Reporting Australia’s particulate matter emissions

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Outline

- National Environment Protection Measures
- The National Pollutant Inventory (NPI)
- Sources of PM$_{10}$
- Issues in reporting particulate matter
NEPMs

- National Ambient Air Quality
- Diesel Vehicle Emissions
- National Pollutant Inventory
The National Pollutant Inventory

- Reporting mechanism for 90 NPI substances
- Data publicly available on a website
- Emissions from industry or facilities and diffuse sources
Australia's national database of pollutant emissions

The National Pollutant Inventory (NPI) provides Australians with access to information on the types, amounts and effects of pollutants being emitted in their communities.

The NPI now holds emission data for close to 3400 facilities, 33 airsheds and 32 water catchments around Australia. Emissions are estimated for industrial facilities across Australia, and for diffuse sources such as transport and domestic activities in airsheds, and agriculture in water catchments.

Search the NPI database and find out about pollutant emissions at the local, regional or national level. Find information about individual facilities in your area and use the map to locate any facility that reports to the NPI.

Search the NPI database
- **Location** - emissions in your neighbourhood or state
- **Substance** - descriptions and emissions of substances
- **Source** - emissions from industry and other sources
- **Facility** - emissions from individual industrial facilities
- **Combined search** - search all of the above categories

Using NPI data

More NPI data is available at

NPI website: www.npi.gov.au
NPI reporting PM$_{10}$: 2002-03

- In total 3,396 facilities reported
- 45% of facilities reported PM$_{10}$
NPI PM$_{10}$ Top Sources

- Burning (fuel red., regen., agric.)/Wildfires*
- Coal Mining
- Metal Ore Mining
- Windblown Particles*
- Paved/Unpaved Roads*
- All Others
Industry sources

- Five major industry contributors including mining and electricity supply

- Contribute 90% of industry emissions of $PM_{10}$

- Other 60 industry sectors contribute 10% of $PM_{10}$
Industry sources

B: Australia: industry

- Metal Ore Mining
- Coal Mining
- Electricity Supply
- Basic Non-Ferrous Metal
- Iron and Steel
- All Others
Regional areas

C: Australia: Postcode 2505

- Basic Non-Ferrous Metal
- Motor Vehicles*
- Fabricated Metal
- Chemical

D: Australia: Postcode 2500

- Motor Vehicles*
- Lawn Mowing*
- Backyard Burning*
- Burning (e.g. Fuel Reduction & Wildfires)*
- Solid Fuel Burning - Domestic*
Issues in reporting PM$_{10}$ emissions

- Accuracy of reporting fugitive particulate matter
- Metals content of particulate matter
- Should PM$_{2.5}$ be reported?
- Community interpretation of NPI data
Working with industry

- Industry consulted on manuals with guidance for estimating particulate matter

- Western Australian NPI Unit undertaking a project to improve accuracy of reported emissions of fugitive PM emissions
Improvement of NPI Fugitive Particulate Matter EET

21 September, 2004
Summary

- Diffuse sources of particulate matter can be greater than industry or facility sources
- Particulate matter emissions are spatially variable
- The mining industry still has issues about the reporting of PM
- The NPI program is seeking to improve the estimation techniques for particulate matter