p>
<p>Issue Reporting to the NPI of substances in "transferred" material would require facilities to monitor or estimate waste movements, which would be additional to other waste tracking and reporting systems, and thus be an extra cost burden of reporting for both industry and government. Reporting for final disposal only (and not for intermediate movements) would reduce costs of reporting transfers. 66 - Department of Environment WA</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>
<p>Issue Reference is made to the cost of analysis. Currently the NPI does not stipulate that measurements of emissions be obtained (rather, estimates using emission factors are sufficient). Will the program insist that facilities perform chemical analysis and mass measurement on transfer streams and, if so, how often?.....The average NPI reporting cost (\$3139) should be regarded as very approximate. It is based on actual reported costs, but there is much uncertainty in the makeup of those costs. For example, were costs attributed to the NPI even though they would have been incurred irrespective of the program? (eg as a condition of an emissions licence). Were the stated costs per facility, or the total for all of a company's facilities? Also, many facilities did not report cost data.....The overall cost of waste management for the average facility is given as \$330,000 in the text and \$430,000 in Table 3-2. The EECO report gives \$430,000. It should be noted that this value would appear high to many of the facilities reporting to the NPI.....If greenhouse gas reporting is not included in the NPI then the 'systems modification' costs of modifying the system to include transfers is likely to be higher than \$85,500 since there would be no shared development costs.....Training costs following the introduction of transfers could be overstated. 66 - Department of Environment WA</p>
<p>Response Noted. Further investigation into estimation methodology for transfers will be undertaken in consultation with industry.</p>
<p>Issue The extra costs involved in reporting transfers are unclear as it is not possible to definitively conclude some of the materials which will be classified as transfers. If a Category 1 or 3 threshold was triggered, then the monitoring and measurement of substances in all waste streams may be onerous. 25 - Australian Plantation Products & Paper Industry Council</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue The inclusion of transfer data will greatly affect us. As the transfer of waste is already monitored under most State and Territory regimes through waste tracking, the benefit of NPI reporting on waste transfers is limited. Given the breadth of reporting triggers, it is expected that during the initial setup phase, significant resources would be required to identify reporting requirements and develop reporting systems. The costs associated with this are expected to be well above the NEPC prediction or industry expectations. 44 - Department of Defence</p>

COSTS
<p>Response Waste tracking systems report waste types as opposed to substances and do not report this information publicly, hence there is no duplication between the NPI and waste tracking systems. The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal. Estimation methodology for transfers will be undertaken in consultation with industry in order to minimise additional costs.</p>
<p>Issue The need for training and education seems to be underestimated in the proposed budgets. Training should be industry-specific or sector specific (eg local government, mining). 6 - EECO Pty Ltd</p>
<p>Response Noted.</p>
<p>Issue It is proposed to commence the variations to the NEPM by July 1 2007. In reference to the above comments on the introduction of "transfers", we submit that deployment of this feature be at least deferred until a more robust cost impact assessment has been carried out. It is noted that "some requirements have the potential to be implemented in a staged manner" - this could apply to transfers (once the financial impact has been properly assessed and communicated). 64 - Confidentiality requested</p>
<p>Response Further investigation into costs of reporting has been undertaken (EECO 2007 study).</p>
<p>Issue Should any specific form of reporting for individual businesses (including the reporting at a plant or organizational level) be included in a new mandatory reporting measure it is anticipated that compliance costs would be unacceptably high. Such specific reporting would not optimally fulfil policy objectives relating to improved accuracy, and would certainly increase the cost to those businesses forced to report. 49 - Australian Lot Feeders Association</p>
<p>Response The amended transfers definition requires mandatory reporting of transfers to final disposal only, which places simpler requirements on industry compared with the original proposal.</p>

OTHER PROPOSED NEPM AMENDMENTS

ADDITIONS/DELETIONS TO SUBSTANCE LIST
<p>Issue Stanwell supports the removal of nickel sub-sulphide and nickel carbonyl from category 2b and the reporting list respectively. 40 - Stanwell Corporation</p>
<p>Response Noted.</p>
<p>Issue Clause 22 – suggest wording “processes for consideration of any amendments to the reporting list will (in addition to meeting the requirements of section 20 of the Commonwealth Act and equivalent provisions of the corresponding Acts of participating jurisdictions) comprise the following: (a) to (d)” etc. 66 - Department of Environment WA</p>
<p>Response Noted.</p>
<p>Issue Retain Acrylamide as a reportable substance. The TAP’s logic for removing (that no one reports it) is incorrect, as historically there has been one WA reporter. 66 - Department of Environment WA</p>
<p>Response Noted. Acrylamide has been retained in the NPI substance list.</p>

ADDITIONS/DELETIONS TO SUBSTANCE LIST
<p>Issue Pesticides and herbicides are currently no included on the NPI substance list. A review of PRTRs indicates that reporting of pesticides and herbicides is undertaken in the US and UK. We understand that consideration of the inclusion of Agvet chemicals in the NPI has been deferred until such time as the DEH can establish a database of chemical use. However the NPI Review Report suggests that it is unknown whether the DEH database will actually include Agvet chemicals. Considering the potential human health and environmental impacts of pesticides and herbicides, and the reporting of these compounds in other countries, we consider that Agvet chemicals should be added to the NPI substance list. 60 - Australian Network of Environmental Defender's Offices</p> <p>Response Noted.</p>
<p>Issue We recommend that PCBs not be included as a transfer on the basis that they are already heavily regulated and currently being phased out. 43 - Australian Aluminium Council</p> <p>Response PCBs are included as a Category 1 substance. Where the 10 tonne usage threshold is exceeded, emissions and transfers must be reported. It is considered that few facilities will use PCBs in such a large quantity.</p>
<p>Issue I support insertions and deletions of chemicals with one exception. Biochemical oxygen demand should be reported by all facilities that trigger for nutrients and for discharges to water. The information is gathered by the facility anyway and this information will be of great use in catchment management. 6 EECO Pty Ltd</p> <p>Response The TAP did not recommend that biochemical oxygen demand be included in the NPI.</p>
<p>Issue Agricultural Chemicals have not been included in variation process and it is understood that the Department of the Environment and Water Resources is developing a chemical monitoring database and this may be able to meet the public information requires on agricultural chemicals. Until this database is developed and is able to be assessed agricultural chemicals remain as a potential for inclusion in future variations to the Measure. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>
<p>Issue Inclusion of polychlorinated dioxins and furans (TEQ) definition and inclusion of polycyclic aromatic hydrocarbons (B[a]PEQ) definition - although it would make sense to weight the emissions based on TEQ definitions, this would require facilities to determine each of the dioxin and furans and then apply their respective TEQ. At some facilities estimating dioxin and furans is done as a group and even then these are at or below detection levels, so what are facilities to report? Possible scenarios are that they end up with the same answer as they currently do or report estimated emissions at half the detection level for each dioxin and furan, then apply the TEQ and end up with even larger number of a possible emission because the default of half detection concentration has to be used for each of the individual congeners. To go down to reporting individual congeners is likely to require additional expensive sampling & analysis. It would be expected that if dioxins and furans as a group are at or below detection levels then on an individual basis the same result would apply. There would be little benefit from such an exercise at these detection levels. It is suggested to either do nothing or require that if results are at detection level, facilities do not to report dioxins and furans, so as not to put misleading results into the community. 17 - Hazelwood Power</p> <p>Response Standard analytical practices apply in summing individual measurements. Direct measurement is only one of the emission estimation techniques available. Most facilities report using emission factors and changing these from 'total mass' to reflect 'TEQ' is relatively straightforward. It is understood that monitoring and assessment methods for dioxins and furans involve determining the concentration of individual congeners, thereby facilitating the use of a TEQ definition. Also, there are examples of emission factors that are already available as TEQ. Further investigation into the application of TEQ to dioxins and furans will be undertaken in consultation with industry.</p>
<p>Issue We welcome the proposed change to the reporting of dioxins from a simple quantitative value to reporting these emissions as Toxic Equivalent (TEQ) units. We consider that this measure could be usefully applied to other substances, particularly</p>

ADDITIONS/DELETIONS TO SUBSTANCE LIST

where there are multiple forms of the substance with differing toxicity ratings, such as Mercury and Chromium. This approach would enable NPI users to more clearly understand the difference between high volume/low toxicity and low volume/high toxicity substances and the critical intersection between dosage rates and community/environmental health impacts. However, this is not a replacement for specific contextual data for NPI substances.

4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia

Response

The Technical Advisory Panel's (1999) approach to metals and metal compounds took into account metals that might be in different oxidation states, in soluble and insoluble forms, or combined in ways that gave rise to specific toxicity. They noted that for some metals – lead, cadmium, zinc and mercury, for instance – there was little to be gained by speciation. However, this is not the case for other metal compounds – eg chromium is reported as chromium(III) and chromium(VI) to recognise the varying toxicity of each species. Further assessment of speciation and/or bioavailability would unnecessarily increase the complexity and cost to industry of reporting to the NPI.

Issue

Acrylamide should be retained as a reportable NPI substance, as it is being used and reported as an emission by one WA facility. The Technical Advisory Panel (TAP) logic for removing (that no-one reports it) is incorrect, as historically there has been one WA reporter. The fact that no-one reports an NPI substance is questioned as a basis for removal of any substance, since the substance may be of environmental significance, and may not be reported for various reasons (such as threshold not triggered, or lack of knowledge or awareness, or lack of emission factors etc).

66 - Department of Environment WA

Response

Noted and agreed. Acrylamide has been retained in the NPI substance list.

Issue

The removal of nickel sub-sulfide and nickel carbonyl as Category 2b substances is supported..... The reasoning for the inclusion of acrolein is not supported by strong analysis (eg 14 'wood industry' facilities tripped Category 1a, therefore expect about 14 facilities to trip on acrolein). However, there appears no reason not to include the substance.

66 - Department of Environment WA

Response

Noted.

Issue

We note that the terms of reference for the TAP review of the NPI NEPM were derived from the conclusions of the NPI Review Report. We have reviewed the NPI Review Report and consider that the approach used to review the NPI substance list and substance thresholds was inadequate. The NPI Review Report does not clearly identify the basis on which substances were nominated for inclusion or deletion from the NPI substance list. This process was primarily driven by a range of interest groups, including industry, government and environment, who responded to a questionnaire. We believe the basis for the review of the NPI substance list and substance thresholds should have been driven primarily by scientific expertise and not the opinions of interest groups. A detailed review of the substance list and substance thresholds has not been undertaken, with international experience and the outcomes of one previous review cited only briefly. We believe the approach taken has constrained the ability of the TAP to undertake the necessary detailed review of the NPI substance list and substance thresholds. The TAP did not undertake a comprehensive review of the NPI substance list for the 2006 variation, owing to the large amount of work required to do this and the tight deadline for the TAP Report. A limited number of substances were reviewed based on the recommendations of the NPI Review Report, which as identified above, were derived from information gathered in consultation with stakeholders from a range of interest groups. We support the review of the substance list. Review of the list could draw on a range of resources including the NICNAS database.

60 - Australian Network of Environmental Defender's Offices

Response

Noted.

Issue

The TAP recommended that PCBs be added to the substance list. This change has not been reflected in the table of amendments in the draft variation, although PCBs will be included in Table 1. We would like confirmation that PCBs will be on the substance list.

60 - Australian Network of Environmental Defender's Offices

Response

PCBs are proposed for inclusion in the NPI as a Category 1 substance.

ADDITIONS/DELETIONS TO SUBSTANCE LIST
<p>Issue</p> <p>The TAP recommended that 1,3-dichloropropene is not included on the substance list on the basis that its use is limited. The APVMA lists 1,3-dichloropropene as registered for use in Australia. The APVMA declined to provide information to the TAP on this chemical due to 'commercial-in-confidence'. We consider that the precautionary principle should be applied and this compound listed on the substance list.</p> <p>60 - Australian Network of Environmental Defender's Offices</p> <p>Response</p> <p>Noted.</p>

AQUACULTURE
<p>Issue</p> <p>The document constitutes one of the laziest pieces of public policy that we have dealt with, and does reflect the standing the NEPC. The claims made against aquaculture are unsubstantiated. If the council had bothered to undertake some basic research it would have proved the statements untrue eg sewage equivalence of aquaculture discharge. It is on this basis, the document needs to be retracted, revised and an apology made to the aquaculture industry.</p> <p>54 - Aquaculture Council of Western Australia (ACWA)</p> <p>Response</p> <p>Research indicates some aquaculture facilities emit nutrient quantities in excess of industrial facilities such as sewage treatment plants in some catchments. Aquaculture facilities that emit nutrient loads below the thresholds will not be required to report to the NPI.</p>
<p>Issue</p> <p>Aquaculture should be exempted as:</p> <ul style="list-style-type: none"> • all the risks, reporting methods and the community benefits are managed already by state agencies. The proposed NPI duplicates reporting requirements of the states (both to DEC & Fisheries); • there have been no breaches of the current arrangements; • all of the industry environmental monitoring reporting is publicly available; • the reporting of gross N and P has no value, as it has no regional context to make an informed evaluation; • aquaculture is fundamentally different to other intensive industries, in that its business objectives cannot be achieved without maintaining high water and environmental quality. <p>54 - Aquaculture Council of Western Australia (ACWA)</p> <p>Response</p> <p>See section 3.1 of this report.</p>
<p>Issue</p> <p>Fully support this clause (clause 9(7)(e)(iii)) that removes the exemption for aquaculture reporting.</p> <p>15 - Conservation Council of SA, 16 - Whale and Dolphin Conservation Society, 21 - Aluna, Marine Education & Experience, 55 - Nature Conservation Council of NSW (Fisheries and Marine Network)</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>We support the removal of the exemption or aquaculture. These activities lead to water quality problems and impacts on water supplies and on aquatic species and organisms gaining a more complete understanding of the nutrient loads being emitted into receiving water by this industry and the potential to harm waterway health.</p> <p>18 - CASANZ - Vic/Tas Branch</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Retain the exemption for aquaculture.</p> <p>46 - Australian Prawn Farmers Association, 47 - National Aquaculture Council,</p> <p>54 - Aquaculture Council of Western Australia (ACWA), 74 - WA Department of Fisheries</p> <p>Response</p> <p>See section 3.1 of this report.</p>

AQUACULTURE
<p>Issue Removing the exemption for aquaculture must be pursued consistent with the government's existing policy on aquaculture industry development and regulation. It should be commensurate with the level of environmental risk posed by the aquaculture industry and not impose additional, overlapping regulatory burden. The Productivity Commission review of regulatory arrangements for aquaculture found that point source water pollution from land-based aquaculture, such as prawn or trout farms, is often more heavily regulated than diffuse sources of pollution from other land uses, such as pastoral or horticultural farming. This has implications for the efficient and effective management of environmental impacts and the development of the aquaculture industry. The Commission concluded there is a need for further research to assess if the level of regulation and control is consistent with the environmental risk posed. Further consultation is needed with the aquaculture industry before this exemption is removed. 59 - Department of Agriculture, Fisheries & Forestry</p> <p>Response See section 3.1 of this report.</p>
<p>Issue We support the inclusion of aquaculture reporting on the basis that all significant sources of emissions, whether natural, diffuse or industrial should be included to ensure the integrity of reporting system, and provide the most accurate information and context to the community. 72 - Australian Petroleum Production & Exploration Association, 75 - Exxon Mobil</p> <p>Response Noted.</p>
<p>Issue Requiring aquaculture facilities to report will place financial constraints on operations. This industry should remain exempt and not reconsidered for future inclusion. The current regulatory regime is already providing a framework of transparency, accountability and environment sustainability that members of the public can interrogate should they so choose. 74 - WA Department of Fisheries</p> <p>Response See section 3.1 in this report.</p>
<p>Issue We are fully supportive of the proposal to include aquaculture in the list of reporting industries. The known environmental impacts of aquaculture and the resultant emissions from aquaculture operations do not justify its continuing exclusion as a reporting industry. Requiring the aquaculture industry to report its emissions enables the public and government to quantify the environmental impact of these emissions. This is in line with the environmental management and public participation goals of the NEPM. 60 - Australian Network of Environmental Defender's Offices</p> <p>Response Noted.</p>
<p>Issue The reporting requirements as proposed under the draft variation is seen as counterproductive for an industry whose businesses quite frankly have almost no capacity to comply with much more regulation. 33 - Northern Territory Seafood Council</p> <p>Response See section 3.1 in this report.</p>
<p>Issue People accessing data will not be able to understand the context in which it is provided. This will lead to certain groups using their own interpretation that in turn could easily misrepresent the industry and its sustainable approach to production of seafood. The industry is seriously concerned that the Government is now going back on its commitment of reducing the impost of these bureaucratic processes on industry and does not fit with the spirit and intent of the Action Agenda and its key outcomes. The industry has in good faith and in partnership with Government developed an EMS based reporting process to state agencies based on the Fisheries Research and Development Corporation ESD framework for aquaculture. This is a cost effective mechanism to industry and Government. 46 - Australian Prawn Farmers Association, 47 - National Aquaculture Council</p> <p>Response See section 3.1 of this report.</p>

AQUACULTURE
<p>Issue</p> <p>Estimating and reporting transfers is a complicated and expensive exercise when dealing with an aquatic environment as there are numerous influences concerning seasonal change and natural organic and inorganic loadings in the various aquatic systems. It must be understood that nitrogen and phosphorous reactions in salt and freshwater environments are quite different. It is clear to the industry that there is lack of any science or risk assessment that underpins decisions and this is completely unprofessional given the circumstances. Decisions to include aquaculture have been based on anecdotal information and an attitude from the NPI of “why not include it?”</p> <p>46 - Australian Prawn Farmers Association, 47 - National Aquaculture Council</p> <p>Response</p> <p>See section 3.1 of this report.</p>
<p>Issue</p> <p>The sensitive nature of marine, estuarine and freshwater ecosystems is recognised by erasing the exemption of aquaculture farms from NPI reporting.</p> <p>2 - Horizon Power</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>The proposed annual discharge level of 15 tonnes of nitrogen and/or 4 tonnes phosphorous into the environment would be reached by a farm whose size would require the employment of as few as two or three people to operate it. This is a small business enterprise which will not be able to comply with further regulatory imposts. Further consultation with industry is needed to gain a greater appreciation of the effects on these small businesses of the proposed regulation. There is very little information about the fate of nitrogen and phosphorus released from farms. From a scientific perspective, the fate of nitrogen and phosphorus in the receiving waters in tropical estuaries is unknown. For this reason alone, inclusion of aquaculture would seem premature and inappropriate.</p> <p>33 - Northern Territory Seafood Council</p> <p>Response</p> <p>See section 3.1 of this report.</p>
<p>Issue</p> <p>I agree that aquaculture should be included.</p> <p>6 EECO Pty Ltd</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>The assertion that aquaculture facilities emit large amounts of nitrogen and phosphorous is a generalisation and shows a lack of understanding of the considerable amount of research that has been undertaken by the industry in regards to managing discharges and the range of species being aquacultured. There are no operations in WA that are emitting amounts of pollution above the agreed trigger values of N and P resulting in detrimental impacts on the environment.</p> <p>74 - WA Department of Fisheries</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>The industry has developed other public reporting processes. These are done in conjunction with state and federal jurisdictions. Compliance with the EPBC guidelines for aquaculture through the Department of Environment and Water Resources is a case in point.</p> <p>46 - Australian Prawn Farmers Association, 47 - National Aquaculture Council</p> <p>Response</p> <p>See section 3.1 of this report.</p>

AQUACULTURE

Issue

It is clear there will be significant duplication in industry having to report to various agencies as well as the NPI. Industry is of the view that access to any data must be through the relevant state agency to which industry must report and comply concerning appropriate agreed key environmental indicators as per their licences. There is a strong view from industry that it would not be too long before the list was expanded to incorporate other parameters that need to be measured. Such creep is being observed in other sectors. It is a pity that the TAP of this process has used one or two submissions from the 2005 review to push the inclusion of aquaculture in the NPI. These submissions have demonstrated their lack of understanding of the industry and consequently the process has adopted misinformation on which to base its decision of inclusion.

46 - Australian Prawn Farmers Association, 47 - National Aquaculture Council

Response

See section 3.1 of this report.

CHANGE IN CATEGORY 3 THRESHOLD

Issue

Nutrient emissions to water of TN and TP are reported through the category 3 threshold. Currently, emissions of TN must be reported where a facility emits more than 15 tonnes to water and TP must be reported where a facility emits more than 3 tonnes to water. The current draft NPI variation proposes to change the application of the thresholds so that if the threshold of one category 3 substance is exceeded, then emissions of both category 3 substances must be reported. This 'trip one/report both' proposal is supported, however, the thresholds should be lowered to reflect changes in climate and land use. The Department of Water advocates that the category 3 thresholds be reduced by a factor of six, ie to 500kg for TP and 2.5 tonnes for TN.

A consequence of climate change currently being experienced in Australia is a decrease of annual rainfall quantity. This will result in a decrease of runoff, ie a reduction of the catchment's capacity to flush its nutrient production. Through a simple analysis (under the assumption that catchment management does not change) it can be shown that a decrease of rainfall will result in an increase of the loading (in terms of nutrient concentration) to the receiving water bodies (rivers or estuaries). As a result "medium" nutrient emitters in the catchment will need to be targeted in order to control nutrient emission to receiving water. These "medium" nutrient emitters are actually in a far greater number than the "large" nutrient emitters, and they often are not captured in the NPI reporting system. Their total capacity to influence nutrient emission is already important and would be increased under drier conditions. DoW officers advocate reduction the threshold level associated with the Category 3 substances. The new thresholds should be reduced by a factor of six: 500kg for Total Phosphorus and 2.5T for Total Nitrogen.

66 - Department of Environment WA

Response

Noted.

Issue

We are also aware that stakeholders (eg officers of WA Department of Water) have concerns about thresholds for nutrients TN and TP.

66 - Department of Environment WA

Response

Noted.

NAME CHANGE

Issue

We support the proposed name change to NEI.

9 - Rio Tinto Aluminium (RTA), 10 - Solvay Interox Pty Ltd, 22 - Australian Sugar Milling Council (Brisbane),
24 - Australian Business Ltd/State Chamber (NSW), 25 - Australian Plantation Products & Paper Industry Council,
27 - Verve Energy, 31 - Kimberly-Clark, 32 - The Chamber of Minerals & Energy (WA), 34 - PACIA,
40 - Stanwell Corporation, 49 - Australian Lot Feeders Association, 61 - Coogee Chemicals Pty Ltd,
67 - Australian Environment Business Network, 72 - Australian Petroleum Production & Exploration Association,
75 - Exxon Mobil, 77 - Australian Chamber of Commerce & Industry

Response

Noted. See section 3.2 of this report.

NAME CHANGE
<p>Issue We do not support the alteration of the name of the initiative to the National Emissions Inventory. The name should remain as the National Pollutant Inventory. 57 - SA Water</p> <p>Response Noted.</p>
<p>Issue We support a change of name for the National Pollutant Inventory to the “National Emissions Inventory” ONLY if greenhouse gases are to be included as a result of Council decision on greenhouse reporting. Such a name change would overcome various objections raised by industry in relation to greenhouse substances which are not “pollutants”. 66 - Department of Environment WA</p> <p>Response Noted.</p>
<p>Issue We fully support the change of focus from pollutants to an emissions inventory including greenhouse gases in the definition. The change also allows historical work on national emissions baselines for greenhouse gas emissions to be combined with aggregated emissions for the NPI. Transfer calculations are already required, at least in part, in order to calculate usages for reporting thresholds. All of these areas involve the same processes and the same people so it appears logical to include them in the combined NEI programme. 51 - Greenbase Pty Ltd</p> <p>Response See section 3.2 of this report.</p>
<p>Issue The proposal to change the name from the National Pollutant Inventory to the National Emissions Inventory is relatively inconsequential. However one of the arguments supporting this view is that greenhouse gases are not pollutants and therefore if they are included in the NPI then the name should be altered. Like a number of substances greenhouse gases may not be regarded as pollutants when present in small amounts however in large quantities... 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>

PUBLICATION REQUIREMENTS
<p>Issue Part 4 (1) the meaning of “reporting year” should at least indicate that calendar year is acceptable and part (b) should be made part (C). This then clears the case of financial and calendar year reporting without leaving the approval up to the jurisdiction. Change to reporting period definition to make reporting more flexible - this change is supported and also adds to the case for spreading the current workload of jurisdictions across a broader time frame. This will allow and recognise the need for reports to occur in alignment with major business practices of calendar year and Australian financial year reporting. 17 - Hazelwood Power</p> <p>Response Jurisdictional approval is required to report on any reporting period apart from the financial year.</p>
<p>Issue Clause 9(4)(b) - it is noted that it is proposed by Government to extend the public release date of industry reported data by 2 months from 31 January to 31 March each year. The justification provided in the Impact Statement is based on a claim that substantial effort is required by government to collate and verify data to reduce the possibility of errors. As a large industry reporter, we contend that a substantial amount of data collation and verification is also required by large facility reporters to assist in reducing the possibility of errors. Due to the complexity of the processes involved, a heavy reliance is placed on numerous vendors in the industry supply chain to provide data on materials containing NPI reportable substances and that the 3 month ‘window’ currently provided is insufficient for large industry reporter needs. It is proposed that the period of time after the end of the reporting period to report to government also be extended for industry by an additional 2 months. 64 - Confidentiality requested</p>

PUBLICATION REQUIREMENTS
<p>Response Noted. The additional timeframe will allow jurisdictions more time to verify and query the data and similarly, it will allow facilities more time to respond to jurisdictional queries about the information that they have submitted.</p>
<p>Issue The requirement to assign an emissions estimation technique number to each reported sub emission would assist a State or Territory in determining the accuracy of numbers before submitting to the Commonwealth. 51 - Greenbase Pty Ltd</p> <p>Response Noted.</p>
<p>Issue Stanwell supports the inclusion of security provisions and the extension until the 31st March to enable reporting facilities to check, verify and amend erroneous data. 40 - Stanwell Corporation</p> <p>Response See section 3.4 of this report. The timeframe for publication does not affect the industry reporting submission date.</p>
<p>Issue Reporting date changes appear reasonable and allows time for data verification and obviates the need for post publication alterations. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>
<p>Issue Industry is expected to report within 3 months of the end of the reporting period, it would be expected that since there are two main reporting periods, calendar and Australian financial year that the report validation is spread across the year, however the additional time would add value to ensuring validation of the reports occurs and is supported. 17 - Hazelwood Power</p> <p>Response Noted.</p>
<p>Issue With advances in web access and the increased capability and access to computers at home and work it would be acceptable to think that keeping the web site current is the best way of providing the information. The need to produce CD roms and distribute would assist in reducing costs that would be better spent on maintaining the web site and is supported. 17 - Hazelwood Power</p> <p>Response Noted.</p>
<p>Issue If industry is to gain a preview of the data then there will be costs to jurisdictions in providing access. 66 - Department of Environment WA</p> <p>Response It is not proposed to have a 'pre-release database.' See section 3.4 in this report.</p>
<p>Issue We support the proposed changes to the publication requirement, however, any change from the "Industry Handbook" to "Industry Reporting Materials" should ensure that information is clearly outlined and does not place additional burden on industry to identify estimation techniques. 72 - Australian Petroleum Production & Exploration Association</p> <p>Response Noted.</p>
<p>Issue We strongly urge the adoption of varied reporting deadlines for different classes of reporters, as occurs with CPA tax reporting lists, to enable the expansion of our industry and the benefits this development will provide to the NPI. The current fixed reporting deadline unduly restricts a professional approach to emission reporting from evolving in Australia. 51 - Greenbase Pty Ltd</p>

PUBLICATION REQUIREMENTS
<p>Response Noted.</p>
<p>Issue We support the proposal to extend the release date to the 31 March in each year allowing reporters the opportunity to review the pre-release data set. This will assist in improving the quality of the NPI data set. 22 - Australian Sugar Milling Council (Brisbane)</p> <p>Response It is not proposed to have a 'pre-release database,' though the extra time will benefit data quality by allowing jurisdictions more time to verify data and query industry. See section 3.4 in this report.</p>
<p>Issue We support the proposed changes to timing of publication of NPI data. Current timelines have resulted in significant data errors being published. A two month extension of time, allowing industry and jurisdictions to view data across states and territories before publication, will greatly improve detection and correction of errors. 66 - Department of Environment WA</p> <p>Response Noted.</p>
<p>Issue ANEDO supports recommendation 54 of the NPI Review Report. This is to enable jurisdictions and industry to correct errors before public release. Although there will be a delay in the release of data, this will mean improved data quality and quality assurance due to data verification. 60 - Australian Network of Environmental Defender's Offices</p> <p>Response Noted.</p>
<p>Issue We support the establishment of a web-based reporting system. This will lead to greater confidence in the veracity of the data. In particular, the recommendations include automatic data checking and validation functions to ensure consistency of data from all the jurisdictions, as well as information on waste minimisation and cleaner production measures introduced during the reporting year. These measures will ensure that data quality is optimised and that the process of reporting remains a transparent one. 60 - Australian Network of Environmental Defender's Offices</p> <p>Response Noted.</p>
<p>Issue We support the proposed changes to the publication requirements. 75 - Exxon Mobil</p> <p>Response Noted.</p>

OTHER ISSUES

ROLE OF NPI
<p>Issue Overall, we are committed to the objectives of the NPI and support ongoing endeavours to streamline and improve its use. 9 - Rio Tinto Aluminium (RTA)</p> <p>Response Noted.</p>
<p>Issue For the NSW minerals industry, other reporting and regulatory/non-regulatory initiatives already better deal with aspects that the NPI aspires to encourage or address such as cost-effective and risk-based approaches to environmental emissions, GHG mitigation responses, materials stewardship (including waste management). 4 - NSW Minerals Council</p> <p>Response Noted.</p>

ROLE OF NPI
<p>Issue</p> <p>It is our position in relation to the proposed variation to the NPI NEPM is very much linked to our consistent and long standing view that the NEPC Act as it stands, and NEPMs, are not particularly suitable for achieving the desired environmental outcomes in relation to our activities..... We consider national interest exemptions essential to developing alternative and appropriate NEPM reporting solutions in certain circumstances.</p> <p>44 - Department of Defence</p> <p>Response</p> <p>Noted. The Department of the Environment and Water Resources is continuing to work with the Department of Defence on these issues.</p>
<p>Issue</p> <p>The NPI has been generally effective in achieving its goals. The register has provided a clear means of determining who is polluting and by how much. To date, the goal of promoting waste minimisation and cleaner production has been the least successful goal of the NPI. The addition of transfers is therefore a welcome development.....Moreover, the addition of aquaculture as a reporting industry, the inclusion of transfers, the attempts to improve data quality and the updating and consolidation of the diffuse source register will also provide the potential to further realise the goals of the NPI. The reforms would be further strengthened by inclusion of greenhouse gas emissions to the scheme, in the absence of comprehensive environmental reporting requirements nationally.</p> <p>60 - Australian Network of Environmental Defender's Offices</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>The changes proposed are supported.</p> <p>18 - CASANZ - Vic/Tas Branch</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>For the most part, the goals are consistent with "environment protection" and we support these goals, however, in Clause 5(c) the term "sustainable use of resources" is used. Sustainable use and sustainability are generally regarded as triple bottom line issues in which the environment is only one consideration, along with social and economic considerations. NEPMs are not designed to address social and economic considerations. The goals are more consistent with emissions generally rather than emissions causing or having the potential to cause an environmental impact. Verve Energy feels that the NPI, being an "environment protection measure", should focus on emissions causing or having the potential to cause an environmental impact.</p> <p>27 - Verve Energy</p> <p>Response</p> <p>NEPMs may consist of any combination of goals, standards, protocols and guidelines. By encouraging the reuse and recycling of used materials by identifying substances in waste streams through the reporting requirements, the NPI may lead to an improvement in the sustainable use of resources and a reduction in the quantity of substances emitted to the environment.</p>
<p>Issue</p> <p>We support the environmental protection goals established in the NEPM. We support the intent of the NEPM to facilitate the public's right to know about emissions to the environment and to encourage industry to reduce waste and adopt more cost-effective practices through cleaner production.</p> <p>28 - Chamber of Commerce & Industry WA</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Suggest replace "desired environmental outcomes" (Clause 5) with "environmental objectives", since it has proven very difficult to clearly and unequivocally show NPI reporting/disclosure as cause/effect for measurable and provable outcomes in relation to maintenance and improvement of the quality of ambient air, ambient marine estuarine or fresh water. NEPC Act clause 3 establishes an "object" of the Act. Measurable and demonstrable outcomes from the measure are as shown in Clause 6.</p> <p>66 - Department of Environment WA</p>

ROLE OF NPI
<p>Response Noted.</p>
<p>Issue The goals established by the draft variation do not mention misuse of information collected by the NPI. Extreme minority groups could misuse this information to pursue their own agenda. The raids from animal rights and liberation groups are regular and their activities threaten bio-security but have not yet been known to have impacted on on-farm food safety. Consideration should be given to the emergence of terrorist groups and the potential misuse of information to threaten food safety. 76 - NSW Farmers' Association</p>
<p>Response Noted.</p>
<p>Issue As mentioned above, public disclosure of emissions data is useful for our clients from a benchmarking perspective. 51 - Greenbase Pty Ltd</p>
<p>Response Noted.</p>
<p>Issue We support the inclusion of pollutant transfers into the NPI. 71 - Environment Liaison Office Groups</p>
<p>Response Noted.</p>
<p>Issue Whilst there is general agreement on a role for some form of reporting to satisfy community "right-to-know", there is considerable doubt that the NPI process is cost effective and returns adequate value to the general community. We do not believe that the "right-to-know" principle should be applied more broadly than it was originally intended ie to include substances not being emitted to the environment. The community "right-to-know" principle will be satisfied when the facility responsible for emitting the substances to air, land or water reports. 77 - Australian Chamber of Commerce & Industry</p>
<p>Response CRTK refers to requiring industry "...to provide information to the public and, in particular, to the local community, concerning the dangers presented by on-site chemical hazards or industrial waste that may be released into the environment as a result of industrial processes" (Gunningham, N. (1995) <i>Empowering the Public: Information Strategies and Environment Protection</i>. Environment Crime, 1-3 September 1995. Hobart, Australian Institute of Criminology Conference Proceedings). The NPI variation consultation process has shown that there is significant support from environment groups and the community for expansion of the NPI including the reporting of transfers.</p>

EMISSIONS
<p>Issue Direct emissions from non-combustion processes – the wording does not include whether industries are required to report emissions of nitrogen and phosphorous. In the case of poultry industries, these discharges to air and water are unacceptable. They emit hydrogen sulphide, PM2.5, PM10, Nitrogen and Carbon Dioxide although are only required to report on ammonia. Ammonia estimations are taken on a 1kg chicken which does not provide an adequate view of the real estimations. Calculations of estimations should reflect the true emissions. How will NPI know who is not reporting and who enforces the reporting requirements? 1 - Robyn McIntosh</p>
<p>Response Facilities from industry sectors (such as poultry production) that have NPI handbooks published must report to the NPI where they exceed any of the NPI reporting thresholds. Jurisdictions have work plans in place to identify facilities that must report to the NPI and ensure they meet reporting requirements. TAP recommended a more complete review of the substance list for any future review of the NEPM.</p>

EMISSIONS
<p>Issue</p> <p>We point to the fundamental failure of the NPI to precisely and holistically measure emissions. The NPI cannot improve environmental policy setting or decision making by government while other major emitters are not captured in the NPI reporting and assessment frameworks. The current model only allows reducing ammonia emission as a matter or reducing lot feeding numbers or increasing feed conversion efficiency. We believe the NPI presents little or no incentives for feedlots to minimize waste, again not effectively dealing with NPI principles.</p> <p>49 - Australian Lot Feeders Association</p> <p>Response</p> <p>The NPI addresses the need for comprehensive disclosure of emissions from point sources. Such disclosure gives community benefit but may not always be a driver for all aspects of environmental policy setting and decision making. A range of emission estimation techniques are available for use. Generally, increased accuracy at a facility level can be achieved if the facility operator chooses, however such methodology tends to be more complex and costly. Government is working with intensive livestock industry organisations to improve the accuracy of estimation techniques, while maintaining a low cost reporting framework.</p>
<p>Issue</p> <p>Additional points of concern warranting consideration in the variation:</p> <ul style="list-style-type: none"> • point source discharges of microbial pollution; • accidental releases and natural events; and • the reliability sub clause (industry can not be trusted to self regulate). <p>68 - Sunfish North Moreton</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>It is assumed the definition of “emission data” does not include transfers. Please confirm this and suggested amendment “emission data” for a substance, means an estimate of the amount of the substance emitted (it does not include transfers) in a reporting period that identifies....</p> <p>29 - Shell Company of Australia</p> <p>Response</p> <p>Emissions data and transfers data are separately defined in the NEPM.</p>
<p>Issue</p> <p>Clause 3 “substance information” – suggest insert “possible” before “health and environmental impacts”, in order to prevent unnecessary alarm from publication of some emissions, eg in situations where the substance is not released in a bio-available form.</p> <p>66 - Department of Environment WA</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>A 5 kilogram emission of mercury should apply only to combustion or water soluble emissions, not to dust emissions. Otherwise, a facility parking lot may trip the threshold with an emission that will have a negligible impact. It is interesting that PM_{2.5} will only be considered from combustion sources when the impacts are identical regardless of source, whereas metals in dust and in combustion are reported together when their impacts are very different.</p> <p>51 Greenbase Pty Ltd</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Stanwell strongly supports the inclusion of toxic equivalent methodologies for the calculation of emissions of polychlorinated dioxins and furans and polycyclic aromatic hydrocarbons. Stanwell supports the inclusion of changes to NOx emissions to enable reporting as mass equivalent of NO₂.</p> <p>40 - Stanwell Corporation</p> <p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>Reporting values based on LOD. The current procedure that requires one to report an annual emission when the analyte is below the limit of detection is unsound. Emission values using the Limit of Detection multiplied by the flow are</p>

<p>EMISSIONS</p> <p>misleading when reported by the NPI website as if the value was an actual estimate. For practical purposes, such values should not have to be reported to NPI. The space should be left blank. As an alternative, the value must have a < sign, with an explanation noting how the value derives from a 'not detected' measure. 31 - Kimberly-Clark</p> <p>Response Noted. This is an operational issue that is being addressed.</p>
<p>Issue The NPI decision to regulate the intensive beef industry (reflecting 1,000,000 head) and to ignore the extensive beef industry (26,000,000 head) sends a misleading message that the intensive beef industry is making a greater emission contribution than the extensive beef industry, when this can not be the case. 42 - West Australian Lot Feeders' Assoc</p> <p>Response Releases from intensive livestock facilities are concentrated in a small area. Releases from the extensive beef industry may be included as one of the aggregated emission sources estimated by jurisdictions as part of airshed data.</p>
<p>Issue I consider that maintaining an inventory of ammonia, phosphorus and micro particulate emissions; as well as nitrogen and phosphorus transfers from broiler operations is essential to ensure the mutual sustainability of this industry and the environments in which it operates. Responsible planning and catchment management need the aggregate information that the NPI database could provide. 58 Keith McGuigan</p> <p>Response Noted.</p>
<p>Issue Reporting is being considered to be in two parts. Emissions must be separated from transfers with the intent that the public (including NGOs) will not misuse or misinterpret the data (which are only estimates), but understand the clear difference and be able to discern the underlying basis and validity of the data. With the change in name of the NEPM to an emissions inventory it is assumed the general populus will realise that it is not a pollution inventory. However, the definition of 'emission' is a 'release or discharge to the environment'. This seems contradictory in respect to many transfers and does not provide a clear and accurate definition of what constitutes an emission. 35 - NuFarm Australia Ltd</p> <p>Response It is not considered that having two separate databases will lead to better outcomes beyond separation of emissions and transfers information within the existing database. The display of emissions and transfers on the database will be designed to minimise misinterpretation. In the absence of the inclusion of greenhouse gas emissions reporting to the NPI, it is not proposed to change the name to NEI. It is considered that the term 'pollutant' covers both the emission and transfer of listed substances. The majority of PRTRs around the world use the term 'pollutant' in their name but not 'transfer', despite the fact that transfers are often included.</p>
<p>Issue We support the proposal to report emissions of polychlorinated dioxins and furans on a TEQ (toxic equivalence) basis as it provides more meaningful information on the impact of the emissions and the trends in emissions over time. 25 - Australian Plantation Products & Paper Industry Council</p> <p>Response Noted.</p>
<p>Issue The current means for a facility to supply additional context re its emissions is too limited. The new web-based system should allow a greater range of qualifiers to explain a facilities situation. 6 - EECO Pty Ltd</p> <p>Response Noted. It is envisaged that the new reporting tool will allow facilities to provide a greater amount of contextual data.</p>

EMISSIONS
<p>Issue</p> <p>Industries across Australia are required to report to NPI regardless of whether they are located within the airshed for which diffuse emissions are reported. Australia wide reporting of diffuse emissions would be beneficial for diffuse sources and useful in providing additional context in non urban and regional centres.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Response</p> <p>Noted. Airshed coverage is an operational issue being addressed by the jurisdictions.</p>
<p>Issue</p> <p>The current procedure that requires companies to report an annual emission when the analyte is below the limit of detection is unsound, particularly when these figures are later collated and summed along with measured 'real' emissions. The current procedure of reporting an 'emission' at half the limit of detection multiplied by the flow is misleading when reported on the NPI website as if they are an actual estimate. For practical purposes a value lower than the limit of detection should not be reported to the NPI at all. If they are to be reported they could be reported simply as "below the limit of detection" and not treated as an actual emission. If a number is to be allocated to the substance it should remain clearly identified as a surrogate in any aggregation rather than treated the same as a measured emission.</p> <p>25 - Australian Plantation Products & Paper Industry Council</p>
<p>Response</p> <p>Noted. This is an operational issue that is being addressed.</p>
<p>Issue</p> <p>ANEDO recognises the importance and contribution of diffuse source emissions. A comprehensive and accurate record of diffuse source emission levels is needed if a holistic representation of emissions to our environment is to be realised. The recommendations (37-43 and 47) put forward have the potential to achieve a standardisation of diffuse source emission estimation and reporting across all jurisdictions. In addition, diffuse source data will be up-to-date and current. This will provide a means for meaningful comparison, and will enable access to the public who are able to utilise the information for their purposes. We are therefore supportive of these recommendations.</p> <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Response</p> <p>Noted. The coverage of aggregated emissions data from airsheds and water catchments is an operational issue that is being addressed by jurisdictions.</p>
THRESHOLDS
<p>Issue</p> <p>The changes to the reporting categories will drag in small companies who use nitric acid and nitrates, phosphoric acid and phosphates. These companies use more than the reporting threshold in their operations but have very low emissions to the environment. In many cases companies that simply blend materials for sale will be drawn into the reporting mechanism through the reporting threshold. To burden many companies with the reporting of these materials would seem to be more readily obtained from sales data.</p> <p>5 - Peter Hutchinson Consultancy</p>
<p>Response</p> <p>There has been no proposed change to the current reporting thresholds for nitric acid and phosphoric acid. It is proposed that transfers of these substances would also need to be reported if the current 10 tonne usage threshold was exceeded. Nitrates and phosphates must be reported where emissions and transfers of Total Nitrogen and Total Phosphorus exceed 15 tonnes and 3 tonnes respectively.</p>
<p>Issue</p> <p>This variation has replicated the existing NPI inconsistency between threshold definition for Cat 1 and 1 b substances and the definition for emissions (and proposed for transfer reporting) in that the reporting threshold is based on, for example, the sum total of lead and lead compounds whereas emission and transfer reports will be based on just the element. The logic for this distinction is unclear and it would be more reasonable for elemental substance thresholds that the threshold also be based on the element. The most significant difficulty with the current definition is that for many processes the form of many of the compounds both within and at the end of the process is unknown, making it impossible to establish the weight of an element and its compounds for comparison against the threshold without major expenditures which have not been taken into account in the variation costing. In the interests of efficiency it is expected that most entities would simply assess their use thresholds based on installed process measurements or known inputs and outputs from the process. This will be especially the case with respect to many chemical processes where intermediate chemical reaction mechanisms and species are often unknown, complex or transitory.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia</p>

THRESHOLDS
<p>Response</p> <p>Noted. The thresholds were established in a way designed to minimise the complexity and cost to a facility in determining whether they have a reporting requirement for a particular substance. Thresholds based on compound mass are considered to be easier to apply, particularly in the case of materials purchased. Although thresholds could be applied to the elemental mass rather than the compound mass, this would add to the complexity and cost.</p>
<p>Issue</p> <p>The proposal that exceedance of the Category 2a and 2b thresholds should not trigger reporting of transfers (if included) is supported. However this should be extended to emissions. Exceeding the threshold for Category 2a and 2b triggers the reporting of a significant number of substances and therefore the requirement to report all emissions of those substances, no matter how small the other sources are (eg a facility which burns more than 400 tonnes of fuel per annum is required to report all emissions of VOCs regardless of the quantity of VOCs used). Reporting of Category 2a and 2b substances should be limited to the emissions from the combustion process(es) unless the threshold of another category is exceeded. The inclusion of transfers of Category 3 substances may capture many facilities which discharge to sewer and not to 'water'.</p> <p>10 - Solvay Interox Pty Ltd, 34 - PACIA, 61- Coogee Chemicals Pty Ltd</p>
<p>Response</p> <p>Noted. It is considered that only reporting emissions from fuel burning activities may be misleading because fugitive emissions from other sources can be significant in terms of the total emission from the facility.</p>
<p>Issue</p> <p>We agree with the proposal that reporting of substance transfers would not be triggered by Category 2 thresholds. To streamline the program we recommend the same reporting and triggering requirements for transfers should also apply to the existing reporting of emissions. Specifically, we recommend that the Category 2 trigger not flow on to emissions of substances to the other two media (water and soil). This would leave the threshold for water emissions to be set by Category 1, ie 10 tonnes a year of use plus Category 3 for nutrients.</p> <p>31 - Kimberly-Clark</p>
<p>Response</p> <p>Noted. Transfers are not reportable when the Category 2 threshold is exceeded.</p>
<p>Issue</p> <p>Stanwell supports the proposed changes to the reporting thresholds for category 1 and 1a substances. Stanwell supports the inclusion of section 10(5) regarding "usage" of substances..... Stanwell supports the changes proposed for Section 12 with respect to nitrogen and phosphorus emission thresholds.</p> <p>40 - Stanwell Corporation</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>In relation to the term "burning" where it appears throughout and in relation to the use of liquid fuels and wastes (clause 11, and Table 1 Explanatory Notes), we see no reason why a more constructive term such as "use" or "consumption" could not be used.</p> <p>48 - Cement Industry Federation</p>
<p>Response</p> <p>Category 2a and 2b substances are products of combustion, hence, the link to 'burning'. Some combustible materials (eg solvents) are used in other ways (ie not combusted or burned) and a change to 'use' or 'consumption' in this clause would be confusing.</p>
<p>Issue</p> <p>Schedule (1)(b) - the revised definition of thresholds for "Total Nitrogen" and "Total Phosphorus" is still unclear, particularly for transfers. The definition does not clarify limited applicability to only water related transfers (eg liquid wastes to sewerage systems) or whether it is expected that the definition would also extend to solid wastes destined for landfill eg for solid wastes possessing leachable quantities of nitrogen and phosphorus (extensive TLCP testing would be required to determine this).</p> <p>64 - Confidentiality requested</p>
<p>Response</p> <p>The amended definition of transfers simplifies the reporting requirements for industry since only transfers to final disposal will be required to be reported. Under this definition, transfers of Total Nitrogen and Total Phosphorus are reportable to any of the mandatory reporting destinations (eg sewerage system, landfill etc). It is considered that simpler methodology than extensive TLCP testing will be sufficient to establish estimates of transferred quantities.</p>

THRESHOLDS
<p>Issue Table of Amendments – final comment page 24. Does the Cat 1b threshold apply to cadmium and lead (yes or no?). If yes, then make change in Table 1. If no, then delete comment. 66 - Department of Environment WA</p> <p>Response Noted. Category 1b only applies to Mercury. This comment was part of the consultation draft and will be deleted in the final version. Application of 1b to other substances, including cadmium and lead, may be considered should a comprehensive review of the substance list occur.</p>
<p>Issue In the Impact statement it is stated that the inclusion of transfers of contaminated soils and sediments should be recorded where these appear on the reporting list. The NEPM as drafted would not trigger the reporting of substances under Category 1, 1a and 1b because the triggers relate to the ‘use of substances’. Most contaminated sites are not currently in use, and would not trigger these thresholds. Consideration will have to be given to re-writing clause 10, reporting threshold – Category 1, Category 1a and Category 1b substances. 57 - SA Water</p> <p>Response Substances contained in contaminated soil and sediment would be classified as ‘used’ where the soil or sediment was subject to treatment or moved from one site to another.</p>
<p>Issue Although opposed to the reporting of transfers, should transfers become mandatory for reporting, then restriction to Category 1, 1a, 1b and 3 substances would be supported by Stanwell. 40 - Stanwell Corporation</p> <p>Response Noted.</p>
<p>Issue We are concerned about the potential for unnecessary burden being placed on industry through possible duplicate reporting of transfers at different threshold levels. For example, in Western Australia, waste transfers on public roads are already reported under the Environmental Protection (Controlled Waste Regulations) 2004, at thresholds exceeding 200 kg or 200 litres for most substances. The NPI would require reporting of transfers that exceed a range of thresholds, the minimum being 5 kg for mercury. The issue of duplication should be addressed further to ensure an efficient reporting process is developed. 20 -Department of Industry Resources (WA)</p> <p>Response Noted.</p>
<p>Issue We support the proposal that Category 2a and 2b thresholds (fuel burning) should not result in a requirement to report transfers of those substances. 25 - Australian Plantation Products & Paper Industry Council</p> <p>Response Noted.</p>
<p>Issue The requirement that emitters that trigger either the threshold for Total Nitrogen or the Total Phosphorus be now required to report on both based on the interrelationship between these two nutrients is sensible. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>
<p>Issue We ask that the threshold levels be reconsidered, at least for industries where very large quantities of material are processed and the substances contained are not transformed significantly from their natural state. Some of the proposed threshold changes will lead to inconsistencies in the dataset – and we recommend that appropriate action be undertaken to clearly identify and explain these inconsistencies. 43 - Australian Aluminium Council</p> <p>Response The threshold levels for the majority of NPI substances have not been amended. The threshold changes consist of</p>

THRESHOLDS
lowering the usage threshold for Mercury and compounds from 10 tonnes to 5 kg, while the thresholds for Total Nitrogen and Total Phosphorus now apply to emissions to water and transfers to a mandatory reporting transfer destination.
<p>Issue</p> <p>PCBs - The impact statement is unclear on what the trigger would be, 10 tonne threshold on disposal would need a calculation to be done for determining trigger, also what constitutes use (if these are electrical transformer oils) and not substances consumed or part of a the plant / manufacturing process.</p> <p>17 - Hazelwood Power</p>
<p>Response</p> <p>PCBs are a Category 1 substance with a 10 tonne usage threshold. If PCBs are in sealed transformer units they are excluded from the definition of use.</p>
<p>Issue</p> <p>The current review of the NPI NEPM did not involve a comprehensive assessment of the NPI substance thresholds. Only the reporting thresholds for particulate matter and mercury were reconsidered based on the recommendations of the NPI Review Report. The proper levels for thresholds should be carefully considered. If thresholds are set too high, releases of chemicals of environmental significance may not be reported. Relatively small releases of some chemicals can pose human health and environmental threats. Other chemicals are of particular concern not only because they are toxic, but also because they remain in the environment for long periods of time, are not readily destroyed, and build up or accumulate in body tissue (for example mercury, organo-chlorine pesticides and PAHs).</p> <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Response</p> <p>Noted. It is anticipated that a comprehensive review of the substance list will be conducted at some time in the future.</p>
<p>Issue</p> <p>The review undertaken by the TAP recommended a number of changes to the NPI substance thresholds, which have been reflected in the draft variation to the NPI NEPM. We generally support these proposed changes. The reporting threshold for mercury is proposed to be reduced from 10,000kg to 5kg in line with reductions made overseas. Within the table of amendments in the draft variation to the NPI NEPM, a footnote to the change to the mercury threshold states that 'the Category 1b threshold [of 5kg] may also be applied to other substances of similar toxicity such as cadmium and lead'. However, Schedule A of the draft variation to the NPI NEPM does not indicate that the thresholds for these compounds will be changed. This should be clarified. The TAP recognised that reduction of the threshold for mercury to 5kg might have a flow on effect to other substances, including heavy metals such as cadmium and lead. However there was insufficient time for the TAP to review potential changes to the substance thresholds in detail. We consider that reporting thresholds for a number of heavy metals should be investigated and reduced for the draft variation to the NPI NEPM and that the thresholds for other compounds should be reviewed in more detail using international experience.</p> <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Response</p> <p>Mercury is the only substance in Category 1b with a 5 kg usage threshold. Further analysis in this area is envisaged, particularly with respect to similar substances such as lead and cadmium when a comprehensive review of the substance list is conducted.</p>
<p>Issue</p> <p>We submit that it is particularly important that investigations are made into substantially lowering the reporting threshold of lead and lead compounds for the draft variation (as has been done for mercury), for a number of reasons:</p> <ul style="list-style-type: none"> • lead may bioaccumulate in humans and aquatic organisms; • lead may have human health and environmental effects at low exposure levels; • lead may have human health effects in the general population and is not just an issue for occupationally exposed groups; • lead has recently been upgraded from the status of a possible to a probable human carcinogen by the International Agency for Research on Cancer (IARC), based on sufficient evidence for carcinogenic effects in humans. <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Response</p> <p>Noted. It is anticipated that a comprehensive review of the substance list will be conducted at some time in the future.</p>
<p>Issue</p> <p>We also believe that investigations should be made into lowering the reporting threshold of other toxicants:</p> <ul style="list-style-type: none"> • The TAP indicated that the Category 1b threshold [of 5kg] may also be applied to cadmium. We believe that investigations should be made into substantially lowering the reporting threshold of cadmium. Cadmium may bioaccumulate in humans and aquatic organisms. • Investigations should be made into lowering the reporting threshold of other toxicants that are persistent and bioaccumulate and have human health and environmental effects at low exposure levels.

THRESHOLDS
60 - Australian Network of Environmental Defender's Offices
<p>Response</p> <p>Noted. It is anticipated that a comprehensive review of the substance list will be conducted at some time in the future.</p>
<p>Issue</p> <p>We do not support the change in threshold for mercury reporting. Reducing the threshold to 5kg of "use" is unlikely to capture any additional facilities, given that all sites that trigger the 2b fuel threshold already report mercury emissions.</p> <p>75 - Exxon Mobil</p>
<p>Response</p> <p>The Impact Statement notes that it is difficult to identify the number of facilities that may be impacted by this proposed change. It is anticipated that some industries using elemental mercury or mercury compounds will need to consider whether they exceed the new threshold and if so, will need to report on their emissions and transfers.</p>
<p>Issue</p> <p>It is recommended that where a company triggers the Category 2 (fuel burning) threshold that only emissions of those substances to air be reported. Fuel burning is only likely to release emissions of any significant quantity to air and it simply imposes a greater cost burden to monitor, measure and report emissions to water and land. Category 1 and 3 thresholds are used to trigger reporting when there are likely to be significant emissions to water and land. If a company does not trigger these thresholds there should be no obligation to report.</p> <p>25 - Australian Plantation Products & Paper Industry Council</p>
<p>Response</p> <p>Where a Category 2 fuel usage threshold is exceeded, emissions of the associated combustion products to air, water and land must be reported. There is no change to this requirement. It is considered that only reporting emissions of Category 2 substances from fuel burning activities may be misleading because emissions from other sources can be significant in terms of the total emission from the facility. Where Category 1 and 3 thresholds are exceeded, emissions and transfers of these substances must be reported.</p>
<p>Issue</p> <p>We consider that there is insufficient justification provided in the discussion paper regarding the proposal to significantly reduce the threshold level for mercury from 10 tonne to 5kg, other than it is in line with the mercury usage threshold level adopted in Canada. We consider that more detailed investigation to determine the extent of mercury usage in Australia and to identify the potential implications of the lower threshold is required.</p> <p>20 -Department of Industry Resources (WA)</p>
<p>Response</p> <p>The Technical Advisory Panel (2006) noted that information on mercury emissions was not definitive but recommended lowering the threshold for mercury reporting based on the high toxicity of mercury which can lead to adverse effects from relatively low levels of emissions.</p>
PM_{2.5}
<p>Issue</p> <p>Because estimating PM_{2.5} emissions is inaccurate to say the least, it can be double counted with PM₁₀ and can be dominated by aerosols from portable emitters in most locations. Verve Energy questions the value of adding PM_{2.5} to Category 2a and 2b.</p> <p>27 - Verve Energy</p>
<p>Response</p> <p>The Technical Advisory Panel (2006) recommended that PM_{2.5} from combustion sources be included in the NPI. Estimation methodologies for these emissions are considered to be sufficiently accurate. PM_{2.5} is by definition a subset of PM₁₀. There is information on the website advising users of the inappropriateness of adding substances together.</p>
<p>Issue</p> <p>The amount of particulate matter should include all sources and not for burning only. The US AFO includes PM_{2.5} and PM₁₀ for meat broiler farm reporting.</p> <p>1 - Robyn McIntosh</p>
<p>Response</p> <p>Noted. The Technical Advisory Panel (2006) recommends that a comprehensive risk-based review of the substance list be conducted.</p>
<p>Issue</p> <p>We support the exclusion of emissions data from non-anthropogenic sources such as wildfires from the main NPI</p>

<p>PM_{2.5}</p> <p>database...It is important that the database remains a register of human-induced emissions. The inclusion of natural sources of emissions has the ability to confuse users. However, we do support the inclusion of emissions from fire sources that are lit by humans (fuel reduction etc) in the diffuse source emissions data. Up to date information on these emission sources is therefore crucial if the public policy and comprehensive register goals of the NEPM are to be realised. We note that non-anthropogenic sources of emissions (such as wildfires) that contribute significantly to particle emissions, can be significant. We support the recommendation that a separate database be established for these sources.</p> <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>PM_{2.5} substances are not well defined, measured or estimated with respect to emissions from power station, any reported value is almost pure guess work....power station related PM_{2.5} substances are almost irrelevant at public receptor points, which are dominated by aerosols emanating from vehicle emissions....Ambient Air Quality NEPM measures in place have a better and much more robust process for dealing with PM_{2.5} issues. Emissions from stacks under EPA licenses are dispersed in comparison to vehicle emissions at ground level.</p> <p>17 - Hazelwood Power</p>
<p>Response</p> <p>The Technical Advisory Panel (2006) recommended that PM_{2.5} emissions from combustion sources be included in the NPI.</p>
<p>Issue</p> <p>An emission factor for PM_{2.5} will need to be included in the NRT combustion database, or the EET manual for combustion in boilers.</p> <p>12 - BP Australia (Melbourne)</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>We support the inclusion of PM_{2.5}.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Response</p> <p>Noted.</p>
<p>Issue</p> <p>We remain opposed to the inclusion of PM_{2.5} in the NPI. We are opposed to the inclusion of PM_{2.5} in the NPI reporting as it is not a specific substance, rather comprises particulates of all sorts, sizes, chemistry, stability and toxicity. In addition, there is insufficient science to accurately characterise the health risks from PM_{2.5} as a general substance. As the proposal currently does not include the removal of PM₁₀, we support the TAP recommendation for PM₁₀ speciation to allow for additional relevant contextual information about PM₁₀ emissions due to the similar issues outlined above for PM_{2.5}. We maintain that the current system of reporting PM₁₀ as a 'substance' in the NPI is flawed because of its complex nature and the current emission estimating techniques is in need of urgent revision. If PM_{2.5} is included in the NPI as a new substance, then reporting should be restricted to combustion sources only and PM₁₀ reporting should be removed. As a minimum, PM₁₀ speciation should be allowed.</p> <p>4 - NSW Minerals Council</p>
<p>Response</p> <p>The Technical Advisory Panel (2006) recommended that PM_{2.5} from combustion sources be included in the NPI based on scientific research linking health effects with PM_{2.5} emissions. Government will work with industry to improve the accuracy of PM₁₀ emission factors. Operational changes to the NPI supporting the variation are envisaged to include additional opportunities for industry to provide context to their reported figures such as speciating PM₁₀ emissions.</p>
<p>Issue</p> <p>The Council notes that PM_{2.5} is proposed to be included as an NPI reportable substance, and notes the Technical Advisory Panel (TAP) recommendation that reporting of PM_{2.5} emissions be restricted to combustion sources. We support this restriction; and emphasise that PM_{2.5} emissions from fugitive and wind-blown dust sources such as may be associated with mining, mineral processing and metal production should not be reportable to the NPI, in line with the TAP recommendation.</p> <p>43 - Australian Aluminium Council</p>
<p>Response</p> <p>Noted.</p>

<p>PM_{2.5}</p>
<p>Issue Stanwell supports the proposed changes to the list of substances for reporting against the NPI, with the exception of PM_{2.5}. As described in Part 4, Stanwell does not support the inclusion of PM_{2.5} at this time. Stanwell notes that the definition of PM₁₀ requires amendment to reflect the inclusion of PM_{2.5}. Stanwell would support the inclusion of the definition of PM₁₀ to be particulate between 2.6 and 10 microns should PM_{2.5} reporting be adopted. The purpose of this change is to prevent double counting of the PM_{2.5} fraction in emissions reports. 40 - Stanwell Corporation</p>
<p>Response PM_{2.5} is by definition a subset of PM₁₀. There is information on the website advising users of the inappropriateness of adding substances together.</p>
<p>Issue We consider that the proposed inclusion of PM_{2.5} reporting provides an opportunity to simplify the NPI substances list by replacing the existing PM₁₀ with PM_{2.5}. We support the proposal to confine the reporting of PM_{2.5} to combustion sources only, thereby excluding crustal materials such as clay dust, due to a lack of scientific evidence of adverse health effects from these sources. We recommend that should PM_{2.5} be added as a new substance to the NPI, that the existing PM₁₀ substance should be removed to maintain the accuracy, simplicity and scientific validity of the inventory. 4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Response PM_{2.5} emissions from combustion sources and PM₁₀ emissions from all sources will be required to be reported where Category 2a threshold is exceeded. The Technical Advisory Panel (2006) recommends that a comprehensive risk-based review of the substance list be conducted.</p>
<p>Issue We generally support the substance and threshold changes proposed. Many facilities currently report PM₁₀ emissions using the 'sampling or direct measurement' emission estimation technique. PM₁₀ data from combustion operations is generally fairly readily available from previous site testing data. Should facilities be required to test PM_{2.5}, testing costs will increase substantially. The impact statement notes that USEPA data is readily available to generate emission factors for PM_{2.5} data which will limit costs to industry. Given the range of possible results for PM_{2.5} emissions and the different operating conditions for bagasse fired boilers in Australia, we believe that local data should be collected to reflect PM_{2.5} emissions in Australia from bagasse fired boilers. The NPI should provide resources to enable this to occur. 22 - Australian Sugar Milling Council (Brisbane)</p> <p>Response The NPI encourages facilities to conduct source monitoring in order to improve the accuracy of their emission estimations. Government will work with industry to improve the accuracy of the estimation techniques.</p>
<p>Issue It is agreed that a lack of suitable emission factors should preclude the reporting of PM_{2.5} emissions from diffuse sources. However, the same argument could be applied to the reporting of PM₁₀ from diffuse sources. PM₁₀ is currently reportable from such sources. There is a fundamental inconsistency in the approach regarding these two substances (PM_{2.5}, PM₁₀). PM_{2.5} has a greater health connection than PM₁₀. Accordingly the approach to PM_{2.5} should be reviewed. 66 - Department of Environment WA</p> <p>Response There are suitable emissions estimation techniques available for PM₁₀ from diffuse sources.</p>
<p>OTHER COMMENTS</p>
<p>Issue Clause 2(1) appears to reference non-existence clauses. We infer the correct references to be (9)(1)(d) and (9)(1)(e) respectively. 48 - Cement Industry Federation</p> <p>Response Noted. Amendments made.</p>
<p>Issue Clause 7 states "a database to be known as the National Emissions Inventory will be established that contains information..." We suggest this includes "substance information" as defined in Part 1. Clause 7 (a) talks "about emissions and transfers of specified substances, on a geographical basis, including those of a hazardous nature or involving significant impact". In order to be consistent with the environment protection goals, Shell suggest this is amended to read</p>

OTHER COMMENTS
<p>"about emissions and transfers of substances on the reporting list, on a geographical basis". 29 -Shell Company of Australia</p> <p>Response Noted. Text referring to the NPI substance reporting list is included in subsequent clauses.</p>
<p>Issue We are reassured to see that the reporting requirements for the poultry industry have been clarified. However, we question whether there are indeed a number of these groups reporting in the SEQ area.....The following changes should be adopted for the broiler poultry industry:</p> <ul style="list-style-type: none"> - the inclusion of the integrator company name in addition to growers registered name; facilities name; address; latitude and longitude; - ammonia emissions be incrementally reported at the end of each batch and progressively reckoned throughout the year; - NPI dust reporting is necessary for the poultry industry emissions without the fuel usage trigger outlined in the manual and NPI Guide; - Category 3 substances are total N and P to water. The manual should be developed to cover operations which include poultry processes and emissions associated with the disposal of biological matter; waste removal; waste storage and waste treatment..... It is wrong to assume that poultry emissions of dusts in exhausts are benign, with no potential to affect neighbouring communities, other agricultural work place areas and safe food standards..... Airborne emissions of P should be reported. <p>68 - Sunfish North Moreton</p> <p>Response Noted. Further consideration of reportable substances, including thresholds, may occur as part of a comprehensive review of the substance list.</p>
<p>Issue It is recommended that:</p> <ul style="list-style-type: none"> • Operators of broiler growing facilities report to the NPI: <ul style="list-style-type: none"> - calculated ammonia emissions - calculated PM₁₀ emissions - calculated P emissions - quantities and geographic destination of transfers of N and P; • To protect the privacy of operators living on site, the geographic information identifying the grower facility in the database be linked to the name of the contracting integrator; • Integrators, using waybill data, report calculated emissions in parallel to growers. <p>58 - Keith McGuigan</p> <p>Response Noted. Further consideration of reportable substances, including thresholds, may occur as part of a comprehensive review of the substance list.</p>
<p>Issue Appropriate formats should be made available to enable local and state authorities to interrogate the database to assess aggregate and cumulative nutrient loads in catchments or defined geographic areas. 58 - Keith McGuigan</p> <p>Response Diffuse and point source nutrient data on the NPI database can be interrogated by catchment.</p>
<p>Issue It is outrageous that any data reported to the NPI by companies which exceed thresholds are not publicly disclosed - unless the company concerned approves the release of this data. 8 - Bevan Delaney</p> <p>Response The NEPM clearly identifies all data that must be reported by facilities and publicly disclosed.</p>

OTHER COMMENTS
<p>Issue Clause 9(5) states “it is specifically required by another State, Territory or Commonwealth data gathering program.” We request that this item is deleted, as part (a) and (b) should cover this. We believe strict confidentiality provisions should be placed around the use by government of the data we report. 29 - Shell Company of Australia</p> <p>Response This clause has been amended to enable streamlined reporting for industry through one access point. Confidentiality provisions are captured by clause 9(6).</p>
<p>Issue Clause 10(4) states “use of a substance means the handling, manufacture, import, processing coincidental production or other use of the substance”. No reference is made to storage of the substance – is it the intention of this clause to include storage of the substance? 29 - Shell Company of Australia</p> <p>Response Storage in a fully enclosed container (ie no leakage or breathing) is not classified as use. Movement of a substance to or from such a storage container would be captured as ‘use’.</p>
<p>Issue Clause 14 should include a statement on a phase in period for changed reporting requirements that could eventuate from transfers or other changes to the measure in the future, eg a 24 month phase in period to enable preliminary results to be validated to ensure that the first reporting is reasonably accurate to communicate estimated emissions/transfers to the community. 17 - Hazelwood Power</p> <p>Response Noted.</p>
<p>Issue Clause 24(1)(c) should include a time frame if facility does not report emissions...Clause 25(2)(b)(i) "and/or" - leave out the word "or"..... Clause 31 "subject to mechanisms" should be amended to define mechanisms. 1 - Robyn McIntosh</p> <p>Response Enforcement provisions within each jurisdiction depend on the legislation under which NPI requirements are enacted and the policies and guidelines of the environment agency.</p>
<p>Issue In Schedule A, 1(d) and 2(d), the symbol "Cl-" appears to indicate the ion is not free residual chlorine and requires clarification. 10 - Solvay Interlox Pty Ltd, 25 - Australian Plantation Products & Paper Industry Council, 31 - Kimberly-Clark</p> <p>Response The definition has been amended to clarify that it is free residual chlorine and not chloride ion that should be reported.</p>
<p>Issue Schedule A(1)(d) - the revised definition of thresholds for “chlorine and compounds” to include free residual chlorine and hypochlorite should be reassessed. As a disinfection substance used in water, its deployment in the Australian community is so common, that reporting of emissions, particularly transfers (to sewer) will derive limited benefit or engagement from the community. 64 - Confidentiality requested</p> <p>Response Facilities will only have to report emissions of this substance if the 10 tonne usage threshold has been exceeded.</p>
<p>Issue With respect to clause 25(1)(b), which refers to enforcement, the words 'knowingly and intentionally' should be inserted into the phrase "provides false or misleading information to the nominated agency". 12 - BP Australia (Melbourne)</p> <p>Response Inserting 'knowingly and intentionally' is not considered necessary and could make the clause inconsistent with environmental offence provisions in jurisdictions.</p>

OTHER COMMENTS
<p>Issue Stanwell supports the intent of the National Environmental Protection Council to undertake periodic reviews of the NEPM NPI although such proposed reviews and amendments should be required to undergo public consultation. Stanwell does not support the inclusion of section 32(2) of the draft variation. 40 - Stanwell Corporation</p> <p>Response Review of the substance list may be driven by emerging reasons other than from a comprehensive review. NEPC processes have traditionally been transparent. The NEPC Acts require public consultation on any proposed NEPM variation, regardless of whether the variation is contemplating substantial changes or could be classed as a 'minor variation'. There is discretion, however, in terms of the nature of the consultation initiatives employed, ranging from a simple call for written submissions to submissions supplemented by public forums of various kinds. A NEPM review usually precedes an NEPC decision to initiate a NEPM variation. While there is no statutory requirement for public consultation in relation to NEPM reviews, public consultation on 'issues papers' or 'discussion papers' has been the norm.</p>
<p>Issue Under the definition of industry reporting material it should be 'provides' not 'provide'....Clause 22 should be amended to give NEPC to approve minor variations to the NEPM such as typographical errors without the requirement to undergo a full review as required by Clause 22. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted. Clause 32(2) allows Council to amend the NEPM in accordance with section 20 of the Commonwealth Act.</p>
<p>Issue The main objectives of the NPI are listed in section 1, however, this seems to be a combination of the environmental outcomes and the goals as detailed in Part 2 of the "Draft variation". It would be clearer if the environmental outcomes and the goals are consistent with the "Draft Variation". 29 -Shell Company of Australia</p> <p>Response Noted.</p>
<p>Issue We believe that PCBs are unlikely to become an issue unless they are transferred onto grazing land. 19 - Biosecurity Victoria, Dept of Primary Industries</p> <p>Response Noted.</p>
<p>Issue We support the proposed changes for reporting dioxins in TEQs. 19 - Biosecurity Victoria, Dept of Primary Industries</p> <p>Response Noted.</p>
<p>Issue Inclusion of Mercury and a 5kg threshold is supported. 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted.</p>
<p>Issue The CAS No. for Ethylene oxide is 75-21-8 not (72-21-8 as given in draft). 18 - CASANZ - Vic/Tas Branch</p> <p>Response Noted and amended.</p>
<p>Issue We support the proposed change of reporting of certain substances in Toxic Equivalents (TEQ) rather than by weight or volume. 4 - NSW Minerals Council</p>

OTHER COMMENTS
<p>Response Noted.</p>
<p>Issue We remain concerned about the continued lack of contextual data for other NPI substances. It is crucial for the appropriate interpretation and use of data that the provision of contextual information is built into the NPI. The minerals industry considers that the current level of contextual data provided is highly inadequate and can result in members of the public having an inaccurate assessment of the risk posed by an emission. This does not meet with the original goals of the NPI. NSWMC believes that contextual information should be provided for each substance of the NPI and displayed with the reported data to provide more accurate information on natural levels of a substance and exposure risks. 4 - NSW Minerals Council</p> <p>Response Contextual information, such as chemical properties, health effects and common uses and emission sources, is provided for each of the NPI substances on the database.</p>
<p>Issue CCI does not object in principle to other substantial amendments proposed in the draft variation:</p> <ul style="list-style-type: none"> • substance and threshold changes. Specifically, CCI supports the inclusion of the I-TEQ standard for reporting polychlorinated dioxins and furans to align with other national and international reporting programs; • removing exemption for aquaculture reporting; • changes to publication requirements. <p>28 - Chamber of Commerce & Industry WA</p> <p>Response Noted.</p>
<p>Issue Likewise to other prescribed waste disposal, PCB waste is tracked by EPA transport certificate system and reported in annual return to EPA and annual public business report. If state jurisdictions do not remove the need for annual waste returns then wastes transfers incorporated in NPI is another reporting mechanism. The need to calculate actual amount of PCB on each batch/equipment as concentration x volume and express in kg. This may be difficult with small PCB capacitors and old ballasts as accurate estimation of actual PCB concentration and volume will need to undertaken. 17 - Hazelwood Power</p> <p>Response Reporting of PCBs is subject to the 10 tonne usage threshold. Reporting is based on estimations for an annual period. As such, simpler methodology than analysis for each batch would be considered appropriate.</p>
<p>Issue If mining overburden is excluded from NPI transfers, then is mercury in mine overburden excluded even if threshold is reduced to 5kg unless it is released/emitted. Given low concentration of mercury in some fuels, and that large fuel burn would result in excess of 5kg of emission, then won't unnecessary pressure to reduce mercury from combustion stack emissions occur if the 1b category to put in place. It would be difficult to see that if it is necessary to report on 5kg use, that greater than 5kg of Hg emission would not result in huge financial cost to address this emission, eg the US experience. 17 - Hazelwood Power</p> <p>Response The methodology for determining whether a usage threshold has been exceeded has not altered – that is, the amount of a metal species in overburden counts towards a usage threshold (but transfers of metal species within the overburden are not reportable). Given the toxicity of mercury, a 5 kg emission in combustion gases is considered a very significant emission. Moreover, a 'large fuel burn' would likely result in the Category 2b fuel burning threshold being exceeded with emissions of mercury becoming reportable as a result, and as is already the case. The role of the NPI is to collect and make available information about the emissions of listed substances. This information can (and is intended to) inform policy decisions.</p>
<p>Issue Change in definition for CASR number - this is change is supported. 17 - Hazelwood Power</p> <p>Response Noted.</p>

OTHER COMMENTS
<p>Issue Change from 'contextual' to 'substance' information. Although it is important to have clear definitions it is equally important to provide both 'substance' information and 'contextual' information. It is paramount that the public be supplied information that defines the substance and its effects. Equally the emissions must be put into context of what this may mean. Clearly living adjacent to a freeway is not the same as living in close proximity to a site where emissions are controlled, managed and discharged some 150m above ground from a stack for plume dispersion reasons. 17 - Hazelwood Power</p> <p>Response Noted.</p>
<p>Issue We recommend that changes to the reporting threshold for Mercury be accompanied by a parallel study on sources that do not report to the NPI in order to gain a better picture of total amounts and sources of national emissions. 4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p> <p>Response Aggregated emissions data covering airsheds includes information on many sources. Coverage of airsheds is an issue being addressed by jurisdictions.</p>
<p>Issue Clause 5.4: Table 5-2 is not referred to in the text (it is, in fact, from the TAP report). 66 - Department of Environment WA</p> <p>Response Noted.</p>
<p>Issue The reduction in the mercury threshold to 5kg is expected to draw in reporting for this substance for many reporters, especially in the mining industry. Questions on bioavailability could be expected from this sector. 66 - Department of Environment WA</p> <p>Response Bioavailability (where applicable) was a criterion of the environmental hazard rating system used by the Technical Advisory Panel (1999) in their risk assessment of 400 substances based on human and environmental health hazard and likelihood of exposure.</p>
<p>Issue We suggest that in regards the NPI (and all mandatory reporting standards, including for any future greenhouse gas recording systems) that regulators utilize the far more accurate and complete information from the ABARE survey for the feedlot sector. This would negate the need for costly and inconvenient individual facility reporting, and importantly be far more accurate thanks to the industry wide perspective provided. Potentially this would allow for quarterly reporting (as opposed to the current annual reporting requirement) and would provide more accuracy, especially in WA where many feedlots operate on a seasonal basis, and for which annual accounting does not accurately reflect emission patterns. 49 - Australian Lot Feeders Association</p> <p>Response The NPI requires site level reporting from industries that exceed reporting thresholds in order to fulfil community right-to-know criteria.</p>
<p>Issue It is important that all states and territories allow for the electronic submission of NPI reports via the NRT. 12 - BP Australia (Melbourne), 29 - Shell Company of Australia, 30 - QAF Meat Industries Pty Ltd, 62 - Australian Pork Limited</p> <p>Response A national on-line reporting tool is currently being developed.</p>
<p>Issue It is reported that there are possibly many companies that should report to NPI but are not. This is illegal and should be investigated further. It is only by having a comprehensive and complete data set that we can fully understand the emissions into our airsheds. 18 - CASANZ - Vic/Tas Branch</p>

OTHER COMMENTS
<p>Response Noted. Jurisdictions have work programs in place to identify and take action against facilities that should be reporting but are not.</p>
<p>Issue The disclosure of location and personal/business details via the NPI reporting system provides ready access for animal activists seeking to make threats against private businesses. 42 - West Australian Lot Feeders' Assoc, 49 - Australian Lot Feeders Association, 62 - Australian Pork Limited, 76 - NSW Farmers' Association</p> <p>Response This is an operational issue that is currently being addressed.</p>
<p>Issue The lack of reliable and up-to-date contextual data in the current NPI serves to undermine the credibility of the NPI program and the government jurisdictions charged with operating it. 43 - Australian Aluminium Council</p> <p>Response Noted.</p>
<p>Issue Enforcement of NPI reporting in the pork industry has been very sporadic nationally. We wish to ensure that a more simplified and equitable reporting process for producers is established for all states. APL is hopeful that this variation and lack of uniformity across states will be addressed through the National Environment Protection Measure..... We believe that producers with less than 500 sows, or finishing units with less than 10,000 pigs, should not be required to report to the NPI. This could possibly be achieved by defining "small" piggeries as diffuse ammonia emitters. Such an approach would still capture two thirds of pork production (and resulting emissions) while sparing 300-500 small family-run farms from reporting. 62 - Australian Pork Limited</p> <p>Response Noted. The NPI requires site level reporting from industries that exceed reporting thresholds in order to fulfil community right-to-know criteria. Individual thresholds for specific industries are not considered appropriate.</p>
<p>Issue The absence of an appropriate administrative infrastructure is one of the principal difficulties for the application of certain NEPMs to our activities. Given the dispersed nature of our organisation, and the diversity and range of operations with which we are charged, collecting and consolidating the required data to meet basic reporting requirements under the NPI NEPM presents a considerable administrative undertaking and burden. One of our "facilities" may have multiple users, operating independently on a long term, temporary or intermittent basis. This makes reporting requirements under the NPI NEPM administratively difficult and resource intensive. 44 - Department of Defence</p> <p>Response The Australian Government Department of the Environment and Water Resources is working with the Department of Defence to address these issues.</p>
<p>Issue We understand that total nitrogen and total phosphorous are currently included in diffuse source emissions data, but that there are issues with the adequacy of the data, including that estimates are made for only a limited number of catchments. We believe this situation is inadequate, and we do not agree with the conclusion of the NPI Review Report, which suggests that there is no strong imperative to improve the current reporting process. We support the suggestion in the NPI Review Report that diffuse source estimates for total nitrogen and total phosphorous be made on a catchment by catchment basis using sales data and modelling. As identified in the report, there are few commercial in confidence issues with fertiliser products and sales data on a catchment basis could be readily made available. 60 - Australian Network of Environmental Defender's Offices</p> <p>Response Noted. Coverage of airsheds and water catchments are issues being addressed by jurisdictions.</p>
<p>Issue We welcome the proposed development of a nationally consistent electronic reporting format, with capability for data to be submitted electronically. This will streamline the process, particularly for companies with multiple sites, and reduce the reporting burden on industry. 72 - Australian Petroleum Production & Exploration Association, 75 - Exxon Mobil</p>

OTHER COMMENTS
<p>Response Noted.</p>
<p>Issue As noted in the NPI Review Report, recent telephone surveys to gauge awareness of the NPI yielded disappointing results, indicating that the public participatory goal of the NPI is not being achieved. Those who did use it were critical of the website, finding it hard to access, with out of date diffuse data and low data quality. However, the surveys also indicated that there is a strong interest in the community for the kind of information available in the NPI. As a result, the EPHC has made recommendations (50, 51, and 52) to improve data presentation, to allow a capacity for the public to manipulate the data and to commence awareness raising campaigns once data presentation is improved. These had been branded as high and medium priority initiatives. We are supportive of amendments to the NPI that lead to an increase in the profile of the NPI and to greater community awareness of its existence and of its functions. This is in keeping with the 'community right to know' objective of the NEPM. Also, an ability to manipulate the data to observe trends will allow the public to make meaningful use of the data. Furthermore, we are supportive of education campaigns designed to raise awareness of the NPI. However, the appropriateness and effectiveness of these initiatives will need to be re-assessed at the next NEPM review. 60 - Australian Network of Environmental Defender's Offices</p>
<p>Response Noted. The telephone surveys were conducted in 2002 are cannot be considered as 'recent' or an accurate indication of current levels of usage.</p>
<p>Issue We support recommendation 57 put forward to formulate indicators for data collection and data quality. Data quality is a critical component of the NPI. There needs to be confidence in the accuracy and precision of the data, otherwise the potential for the NPI to be a driver of environmental policy and of waste minimisation programmes is limited. Also, NPI data is used in State of the Environment reports by each jurisdiction, and it is therefore essential that data is valid and representative. Moreover, accurate data is needed to enable the public to make informed choices in dealing with industry and in choosing "environmentally-friendly" businesses to deal with. An additional issue relates to the comprehensiveness of the inventory. We support the recommendation to establish measures to determine the fraction of potential reporters actually reporting. Furthermore, we would support an enforcement mechanism to ensure that all relevant industries and facilities that are above the reporting threshold comply with their requirements. 60 - Australian Network of Environmental Defender's Offices</p>
<p>Response Improving data accuracy is an on-going operational issue for the NPI. Governments use a variety of tools for data verification including desk-top and site audits and statistical analysis.</p>
<p>Issue We believe that biannual public surveys to gauge user satisfaction with the NPI process are necessary and appropriate. These would provide indicators of public awareness and satisfaction with the information disseminated by the NPI. Also, these would provide useful information about the success of the campaign measures to increase public consciousness of the NPI that are proposed under the current amendments. 60 - Australian Network of Environmental Defender's Offices</p>
<p>Response Noted.</p>
<p>Issue The utility of the current NPI public database would be much improved for the finance sector if the search facility could link facility data back to the holding company for all emissions not just GHG. Currently a facility search using the holding company name does not find all relevant facilities if the facility name does not contain the holding company name (eg Wesfarmers and CSBP). Again, we also emphasise that 'company' linkage should not be by ABN but by the holding company which ultimately owns the facility. The streamlining of the NPI database for investor purposes, eg by allowing the aggregation of holding company data and so creating a more accessible database, will similarly enhance the NPI NEPM to not only achieve it's goals to disseminate information but also to minimise environmental impacts and improve sustainable use of resources. 69 - Confidentiality requested</p>
<p>Response Noted. The complexity of corporate structures and partnerships must be balanced against the administrative and technical limitations of the reporting form and the database.</p>

OTHER COMMENTS
<p>Issue The current reporting process puts the personal safety of producers who live on farms at risk. We propose, as an immediate measure, that names and phone numbers of our members are substituted with our association's contact details. 76 - NSW Farmers' Association</p> <p>Response This is an operational issue that is currently being dealt with.</p>
<p>Issue It would appear that certain aspects of the consultation process have been deficient. For example in parallel with the process for developing the variation to the NEPM the Cement Industry Action Agenda (CIAA) Strategic Industry Leaders Group (SILG) solicited input from the whole of government including both Commonwealth and state environmental regulatory bodies. This covered many aspects of beneficial material recovery and recycling and alternative fuels use and associated regulations. At no stage was the CIAA alerted to the NEPM Variation project. If they had, the CIAA SILG input into the project may have alleviated the current concerns and prevented the potential for the variation to be in conflict with the recommendations of the CIAA Final Report. 7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p> <p>Response The NPI review and variation processes were widely communicated to key stakeholders and current NPI reporters, some of whom are members of the CIAA-SILG.</p>
<p>Issue The consultation forum was of value. 10 - Solvay Interox Pty Ltd</p> <p>Response Noted.</p>
<p>Issue Consultative process has been good. Peter Thorning has provided very informative and positive presentations locally. There has been adequate material provided on the websites to establish an understanding of the proposed changes eg TAP report. It has been relatively difficult to navigate the NPI website to locate required documentation. 53 - GELITA Australia Pty Ltd</p> <p>Response Noted.</p>
<p>Issue There was no chemical industry expert on the TAP. 34 - PACIA, 35 - NuFarm Australia Ltd, 39 - Advocate for the Consumer, Cosmetic, Hygiene & Specialty Products Industry, 61 - Coogee Chemicals Pty Ltd, 77 - Australian Chamber of Commerce & Industry</p> <p>Response Noted. The TAP did, however, include chemical experts who have extensive experience of industrial processes.</p>
<p>Issue We attended several public discussions concerning the proposed changes to the NPI where stakeholders from industry and members of the general public raised concerns that, with respect to transfers, the draft variation to the NEPM did not match the discussion in the RIS nor the explanations given by the local regulators, and that the estimated costs have been understated. 75 - Exxon Mobil</p> <p>Response Noted. Further work on estimating costs of reporting transfers have been undertaken (EECO 2007 study).</p>
<p>Issue We would like to see the NRT redeveloped to support more simplified electronic reporting online, and the use of standard methodology codes to support auditing. 51 - Greenbase Pty Ltd</p> <p>Response A new on-line reporting tool is currently being developed for use by all NPI reporters.</p>

GREENHOUSE GAS EMISSIONS

SUBMISSIONS RECEIVED
<p>Issue</p> <p>It is essential that there be a consistent, national reporting framework for greenhouse gases. Considering the global impact of GHG release and the growing community awareness of this impact, the NPI seems to be a logical vehicle for this reporting. It is heartening to see that the WBCSD Greenhouse Gas Protocol makes the base for this reporting. I am concerned at the apparently high threshold for GHG reporting. The proposed threshold of 25,000 tonnes/pa should be brought down to 10,000 tonnes or possibly lower. Greenhouse issues are only going to become more pressing in the foreseeable future and should therefore be addressed stronger, sooner. Perhaps there is the intention to drop this threshold in the future as is proposed with the threshold for Mercury.</p> <p>1 - Robyn McIntosh</p>
<p>Issue</p> <p>It is essential that there be a consistent, national reporting framework for greenhouse gases. Considering the global impact of GHG release and the growing community awareness of this impact, the NPI seems to be a logical vehicle for this reporting. It is heartening to see that the WBCSD Greenhouse Gas Protocol makes the base for this reporting. The proposed threshold of 25,000 tonnes/pa should be brought down to 10,000 tonnes or possibly lower.</p> <p>2 - Horizon Power</p>
<p>Issue</p> <p>Our members maintain the strongly held view that it is more fitting to develop an implement a designed-for-purpose, streamlined, national greenhouse gas and energy reporting system rather than use the NPI. Accordingly, we are supportive of the recent COAG decision to establish such a system, based on cost-effective mandatory reporting and disclosure at the company level. We consider the proposal to include greenhouse gas in the NPI to be mistaken and an Issue of great concern for business. Given the clear direction from COAG that no further work is to be done by EPHC on including greenhouse gases in the NPI, we do not intend to make further comment on the NPI proposal at this time.</p> <p>3 - Australian Industry Greenhouse Network (Canberra), 4 - NSW Minerals Council</p>
<p>Issue</p> <p>We continue to support the Australian Government's proposed greenhouse reporting vehicle. Industry has embraced Greenhouse Challenge, Generator Efficiency Standards, Greenhouse Challenge Plus and applicable state based obligations. Rather than another requirement through the NPI, we support a more specific greenhouse focussed reporting vehicle.</p> <p>7 - Flinders Power, 13 - Ash Development Association of Australia, 14 - Australasian Slag Association (Iron & Steel), 37 - Ecocem Pty, 38 - Australian Steel Mill Services</p>
<p>Issue</p> <p>We strongly support the public reporting of greenhouse gas emissions. However, we believe that greenhouse gas emissions should not be included in the scope of the NPI as this would represent a duplication of current public reporting schemes and undermines existing and successful voluntary reporting and emissions reduction arrangements.</p> <p>9 - Rio Tinto Aluminium (RTA), 44 - Department of Defence, 70 - Australian Industry Group</p>
<p>Issue</p> <p>Specific comment on the costs of reporting greenhouse gases will be provided when the final proposal is released.</p> <p>10 - Solvay Interlox Pty Ltd, 61- Coogee Chemicals Pty Ltd</p>
<p>Issue</p> <p>We support mandatory and publicly disclosed GHG reporting. The level of disclosure should be appropriate to the environmental impact that is being addressed. In order to streamline existing reporting requirements, we support a nationally implemented, consistent reporting framework from which all federal and state requirements can be met. We support the current COAG process and look forward to the introduction of a national reporting framework as soon as possible.</p> <p>12 - BP Australia (Melbourne)</p>
<p>Issue</p> <p>With respect to the pilot trial recently conducted in Victoria, and the proposed thresholds and reporting requirements stated in EPA Victoria's findings report, we provide the following comments. A proposal which requires facility-level reporting to government (even if it is aggregated to the company level for public disclosure) would be an unwarranted administrative burden for companies that have a large number of smaller sites such as retail service stations. The system should allow for aggregated submissions to government for smaller sites (eg those sites that fall below a facility-based threshold of 5000t CO₂e).</p> <p>12 - BP Australia (Melbourne)</p>

SUBMISSIONS RECEIVED
<p>Issue</p> <p>We note the findings of the recent Greenhouse Gas NPI pilot held in Victoria which strongly concludes that the NPI is a suitable mechanism for reporting and disclosure of greenhouse gas emissions in Australia and that the six greenhouse gases could easily be added to the substances already reported under the NPI.</p> <p>23 - Moreland Energy Foundation</p> <p>26 - Northern Alliance for Greenhouse Action</p>
<p>Issue</p> <p>The 2000 review of the NPI by Professor Ian Rae recommended that industrial sources of the six major greenhouse gases be added to the NPI reporting list. Five years later there has been no further progress in developing a publicly accessible, mandatory and comprehensive reporting mechanism which fulfils community right to know objectives when it comes to greenhouse gases. This strengthens the case for the NPI to become that mechanism. Alternative programmes have not sought to fulfil these objectives and are unlikely to do so in the future. We concur with the view that including greenhouse emissions on the NPI would raise its profile and increase its relevance to the community.</p> <p>23 -Moreland Energy Foundation</p>
<p>Issue</p> <p>Much of the information given in the consultation documentation on the practicalities of incorporating greenhouse gas emissions into NPI have resulted from the EPA Victoria trial and EPA Victoria and the companies that participated in the trial are to be congratulated for their initiative and input.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Issue</p> <p>There are some aspects of NPI reporting particularly in regard to verification that would need to be strengthened if the data was to be the basis of an emissions trading scheme. The NPI reporting mechanism is not currently designed to accommodate the offsets from the renewable energy sector that is a critical aspect of any future trading scheme as being proposed by the states and territories.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Issue</p> <p>From our review of the NPI variation documents, the National Greenhouse and Energy Framework documents and the recent COAG decision, we are pleased that more substantive and disaggregated reporting of greenhouse gas emissions is being taken seriously and is being fast tracked. This will bring Australia in line with other first world countries. We agree that the system for reporting greenhouse gas emissions and energy use should be cost effective and have minimal associated 'red tape' - NPI is a mechanism for this to occur. To meet a range of goals, principally a reduction in GHG emissions, the provision of publicly available data at a much greater level of disaggregation than is currently available is essential if the wider community is to be practically engaged on the need for action on greenhouse gases.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Issue</p> <p>We support the view that industry should not be reporting GHG emissions to more than one system as multiple reporting has the potential for data mismatches that could result in not being able to source the data required or opens the data up to misinterpretation. One of the particular benefits of the NPI is the inclusion of the diffuse source data ie agricultural sources; coal seam emissions; energy transmission systems etc from an array of perspectives (eg research, policy development, public health etc). We support having the diffuse GHG emissions incorporated into the NPI. This incorporation into NPI could be achieved using current data and emission factors as they are validated. From the consultation document for 'streamlined' national reporting framework it is not evident how much diffuse source data would be included, or as to whether they are regarded as important.</p> <p>18 - CASANZ - Vic/Tas Branch</p>
<p>Issue</p> <p>The NPI is currently undermined by the omission of greenhouse gases from the scheme. There is major community concern about greenhouse gas emissions from Australian industry and their contribution to climate change. Greenhouse gases are also much easier to measure and estimate than many of the other pollutants in the NPI. There would be virtually no additional cost to industry to include greenhouse gas emissions in their NPI report. There is no compelling reason why greenhouse gases should not be included. I am very disappointed with the COAG decision that prevented greenhouse gas emissions from being incorporated into the NPI. The COAG decision fundamentally undermines the NPI as an information tool.</p> <p>52 - Don White</p>
<p>Issue</p> <p>The majority of our member companies already report emissions voluntarily and publicly through this database. We see the inclusion of greenhouse gas emissions as unnecessary duplication of reporting. We are aware of the COAG recent decision that the NPI is not used as a vehicle for reporting greenhouse gas emissions and support this decision.</p> <p>32 - The Chamber of Minerals & Energy (WA)</p>

SUBMISSIONS RECEIVED
<p>Issue We support the introduction of recording Greenhouse Gas Emissions (GHGs) in the NPI. The inclusion of GHG reporting will require all large generators to report, not just 'early movers'. 57 - SA Water</p>
<p>Issue The specific items that a "business entity" are to report are not well differentiated from a facility (clause 9(2)). For example, what should Wesfarmers report versus its individual business groups such as CSBP Kwinana, CSBP country depots, Bunnings, and other commercial activities? 66 - Department of Environment WA</p>
<p>Issue The case for including greenhouse gas reporting in the impact statement and the review of existing reporting measures across Australia provide a compelling argument for inclusion in the NPI. We support the proposal for recording of GHGs in the NPI. Current accounting systems for Greenhouse Gas Emissions (GHGs) and the Australian Greenhouse Office method for emissions factors are considered flawed for site specific data collection. Increasingly electricity customers are looking to purchase electricity products that are lower in emissions (say electricity from natural gas in preference to electricity from coal power), or renewable. Any mandatory reporting of greenhouse gas emissions from electricity usage should accommodate actual product data as a first preference, and a new aggregated emissions factor (that takes out renewables traded) should be created for standard pool electricity users. 57 - SA Water</p>
<p>Issue The methods for determining and reporting 'off-sets' and reductions will also need to be investigated thoroughly. 57 - SA Water</p>
<p>Issue It is desirable that a trial of how GHG reporting would be carried out using the National Reporting Tool is carried out prior to implementation. Industries who aim to actively manage and reduce their GHG emissions rely heavily on recording and reporting tools for internal reporting. The National Reporting Tool will require significant modification to incorporate flexibility for extracting data in various forms for the purpose of generating charts if it is to be useful to industries. If the tool does not provide this functionality then industries will have to develop duplicate databases which is a waste of resources. 57 - SA Water</p>
<p>Issue We support the COAG decision to establish a national reporting system in preference to NPI. We support the deferral of NPI reporting. We do not consider it is appropriate to further comment on the use of the NPI for greenhouse gas (GHG) reporting apart from noting our emphatic opposition. It is noted that the states and territories have retained the right to revisit inclusion of GHG emissions reporting in the NPI if the COAG process does not meet necessary requirements. If this is the case, additional time to allow for necessary consultation with stakeholders must be provided. 4 - NSW Minerals Council</p>
<p>Issue It is our understanding that the reporting requirements and mechanism for greenhouse gases is to be determined by COAG agreement no later than December 2006 and does not form an aspect of this particular submission. 53 - GELITA Australia Pty Ltd</p>
<p>Issue We does not support the use of the NPI for reporting of greenhouse emissions for the following reasons:</p> <ol style="list-style-type: none"> 1) The NPI was designed as an environment protection measure, that is, to report pollutants in a regional airshed. As greenhouse gases are generally regarded as a global issue and not a local pollutant (they do not directly impact the environment or human health) it is not appropriate to report them in the NPI. 2) An additional reporting requirement for essentially the same thing, perhaps with slightly different rules, will place a further unnecessary administrative burden on us and other industry for little or no gain. 3) If, and probably when, carbon sequestration or capture is used in the electricity generating industry, under the transfer and greenhouse reporting proposals, the greenhouse gases sequestered or captured will have to be reported to the NPI. 4) It is not clear in any of the documentation how the transfer of natural gas, which consists primarily of the greenhouse gas methane, will be treated in the greenhouse gas and transfer proposals. <p>27 - Verve Energy</p>

SUBMISSIONS RECEIVED
<p>Issue</p> <p>Our member are strongly opposed to the use of the NPI as the mechanism for reporting greenhouse and energy for policy, legal and commercial reasons, namely:</p> <ul style="list-style-type: none"> • the NPI is not flexible enough to meet the broad needs of greenhouse reporting; • the NPI was designed for report pollutants in a regional air shed, where as greenhouse is a global Issue; • carbon dioxide is an essential part of the natural cycle and should not be classified as a pollutant; • methane is a resource sold in commercial markets. Classification of it as a pollutant or waste could prejudice international trade of Western Australian natural gas and LNG; • all jurisdictions endorsed the Ministerial Council on Mineral and Petroleum Resources' Carbon Dioxide Geosequestration Working Group report to the Council's Standing Committee of Officials, which stated that carbon dioxide should not be classified as waste or a hazardous substance; • we are concerned about how commercial-in-confidence greenhouse emissions data would be managed through the NPI; • the current myriad reporting requirements are placing an unacceptable, ever-increasing administrative burden on companies with no enhanced environmental outcome. • We therefore support the decision COAG took at its July 2006 meeting to postpone incorporation of greenhouse gas emissions reporting into the NPI. Any system for reporting greenhouse gas emissions must be nationally consistent, efficient, and meet the requirements of industry, government and community stakeholders. <p>28 - Chamber of Commerce & Industry WA</p>
<p>Issue</p> <p>Following the COAG agreement (14th July 2006) that the NPI will not be used as a vehicle for reporting greenhouse gas emissions, and that no further work will be undertaken by the EPHC on incorporating greenhouse gas emission reporting in the NPI (pending finalisation of a further report proposing streamlining emissions and energy reporting), no comments have been prepared by Shell on this matter. It is also assumed that all references to greenhouse gas emissions will be removed and category 4 substances removed from Schedule A. Shell recognise that every effort will be made to reach agreement on purpose-built national legislation by December 2006 and that states and territories reserved the right to use the NPI if the Commonwealth, states and territories failed to reach agreement on purpose-built national legislation at the next COAG meeting. Should this be the position in 2007, Shell would expect further consultation on this topic. We have therefore not made further comment on this, but would be happy to discuss further if required.</p> <p>29 - Shell Company of Australia</p>
<p>Issue</p> <p>Congratulations must go to the EPA (Victoria) for instigating the Greenhouse Gas Emissions Reporting and Disclosure Pilot in partnership with COAG.</p> <p>36 - Gecko - Gold Coast & Hinterland Environment Council</p>
<p>Issue</p> <p>We consider that all industry should be represented by a single, nation-wide mandatory reporting scheme with a consistent approach to monitoring greenhouse emissions, capturing the whole range of pollutants, both direct and indirect, that may be emitted from all sectors of Australian government agencies, industry and the community and to ascertain the real level of emissions output in Australia and to assess accurate reductions in greenhouse emissions.</p> <p>36 - Gecko - Gold Coast & Hinterland Environment Council</p>
<p>Issue</p> <p>We are aware of COAG's decision not to progress work on the inclusion of GHG emissions into the NPI pending finalisation of the report to COAG by Senior Officials in December this year and discussions on the use of OSCAR as the currently preferred tool for reporting emissions. While the BCSE supports the use of the national pollutant inventory as the ideal framework for GHG emissions reporting, OCSAR is also likely to fulfil the function appropriately. However, we would stress the importance of a timely progression towards the establishment of mandatory reporting on a facility basis, regardless of the tool chosen. If agreement on the use and design of OSCAR cannot be reached by December 2006, then work towards including GHG emissions into the NPI should be swiftly recommenced.</p> <p>41 - Business Council for Sustainable Energy</p>
<p>Issue</p> <p>If pork producers are required to report each GHG emission individually, then APL prefers that this is enacted through existing NPI processes.</p> <p>62 - Australian Pork Limited</p>
<p>Issue</p> <p>It is understood that this component of the draft variation is subject to further review by COAG. No further comment on this section.</p> <p>64 - Confidentiality requested</p>
<p>Issue</p> <p>The reporting or inclusion of greenhouse to the NPI/NEI is not supported and industry needs a single reporting mechanism that meets all needs (industry, government, public), particularly if a future emissions trading system is introduced.</p>

SUBMISSIONS RECEIVED
17 - Hazelwood Power
<p>Issue</p> <p>Table 4.4 shows us what number of participants there are in NPI and Greenhouse Challenge, however the comparison does not state that Greenhouse Challenge is not a regulatory requirement and also does not define who of the NPI participants would trigger the threshold for reporting CO₂ e. It should be noted also that the majority of AGO reporters are probably the larger emitters. If greenhouse gas reporting was to be adopted (should a COAG outcome not occur) the current pilot reporting mechanism will do no more than add another reporting mechanism, and therefore should either be dropped or formulated to enable validation by AGO of industry data prior to reporting to an NPI/NEI mechanism.</p> <p>17 - Hazelwood Power</p>
<p>Issue</p> <p>Stanwell opposes the inclusion of greenhouse gases in the NPI on the basis that the NPI is a coarse mechanism (total mass emission per annum). Greenhouse emissions have two primary aspects. The first is the total mass of emission and the second is the intensity (or rate of emission per unit production). Changes in year on year emissions may occur from a range of mechanisms (such as increases in product, expanded production, or both of these together). As proposed, the NPI may capture the total mass of emissions however, it will not be capable of assessment of the intensity or efficiency of production. Unless the greenhouse gas reporting program can simultaneously achieve both of these aims, it is not going to be effective at driving industry reductions. Stanwell does not support the inclusion of greenhouse gas reporting into the NPI.</p> <p>40 - Stanwell Corporation</p>
<p>Issue</p> <p>We question the efficacy of the NPI, in particular the quality of the context information, which accompanies the industry data. Greenhouse contextual data should be provided by the Commonwealth and collected through one agency to prevent the mismatching of contextual emission estimation techniques currently occurs by the jurisdictions for other 'pollutants' under the NPI. We do give credit that the contextual data is slowly improving. Given the options provided in the Reducing the Burden paper, AEBN considered that a national reporting threshold of 125 Kt CO₂-e appears to have a reasonable basis.</p> <p>67 - Australian Environment Business Network</p>
<p>Issue</p> <p>COAG has determined that greenhouse gas reporting will be mandatory but has yet to decide the mechanism by which this will happen. There is a parallel process underway seeking to determine a purpose built national legislative instrument but that the NPI variation is being held in reserve. If the NPI framework is used (and we consider this would be an efficient vehicle by which to report NPI data) we believe that a review of NPI greenhouse gas emissions for our industry as a whole is required. Better data on actual wastewater generation per unit of production is considered essential, as is verification of emissions from wastewater, to prevent over-estimation of the industry's contribution, inappropriate application and erroneous conclusions.</p> <p>65 - South Australian Wine Industry Association</p>
<p>Issue</p> <p>We enthusiastically endorse Option 1, that the NPI to be the single Commonwealth level programme for the collection of greenhouse gas data. There are big advantages to combining the technical resources of the groups to avoid over dependence on key individuals, highlighted by the recent departure of the main NPI technical officer this year. A unified auditor accreditation scheme from extending the Greenhouse Challenge programme would also be valuable.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>We recommend that the NPI manuals be the central technical document for all emissions and transfers reporting. The NPI manuals are much better organised than the AGO equivalents and cover a larger scope of emission estimation techniques, rather than just emission factors, while providing a context for method usage. The National Carbon Accounting Toolbox is, on the other extreme, undocumented, difficult to apply, and in-auditable. Other standards, such as those of the Canadian NPRI, support reporting of greenhouse gases in a manner consistent with the more detailed NPI approach.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>We agree with the impact statement that the online tool OSCAR would be inadequate to support the needs of NPI reporters for most facilities because it's architecture is limited to emission factors and batch data entry utilities do not exist. In our experience, NPI reporting is an order of magnitude more complex than that which can be supported by OSCAR. In addition, the requirement for government to supply verification and validation services, such as we offer our clients, would require a substantial commitment of resources over and above what we feel government has been willing to dedicate based on past efforts.</p> <p>51 - Greenbase Pty Ltd</p>

SUBMISSIONS RECEIVED
<p>Issue</p> <p>We endorse the exclusion of Scope 3 emissions. The current status of reporting standards and technical guidance are not sufficient to gain value from inclusion. If technical guidance is improved upon as well as standard boundary definition being applied, inclusion should be reconsidered at later date since these figures do support cleaner production.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>We recommend a facility level reporting threshold of 1 kt CO₂-e since this is consistent with carbon monoxide thresholds, does not exclude some mining operations as a 5kt threshold would, and does not complicate reporting further for our clients as companywide reporting would do.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>Additional costs of greenhouse reporting for many of our clients, who currently report to multiple programmes, could actually decrease if the NPI was used as the sole avenue for reporting. In our view, the NPI model is the only one robust enough to cover all competing requirements for greenhouse gas data.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>We support public disclosure of greenhouse gas data to support benchmarking of company performance. In most cases, companies already publish this data through the Greenhouse Challenge but in an inaccessible, text based format. It is also often included in corporate annual reports.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>The cement industry does not support an additional reporting regime as proposed through NPI, but does support a national, mandatory energy and greenhouse reporting regime that streamlines the plethora of current jurisdictional greenhouse and energy reporting requirements. This section has not been considered further in detail given the current standing COAG decision in relation to greenhouse gas reporting and the NPI.</p> <p>48 - Cement Industry Federation</p>
<p>Issue</p> <p>We recommend that all jurisdictions should actively commit to the development of a streamlined, nationally consistent system for mandatory public reporting of both greenhouse gas emissions and their abatement and that there should be significant additional opportunities to provide comment should governments agree to reconsider the inclusion of greenhouse gas emissions within the NPI.</p> <p>4 - NSW Minerals Council, 32 - The Chamber of Minerals & Energy (WA), 45 - Queensland Resources Council, 63 - Minerals Council of Australia</p>
<p>Issue</p> <p>Specific comment on the costs of reporting of greenhouse gases will be provided when the final proposal is released.</p> <p>10 - Solvay Interlox Pty Ltd, 34 - PACIA</p>
<p>Issue</p> <p>We are concerned that the reporting of greenhouse gas emissions to the NPI may be ineffective in respect of the Commonwealth and other state governments' commitments to abating these emissions. The NPI model does not support industry commitment to management of greenhouse gas emissions through the development of abatement measures as it is limited to emissions inventory reporting. We would prefer a system such as the Greenhouse Challenge Plus program to assist us to contributing better to the national effort in abating Australia's greenhouse gas emissions</p> <p>20 -Department of Industry Resources (WA)</p>
<p>Issue</p> <p>In light of the COAG decision, we do not support the inclusion of greenhouse gas emissions reporting in the NPI. Should further consideration be given to the inclusion of greenhouse gas reporting in the NPI, then we request that we be involved in further consultation with the NEPC.</p> <p>20 -Department of Industry Resources (WA)</p>
<p>Issue</p> <p>We are very concerned at the increasing statutory requirements for greenhouse gas and energy reporting - each with different data requirements. We strongly support the COAG initiative to develop a streamlined system for both energy use and greenhouse gas reporting and this system being designed to minimise the cost and red tape burden to reporters. As COAG has put in place this further review into the development of a streamlined greenhouse and energy reporting system, and noting that the NPI will not be the vehicle for this reporting, no further specific comment is made on the reporting of greenhouse gas emissions through the NPI at this time.</p> <p>22 - Australian Sugar Milling Council (Brisbane)</p>
<p>Issue</p> <p>In the model proposed, there are unresolved issues on the entity reporting (business entity, facility - see queries in section B below). Information on greenhouse from NPI reports would not be readily reconcilable with greenhouse data published in company annual reports or sustainability reports, and could lead to misinterpretation by the public.</p>

SUBMISSIONS RECEIVED
66 - Department of Environment WA
<p>Issue</p> <p>Explanatory note for Category 4 should be clarified such that “Category 4 involves (i) the emission of 25,000 tonnes or more of greenhouse gases by the business entity...etc”.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Energy data are not included in the proposed varied NPI NEPM to the extent required by existing programs (eg ABARE Fuel and energy survey), so the COAG objective of streamlining greenhouse and energy data would not be met by this NPI option.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Activity specific fuel and energy data for fuel combustion activities is desirable to evaluate the costs and benefits of potential energy policy measures. The proposed NPI NEPM variation would not differentiate fuel consumption where multiple activities are undertaken within a single facility. Examples might include fuel use for on-site transport, process heat generation and electricity generation. Aggregate fuel consumption across a number of activities will make it difficult to ascertain the impact or exposure of particular sectors to measures that target specific activities, such as electricity generation or transport fuels. It is also unclear if upstream (scope 2) emissions for the use of thermal energy will be covered by the measure. Point (i) on page 16 only refers to the scope 2 emissions from electricity. Examples include reticulated steam from industrial cogeneration plant. It is understood that there are also groups looking at district cooling systems. Any proposed measure should be flexible enough to account for future projects. The current methodology employed by the Australian Greenhouse Office attributes all emissions from cogeneration plant to only the electrical output. Such a methodology would clearly impact on the inclusion of reporting emissions from thermal energy consumption. It is also unclear how upstream (scope 2) emissions for electricity use for programs such as Green Power would be reported in the measure.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>We consider that greenhouse gases should be included in the NPI as a matter of urgency. We are very disappointed with the COAG decision that prevented greenhouse gas emissions from being incorporated into the NPI. The COAG decision fundamentally undermines the NPI as an information tool. Facility-level public disclosure is crucial to protecting the community’s right to know. Even if an alternative scheme for public reporting of greenhouse gas emissions is developed, the NPI should also list these emissions.</p> <p>71 - Environment Liaison Office Groups</p>
<p>Issue</p> <p>In terms of strategic usefulness of data, an overall picture of a company’s greenhouse performance is unlikely to be reported or disclosed in this NPI model, since emission reductions from sequestration or offsets are not included. Disclosure of greenhouse emissions at facility level has also been vigorously opposed by certain industry sectors (cement, aluminium) on the basis of commercial confidentiality.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>The legality of using the NPI NEPM for collecting greenhouse gas emissions information is debatable. Legal advice from various sources is not in agreement. The key issue is whether greenhouse gas emissions can be shown to relate directly to ambient air quality, which may be a requirement under section 14 of the NEPC Act for a NEPM to be able to be made. A review of the NEPC Act is underway.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Concerns and queries over possible double reporting of greenhouse information for organisation and facility data to the NPI, and the possible continued need to report greenhouse data to non-NPI programs (also “double reporting”).</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Reporting of greenhouse gas emissions (section 9 of the Measure) appears to be basically for direct emissions (in the generality, consistent with other NPI substances). However section 9(2a) adds the requirement that emissions from outside the facility boundary (ie physical boundary) attributed to operations of that facility are to be included. It is not clear whether these are only direct emissions as applicable to the entity, or indirect emissions as well (and on what basis). The impact statement document however proposes that Scope 3 type emissions not be included, which suggests direct emissions. Note the inclusion of indirect emissions in 9(2c). Specific methodology/protocols would be required to clarify this point.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Section 9(2c) adds the indirect emissions from offsite generation of electricity used at the facility. Thus the greenhouse gas information in the NPI will have an indirect component (at least from electricity use, and possibly others – see comment 4</p>

SUBMISSIONS RECEIVED
<p>above), which is a different treatment to the rest of the NPI substances. This could add to public confusion, and raises the possibility of double counting if someone tries to aggregate the greenhouse emissions in a region by simply adding data from component facilities. To overcome this, the NPI greenhouse information and database needs to keep direct and indirect emissions separate (vis comment 1). It should be noted that this same principle of separate data is proposed in the TAP report for transfers.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>It is also not clear in the clause whether the electricity used is sourced from the entity's operations elsewhere or purchased from third parties. This needs to be resolved. The same applies to the other indirect (to the facility) emissions. Note that the wording of Clause 13(2) would suggest the broader meaning, ie applying to purchased electricity. Also the impact statement refers to Scope 2 emissions, which are third party sourced.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>It is of interest to note that the impact statement proposes that transfers of greenhouse gases not be considered, and the impact statement on transfers does not cover greenhouse gases. This is in accord with the proposal that Scope 3 emissions not be included. The inclusion of indirect emissions due to electricity use (which are in effect a "virtual" transfer) in not in accord with this general philosophy.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>The exclusions of "facilities" in section 9(7) particularly of mobile sources and agriculture will limit the coverage of direct greenhouse gas emissions in Australia by NPI to about 70%.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>If the intent is for greenhouse gases to be included in the provisions of Clause 20 - in accord with the "estimations from diffuse sources" concept currently in the NPI, then jurisdictions would need to estimate some 30% of Australian emissions that are not captured by this variation proposal. Such intent is discussed in the impact statement document. This will involve more cost and use of specialised resources for jurisdictions. It is not very clear that this aspect of the costs has been included in the projection provided in the impact statement.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>The impact statement suggests that the AGO Factors Workbook should be used to estimate greenhouse gas emissions. The NPI unit may have to develop supplementary protocols for managing the structuring of such reporting for NPI purposes. In the absence of these, clause 15 of the measure appears to put responsibility on each jurisdiction to manage this aspect. This could provide jurisdictions with a complex and costly task, which would be extra to current management of the NPI programme.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>The NPI manuals format is unique for pulling together methodologies for use by a particular industry. This approach has been useful to us by providing a context and industry specific vocabulary for applying calculation methodologies. This quality of NPI manuals has been recognised in their designation as official standards for the European PRTR. We strongly recommend that greenhouse gas and transfer methodologies be incorporated into existing industry NPI manuals. Other standards such as the AGO factors workbooks, are not as accessible and often restrict the type of methodology used, for instance to only an emission factor approach.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>We understand that the NEPC view the reporting of greenhouse gas emissions through the NPI as a viable fallback option to the national purpose-built legislation proposed by COAG. Given the COAG decision on including greenhouse gases in the NPI, it is not appropriate for us to provide comment at this time. Should the option to report greenhouse gases in the NPI be reactivated, we would expect that an appropriate process of consultation will be undertaken.</p> <p>25 - Australian Plantation Products & Paper Industry Council</p>
<p>Issue</p> <p>Inclusion of a Category 4 threshold could have a significant impact on resources required to complete annual reporting requirements. This proposed change would include direct emissions and indirect emissions.</p> <p>44 - Department of Defence</p>
<p>Issue</p> <p>Emissions of greenhouse gases generated outside of the facility, but attributable to activities of the business entity (ie transport fleet or off-site generation of electrical energy) may be provided as attributable to a reporting facility. This will be unworkable for our organisation due to our level of vehicle movements.</p> <p>44 - Department of Defence</p>

SUBMISSIONS RECEIVED
<p>Issue</p> <p>There would be serious resources implications for our organisation if greenhouse variations were included in the NEPM. We are concerned about the cost-benefit equation in the application of this NEPM to our activities.</p> <p>44 - Department of Defence</p>
<p>Issue</p> <p>Stanwell does not support the inclusion of Category 4 substances (greenhouse gas substances), and these should be removed from the draft variation.</p> <p>40 - Stanwell Corporation</p>
<p>Issue</p> <p>We support the development of mandatory reporting of greenhouse gas emissions and energy through a single, national scheme. The scheme should be consistent with international methodologies and aim to meet the needs of both industry and government. We welcome the COAG decision to reduce red tape burden. We note the COAG decision regarding national purpose-built legislation. With this decision in mind, all work in this area should be suspended, pending the outcome of the COAG deliberations. We are particularly concerned that some jurisdictions are acting in a manner that could be considered to run contrary to the COAG decision or are misinterpreting the decision to suit their own objectives. If any future consideration of incorporating greenhouse reporting into the NPI occurs, this consideration must be the subject of a fresh round of consultation with industry. We reject any notion that the current consultation period is adequate for considering such a change to the NPI.</p> <p>72 - Australian Petroleum Production & Exploration Association</p>
<p>Issue</p> <p>We support the COAG decision requesting jurisdictions to pursue national purpose-built legislation for emissions and energy reporting - including reporting of greenhouse gas emissions. We support the EPHC halting all work on this aspect as a result of this decision.</p> <p>27 - Verve Energy</p>
<p>Issue</p> <p>We support a consistent reporting system for greenhouse gas emissions, but submit that the push to "streamline" regulatory requirements must not be at the expense of fully accountable, accurate and transparent reporting. Our strong preference is for a purpose-built national mandatory greenhouse gas and energy reporting scheme that requires full reporting at the company level. Reports should be publicly available and audited. The EPHC and COAG should progress this as a priority. However, we are concerned at the delay in commencing greenhouse gas emissions reporting and therefore support the NPI being used if purpose-built legislation is not commenced in each jurisdiction by December 2006. A pilot in Victoria for reporting greenhouse gas emissions shows reporting could be done using the NPI reporting system or OSCAR. The Victorian EPA described the NPI option as the "lowest red tape option" and "low effort to report." Furthermore, using NPI for reporting for greenhouse gas emissions could commence as early as 2007.</p> <p>60 - Australian Network of Environmental Defender's Offices</p>
<p>Issue</p> <p>Schedule A - Clause 1(g) is missing (referred to in Table of Amendments).</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>We support the development of a streamlined national reporting framework for energy and GHG data as company energy and greenhouse information is increasingly material to the financial position of S&P/ASX companies and hence should be disclosed to the market. Streamlining GHG reporting minimises compliance burden on companies. We support the pilot's proposed flexible reporting model where companies have the choice of reporting via the Greenhouse Challenge Plus' OSCAR reporting interface or via the NPI reporting interface.</p> <p>69 - Confidentiality requested</p>
<p>Issue</p> <p>We emphasise that for investment analysis purposes, GHG reporting via the NPI requires linkage to the ultimate holding company, ie the company which has ultimate control of the facility. From the Draft NPI NEPM Variation and Impact Statement, we understand that the Draft Variation recognises the need for company linkage of individual facilities. However, it proposes that various facilities are linked and disclosed at a business entity level as identified by the Australian Business Number (ABN). The linking of facilities by their ABN business entity will not meet the finance sector's requirements as large companies, such as publicly listed Australian companies, have structures involving subsidiary companies with separate AB's. It is the ultimate holding company for which the investment sector assesses risks and opportunities, and for which the market requires transparency. Linkage to the ultimate holding company would also allow company disclosures to be more accessible and understandable to the broader community who may not understand holding company structures. The current Draft Variation would have ABN business entities with similar names have separate GHG disclosures, which may cause confusion for the general public (community stakeholders) in understanding the business entity relationships and ultimate control of facilities' GHG management, eg for a facility search for 'Nufarm', the NPI now brings up three ABN business entities - Crop Care Austral P/L, Nufarm Aust Ltd and Nufarm Coogee Pty Ltd. We view that this linkage to ultimate holding company would not be difficult to meet. Note that individual facility data is still useful to the investment sector as it provides further depth in understanding GHG emissions and their sources within a company. However, as assessments are made on the ultimate holding company, aggregation of</p>

SUBMISSIONS RECEIVED
<p>data is essential. 69 - Confidentiality requested</p>
<p>Issue Direct and Indirect Emissions, Abatement Actions/Savings, and Contextual Data - we support public disclosure of all these elements, in particularly mandatory disclosure of direct and indirect GHG emissions (as defined by the World Resources Institute's (WRI) and the World Business Council for Sustainable Development's (WBCSD) standard, The Greenhouse Gas Protocol, revised edition) and abatement actions/savings. 69 - Confidentiality requested</p>
<p>Issue We call for the public disclosure of company energy use under any streamlined system for GHG emissions and energy reporting. As companies currently report the type and quantity of fuel burnt to the NPI, we encourage this data to be publicly reported, at least at the holding company level. We acknowledge that some companies view energy consumption data as commercially sensitive, and understand there needs to be a balance between what companies publicly report and what information is kept as commercial in confidence. However, there is a certain level of energy and greenhouse information which companies generally do not believe would be commercial in confidence, eg total energy use and total GHG emissions, and energy and GHG intensities for a holding company. 69 - Confidentiality requested</p>
<p>Issue We do not support the inclusion of greenhouse gases in the NPI as this is being addressed through COAG. We request that industry be given an opportunity to provide additional comment should there be further consideration of inclusion of greenhouse gases in the NPI. 75 - Exxon Mobil</p>
<p>Issue We do not believe that Greenhouse emissions should be included in the NPI until such time as the Federal Government implements a national cap on carbon emissions and a legislative framework for carbon trading. This may be contingent on Australia ratifying Kyoto. Arrangements for accounting for and reporting on carbon are an integral part of a carbon accounting and trading system. In the absence of a robust accounting framework for greenhouse pollution, data collected for the NEPM would be of low quality and value, nor would it appear to have any practical purpose. It may, however, result in defusing public concern about this critical Issue by giving the false impression that Australia is taking effective action to address climate change. Since Australia is not, this would be a highly undesirable outcome. 76 - NSW Farmers' Association</p>
<p>Issue Our preferred option for streamlining greenhouse gases and energy reporting is for a national reporting framework without regulations. We do not consider the NPI an appropriate framework for reporting greenhouse gas and energy data. We support a voluntary emission reporting program which introduces incentives for companies to participate through recognition of previous abatement programs and wider dissemination of information about companies successfully implementing greenhouse gas reduction programs. We support the development of initiatives that provide for better information and better decisions. We will provide comments to the appropriate government review body but support the outcome of the COAG meeting. 77 - Australian Chamber of Commerce & Industry</p>
<p>Issue In the calculation of energy consumption and CO₂ emissions against the threshold for Category 4 substances, the draft NEPM states that the business activities include those '...conducted outside the boundary of the business entity's facilities, but attributable to the activities of the business entity, such as transport fleet...'. It is unclear as to what this does and does not include. The impact statement (Section 4.4.1) does not designate transport fleet energy and emissions as scope 2 (indirect emission) in the WBCSD/WRI protocol and appears to be excluded by the text '...upstream/downstream indirect emissions, such as the downstream implications of transporting an organisation's product are categorised as WBCSD/WRI Scope 3 emissions and are not included in the elements proposed to be reported to the NPI. Further clarification should be made to define the boundaries of energy consumption or CO₂ emissions in relation to off-site transport attributable to the business entity. 78 - BHP Billiton - Olympic Dam</p>
<p>Issue Change 'energy' definition to restrict it to electrical energy and exclude lighting and motive power. It is noted that the intent originally was not to capture facilities that may use energy for lighting and motive power in relation to Category 2 b. The change should ensure that the definition does not impact Category 4 definitions with respect to energy use. Otherwise should a greenhouse reporting requirement be adopted in the future, some facilities may not report because of the definition of energy not to include electrical energy for lighting and motive force. This could result in large manufacturing or commercial facilities not reporting a future category 4 substance. 17 - Hazelwood Power</p>

SUBMISSIONS RECEIVED
<p>Issue</p> <p>We note the comment at 5.13 suggesting that the Victorian Greenhouse Gas Emissions Reporting and Disclosure Pilot somehow determined that concern in relation to the naming of the NPI had "no real substance". Our review of the findings of the Pilot study show no suggestion of this, nor were we aware that this was even a focus of the Pilot study.</p> <p>48 - Cement Industry Federation</p>
<p>Issue</p> <p>The Category 4 reporting threshold is for the business entity as identified by the ABN. We point out that the business entity as identified by the ABN will not always correlate to the ultimate holding company. This is not necessarily a problem when applying a reporting threshold (as it simply means a large company will have thresholds applied to its various subsidiaries). It may, however, create misunderstandings in the public disclosure of the company's GHG emissions, where stakeholders such as investors, expect 'company' level disclosure to represent the ultimate holding company's GHG emissions. Again, community stakeholders may also perceive ABN business entity level disclosure as confusing and not transparent. On the issue of a reporting threshold which is applied at the company level, from an investment perspective, we see the benefits as follows. GHG emissions and any liabilities that may arise, represent shareholder risks for the company as a whole. Individual facility thresholds may miss identifying a material aggregated company GHG emission total (in the case where individual facilities are below a facility threshold but the sum of all facilities' GHG emissions represents a significant liability in total).</p> <p>69 - Confidentiality requested</p>
<p>Issue</p> <p>If carbon dioxide is no longer part of the variation then references to CO2 e etc should be removed from the definitions, thresholds and the measure as a whole.</p> <p>17 - Hazelwood Power</p>
<p>Issue</p> <p>All definitions relation to greenhouse gases should be deleted and further comment requested when the COAG decision is available.</p> <p>10 - Solvay Interlox Pty Ltd, 61- Coogee Chemicals Pty Ltd</p>
<p>Issue</p> <p>The definition of a facility may have to be revisited in this section with regards to greenhouse gas emissions.</p> <p>51 - Greenbase Pty Ltd</p>
<p>Issue</p> <p>"Business entity" (clause 3(3)) - this concept may need further consideration in relation to international greenhouse reporting concepts for organisational boundaries (operational control/equity share), and for complex entities such as joint ventures or multiple ABN companies.</p> <p>66 - Department of Environment WA</p>
<p>Issue</p> <p>Clause 9(2) dealing with greenhouse should be removed, based on the COAG alternative measure..... Clause 13 should be removed in order to be consistent with COAG directions on a suitable greenhouse reporting measure.</p> <p>17 - Hazelwood Power</p>
<p>Issue</p> <p>Clause 16 is a good example of why the same level of data integrity is needed should greenhouse gas emissions become reportable to a public database like NPI/NEI. The important commercial impact of ensuring that greenhouse data is approved/validated by a system like GES, prior to that year's data becoming available on an NPI/NEI type system is paramount to ensuring that only one accurate set of data is reported.</p> <p>17 - Hazelwood Power</p>
<p>Issue</p> <p>Delete the definition of "greenhouse gases" from the definitions, on the basis that greenhouse gases are should not be included in National Pollutant Inventory reporting.</p> <p>40 - Stanwell Corporation</p>
<p>Issue</p> <p>We support the new Category 4 designation for greenhouse gases, however it would be better to apply the limit to a facility level, at least for natural resources extraction. Our experience in the mining industry is that mining facilities frequently change hands and joint ventures are common. Disentangling facility emissions from company emissions in this case is difficult. Moreover, emissions from operating facilities (as opposed to head office) usually represent >98% of emissions. A possible limit for CO₂ emissions per facility might be 1,000 tonnes. Since carbon monoxide emissions are typically 1% of CO₂ emissions this would match the 10 tonne self triggering NPI threshold for carbon monoxide.</p> <p>51 - Greenbase Pty Ltd</p>

SUBMISSIONS RECEIVED
<p>Issue The approach used by the Greenhouse Challenge programme of certifying third party auditors is preferable to a requirement for state agencies to conduct audits. Third party consultants already perform company environmental audits and generally have a wealth of experience in industry sector that can help in validating a facilities approach. 51 - Greenbase Pty Ltd</p>
<p>Issue We reserve comments in relation to clause 9(2), clause 13 and other clauses relevant to greenhouse gas reporting given COAG's decision in relation to the inclusion of greenhouse reporting within the NPI. 48 - Cement Industry Federation</p>
<p>Issue To what extent is the collection of energy data under the proposed NPI variation intended to fulfil the "streamlined" reporting function (as described in EPHC/MCE consultation documents)? If the NPI is to pick up the majority of such reporting, then clauses 9(1)(c) and (d) may need to be more explicit in data being gathered on a mandatory basis. 66 - Department of Environment WA</p>
<p>Issue Stanwell does not support the inclusion of carbon dioxide equivalent and both carbon dioxide and carbon dioxide equivalent should be deleted from Table 1 in Schedule A (ie where these appear as reportable emissions under category thresholds 2b and 4). 40 - Stanwell Corporation</p>
<p>Issue Schedule A2(i) - carbon dioxide equivalent (indirect) - this substance, if reported and displayed, needs to be carefully explained as being separate from total greenhouse gas emissions converted to CO₂e (eg by multiplying each greenhouse gas CO₂, CH₄ etc by global warming potential). The International GHG Protocol has a slightly different definition for Scope 2 electricity indirect emissions, which can include emissions from heating/cooling and steam (pages 25 and 33, The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard revised edition). It may be prudent to define and align direct and indirect emissions as far as possible with this GHG Protocol, to maximise comparability between reporting. 66 - Department of Environment WA</p>
<p>Issue We support the COAG decision of 14 July to consider a single, national, purpose built system for reporting greenhouse gas emissions and energy reporting. 43 - Australian Aluminium Council</p>
<p>Issue If threshold 4 is to be included, then it is suggested that the threshold for Energy Use be 0.5PJ to be consistent with the Energy Efficiency Legislation rather than introducing a different energy threshold of 100TJ. 9 - Rio Tinto Aluminium (RTA)</p>
<p>Issue Re CO₂ emissions - we question the value of reporting these emissions. But if this is a requirement, then reported via the AGO and OSCAR seems a better mechanism than reporting under NPI/NEI. 31 - Kimberly-Clark</p>