

Variation to the National Environment Protection (National Pollutant Inventory) Measure 2007

EXPLANATORY STATEMENT

Issued by the National Environment Protection Council

National Environment Protection Council Act 1994

Subsection 20 of the *National Environment Protection Council Act 1994* (the Act) prescribes that the National Environment Protection Council may vary national environment protection measures (NEPMs).

ABOUT NEPMS

NEPMs are broad framework-setting statutory instruments which, through an extensive process of inter-government and community/industry consultation, reflect agreed national objectives for protecting particular aspects of the environment. NEPMs may consist of any combination of goals, standards, protocols, and guidelines.

Once a NEPM has been finalised, it is then formally “made” by NEPC. A decision to make (or to vary) a NEPM requires the support of a two-thirds majority of members of NEPC. NEPMs are implemented by jurisdictions that participate in NEPC within their own jurisdictional legal frameworks.

NATIONAL POLLUTANT INVENTORY NEPM

The National Pollutant Inventory (NPI) is an internet database designed to provide the community, industry and government with information on the types and amounts of certain substances being emitted to air, land and water. The NPI belongs to the general class of pollutant release and transfer registers (PRTRs) that have been implemented in a comparatively small number of developed countries.

The main objectives of the NPI are to:

- provide information to industry and government to assist in environmental planning and management
- satisfy community demand for accessible information on emissions to the environment, and
- promote waste minimisation, cleaner production, and energy and resource savings.

Industrial facilities, such as power plants and steel works, are required to estimate and report annually on their emissions. Emissions from smaller industrial facilities, such as petrol stations and dry cleaners, and emissions from household and other everyday activities, are estimated by the governments of each state and territory. This approach provides a ‘total’ emissions picture.

The NPI has published facility data since 1998–99 and is currently in its eighth reporting year. The NPI reports on 90 priority substances that were selected following consideration of exposure to health and environmental risks in Australia.

REASON FOR THE VARIATION TO THE NATIONAL POLLUTANT INVENTORY NEPM

At its meeting in December 2004, the NEPC agreed to review the NPI to assess whether any improvements could be made to the program to make it more useful to stakeholders. The review was completed by Environment Link in April 2005 and the final report can be found on the EPHC website at <www.ephc.gov.au/pdf/npi/NPI_Review_April_2005.pdf>. The results of the review were presented to NEPC on 1 July 2005 along with a proposal for a variation to the NPI NEPM.

At this meeting, NEPC agreed to initiate a variation to the NPI NEPM, with the scope covering:

- the inclusion of data on the transfer of substances in waste from one location to another
- changes to reporting timeframes
- removal of the exclusion clause for aquaculture
- adjustments to the substance reporting list
- reporting on greenhouse gas emissions
- threshold changes for mercury, PM₁₀ and, if included in the NPI, PM_{2.5}, and
- other matters identified in the 2005 NPI Review Report.

REASONS FOR GOVERNMENT INTERVENTION

The NPI is the only Australian database of emissions to air, land or water where information is collected in a nationally-consistent way. Government action is needed to ensure that the NPI continues to fulfil this function.

By making emission information available to the community, governments are able to formulate and assess cost-effective environmental management and pollution reduction policies on the basis of consistent information. Individuals are also able to make informed decisions about issues affecting them and their surroundings.

IMPACTS AND EFFECT

As required by the Act, an impact statement was prepared for the variation. Information on the environmental, social and economic impacts of the variation can be found in the impact statement. A copy of the impact statement is available from the NEPC website <<http://www.ephc.gov.au>>.

CONSULTATION

In June 2006, NEPC released a draft NEPM variation, impact statement and other supporting documents for public consultation. The public was notified of the release of these documents through statutory notices in newspapers circulating in all jurisdictions and the *Commonwealth of Australia Gazette* and placement of the relevant documents on the EPHC website. Public consultation forums were held in all Australian capital cities. A total of three hundred and fifty six individuals attended these meetings.

Seventy-eight written submissions were received in response to the release of the draft NEPM variation and impact statement - fifty-three submissions from industry groups or individual businesses, 10 from community groups, four from individuals, seven government submissions and four from consultants and academia.

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 were made, particularly in relation to transfers.

The consultation documentation addressed the inclusion of greenhouse gas emissions reporting in the NPI NEPM, 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). A summary of the greenhouse-related comments contained in the submissions on the proposed variation to the NPI NEPM was made available to the COAG process.

At its meeting on 13 April 2007, COAG agreed to establish a mandatory National Greenhouse Gas Emissions and Energy Reporting System, with the detailed design to be settled after the Prime Minister's Task Group on Emissions Trading reports at the end of May 2007. However, NEPC Committee at its 27 April 2007 meeting (with the Commonwealth dissenting) agreed to modify the draft proposed variation to include greenhouse gas emissions as an option for consideration by Council.

As the greenhouse component of the variation was not discussed during the public consultation period in July/August 2006, targeted information sessions across four capital cities were conducted in May 2007 - with three hundred and twenty eight people attending - to explain how the NPI proposal would work and to receive feedback in relation to this from stakeholders. Thirty seven written submissions were received.

On 1 June 2007, in accordance with section 19 of the Act, NEPC considered the submissions received and resolved to "make" the variation to the National Pollutant Inventory NEPM. A copy of the summary of submissions document is available from the NEPC website <<http://www.ephc.gov.au>>.

It should be noted that aquaculture remains exempt from reporting to the NPI - Ministers did not remove the exemption for aquaculture.

IMPLEMENTATION

Once a NEPM (or variation) is made by the NEPC, jurisdictions are required to implement the NEPM. Jurisdictions will implement the National Pollutant Inventory NEPM as varied through their environment protection policies or regulations.

As required by the Act, jurisdictions will continue to report annually on the implementation and effectiveness of the NEPM.

LEGISLATIVE REQUIREMENTS

All legislative requirements specified in the Act have been met during the development of this variation.

DESCRIPTION OF THE VARIATION

Details of the variation are set out in the attachment.

This instrument is a legislative instrument for the purposes of the *Legislative Instruments Act 2003* and commenced on the day after registration on the Federal Register of Legislative Instruments.

**DETAILS OF THE VARIATION TO THE NATIONAL ENVIRONMENT PROTECTION
(NATIONAL POLLUTANT INVENTORY) MEASURE 2007**

The following amendments to the National Pollutant Inventory NEPM were made by the NEPC on 2 June 2007:

- inclusion of transfers
- inclusion of greenhouse gases
- changes to publication requirements
- substance and threshold changes.

Further detail on these amendments is set out below.

Note that the draft variation to the NEPM proposed that aquaculture no longer be exempt from reporting to the NPI. On 2 June 2007, the NEPC did not remove the exemption – aquaculture remains exempt from reporting to the NPI.

Inclusion of Transfers

Currently, the NPI NEPM only requires reporting of direct emissions of substances to the environment. The requirement to report transfers of NPI substances in waste has been established under the NPI NEPM.

The majority of submissions received on the draft variation referred to the inclusion of transfers reporting. In light of these submissions, changes were made to address the concerns raised.

The NEPM variation includes:

- mandatory reporting of NPI substances in waste transferred to a destination for containment or final disposal (including landfill, tailings storage facility, underground injection), or to a sewerage system or for destruction
- voluntary reporting of NPI substances in waste transferred for reuse, recycling, reprocessing, purification, partial purification, immobilisation, remediation or energy recovery.

These changes will mean that:

- there is no need for a nationally consistent definition of waste
- there is no need to distinguish between 'waste', 'product' and 'by-product'
- the focus will be firmly placed on the NPI substances and their destination (not on the waste that is being moved), and
- the risk of misinterpretation by database users will be reduced.

Voluntary reporting of substances destined for beneficial reuse will give added opportunity for industry to showcase achievements.

The additional costs, particularly to industry, associated with reporting transfers also featured prominently in submissions. In response to this, a second cost study, based on eleven case studies across various industry sectors using the revised definition of a mandatory reporting destination, has indicated that anticipated costs have significantly decreased, with some industries incurring

no, or minimal, cost. A detailed analysis of expected costs is contained in *Cost analysis of reporting National Pollutant Inventory transfers: Case studies using the amending NPI NEPM Variation*.

Inclusion of Greenhouse Gases

A requirement to report greenhouse gas emissions has been established under the NPI NEPM. It has been activated as an interim measure should the National Greenhouse and Energy Reporting System not be implemented by 1 July 2008. The primary objective of this requirement is the mandatory reporting and public disclosure of greenhouse gas emissions. This will ensure that the requirement to report data on greenhouse gas emissions from industry will be in place from 1 July 2008 (regardless of which mechanism enables it) and publicly disclosed by 31 March 2010.

It is anticipated that adding greenhouse gases at the current proposed threshold levels may increase the total number of reporting facilities from the current industry sector under the NPI by up to 100 facilities (an increase of 3%). This is because the vast majority of reporters of greenhouse gases would come from those already captured by the NPI program. It is considered that the median NPI reporting cost of \$600 per annum per facility would conservatively cover the greenhouse gas reporting requirements for these new facilities, since they are likely to be subject only to the requirement to report energy-indirect emissions.

During the public consultation period on the NPI NEPM variation in July/August 2006, a number of submissions were received regarding the initial proposal to include greenhouse gas emissions in the NPI. These comments were made available to the COAG process. In essence, a mixed response was received from stakeholders with organisations showing support for the National Greenhouse and Energy Reporting System and others for the NPI programme. Comments also made reference to the work government is proposing on enabling publicly disclosed information on greenhouse gas emissions.

The Environment Protection Authority Victoria undertook a pilot programme to look at the issues associated with using the NPI as a greenhouse gas emissions reporting and disclosure mechanism. The findings from this work indicate that the NPI is a suitable mechanism to bring this reporting about, its advantages of efficiency and timing (and therefore cost) largely due to its existing administrative and regulatory framework. Overall, the consensus amongst the 25 companies (representing 76 sites) that reported emissions data was that the proposed implementation model for including greenhouse gases in the NPI, in particular its flexible approach, was supported. This support ranged from strong to cautious, to near ambivalence.

Changes to Publication Requirements

The proposal in the original documentation to extend the publication date is still considered valid. Currently, the timeframe between the provision of data to the Australian Government by states and territories and its subsequent provision to the community is tight and could result in errors in the published data.

Facilities will still be required to submit their NPI reports within three months of the end of their reporting period. The extended 'correction time' available to jurisdictions will result in higher quality data being released to the public due to more time for data verification.

The revised data publication date is still impressive (in terms of speed in achieving public access) by overseas standards.

Substance and Threshold Changes

There have been no changes required in relation to the substances (Acrolein, PM_{2.5}, Polychlorinated Biphenyls) proposed to be added to the NPI reporting list, to substance definition refinements and to the previously proposed threshold adjustments.

Substances previously proposed for deletion from the reporting list be retained. Removal was proposed on the basis of either nil or very limited reporting of these substances. A precautionary approach has been taken in relation to the removal of substances in the absence of a comprehensive review of toxicity and exposure in relation to all substances on the list. There is no advantage in removal and retention allows for reporting in future should they become relevant to the Australian context.

Name Change (Change from original draft Variation and Impact Statement)

The proposed name change from NPI to National Emissions Inventory will not proceed. This is due to:

- the change of title being originally linked to the inclusion of greenhouse gas emissions in the proposed variation as a permanent feature (as opposed to an interim measure only)
- the term emission could be confusing, especially as transfers (as the major new addition to the inventory) are not emissions
- keeping the current name retains program recognition.

Detailed amendments

Provision affected	How affected
Clause 1	Changed to comply with the <i>Legislative Instruments Act 2003</i> .
Clause 2	Changed to set the date for commencement of various sections of the NEPM. Reporting on some of the new aspects is delayed to allow industry time to collect information and implement reporting into their operating procedures
Clause 3	<p>Definitions have changed:</p> <ul style="list-style-type: none"> • "aggregated transfer data" is a new definition similar to "aggregated emission data" • "CAS number" replaces "CASR Number" to correct the definition in original NEPM and for adoption of the more common form "CAS Number" • "Category..." definitions are changed to match up with the new format of Table 1 and the new threshold categories as described in Clauses 10 - 12. • "emission" is re-worded to ensure that the definition does not contain the word it is defining. Definition is further simplified because "transfer" is now defined. • "estimation technique" definition changed to also apply to transfers • "facility" definition changed to include clarification of the relationship of a facility to what is commonly known as a "site" - dictionary definition for site suffices. • "financial reporting year" replaces "reporting year" to match changes to clause 4 "Reporting Period" • "industry reporting materials" replaces "industry handbook". • "OECD code" is removed. It is the ANZSIC code which is used in Australia (this can be cross-matched to the OECD code). • "reporting list" definition changed to match up with the new format of Table 1. • "substance information" replaces "contextual information", "transfer" is included and the definition is simplified to account for only having one table of substances. • "transfer" definition changed. • "overburden", "mandatory reporting transfer destination", "mandatory transfer data", "voluntary reporting transfer destination", "voluntary transfer data" and "waste rock" are new definitions.
Clause 4	Changed to simplify it and to increase the flexibility for jurisdictions to approve alternative reporting periods where warranted. Sections dealing with commencement of reporting clauses have been moved to clause 13 and simplified.

Provision affected	How affected
Clause 5	Changed to widen the scope to “sustainable use of resources” from the more limited “re-use and recycling of used materials”.
Clause 6	Changed to simplify to focus on the core business of the NEPM. Transfers are added and “to air, land and water” removed because this is included in the definition of emissions.
Clause 7	Changed to simplify and clarify the intent of the NEPM.
Clause 8	Changed to include transfers and replace “contextual information” with “substance information” to clarify meaning.
Clause 9	Changed: to include the requirement to report the amount of fuel and waste burned and the amount of electricity consumed for the assessment of emissions data integrity; to include mandatory transfer data and voluntary transfer data; and, to clarify that poultry raising is included as intensive livestock. Changed requirements for release of data supplied for assessment of integrity of reporting.
Clause 10	Changed to include a lower usage threshold for substances of high toxicity or high potential for causing environmental harm and to remove the 25 kilotonne threshold for “bulk” facilities
Clause 11	Changed to clarify the application of the Category 2b threshold with respect to lighting and motive power.
Clause 12	Becomes the clause dealing with Category 3 substances (previously clause 13). The clause has also been changed to include transfers and the requirement to report all Category 3 substances if one exceeds the threshold.
Clause 13	Previously Clause 14. Changes the trigger for reporting. It is clarified that it is the ANZSIC code that determines the reporting requirement. The clause is also changed to fit with the change from “industry handbook” to “industry reporting materials”. The Commonwealth will publish a list of ANZSIC codes and the primary reporting materials associated with reporting. A facility will not be required to report until the relevant ANZSIC code is published in the list and relevant industry reporting materials are published.
Clause 14	Previously Clause 15. Changed to include transfers and the change from “industry handbooks” to “reporting materials”. Also changed is the previously set time of three years for retention of data. This is now left to be set by jurisdictions and therefore be consistent with other record keeping requirements, such as under licence conditions.
Clause 16	Previously Clause 17. Changed to include transfers.
Clause 17	Previously Clause 18. Changed to include transfers.
Clause 18	Previously Clause 19. Changed to include transfers. The requirement to provide OECD industry activity codes and reliability data has been removed since this data does not contribute useful information and, in practice, is not collected.
Clause 19	Previously Clause 20. Changed to include transfers.
Clause 20	Previously Clause 21. Changed to include transfers.
Clause 21	Previously Clause 22. Changed to remove “The council envisages”.
Clause 22	Previously Clause 23. Changed to remove “The council envisages”.
Clause 23	Previously Clause 24. Changed to remove “The council envisages” and to simplify the clause since provision for enforcement of the NPI is a jurisdictional matter and provisions are made in accordance with other similar legislation in each jurisdiction.
Clause 24	Previously Clause 25. Changed to remove “The Council envisages”.
Clause 25	Previously Clause 26. Changed to remove “The Council envisages”.
Clause 26	Previously Clause 27. Changed to remove “The Council envisages”.
Clause 28	Previously Clause 29. Changed to remove “The Council envisages” and to change the publication date of the data as well as the format for publishing the data.
Clause 29	Previously Clause 30. Changed to remove “The Council envisages”
Clause 30	Previously Clause 31. Changed to remove “The Council envisages”, to remove the requirement to publish “data reliability” and to include publishing of transfer data. Clause 30(g) is added so that transfer data will be clearly differentiated from emissions data.
Clause 31	Previously Clause 31. Changed to remove “The Council envisages”

Provision affected	How affected
Clause 32	Previously Clause 32. Changed to update it and to remove the need to change the clause at future dates. "The Council envisages" is removed and the clause is changed so that Reviews will occur every 5 years or at a shorter interval if Council so determines.
Clause 34	Added to include interim reporting on Greenhouse Gases.
Clause 1(b) of Schedule A	Changed to clarify the transfers reporting requirement of "Total Nitrogen" and "Total Phosphorus".
Clause 1(c) of Schedule A	Changed to replace "CASR" with "CAS"
Clause 1(d) of Schedule A	Changed to replace "Chlorine" with "Chlorine & compounds" and to define what Chlorine compounds need to be included when determining whether the reporting threshold has been exceeded.
Clause 1(f) of Schedule A	Deleted - it dealt with "Phenol" and did not clarify the reporting requirement as it was first envisaged to do.
Clause 2 of Schedule A	Changed to include transfer data.
Clause 2(a) of Schedule A	Changed to include transfers.
Clause 2(b) of Schedule A	Changed to include transfers
Clause 2(c) of Schedule A	Changed to include transfers
Clause 2(d) of Schedule A	Changed to include transfers, to change "Chlorine" to "Chlorine & compounds" and to define how "Chlorine & compounds" are to be reported.
Clause 2(e) of Schedule A	Changed to include transfers
Clause 2(f) of Schedule A	Deleted - referred to "Phenol" has been deleted. Replaced with a new Clause 2(f) which defines how "Polychlorinated Dioxins and Furans (TEQ)" are to be reported.
Clause 2(g) of Schedule A	Added to define how "Polycyclic Aromatic Hydrocarbons (Benzo[a]pyrene equivalent)" are to be reported.
Clause 2(h) of Schedule A	Added to define how "Oxides of Nitrogen" are to be reported.
Clause 2(j) of Schedule A	Added to define how "Particulate Matter $\leq 2.5 \mu\text{m}$ (PM _{2.5})" is to be reported.
Table 1	<ul style="list-style-type: none"> • Changed and now replaces the old Table 1 and Table 2. • The table has been simplified with 5 columns being reduced to 3 • Threshold explanation has been added to the bottom of the table as an explanatory note. • The ISO standard of chemical naming has been adopted e.g. "sulphide" becomes "sulfide". • "Acrolein" has been added with a Category 1 threshold. • "Particulate Matter ≤ 2.5 (PM_{2.5})" has been added with Category 2a and 2b thresholds. • "Polychlorinated Biphenyls" has been added with a Category 1 threshold. • "Chlorine & compounds" replaces "Chlorine". • "4,4'-Methylene bis(2-chloroaniline) (MOCA)" is corrected • "Polychlorinated Dioxins and Furans (TEQ)" replaces "Polychlorinated Dioxins and Furans". • "Polycyclic Aromatic Hydrocarbons (Benzo[a]pyrene equivalent)" replaces "Polycyclic Aromatic Hydrocarbons". • The threshold for "Mercury & compounds" has been changed from Category 1 and Category 2b to Category 1b and Category 2b. • The threshold for "Nickel subsulfide" has changed from Category 1 and Category 2b to Category 1. • The threshold for "Nickel carbonyl" has changed from Category 1 and Category 2b to Category 1.