

SYDNEY PORTS CORPORATION

Environment Update 2003/2004



Our Commitment

We understand that the future success of Sydney Ports is dependent upon our continued protection of the fragile environments of Sydney Harbour and Botany Bay.

Botany Bay, with its mangroves, sand flats, beaches, estuaries and wetlands provides a habitat for a variety of native flora and fauna, as well as migratory birds.

Sydney Harbour is renowned as one of the most beautiful harbours in the world. Its rocky reef shelves, intertidal zones, kelp and seagrass beds all provide homes for an abundance of marine species.

Sydney Ports believes in being proactive about managing the environmental risks of our business. Our Corporate Vision supports this intention:

Sydney Ports' Vision is to be an internationally respected commercial port manager in all operational and environmental aspects, and to provide facilities to promote and support trade growth for the benefit of the New South Wales economy.

Further, our Environmental Policy commits Sydney Ports to:

- Protecting and preserving Sydney Harbour, Botany Bay and adjacent port land
- Complying with health, safety and environmental laws and take corrective action where deficiencies are detected.
- Minimising the environmental risk and impact of port development on the port and the surrounding community.
- Administering Dangerous Goods Regulations diligently to safely and efficiently handle dangerous cargoes

- Minimising the use of raw materials, toxic substances, energy, water and other resources and encourage other port users to adopt a similar policy.
- Maintaining 24-hour response capability and telephone reporting line for any incident within Sydney Harbour, Botany Bay and within three nautical miles of the coastline.
- Developing training programs to maintain a high level of environmental and safety awareness and emergency preparedness.
- Co-operating with regulatory authorities, contractors and port users to uphold our responsibilities.
- Setting strategies and implement actions to achieve continual improvement in our safety and environmental performance.

In addition, we have the legal responsibility to prosecute spill offenders responsible for ship-sourced pollution within the port.

Sydney's port users must also comply with Federal quarantine requirements relating to the discharge of ballast water; and NSW environmental and planning legislation, particularly the *Protection of the Environment Operations Act*, the *Environmental Planning and Assessment Act* and the *Marine Pollution Act*.

This brochure provides updated information on Sydney Ports' performance against our environmental management responsibilities during 2003/04. We encourage you to read this update in conjunction with our 2003/04 Annual Report, for a broader perspective of our performance across all business sectors.

This Update follows from the detailed Environment Report produced for 2002/03, which is available on Sydney Ports' website, www.sydneyports.com.au.

Sydney Ports welcomes your feedback on this Environment Update:
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Sustainable Trade

Sydney Ports Corporation is a progressive, dynamic organisation responsible for managing and developing key port facilities integral to the economic success of NSW.

As well as protecting the marine environment, Sydney Ports' key business responsibilities include port management and development, trade facilitation, navigational and operational safety needs.

Sydney's ports serve the nation's largest consumer market. With 99 per cent of Australia's international trade transported by sea, Sydney's ports are pivotal to Australia's economic future. Each year, Sydney's ports:

- contribute more than \$2.5 billion to the NSW economy
- handle over \$50 billion worth of international and domestic trade
- generate more than 17,000 jobs
- handle nearly one third of Australia's total containerised trade; and
- will handle increasing amounts of trade each year for at least the next 20 years.

During 2003/04, and for the first time, container trade through Sydney's ports peaked above 1.2 million TEUs (one TEU is equal to one twenty-foot long container), a 9.5% increase on 2002/03 and a 25% increase over the past two years. The total trade for Sydney's ports during 2003/04 saw:

- 25.1 million tonnes total cargo mass, an increase of 6.3% compared to 2002/03
- 10.9 million tonnes containerised cargo, an increase of 6.4%
- 14.2 million tonnes non-containerised cargo, an increase of 6.2%
- Total imports rise by 6%; and
- Total exports rise by 7.5%.

Some 2,408 cargo ships visited Sydney's ports in Sydney Harbour and Botany Bay during 2003/04. Charter boats, passenger liners, recreational vessels and ferries also use port waters.

Photo: The car carrier, Phoenix Leader, safely navigates its way to port facilities at Glebe Island



Environment Performance

Sydney Ports' environmental performance during 2003/04 – against our key environmental performance indicators - is shown below.

Indicator	Achieved	2003/04 Target	Comments
Regulatory Compliance			
<ul style="list-style-type: none"> Number of regulatory notices/actions taken against Sydney Ports 	Nil	Nil	During 2004/05, Sydney Ports will seek Environment Protection Authority (EPA) approval to handle bulk cargoes through White Bay port.
<ul style="list-style-type: none"> Number of EPA penalty actions taken against port customers 	Nil	Nil	A number of port users hold EPA licenses for cargo handling and storage. These licenses impose a range of monitoring requirements and performance standards which are regularly reviewed.
Incident Management & Response			
<ul style="list-style-type: none"> Noise complaints per 100 vessel visits at: Darling Harbour: 2 Glebe Island/White Bay: 28 Botany Bay: 1 		Baseline year*.	Noise complaints are monitored by Sydney Ports and investigated where feasible. During 2004/05, noise complaints from White Bay are expected to decrease due to the relocation of container vessel activity.
<ul style="list-style-type: none"> Number of pollution incidents generated from Sydney Ports' own activities 	Nil.	Nil	During 2003/04 Sydney Ports developed a process for conducting workplace inspections, to identify and prevent the occurrence of safety and environmental incidents.
<ul style="list-style-type: none"> Number of port-related pollution incidents per 100 vessel visits in: Sydney Harbour: 5.4 Botany Bay: 3.9 		0 0	Pollution from commercial vessels – although outside the control of Sydney Ports – is an important indicator of the sustainability of port operations. These incidents could include marine pollution, air emissions or littering.
<ul style="list-style-type: none"> Total annual number of marine pollution incidents attended by Sydney Ports. 	216	No target to be set ⁺ .	Sydney Ports has an important role in cleaning up marine pollution events, regardless of whether the pollution is sourced from port-related activities; or from land run-off, commercial or recreational vessels. During 2003/04 we invested some \$11 million in emergency response preparedness and equipment to prevent pollution and protect the marine environment.
<ul style="list-style-type: none"> Port-related water pollution incidents, as a percentage of total annual marine pollution reports[#] 	2%	0	Five of the above 216 incidents were thought to relate to port-generated marine pollution, which were primarily sourced from minor maintenance on berthed vessels.
<ul style="list-style-type: none"> Number of annual emergency response exercises 	2	2	These exercises ensure emergency response, environmental protection and safety measures are maintained at the highest level. They are undertaken in conjunction with port tenants, the NSW Police Service, NSW Fire Brigade and other emergency service organisations.

* 2003/04 was the first year that this indicator was established and hence no performance target has been set.

⁺ Sydney Ports is obliged to respond to all incidents of marine pollution.

[#] All reports of marine pollution received by Sydney Ports, from across Sydney Harbour and Botany Bay.

Environment Performance continued...

Indicator	Achieved	2003/04 Target	Comments
Monitoring & Regulatory Enforcement			
<ul style="list-style-type: none"> Safety audits conducted by Sydney Ports on all bulk oil, gas and chemical vessels. 	3,331 audits undertaken (target met)	All vessels audited.	These audits prevent safety and pollution incidents by ensuring State, national and international requirements are implemented.
<ul style="list-style-type: none"> Dangerous Goods audits conducted by Sydney Ports at container terminals 	586 audits undertaken at terminal facilities (target met)	Terminals audited as standard procedure.	Approximately 4 per cent of all containers carry dangerous goods. Sydney Ports audits check that these goods are managed in accordance with regulations. During 2003/04, Sydney Ports issued 169 penalty notices for infringements of dangerous goods requirements.
<ul style="list-style-type: none"> Inspections undertaken by Sydney Ports for all refuelling activities 	1,228 inspections completed (target met)	All refuelling inspected.	The inspections aim to ensure standard procedures are implemented to prevent water pollution from the refuelling of commercial vessels.
<ul style="list-style-type: none"> Percentage successful prosecutions, from annual cases determined 	100%	100%	During 2003/04, Sydney Ports launched no new prosecutions under the <i>Marine Pollution Act</i> ; and no penalty infringement notices were issued for marine pollution incidents. All cases which received judgement during 2003/04 (1) were determined in Sydney Ports' favour. As at 1 July 2004, 11 prosecutions previously launched by Sydney Ports remained pending.

Planning Ahead to 2004/05

2003/04 saw considerable effort put in to assessing the potential environmental impacts associated with the proposed expansion of Port Botany (see following pages). If the proposal is approved, then much of 2004/05 will be spent establishing environmental monitoring programs and ongoing consultation arrangements in preparation of the commencement of constructions works.

However, Sydney Ports has also identified other priority environmental impacts where we will take a leadership position. Given the importance of global climate change issues, a particular focus of Sydney Ports over the following year will be the management of port-related greenhouse gas emissions.

The proposed expansion itself forms a crucial step in Sydney Ports' strategy to reduce greenhouse gas emissions.

The EIS shows that by 2020-2025, the construction and operation of the proposed Port Botany expansion alone, without any changes to the existing freight rail system, is expected to produce approximately 505,000 tonnes per annum less greenhouse gas than the alternative of not expanding Port Botany and sending excess containers to another port and bringing them into Sydney by rail.

This amount of greenhouse gas is slightly more than the total emissions produced by all rail and sea transport in South Australia in 2001.

During 2004/05 Sydney Ports will also be investigating the use of biodiesel fuel in its marine response and other vessels, and will examine opportunities to offset the greenhouse emissions generated by its motor vehicle fleet.

Case Study: Port Botany Expansion Proposal

Sydney Ports believes that expanding Port Botany - given its proximity to the dominant Sydney market, access to a dedicated freight rail line, good road links and deep water channel - is the most efficient and environmentally favourable means of handling future container trade. It also means that the local economic benefits brought about by the port –estimated to be almost 30,000 jobs in 2025 - are protected; and the benefits to NSW – \$400 million in household income in 2025 – are consolidated.

Port Botany provides direct access to NSW's largest consumer market – Sydney. Forecasts show that the demand for this trade in containers is expected to treble over the next 20 years. However, Sydney currently does not have enough port capacity to handle this forecast level of container trade.

Shifting these containers to another port outside Sydney would not solve this problem. This is because around 85% of these containers would then need to be transported back into Sydney by road and/or rail. This will considerably increase the cost of the goods being transported; and will create significantly more environmental impacts and climate-change inducing greenhouse gas emissions.

The proposed expansion of Port Botany involves the reclamation of approximately 60 hectares of land to develop five new container berths and container terminal area, alongside the existing berths at Brotherson Dock and sheltered by the Parallel Runway. The Environmental Impact Statement (EIS) for this project was released in 2003/04, and contained the results of over 30 detailed studies into the environmental and social impacts of the proposal. Key aspects of the proposal and the EIS are summarised here.

Foreshore Beach and Local Parks

Integral to the EIS is our plan to protect and improve the Foreshore Beach corridor. The plan – developed with the aid of local community suggestions - includes:

- keeping the majority of Foreshore Beach open for the public, linking Sir Joseph Banks Park to the beach by a footbridge and bicycle overpass, and improving the existing beach and native vegetation buffer
- building a four-lane boat launching ramp and a car park for around 130 cars and boat trailers
- constructing a pedestrian/cycle path along Foreshore Road
- providing landscaping along Foreshore Road, and
- adding sand to, and re-contouring, Foreshore beach to improve its appearance and amenity.

Penrhyn Estuary

Extensive enhancement works are proposed for Penrhyn Estuary as part of the port expansion. This will involve:

- expanding saltmarshes, intertidal sand and mud flats which are important bird sanctuaries
- transplanting seagrasses affected by construction into specially-designed seagrass beds, which will be twice as big as the original habitat
- ensuring suitable tidal flushing and runoff water dispersal, and
- limiting pedestrian access, and preventing access by boat, into the Estuary to protect these important ecological areas.

Photo: Sydney Ports staff surveying Lady Robinsons Beach



Reclamation and Dredging

The proposal would require dredging of a small area (less than 1.5%) of Botany Bay. This would be limited to the area between the existing port and the Parallel Runway.

The EIS is clear that dredging of Botany Bay would not release groundwater contaminants into the Bay; nor will the proposed expansion increase the concentration of the groundwater contaminants (caused by other industrial activities) destined for the Penrhyn Estuary. Further, the existing groundwater pollution has not caused sediment contamination within the area of Botany Bay that would be dredged.

The EIS demonstrates that the proposed dredging and reclamation will not cause any noticeable change to either the southern or western coastline of Botany Bay. This is because the reclamation is 'sheltered' by the existing port and the Parallel Runway. Therefore, apart from Foreshore Beach, no beach or coastline within Botany Bay will be affected by the proposed port expansion.

Traffic

Sydney Ports' first priority is to manage the growth of the number of trucks accessing the port in the future by increasing the use of rail. At the moment trains handle around a fifth of all containers that pass through Port Botany. By 2011, the NSW Government aims to increase this to 40%.

This means that although the number of containers handled through Port Botany will triple over the next 20 years, there would only be a 60% increase in trucks visiting the port. In 2021, this would comprise less than 2% of the total (morning) peak hour traffic on the main

roads surrounding the port. Most truck traffic would be along Foreshore Road, bypassing local roads and residential areas. The design of the access road to the new terminal means that key sections of roads through residential and commercial areas such as Botany Road would not be a direct route for trucks travelling between the port and South Sydney or the Inner West.

Noise

The EIS demonstrates that the predicted noise levels from expanded port operations would not be noticeably different to the noise levels which would be experienced if the expansion did not go ahead. A four metre high noise barrier along the northern and eastern boundaries of the expanded port will help to shield the nearest residential areas from noise from the new port terminal.

Ongoing Monitoring

The design of the proposed port expansion, and the way in which it would be constructed, means that the likely effect on the environment has been kept to a minimum. However, Sydney Ports is committed to monitor the environment before, during and after construction of the proposed expansion. This monitoring will include assessing seagrass health; counting migratory birds; surveying beach erosion; measuring air and water quality, as well as noise and groundwater levels; and monitoring construction truck traffic. This monitoring would be documented as part of an overall Environmental Management and Monitoring Plan and will be reported on in future Environment Reports.

Case Study: Lady Robinsons Beach Restoration

A major project to stabilise and restore Lady Robinsons Beach between Kyeemagh and Monterey commenced in March 2004, following extensive community consultation and State Government approval. This work is being managed by Sydney Ports.

Complementing the successful restoration work at the southern end of the beach in 1997 (which won the 1998 NSW Case Earth Award on the merits of its environmental values) the project involves the pumping of 310,000 cubic metres of sand from a beach shoal to build up the northern beach zone.

The construction of five 100 metre rock groynes, the transplanting of 6,000 square metres of seagrass and an extensive landscaping program will further protect and enhance this area. Once completed, the western shore of Botany Bay will again be a continuous stable sandy beach over its entire seven kilometre length from Sandringham to Kyeemagh. Work is scheduled for completion in early 2005.

Sydney Ports Corporation and the Community

Consistent with its corporate vision, Sydney Ports supports and participates in many community activities. The aim of these activities is to provide opportunities for open dialogue with the community and further develop relationships with our key stakeholders.

We have been involved as a sponsor of a number of community events for several years including:

- Australia Day Celebrations, including the Sydney Ports Jazz on the Water Concert, Pyrmont Point Park
- The Balmain Art and Craft Show (fundraiser for the Father John Therry School, Balmain)
- Play for Playgrounds (fundraiser for Balmain and Rozelle primary schools)
- Australian National Maritime Museum Sydney – Working Harbour exhibition
- Australia Day Botany Bay Regatta
- Navigators Cup Race
- Air Services Australia Fire Fighting Unit in the NSW Police Games Yacht Racing Event
- Festival of Kurnell
- Village Voice Balmain and Rozelle Citizen of the Year Awards
- Sydney Harbour Week.

Sydney Ports takes a lead role in facilitating or participating in community committees including:

- Shell Gore Bay Community Consultative Committee
- Glebe Island and White Bay Noise Reference Committee
- Botany and Eastern Region Environment Protection Association
- Port Botany Neighbourhood Consultative Committee
- Liaison with local councils
- Coastal Management Committees.