

# National Pollutant Inventory

Summary  
Report of  
Second Year  
Data  
1999 - 2000



[www.npi.gov.au](http://www.npi.gov.au)

# Keep an eye on pollution

This summary report is based on the NPI data published on 28 May 2001. It is important to realise that the NPI is a database of estimated emissions and the accuracy of the data will vary according to the estimation technique used.

Aggregated emissions data is not estimated every year, but for a particular period to provide a snap-shot of the background emissions from mobile and non-industrial sources and sub-threshold facilities (smaller facilities whose emissions are below certain levels). Comparative analysis of the aggregated emissions data is likely to be misleading, because at this early stage of implementation of the NPI the techniques used are not consistent across all jurisdictions. It would also be unwise to make comparisons between industries or facilities without first checking to ascertain the basis and extent of reporting. Some reporting facilities have included Internet links to their own pages in their Internet reports. The views expressed in the pages reached through the facility hotlinks are not necessarily the views of the Commonwealth, Environment Australia or the National Environment Protection Council.

## Introduction

The NPI is an Internet database designed to provide the Australian community, industry and government with information on the types and amounts of certain substances being emitted to the air, land and water around Australia.

The second year of the NPI saw the number of facilities reporting to it increase by over 50 percent, the number of sectors covered by it increase by over 300 percent, and the average number of substances reported by each facility increase by almost 50 percent.

In addition, a large number of aggregated emission data studies, both airsheds and water catchments, have been completed and included on the database. These studies provide a more complete picture of pollutant emissions in Australia.

NPI data can be used for promoting cleaner production and pollution prevention and identifying sources of environmental pressures. This report provides a summary of the second year NPI data. For more information on 1999-2000 emissions please visit the NPI Internet site at [www.npi.gov.au](http://www.npi.gov.au)



# Background

The NPI provides information on both point sources (facilities like manufacturing sites) and 'aggregated emissions' from diffuse or mobile sources (such as households and transport).

The NPI was created in February 1998 as the first National Environment Protection Measure (NEPM) by the National Environment Protection Council (NEPC).

The desired environmental outcomes of the Measure are:

- (a) the maintenance and improvement of:
  - (i) ambient air quality; and
  - (ii) ambient marine, estuarine and fresh water quality;
- (b) the minimisation of environmental impacts associated with hazardous waste; and
- (c) an expansion in the re-use and recycling of used materials.

The implementation arrangements for the NPI are detailed in the NPI NEPM document and associated Memorandum of Understanding which are available on the NPI web site.

# What is reported

A Technical Advisory Panel developed the NPI reporting list by considering the environmental and human health effects of over 400 substances, before developing a priority list of 90 for inclusion in the Inventory.

In the phase in years of 1998-1999 and 1999-2000, facilities were only required to report on 36 substances. From 1 July 2001 this will increase to 90 substances.

A threshold is set for each substance according to its nature. There are three types of thresholds: category 1 based on NPI substance use; category 2 based on energy/fuel consumption; and category 3 based on emissions of total nitrogen and total phosphorus to water.

Details of each of the NPI substances can be found in the NPI's contextual information, available on the NPI Internet site and in hard copy. The information is provided to help people gain a better understanding of the nature of the substance in question and includes identifiable features, chemical characteristics, sources and health and environmental effects.

The information in this report is presented in two sections. The first section is on facility (point source) emissions and aggregated emissions for airsheds and water catchments, while the second section is on customised emission reports from the database.

# Reporting Facilities: Point Source Emissions

Number of reporting facilities and substances by jurisdiction in 1999–2000

Jurisdiction	Number of reporting facilities	Number of substances reported	Number of Sectors
Australian Capital Territory	21	47	9
New South Wales	361	69	55
Northern Territory	95	65	18
Queensland	428	67	52
South Australia	223	56	40
Tasmania	121	55	28
Victoria	388	70	57
Western Australia	330	71	39
<b>TOTAL for 1999–2000</b>	<b>1,967</b>	<b>83</b>	<b>67</b>
<b>TOTAL for 1998–1999</b>	<b>1,200</b>	<b>69</b>	<b>23</b>

In 1998-1999 only 23 industry sectors were required to report to the NPI. This grew to 90 industry sectors in 1999-2000. In this period 1,967 facilities reported on an average of 8.4 substances, up from the 1,200 facilities which reported on an average of 5.8 substances the previous year. Full details of the emissions from any of the listed facilities can be obtained from the NPI database, available on the Internet at [www.npi.gov.au](http://www.npi.gov.au)

The tables on the following pages summarise 1999-2000 facility data.

## Facilities reporting in major sectors by jurisdictions in 1999–2000

Industry Sectors	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	TOTAL
Bakery product manufacturing	2	8		6	2		5	2	25
Ceramic product manufacture		15		7	6	2	13	9	52
Dairy product manufacturing		6		4	3	4	17	3	37
Electricity supply		10	31	14	16	3	17	35	126
Log sawmilling, timber dressing and wood product manufacturing	2	5		5	8	13	5	8	46
Meat and meat product manufacturing		4	1	9	4	4	9	2	33
Mining		20	14	38	3	7	1	84	167
Mining of non-metallic minerals		3	1	9	3		3	18	37
Oil and gas extraction			6	24	27		5	21	83
Paper and paper product manufacturing		5		6	3	3	12	2	31
Petroleum and coal product manufacturing		4		7	1	2	11	2	27
Petroleum product wholesaling	5	126	14	105	70	18	72	67	477
Sewerage and drainage services	2	43	6	48	13	30	43	4	189
Waste disposal services: sewerage sludge and biochemical waste incineration	4	2	3	42		6	2	6	65
Water supply	1	3			8	5	1	9	27
All other sectors	5	107	19	104	56	24	172	58	545
Total for all reporting sectors for 1999–2000	21	361	95	428	223	121	388	330	1,967
Total for all reporting sectors for 1998–1999	12	270	74	279	116	68	177	199	1,195

The following table provides information on total facility emissions (point source emissions to air, land and water) of some of the NPI substances. This is aimed to provide an overview of the national point source emission scenario.

## Emissions in million kg by destination for reporting facilities for 1999–2000

Substance	Emissions to air in million kg	Emissions to land in million kg	Emissions to water in million kg	Total emissions in million kg
Sulfur dioxide	1,480.00	N/A	N/A	1,480.00
Carbon monoxide	616.00	N/A	N/A	616.00
Oxides of nitrogen	607.00	N/A	N/A	607.00
Particulate matter ≤ 10.0 micron	335.00	N/A	N/A	335.00
Total nitrogen	N/A	N/A	67.24	67.24
Total volatile organic compounds	36.00	0.01	0.19	36.20
Ammonia (total)	13.80	0.31	5.29	19.40
Sulfuric acid	0.12	0.01	17.09	17.22
Total phosphorus	N/A	N/A	16.16	16.16
Fluoride compounds	7.97	0.63	1.30	9.90
Cyanide (inorganic) compounds	4.68	0.44	0.04	5.16
Benzene	1.80	0.00	0.06	1.86
Lead & compounds	0.72	0.01	0.03	0.76
Arsenic & compounds	0.45	0.01	0.01	0.47
Polycyclic aromatic hydrocarbons	0.38	0.00	0.04	0.42
Mercury & compounds	0.008	0.00006	0.0001	0.008



# Airsheds

## Aggregated Emissions:

# Airsheds and Water Catchments

Aggregated emissions data is estimated by State and Territory environment protection agencies for substances emitted from mobile sources (motor vehicles, trains, aircraft and commercial and recreational boating) and sub-threshold facilities (smaller companies that do not trip the threshold). These sources are listed below. Such data is restricted to geographically discrete specific airsheds and catchments. It should be taken into account that each airshed and catchment is influenced by climate, size, general topography, population densities and other site specific characteristics. Estimated emissions reported may therefore not be directly comparable.

Emission sources for an airshed are classified as 'core' or 'non-core'. Core sources are those estimated by all states and territories. Non-core sources are those on which jurisdictions may report where relevant. Emission estimation technique handbooks have now been completed for all core and non-core sources. The following table lists core and non-core sources considered as part of the NPI airshed studies.

### Core and non-core sources for airsheds

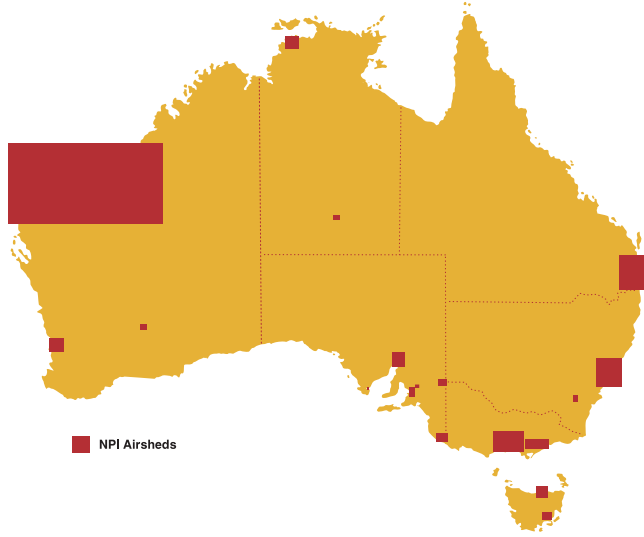
Core – to be reported by a jurisdiction if it is appropriate to the airshed	Non-Core – may be reported by jurisdiction
Mobile sources: motor vehicles, boating (commercial shipping/boating, recreational boating), aircraft, railways	Backyard incinerators
Domestic/Commercial solvents	Biogenics
Domestic fuel use (solid (wood, coal), liquid, gas)	Paved and unpaved roads
Lawn mowing (domestic, open space)	Gas leakage
Service stations	
Architectural surface coating	
Motor vehicle refinishing	
Dry cleaning	
Printers (volatile organic compounds only)	
Cutback bitumen	
Sub-threshold industrial solvents (trichloroethylene)	
Bushfires and prescribed burning	
Fuel combustion sub-threshold	



# Airsheds

The 1999-2000 Inventory provides reports on 29 airsheds, up from seven airsheds in 1998-1999. The airsheds, as shown on the map below, cover all of the major population and industrial centres. This coverage is aimed to provide information on the impact of human and industrial activity on our environment.

## NPI Airsheds 1999-2000



### Airsheds listed by jurisdiction

Jurisdiction	Airshed
ACT	Canberra
NSW	Sydney Newcastle Wollongong
NT	Alice Springs, Darwin
QLD	South East Queensland
SA	Adelaide, Barmera, Barossa, Berri, Loxton, Lyndoch, Millicent, Mount Gambier, Nuriootpa, Port Augusta, Port Lincoln, Port Pirie, Renmark, Riverland, South East, Spencer Gulf, Whyalla
TAS	Hobart, Launceston
VIC	Latrobe Valley Region, Port Phillip Region
WA	Kalgoorlie, Perth, Pilbara

# Airshed Substance Reports

Information on four NPI listed substances – carbon monoxide, oxides of nitrogen, particulate matter (PM<sub>10</sub>) and sulfur dioxide – is presented in this summary report. These substances have been chosen because of their potential effect on human health and the environment. The following charts have been prepared by adding point source and aggregated emissions data.

For the purposes of this summary report, the charts group emissions into three broad categories:

- Industry – large reporting facilities (point source) and smaller sub-threshold facilities (aggregated source).
- Transport<sup>1</sup> – motor vehicles, aeroplanes, railways, recreational boating, commercial shipping etc. (aggregated sources).
- Other<sup>2</sup> – household sources, service stations, prescribed burning/wild fires, paved and unpaved roads etc.

1 It should be noted that not all of these sources were included for all the airsheds. For example, some airsheds included aeroplanes or railways and some did not.

2 It should be noted that not all of these sources were included for all the airsheds. For example, Hobart and Canberra airsheds had domestic fuel use as one dominant aggregated source while it was not considered relevant in other airsheds.



# Airshed Substance Reports

## Carbon monoxide

Exposure to low levels of carbon monoxide may cause poor concentration, memory difficulties, vision problems and loss of muscle coordination while at higher levels it can cause headaches, fatigue and nausea. Carbon monoxide is considered to be a precursor to greenhouse gases.

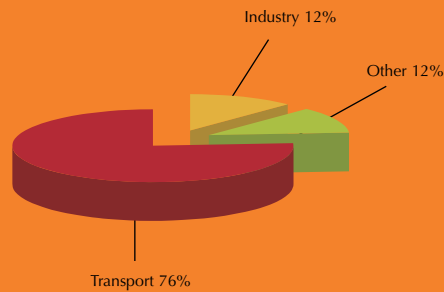
The pie charts show carbon monoxide emissions in all capital city airsheds, with the Hobart airshed as a case study.

## Oxides of nitrogen

Exposure to oxides of nitrogen may not always produce immediate effects but can result in fatal excessive fluid in the lung tissues (pulmonary oedema) hours after exposure. In the lower atmosphere, oxides of nitrogen play a major role in the formation of photochemical smog. Excessive levels of oxides of nitrogen can kill plants and increase the acidity of rain.

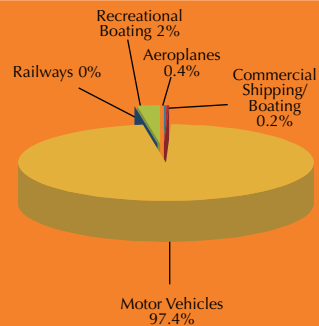
The pie charts show emissions of oxides of nitrogen in all capital city airsheds, with the Adelaide airshed as a case study.

Carbon Monoxide Emissions–  
Capital City Airsheds



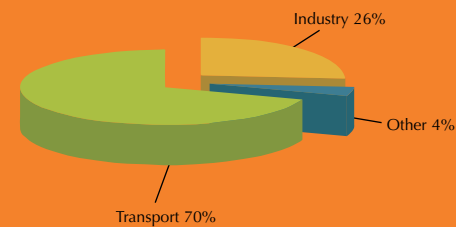
Total carbon monoxide emitted in capital city airsheds: 2,800 million kg/yr

Carbon Monoxide Emissions–  
Hobart Airshed, Transport Sector



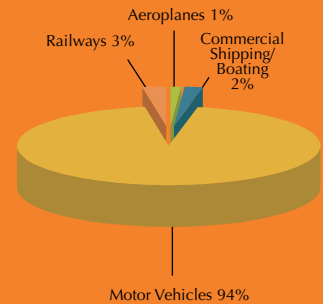
Total carbon monoxide emitted by all sectors in Hobart airshed: 76 million kg/yr  
Total carbon monoxide emitted by the transport sector in Hobart airshed: 52 million kg/yr

Oxides of Nitrogen Emissions–  
Capital City Airsheds



Total oxides of nitrogen emitted in all capital city airsheds: 480 million kg/yr

Oxides of Nitrogen Emissions–Adelaide Airshed,  
Transport Sector



Total oxides of nitrogen emitted by all sectors in Adelaide airshed: 30 million kg/yr  
Total oxides of nitrogen emitted by transport sector in Adelaide airshed: 21 million kg/yr



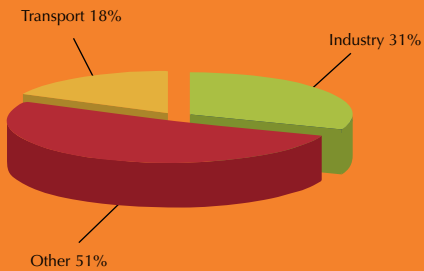
# Airshed Substance Reports

## Particulate matter (PM<sub>10</sub>)

Every one is exposed to some extent to particulate matter (PM<sub>10</sub>), which is defined as dust particles of any substances that are less than or equal to 10 micrometers in aerodynamic diameter. Health effects include toxic effects by absorption of the dust into the blood (eg. lead, cadmium and zinc), allergic or hypersensitivity effects, bacterial and fungal infections, fibrosis, cancer and irritation of mucous membranes. The factors that influence the health effects are dust composition, concentration, size and duration of exposure to dust.

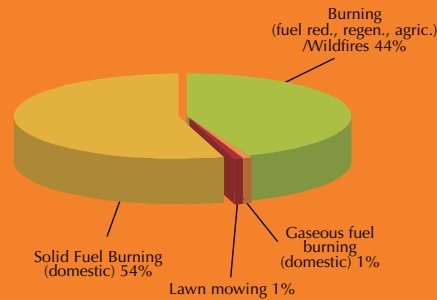
The pie charts show emissions of particulate matter in all capital city airsheds with the Perth airshed as a case study.

Particulate Matter Emissions—  
Capital City Airsheds



Total particulate matter (PM<sub>10</sub>) emitted in capital city airsheds: 86 million kg/yr

Particulate Matter Emissions—Perth Airshed,  
Other Sector



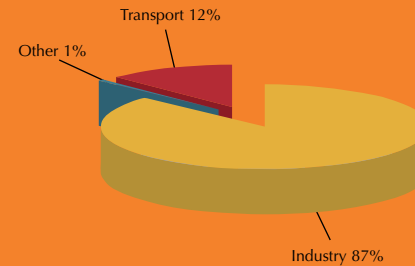
Total particulate matter (PM<sub>10</sub>) emitted by all sectors in Perth airshed: 10 million kg/yr  
Total particulate matter (PM<sub>10</sub>) emitted by sector other than transport or industry in Perth Airshed: 4 million kg/yr

## Sulfur dioxide

Exposure to sulfur dioxide can cause headaches, general discomfort and anxiety. Those with impaired heart or lung function and asthmatics are at increased risk. Sulfur dioxide is absorbed by soils and plants and captured within and below clouds and in certain circumstances can increase the acidity of rain.

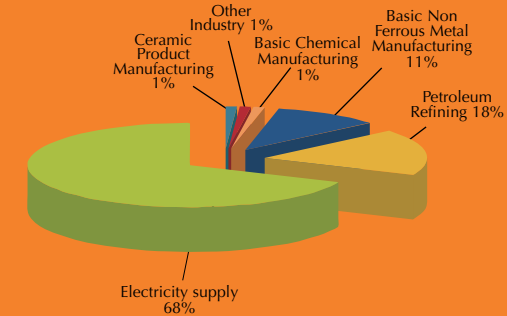
The pie charts show sulfur dioxide emissions in all capital city airsheds with the Port Phillip airshed as a case study.

Sulfur Dioxide Emissions—  
Capital City Airsheds



Total sulfur dioxide emitted in all capital city airsheds: 190 million kg/yr

Sulfur Dioxide Emissions—Port Phillip Airshed,  
Major Industry Sectors



Total sulfur dioxide emitted by all sectors in Port Phillip airshed: 39 million kg/yr  
Total sulfur dioxide emitted by industry sector in Port Phillip Airshed: 33 million kg/yr



# Water Catchments

## Airshed Substance Reports

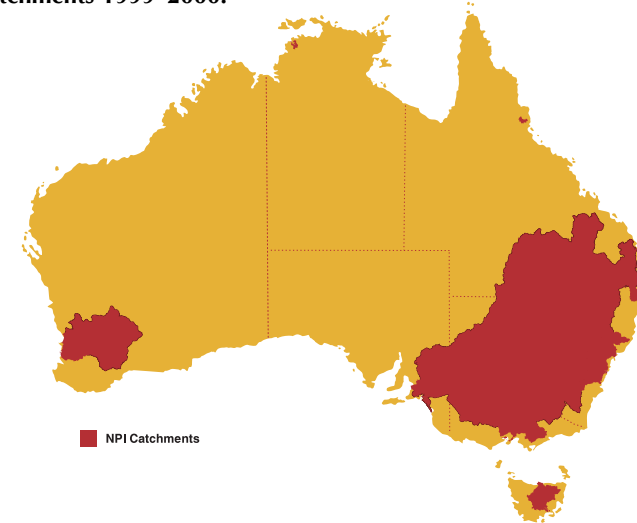
In 1999-2000, 23 catchments were studied, and total nitrogen and total phosphorus emissions have been estimated. Detailed information on each of these catchments can be obtained from the NPI database on the Internet, using the 'Quick Search' function. Information on the Murray-Darling Basin is included as an example.

Rather than showing distribution of priority pollutant emissions from different sources, the NPI can also provide information on priority pollutant emissions from a single dominant source, motor vehicles, as illustrated in the table below.

### Total emissions of motor vehicles (aggregated source) for selected NPI substances across all NPI airsheds

Substance	Emission in million kg/yr
Carbon monoxide	2,100.00
Oxides of nitrogen	330.00
Particulate matter (PM <sub>10</sub> )	14.00
Sulfur dioxide	10.00
Benzene	8.70
Lead & compounds	0.50

### NPI Catchments 1999-2000:



### Catchments by jurisdiction

Jurisdiction	Catchment
(ACT, NSW, QLD, SA, VIC)	Murray-Darling Basin
ACT	Canberra
NSW	Botany Bay, Hawkesbury-Nepean River, Hunter River, Lake Illawarra, Manning River, Port Jackson, Richmond River
NT	Darwin Harbour and surrounding catchments
QLD	Dawson River, Johnstone River, SE Queensland
SA	Adelaide, Barossa
TAS	Derwent, Esk/Tamar
VIC	Latrobe-Thomson, Port Phillip Bay
WA	Avon, Peel-Harvey, Perth, Upper Swan-Canning



Acknowledgement – Australian Capital Territory, Environment Protection Section.

# Catchment Substance Reports

The following tables, charts and figures have been prepared by adding point source and aggregated emissions data for total nitrogen and total phosphorus for selected water catchments.

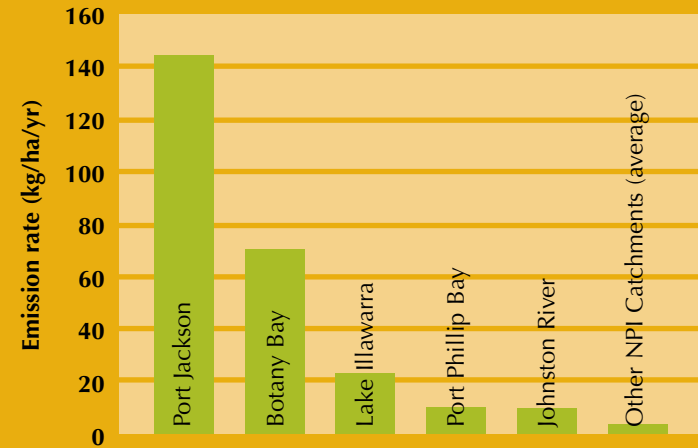
Total nitrogen is defined by the NPI as compounds that give rise to nitrate and nitrite ions. This is a very broad group that covers many natural and human made substances, either containing nitrates or nitrites or decomposing into other sources or containing both of them. The main health effects associated with nitrate and nitrite is methaemoglobinaemia ('blue baby syndrome').

Total phosphorus is defined by the NPI as compounds that give rise to phosphate ions. This is also a very broad group including many natural and anthropogenic substances. These compounds include salts such as trisodium phosphate and calcium hydroxyapatite, and polyphosphates and organophosphates. Many industrial organophosphates are nerve toxins (for example pesticides) and exposure to these can lead to sub-lethal and lethal effects.

A more general concern in relation to total nitrogen and total phosphorus is its environmental effects, where elevated levels of nitrogen and phosphorus often cause enhanced algal bloom. This may ultimately manifest itself as blue-green algal blooms which can produce hepatotoxins, neurotoxins and endotoxins and affect human health through contact or consumption.

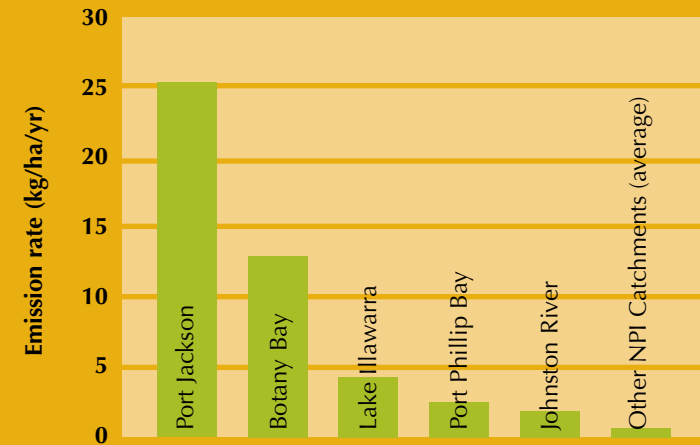


Rate of total nitrogen emissions (kg/ha/yr) – Top five NPI catchments



Average rate of total nitrogen emitted in all NPI catchments: 14 kg/ha/yr

Rate of total phosphorus emission (kg/ha/yr) – Top five NPI catchments



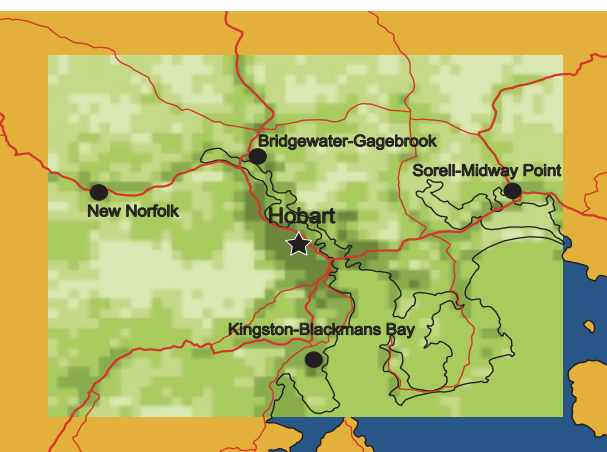
Average rate of total phosphorus emitted in all NPI catchments: 2.4 kg/ha/yr

# Customised Emission Reports

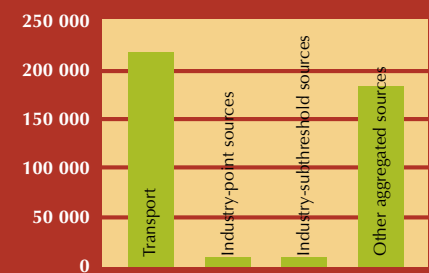
Reports from the database provide information on emissions of the listed NPI substances together with location details mapped at desired national, state or local level. A user can query the database by substance, source, location and facility. In addition, information on emissions of specific substances at particular locations or facilities can be accessed through the 'Quick Search' facility. Another useful feature is 'Sort', which allows the user to sort the emissions in ascending/descending order in the emission report. Through the combined use of these features, information can be customised to meet individual user requirements as shown in the following examples.

## Demonstrations of database use

Information on emissions of a specific substance in a particular area can be acquired by using a 'location' query. For example, a user can find information on the amount of benzene emitted in the Hobart airshed. The information can then be viewed in either map or graph form.

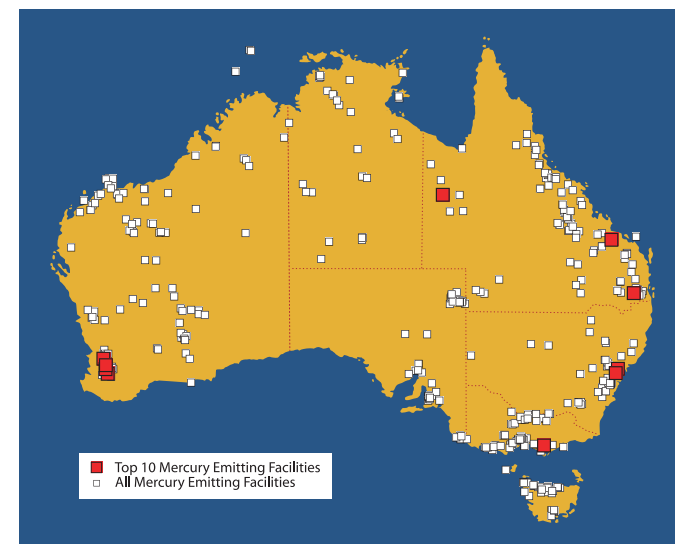


Benzene Emissions in kg/yr – Hobart Airshed



Information on the top 10 emitters of a particular NPI substance can be obtained by using the 'Quick Search' facility. For example, the 'Quick Search' facility can produce a map of all mercury emitting facilities across the nation. These facilities can then be sorted in ascending order so that the top ten emitters can be found.

Reporting period	01 Jul 1999 to 30 Jun 2000
Reporting facilities	Amount of mercury in kg
Mount Isa Mines Limited, Mount Isa	2,000
Worsley Alumina Pty Ltd, Collie	450
Edison Mission Energy Aust Ltd, Traralgon	440
Alcoa World Alumina-Aust, Pinjarra	390
Alcoa World Alumina-Aust, Kwinana	320
Alcoa World Alumina-Aust, Wagerup	300
Pasminco Cockle Creek Smelter, Boolaroo	300
Smorgon Steel Group Ltd, Mayfield West	280
Claypave Pty Ltd, Dinmore	270
Queensland Alumina Limited, Gladstone	240



# Demonstrations of database use

Information on emissions from individual facilities can be obtained by using a 'facility' query. In addition to providing estimates of their emissions, many facilities also provide information on their efforts to reduce emissions. In the example shown below, in 1999-2000, the Bolivar Wastewater Treatment Plant reduced its emission of nitrogen by 26 per cent and its emission of phosphorus by 19 per cent over its 1998-1999 emission levels. Its report for 1999-2000 attributes this reduction to cleaner production activities and better technology.

Region: South Australia

## South Australian Water Corporation Bolivar Wastewater Treatment Plant

Address: Port Wakefield Road Bolivar, SA 5150

Reporting period	01 Jul 1999 to 30 Jun 2000			
Emitted substance	Air	Land	Water	kg
Arsenic & compounds	0.032	0.015	74.00	kg
Cadmium & compounds	0.18	0.0014	7.00	kg
Carbon monoxide	13,000.00			kg
Chromium (VI) compounds	0.22	0.21	1,100.00	kg
Lead & compounds	0.080	0.0076	40.00	kg
Mercury & compounds	0.042	0.0021	11.00	kg
Oxides of nitrogen	16,000.00			kg
Particulate matter ≤ 10.0 micron	1,200.00			kg
Polycyclic aromatic hydrocarbons	0.11			kg
Sulfur dioxide	83.00			kg
Total nitrogen			1,100,000.00	kg
Total phosphorus			170,000.00	kg

## Emission reduction activities

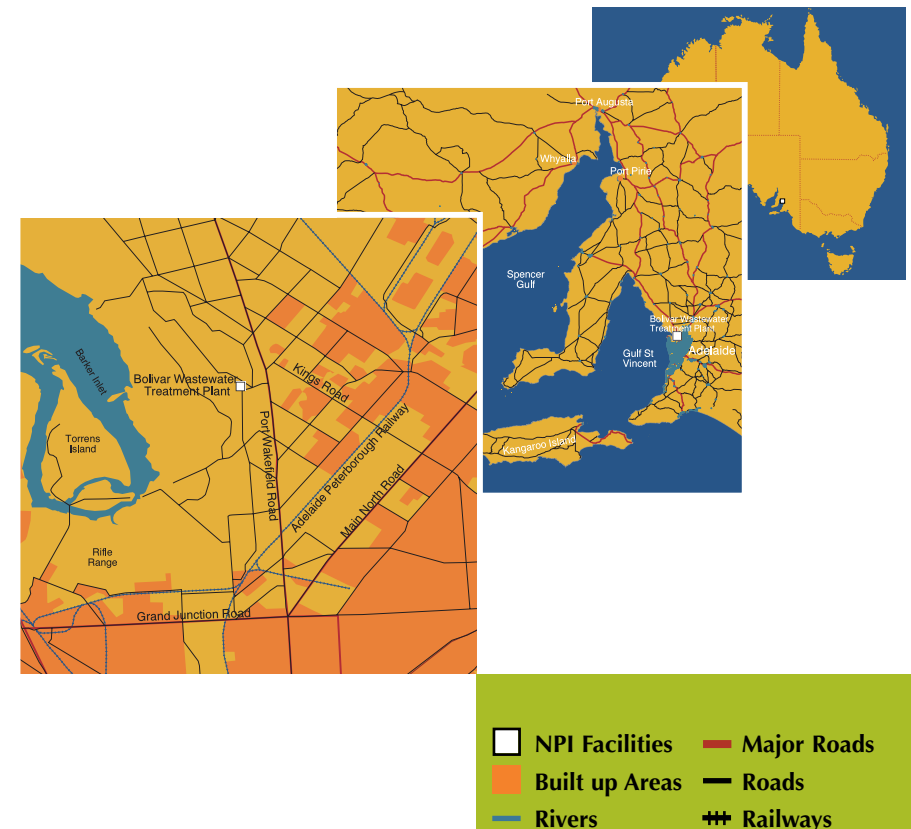
### Cleaner production activities

- Improved maintenance scheduling, record keeping, or procedures
- Modified process, equipment, layout or piping
- Installed overflow alarms or automatic shut-off valves
- Dust suppression—water sprays/chemical suppression
- Dust suppression—wind breaks/covered/enclosed stockpiles
- Trade waste program targeted at reducing trade waste discharges to sewer

### Installation of pollution control equipment

Secondary wastewater treatment process was installed at Bolivar Wastewater Treatment Plant to reduce the emissions of total nitrogen being discharged to Gulf St Vincent.

Note: The NPI consists of substances spanning a wide range of toxicities. A small number may not necessarily imply an insignificant emission; for example, a small emission of a highly toxic substance may be of more concern than a larger emission of a substance of relatively lower toxicity.



# Demonstrations of database use

## Water catchment – Murray-Darling Basin

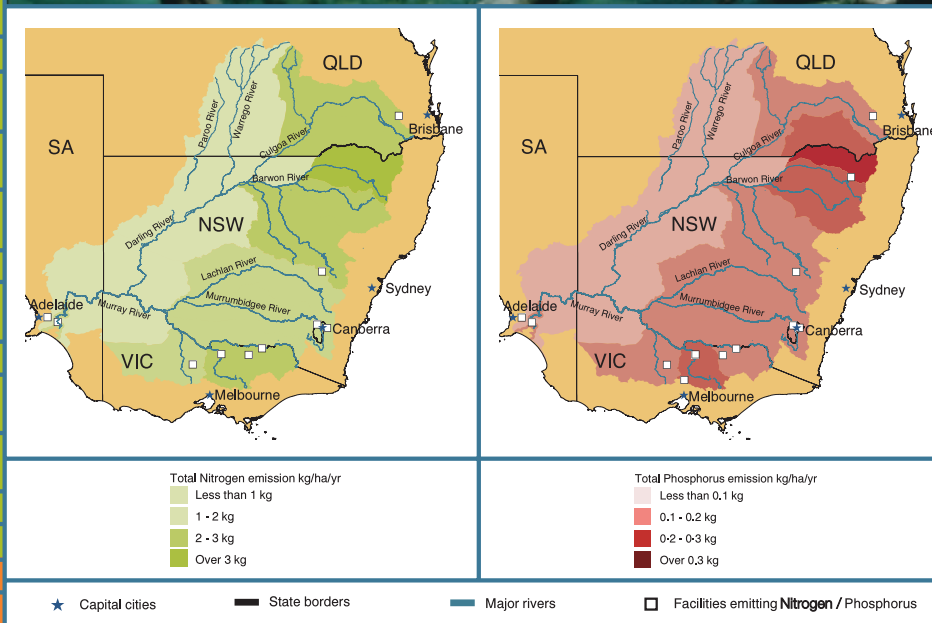
Information on emissions of specific substances in a particular catchment can be obtained by using a 'substance' query and narrowing it down to a particular catchment. This example shows nutrient emissions from both point and aggregated sources into the Murray-Darling Basin.

Emissions of total nitrogen to water for 1999–2000

Aggregated Sources	Amount in million kg
Unimproved pasture	70.00
Cropping	48.00
Improved pasture	17.00
Woodland/forest/forestry	12.00
Cotton	1.30
Sub-threshold point sources	0.10
Urban	0.06
Horticulture–perennial	0.59
Horticulture–annual	0.27
<b>Total emissions from aggregated sources</b>	<b>149.30</b>
Point Sources (Reporting Facilities)	Amount in million kg
ACTEW Corporation, Lower Molonglo Water Quality Control Centre–Sewage Treatment	0.74
Toowoomba City Council, Wetalla WWTP (Stage 3)	0.14
Queanbeyan City Council, Queanbeyan Sewage Treatment Plant	0.07
Goulburn Valley Region Water Authority, Shepparton Wastewater Treatment Plant	0.05
South Australian Water Corporation, Murray Bridge Wastewater Treatment Plant	0.05
ADI Limited, ADI Limited	0.04
Orange Sewage Treatment Plant, Orange Sewage Treatment Plant	0.03
Toowoomba City Council, Wetalla WWTP (Stage 4)	0.03
Coliban Region Water Authority, Bendigo Wastewater Treatment Plant	0.02
South Australian Water Corporation, Bird-In-Hand Wastewater Treatment Plant	0.02
North East Region Water Authority, North East Water	0.02
North East Region Water Authority, North East Water	0.02
<b>Total emissions from point sources (reporting facilities)</b>	<b>1.20</b>
<b>Total emissions from aggregated and point sources</b>	<b>151.00</b>



Acknowledgement – Murray-Darling Basin Commission (Australia)



Emissions of total Phosphorus to water for 1999–2000

Aggregated Sources	Amount in million kg
Cropping	6.20
Unimproved pasture	3.20
Improved pasture	1.60
Woodland/forest/forestry	0.68
Sub-threshold point sources	0.23
Cotton	0.16
Urban	0.10
Horticulture–perennial	0.06
Horticulture–annual	0.04
<b>Total emissions from aggregated sources</b>	<b>12.30</b>
Point Sources (Reporting Facilities)	Amount in million kg
Toowoomba City Council, Wetalla WWTP (Stage 3)	0.055
Goulburn Valley Region Water Authority, Shepparton Wastewater Treatment Plant	0.021
South Australian Water Corporation, Murray Bridge Wastewater Treatment Plant	0.014
North East Region Water Authority, North East Water	0.011
Coliban Region Water Authority, Bendigo Wastewater Treatment Plant	0.009
Toowoomba City Council, Wetalla WWTP (Stage 4)	0.009
North East Region Water Authority, North East Water	0.008
South Australian Water Corporation, Bird-In-Hand Wastewater Treatment Plant	0.007
Inverell Shire Council, Inverell Sewage Treatment Works	0.004
Goulburn Valley Region Water Authority, Kilmore Wastewater Treatment Plant	0.003
ACTEW Corporation, Lower Molonglo Water Quality Control Centre–Sewage Treatment	0.003
Orange Sewage Treatment Plant, Orange Sewage Treatment Plant	0.003
Queanbeyan City Council, Queanbeyan Sewage Treatment Plant	0.0003
<b>Total emissions from point sources (reporting facilities)</b>	<b>0.150</b>
<b>Total emissions from aggregated and point sources</b>	<b>12.500</b>

Aggregated emissions are not estimated every year. They are estimated for a particular period to provide information on the background emissions.

Maps created for the presentation of the NPI data

Aggregated emissions are not estimated every year. They are estimated for a particular period to provide information on the background emissions.

# National Pollutant Inventory contacts

Inquiries regarding emissions data on the National Pollutant Inventory should be directed to the relevant State or Territory Environment Protection Authority, as the State or Territory undertakes the collection of data from reporting facilities.

Questions relating to the database itself, or on major policy issues can be directed to the Commonwealth contact.

## The contact points for the NPI are:

### Commonwealth

NPI Section–Environment  
Australia  
GPO Box 787  
CANBERRA ACT 2601  
Phone: 1800 657 945  
Facsimile: (02) 6250 0365  
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### Australian Capital Territory

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Email:  
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### New South Wales

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### Northern Territory

National Pollutant Inventory  
Officer  
Environment and Heritage  
Division  
Department of Lands,  
Planning and Environment  
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### Tasmania

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