February - March 2006

Issue 9

Welcome to the February – March 2006 edition of the National Pollutant Inventory Update newsletter.

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

In this Issue

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 helps everyone to keep an eye on pollution – it's your right to know.

2004-05 NPI emissions data

Emissions to air, land and water are estimated by facilities each year. Key points are:

- data was published on 31 January 2006
- this was the seventh NPI reporting year
- the number of facilities reporting has risen from around 3600 in 2004 to more than 3700 in 2005 *and*
- facilities reported on 85 of the 90 NPI substances.

The new data is on the web at: www.npi.gov.au

Some key results from the data are featured on the NPI web site at latest NPI data.

Highlights from the latest emissions data are provided to showcase what you can find in the NPI database and web site. These will help you find fast facts about several NPI substances and emissions from major industry sectors.

Industry sectors - chemicals, electricity supply, food and drink, mining and paper – more about industry sectors.

Substances - acetic acid, benzene and total phosphorus emissions – more about the NPI substances.

Get easy access to reports and maps for the whole country and individual states or territories **–** 2004-05 reports and maps.

1050 facilities have provided information on their emission reduction activities since the commencement of NPI reporting.

Ministerial announcement

The Acting Minister for Department of the Environment and Heritage, Warren Truss, released a statement to the media about the latest NPI data. Mr Truss noted that the amount of phosphorus entering the Murray Darling Basin from sewerage and water treatment plants fell 31 % during 2004-05, and said the reduction reflected hard work by the Australian Government and relevant states to upgrade the water quality of the Murray Darling Basin. More about the media release.

Using NPI data

Here are a few tips to help you use and understand the NPI data.

About the data

The NPI has two types of data – facility emissions and diffuse emissions. Emissions data is provided by facilities annually. Diffuse data is the most up-to-date available. The diffuse data is not necessarily for the particular facility reporting year being examined. For example, diffuse data may be from a study completed in 2001-02 and the facility data from 2004-05.

How toxic?

90 NPI substances span a wide range of toxicities - a small amount of a highly toxic substance may be more important than a larger emission of a less toxic substance.

Doesn't add up

Adding together emissions of different substances does not provide a measure of total pollution. This is because NPI substances have differing properties and toxicities.

It's all in the technique

The NPI comprises estimated emissions, and it is important to note that the accuracy of these estimates may vary according to the technique used.

It's adjustable

Data for the most recent reporting year can be updated if an error has occurred. Changes are usually made around April after the January data publication. Check the data changes notification page for information on recent corrections/additions to NPI data – more about data changes.

The Environment Protection Authority South Australia has published an interpretive guide to the NPI that can help you understand the aims and use of the NPI. More about the EPA SA interpretive guide.

The NPI is an important starting point for finding out about sources of pollution in Australia.

How is the data collected?

Industrial facilities estimate their emissions annually and provide the results to the environment agency in their state or territory. The agency checks the data and forwards it to the Australian Government Department of the Environment and Heritage, and it is published on the NPI web site in January each year.

Emissions from diffuse sources like motor vehicles, cigarette smoking, domestic wood combustion and facilities that do not reach the reporting threshold are estimated by state and territory agencies. Diffuse emissions are not estimated annually. Diffuse data shows the contribution of non-industrial sources to Australia's pollutant emissions.

Should your facility be reporting to the NPI?

Facilities have to report to the NPI if they reach certain reporting thresholds. The thresholds relate to how much fuel, electricity and NPI substances facilities use.

For more information on whether your company or facility needs to report, contact your state or territory environment agency or read the NPI guide. The NPI guide will help you determine whether emissions from your facility should be reported to the NPI and will take you step-by-step through the reporting process – more about the NPI guide.

In 2004-05, more than 3700 facilities from a wide range of industry sectors reported to the NPI.

What else is new in 2006?

In 2006, the NPI team is developing an on-line reporting system which will streamline industry reporting. We are also developing ways to deliver the emission estimation technique manuals with simplified calculation tools, and we are enhancing the database search facility

Key dates

31 January 2006 – 2004-05 facility data published on the NPI web site for the 7th reporting year.

20-26 March 2006 – NPI database searches and tools will not be available to prepare for the publication of data corrections.

27 March 2006 – corrections to 2004-05 facility data published on the NPI web site.

Clean Up Australia Day

Every year hundreds of thousands of Australians help to clean up their environment on Clean Up Australia Day.

Clean Up Australia Day will be held on Sunday 5 March 2006.

It's easy, fun and everyone can take part. More information about Clean Up Australia Day

Clean Up Australia Day in Melbourne

Report card on sulfur dioxide

Sulfur dioxide is one of the 90 NPI substances. In the 2004-05 NPI reporting year it was estimated that about 1.4 million tonnes of sulfur dioxide was emitted from industrial facilities and diffuse sources.

The major industry sources of sulfur dioxide reported to the NPI are electricity supply, basic non-ferrous metal manufacturing, and metal ore mining. The major diffuse sources of this substance are fuel combustion from non-reporting facilities, commercial boating/shipping and motor vehicles.

Compared to the previous reporting year, emissions from:

- electricity supply increased by 5%
- basic non-ferrous metal manufacturing remained the same *and*
- metal ore mining decreased by 22%.

Sulfur dioxide is emitted mainly to air, although there are also some small emissions to land and water.

It is a common pollutant to which we are exposed at very low levels every day by breathing air in cities and some industrial environments. Higher exposure levels are more likely to be found in the workplace where it is produced as a by-product, such as in smelting and the combustion of fuel containing sulfur – mainly coal and oil. Exposure can also result from the manufacture of fumigants, food preservatives, bleaches and wine making.

The gas is irritating to the throat and lungs. Repeated or prolonged exposure to moderate concentrations may cause inflammation of the respiratory tract, wheezing and lung damage. Asthmatics and those with impaired heart or lung function are at increased risk.

Sulfur dioxide in the atmosphere is absorbed by soils and plants. It is also captured within and below clouds and in certain circumstances may raise the acidity of the resultant rain. This is known as acid rain.

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. Sulfur dioxide was ranked as 4 out of 400.

Fact sheets are available for all of the 90 NPI substances – more about sulfur dioxide.

Loy Yang power station in Victoria – to reduce emissions, Loy Yang uses electrostatic dust precipitators which extract solid particles from the boiler flue gases prior to them being emitted to the atmosphere via the chimney stacks.

Air quality issues confronting our towns and cities are being addressed through a comprehensive package of programmes underpinned by research and public education. Australian, state and territory governments have agreed on a National Environment Protection Measure for Ambient Air Quality. The Measure includes national standards for six criteria air pollutants, including sulfur dioxide. Monitoring of sulfur dioxide concentrations in cities is carried out regularly as each jurisdiction has developed a monitoring plan to measure its performance against the air quality standards. More about the Ambient Air Quality NEPM.

International news

The European Pollutant Emission Register (EPER) has data on emissions to air and water from over 10 000 facilities.

National governments of all European Commission member states are required to maintain inventories of emission data from specified industrial sources and to report emissions from individual facilities to the European Commission. The reported data is accessible in a public register (EPER), and is intended to provide environmental information on major industrial activities.

European Commission member states submitted their first report in June 2003 covering 2001 emissions. The next report will be delivered in June 2006 and will cover emissions in 2004. The present EPER can be considered as a first step towards developing a fully integrated pollutant release and transfer register (PRTR) for Europe.

Member states include Germany, the United Kingdom, Scotland, Austria, Spain and Portugal. More about the European Pollutant Emission Register.

A regulation concerning the establishment of a European Pollutant and Transfer Register (European PRTR) which has been adopted by both European Parliament and Council was published in January 2006.

The European PRTR will then replace the EPER. The regulation stipulates in its Article 14 the establishment of a Guidance document as soon as possible. More about the draft Guidance Document for the implementation of the European PRTR.

www.npi.gov.au

NPI NEPM variation

A cross-jurisdictional project team is working on the NPI NEPM variation process. The project team has been considering varying the NEPM and developing the accompanying impact statement, taking into consideration recommendations by the Technical Advisory Panel (TAP). Members of the TAP are drawn from the scientific, industry and academic community. They are brought together to consider issues arising from the 2005 review including amending the NPI substance list and thresholds, and considering the feasibility of reporting of transfers of waste.

Documentation is still being developed and is not yet available for public consultation. The National Environment Protection Council Service Corporation will soon be sending invitations to non-government organisations to participate in the first round of consultation for the draft NEPM variation and the impact statement.

Following this, the project team will seek clearance from the Environment Protection and Heritage Council to release the draft NEPM variation and impact statement for broader public consultation. This is expected to occur in May/June 2006. Further updates will be posted on the EPHC and NPI web sites over the coming weeks.

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/