



Australian Government
Department of the Environment and Heritage

NPI Update

July - August 2006

Issue 10

Welcome to the July-August 2006 edition of the National Pollutant Inventory Update newsletter.

The National Pollutant Inventory (NPI) provides information on the web about substance emissions from industrial facilities and diffuse sources, their possible impact and what you can do to help reduce emissions.

The NPI is a cooperative programme implemented by the Australian, state and territory governments.

This newsletter informs the community, industry and government about NPI issues such as upcoming events and the progress of the NPI review.

[Find out more about this and earlier NPI newsletters.](#)

Subscribe to NPI update

To receive email updates of news and announcements from the NPI please subscribe to the npi-update mailing list. Subscription to this list is open to everyone.

[Find out more about subscription to NPI update.](#)



www.npi.gov.au

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If you have any feedback or comments about the NPI, contact the Department of the Environment and Heritage or your relevant state or territory agency. Contact details are at the end of this newsletter.

The NPI is tracking emissions across Australia.



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NPI NEPM variation

The National Pollutant Inventory (NPI) National Environment Protection Measure (NEPM) was reviewed in April 2005 with a number of recommendations put forward to increase the functionality of the programme. The recommendations were accepted at the Environment Protection and Heritage Council (EPHC) meeting in July 2005 with environment ministers agreeing to initiate a variation of the NPI NEPM.

A project team comprising representatives from the states and the Australian Government environmental agencies has been working on the variation process. The project team has developed a draft variation to the NPI NEPM and an accompanying impact statement, taking into consideration recommendations by the Technical Advisory Panel (TAP). Members of the TAP were drawn from the scientific, industry and academic community and were brought together to consider issues arising from the 2005 review.

Proposed changes to the NPI NEPM:

- reporting of transfers of waste
- removal of the reporting exemption for aquaculture
- amending thresholds for substances including mercury, total nitrogen and total phosphorus
- deletions and additions to the current NPI substance list
- changing the title of the measure
- changing a number of definitions, *and*
- making a number of operational changes.

[More about the NPI NEPM variation](#)

At the EPHC meeting in June 2006, environment ministers agreed to release the documentation for the NPI NEPM variation for a public comment period of two months starting 10 July until 15 September 2006. The documentation consists of:

- Draft variation to the NPI NEPM
- Impact statement
- Final report to the NEPC, and
- Analysis of the financial costs of including transfers in the National Pollutant Inventory

Stakeholders and the public are asked to provide comment on the documentation listed above. Public forums will also be held in each capital city on the following dates:

- Monday 24 July – Hobart
- Tuesday 25 July – Melbourne
- Wednesday 26 July – Adelaide
- Tuesday 1 August – Canberra
- Wednesday 2 August – Sydney
- Thursday 3 August – Brisbane
- Monday 7 August – Perth
- Tuesday 8 August – Darwin

Further information on the public consultation forums and the NEPM variation process can be obtained from the NEPC Service Corporation on (08) 8419 1200, by emailing exec@ephc.gov.au or viewing the EPHC web site at www.ephc.gov.au

What is a transfer?

A transfer is the movement of substances in waste for the purpose of containment, destruction, treatment or energy recovery.

[More definitions in the NPI glossary](#)



2006-07 NPI reporting period

The NPI annual reporting period commences on 1 July each year for most reporters.

Every year Australian industrial facilities that use certain amounts of the 90 NPI substances must estimate and report their emissions directly to their state or territory environment agency.

The state and territory environment agencies review all NPI reports for accuracy and forward the data to the Australian Government. The reports are then displayed on the NPI public web site.

Should your facility report to the NPI?

The NPI Guide will help you find out if you need to report to the NPI and gives you general assistance on how to estimate and report your facility's emissions.

Emission estimation technique (EET) manuals have been developed for each reporting industry sector. The NPI guide and the list of reporting industry sectors are available on the NPI web site.

- [NPI guide](#)
- [List of industry sectors](#)

How do you lodge your NPI report?

Lodge your NPI report with your state or territory environment agency using the email based NPI National Reporting Tool (NRT) or a paper form.

The deadline for submitting your 2005-06 NPI facility data is **30 September 2006**.

[More about lodging NPI reports](#)

Publication of 7th NPI summary report

This summary report presents an overview of activities during 2004-05, together with examples of the types of information you can find on the NPI web site and tips on how to use the data. The report also explains why substances are included in the NPI, and discusses the sources and paths of substance emissions to air, land and water.

Finally, this summary contains a set of useful links as well as contact details of government agencies involved in the NPI.

- [Read the summary report of 7th year data](#)

Key points from the summary report

- 2004-05 was the seventh year for NPI facility reporting.
- 3826 facilities reported to the NPI – 5.4% more than the previous year.
- Facilities reported on 85 of the 90 NPI substances.
- More than half of these substances had decreased reported emissions compared to last year's data.
- The metal ore mining sector reported the largest amount of emissions to the Australian environment.
- The Australian Government together with the states and territories pursues a range of initiatives to reduce emissions and protect our environment.
- The NPI web site continues to be updated, making it easier to use.



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Report card on chromium (VI) compounds

Chromium (VI) compounds are included in the 90 NPI substances. In the 2004-05 NPI reporting year it was estimated that about 24 000 kg of chromium (VI) compounds were emitted from industrial facilities and diffuse sources.

The major industry sources of chromium (VI) compounds reported to the NPI are coal mining; water supply, sewerage and drainage services; and metal ore mining. The major diffuse sources of this substance are burning and wildfires, aeroplanes and paved/unpaved roads.

Compared to the previous reporting year, estimated emissions from:

- coal mining increased by 6.8%
- water supply, sewerage and drainage services decreased by 50% and
- metal ore mining increased by 24%.

Changes in emissions can be caused by changes in facility operations, increased production, better estimation of emissions and the installation of new pollution control equipment.

Chromium (VI) compounds are emitted mainly to air and land, although there are also some small emissions to water.

The major uses of chromium (VI) compounds are for bricks and linings for furnaces; chrome plating (chromic acid); manufacture of dyes (soluble chromates); wood treatment and water treatment.

Chromium (VI) compounds are usually highly toxic. Long-term exposure to airborne chromium (VI) can have adverse effects on

the respiratory and immune systems and can cause cancer. Higher exposure levels are more likely to happen from breathing workplace air from welding, chrome plating and handling some chromate chemicals. Facilities undertake cleaner production activities such as monitoring programs for potential spill or leak sources, dust suppression and install pollution control equipment to ensure that emissions of substances on-site are reduced.

Chromium (VI) compounds in the atmosphere are carried in the air as particles or dust for a period of time. As it settles it will contaminate soil and water with only small amounts dissolving. Chromium (VI) is released into the air, soil and water during the manufacture and disposal of products and chemicals containing chromium (VI) or the burning of fossil fuels (coal, oil or gas).

Approximately 400 substances were considered for inclusion on the NPI reporting list. A ranking and total hazard score was given based on health and environmental hazards and human and environmental exposure to the substance. Chromium (VI) compounds were ranked as 2 out of 400.

Fact sheets are available for all of the 90 NPI substances – [more about chromium \(VI\) compounds.](#)

Chromium (VI) compounds or hexavalent chromium was the substance alleged to have contaminated the drinking water in the California town of Hinkley.

An unqualified legal clerk, Erin Brockovich, investigated the local compressor station owned by Pacific Gas and Electric, for their contribution to unclean water in the town.

More than 600 plaintiffs took the company to court which settled in 1996 for US\$333 million. At the time it was the largest settlement ever paid in a direct-action lawsuit.

Erin Brockovich's story is the topic of an Academy Award winning feature film, *Erin Brockovich*.



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International news

US EPA TRI 2004 data

The United States Environment Protection Agency (US EPA) released the 2004 Toxics Release Inventory (TRI) data on 12 April 2006.

The Toxics Release Inventory (TRI) is a database containing detailed information on nearly 650 chemicals and chemical categories that over 23,000 industrial and federal facilities manage through disposal or other releases, and waste management for recycling, energy recovery, or treatment. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

The US EPA reports that the amount of toxic chemicals released into the environment fell 4% from 2003 to 2004.

[More about the 2004 TRI data release](#)

Canada's 2004 NPRI data

Canada's 2004 National Pollutant Release Inventory (NPRI) data includes information on releases, disposals and recycling of more than 300 substances from over 8,000 facilities across Canada.

The 2004 data is current as of 25 April 2006, and may change periodically based on updates received from reporting facilities.

[More about the 2004 NPRI data release](#)



Key dates

10 July 2006 – public consultation period commences for the draft variation to the NPI NEPM.

24 July – 8 August 2006 – public consultation forums for the NEPM variation held in capital cities. Further information available at www.ephc.gov.au

15 September 2006 – final date for submission of documentation on the NPI NEPM variation.

30 September 2006 – reporting facilities to provide information on the previous reporting period to the state or territory environment authority in its jurisdiction.

30 November 2006 – state and territory environment agencies review all NPI reports for accuracy and forward the data to the Australian Government.

NPI contacts

If you wish to contact NPI units in the states or territories, NPI contact details are available on the web.

[Full current NPI contact details](#)

Contact the NPI unit at the Australian Government Department of the Environment and Heritage:

Phone us: 1800 657 945

Email us: npi@deh.gov.au

View us: <http://www.npi.gov.au/>

Crepuscular rays at Pyengana. Credit: Margaret Brown

