



ANNUAL **REPORT**

NATIONAL PLAN
TO COMBAT POLLUTION
OF THE SEA BY OIL AND
OTHER NOXIOUS AND
HAZARDOUS SUBSTANCES

1999–2000



NATIONAL PLAN MANAGING AGENCY

**National Plan to Combat Pollution
of the Sea by Oil and other
Noxious and Hazardous Substances**

**ANNUAL REPORT
1999-2000**

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MISSION

**The purpose of the National Plan
is to maintain a national integrated
Government and industry
organisational framework capable
of effective response to pollution
incidents in the marine
environment and to manage
associated funding, equipment
and training programs to support
National Plan activities.**

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CHAIR'S FOREWORD

The National Plan maintained a high level of activity during 1999/2000. One of the National Plan's largest response operations was undertaken following the loss of an estimated 250-300 tonnes of cargo from the tanker Laura D'Amato at Sydney's Gore Bay terminal on 3 August. Oil recovery operations in Sydney Harbour continued until 14 August, and spot cleaning of foreshores until 20 August. An Incident Analysis Team found the response was effective and well executed, although there are areas where lessons can be learned and improvements made. The National Plan also responded to several minor incidents during the period.

A major undertaking completed during the period was the development of the Oil Spill Response Atlas (OSRA) for Australia. The development of OSRA followed the allocation of \$1 million from the Commonwealth's Natural Heritage Trust, Coasts and Clean Seas Program. The major outcome of this project was to produce a complete and uniform National Oil Spill Response Atlas for Australia in a computerised Geographic Information System (GIS).

Work continued on the introduction of the internationally recognised Oil Spill Response Incident Control System (OSRICS) as the National Plan response management system. Full implementation is expected by the end of 2001. The introduction of OSRICS requires changes to most National Plan contingency plans at national, regional and local levels.

A Review of the National Plan was completed during the period, and a report will be presented to the Australian Transport Council by the end of 2000. The Review demonstrated that the National Plan has some very clear operational strengths, and when called into action has worked well. However, the report makes several recommendations to improve the future effectiveness of the National Plan, including the introduction of more collaborative strategic decision-making by the major stakeholders, and underpinning the National Plan with a formal inter-governmental agreement.

The National Plan Advisory Committee (NPAC) held one regular session during the period, in Brisbane on 20 October 1999. At this session NPAC finalised Y2K contingency plans and agreed to the extension of the existing Fixed Wing Aerial Dispersant Spraying Contract until 2003.

On behalf of the National Plan Advisory Committee, I have much pleasure in submitting the Annual Report of the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances for the year ended 30 June 2000.



David Baird
Chair
National Plan Advisory Committee
September 2000

NATIONAL PLAN HIGHLIGHTS 1999-2000

NATIONAL PLAN REVIEW

- The planned 10-year review of the National Plan for 2003 was brought forward and commenced in 1999, with completion in April 2000. (page 8)

OIL POLLUTION INCIDENTS

- There was one major pollution incident during 1999/2000, the *Laura D'Amato* spill in Sydney Harbour in early August 1999. An estimated 250-300 tons of crude oil was spilled into Gore Bay. The clean up operation was successful. (page 11)

FINANCE

- National Plan income totalled \$4.3m. Expenditure increased by 13% to \$4.9m. (Page 8)

ENVIRONMENTAL AND SCIENTIFIC ISSUES

- The development of the Oil Spill Response Atlas (OSRA) for Australia was completed followed the allocation of \$1 million from the Commonwealth's Natural Heritage Trust, Coasts and Clean Seas Program. (page 17)
- Phase 1 of the Net Water Movement Project was completed and the Oil Spill Trajectory Model (OSTM) is in place for the National Plan, replacing the previous On Scene Spill Model (OSSM). (page 18)
- The 9th Environment and Scientific Coordinators (ESC) Workshop was held in Perth. (page 19)

ADMINISTRATION

NATIONAL PLAN 1999/2000 FINANCIAL POSITION

Financial statements reporting the cost of National Plan administration and operations are reviewed by KPMG and are included at Appendix 1.

The operating deficit of \$258,726 for the 1999-00 financial year was in line with the 'break even over time' policy set by Government. Revenue from the Protection of the Sea Levy provided the main source of funding for National Plan operations, which increased slightly this financial year, however, the Protection of the Sea Levy remained at 3.3 cents per tonne.

Total income received during the 1999-00 financial year increased by \$551,887 compared with the previous year. The increase in incident recoveries reflect the recovery of costs from two significant incidents, *Laura D'Amato* and Port Stanvac, in the 1999-2000 financial year.

National Plan expenditure increased by 13 percent from 1998/99, with total expenses of \$4,912,113.

As at 30 June 2000 the National Plan's total assets were \$8,092,935 compared with total liabilities of \$406,025. This places the National Plan in a sound financial position, with equity totalling \$7,686,909.

It should be noted that the National Plan has fully expended monies in trust for the development of the National Plan Oil Spill Response Atlas.

1999/2000 NATIONAL PLAN REVIEW

The National Plan was last comprehensively reviewed in 1993. Since then it has been generally agreed that the operational aspects of the Plan have worked well and met the expectations of all parties.

However, in late 1998 a number of issues were raised regarding the operation of the National Plan. The 1998 Thompson Clarke Shipping report on Port Reform and the National Plan raised a number of issues about the role of port authorities in the National Plan arrangements, particularly in view of the privatisation and corporatisation of ports in a number of jurisdictions. Several jurisdictions also

raised questions about the basis on which the National Plan is funded, specifically the relative financial contributions of the parties and the adequacy of the policy and decision making forums and the need for the formal agreement between the Government parties to the National Plan to set out their responsibilities and accountabilities.

In light of these issues, the Australian Transport Council agreed in early 1999 that the planned 10-year review of the National Plan in 2003 be brought forward and conducted during 1999/2000.

The Review was oversighted by a Steering Committee with an independent chairperson. The Steering Committee consisted of all States and the Northern Territory, AMSA, the Department of Transport and Regional Services, the Australian Institute of Petroleum, the Australian Shipping Federation, the Association of Australian Ports and Marine Authorities and the Great Barrier Reef Marine Park Authority. Secretariat support was provided by AMSA.

The Steering Committee completed its work in April 2000, and found that the National Plan has some very clear strengths, including:

- a history of generally willing and effective cooperation between key players from both government and industry;
- an informal network of experienced and committed individuals whose personal actions have helped to maintain a high level of response capacity in many locations;
- the generally well-regarded role played by AMSA as the 'competent national authority', particularly in providing advice and expertise in the context of exercises and incidents; and
- the considerable financial commitment to marine pollution preparedness presently made by the oil and large shipping industry.

When called into action, the National Plan has worked well and has provided both timely and effective response to actual pollution incidents.

ADMINISTRATION

However, the Steering Committee concluded that there is scope to enhance the future effectiveness of the National Plan by:

- introducing more collaborative strategic decision-making by the major stakeholders in the National Plan;
- underpinning the National Plan with a formal inter-governmental agreement;
- funding the National Plan more equitably by contributions from actual and potential polluters;
- clarifying the role of ports and other fixed installations that are potential sources of marine oil and chemical spills; and
- addressing a number of concerns identified during the review to improve the effectiveness of arrangements for responding to chemical spills.

The Steering Committee prepared a report containing 17 recommendations. The report is expected to be endorsed by the Australian

Transport Council by the end of 2000. It is anticipated the recommendations arising from the review will be implemented during 2001.

AUDIT

A number of inquiries and audits concerning the operation of the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances have been conducted since its inception. Information on audits conducted in previous years can be found in earlier National Plan annual reports.

In November 1999, a National Plan Asset Maintenance Review (Internal Audit) was conducted. This was a follow up to a previous audit to assess whether the maintenance of National Plan assets is appropriately managed and monitored. Three new recommendations arising from the November audit have been implemented.

OIL POLLUTION STATISTICS

THE OILSPILL DATABASE

Accurate statistical data required for oil spill response strategic planning provides a valuable resource to assist responding to an increasing number of queries from the media, interest groups and the general public. It also provides valuable input to Government projects such as the State of the Marine Environment Report and a measure of the effectiveness of the pollution prevention measures being progressively implemented. These statistics will be of value in the ongoing National Plan Review assessment of current and projected risk.

AMSA uses the following definitions in maintaining the database:

'Oil discharges' refers to any discharges or suspected operational discharges of oil from (a) vessel(s) in excess of the permitted discharge rate under MARPOL 73/78 (generally 15 parts per million oil in water).

'Oil spills' refers to accidental spills resulting from incidents such as groundings or collisions as well as spills during bunkering resulting from overflow of tanks, burst hoses, etc.

AMSA's OILSPILL database currently contains over 4700 records. Information is entered from the following sources:

- oil discharge reports received through AMSA's Search and Rescue Centre (AusSAR), which includes reports from aircraft (Coastwatch, RAAF and civil) as well as from vessels at sea;
- records of National Plan expenditure in responding to oil spills;
- monthly incident reports submitted by State/NT authorities; and
- other sources (eg Department of Industry, Science & Resources, industry).

At least 25 per cent of the reports received by AMSA are ultimately not entered onto the database. Reasons for not entering a reported pollution sighting include where the sighting is or is strongly suspected to be one of the following:

- land sourced, including tank farms, road tanker accidents, drains or road runoff after heavy rain

(unless National Plan response costs are incurred); or

- coral spawn or other marine algae or similar occurrence, taking into account the location of the report and the time of the year; or
- discoloured water with no sheen; or
- washings of coal dust from bulk carriers which have departed from a coal port; or
- discharge from a sewage outfall.

Reports of maritime incidents where there is no reported pollution are not entered unless there are preventative measures taken by a National Plan authority which incur costs.

While AMSA makes every effort to ensure the OILSPILL database is as complete as possible, the reliability and completeness of the data cannot be guaranteed, as only those incidents reported to AMSA can be included.

OIL POLLUTION STATISTICS 1995-1996 TO 1999-2000

Between 1995-1996 to 1999-2000 inclusive there were 1683 oil discharge sightings and oil spills reported. National Plan resources were involved in 75 of these incidents. Figure 1 shows the breakdown for each year.

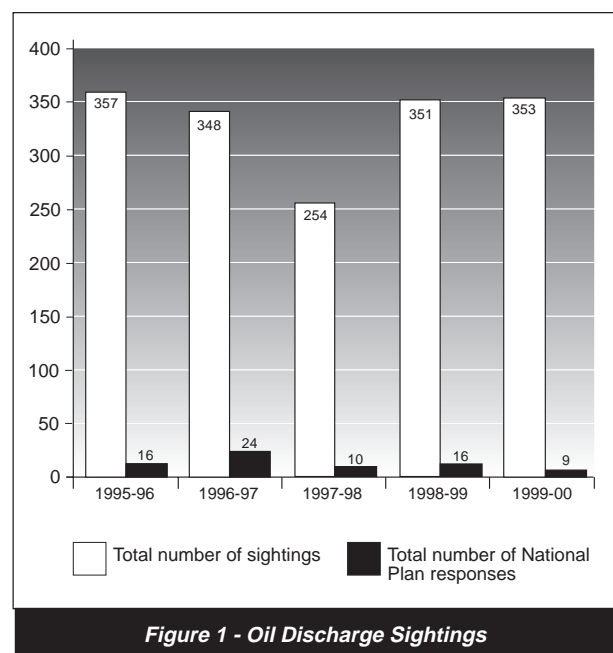


Figure 1 - Oil Discharge Sightings

OIL POLLUTION STATISTICS

OIL POLLUTION SOURCES

Figure 2 indicates the types of vessels from which discharges were reported during the five-year period. Where a vessel type is not identified, this generally means that a vessel has been seen from the air and cannot be classified.

The sources of 1195 sightings during the period were not identified, although the majority are assumed to be ship-sourced.

INCIDENTS IN AUSTRALIAN WATERS 1999-2000

Laura D'Amato, Sydney, NSW - 3 August 1999

On 3 August 1999 the Italian tanker *Laura D'Amato* released about 250 - 300 tonnes of light crude oil into Sydney Harbour near the Gore Bay oil terminal during cargo discharge operations. Following a request from the NSW Ports Corporation and Waterways Authority, AMSA officers travelled to Sydney to support the State authorities' response to this significant spill. This support included managing aspects of the clean-up, dissemination of information, preparation of environmental and scientific advice as well as the tracking of wider issues such as ship insurance and cost recovery. Oil spill staff from seven agencies Australia-wide were involved in the response.



Oil contained in booms in Sydney Harbour during the response to the spill from the *Laura D'Amato*.

Photo courtesy Robert Lea, Department of Transport, NSW.

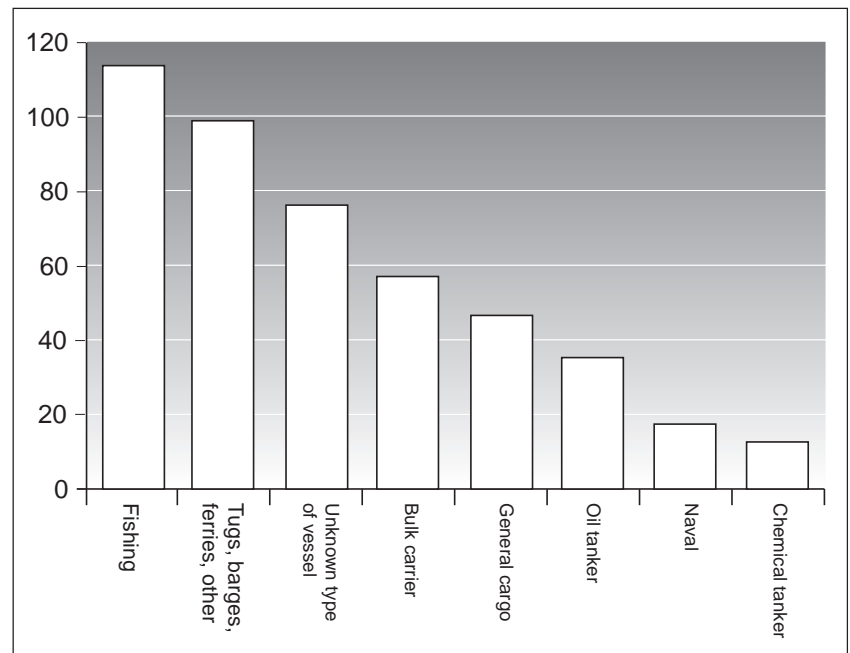


Figure 2 - Discharge Sources by Vessel Type

AMSA mobilised two Marco oil recovery vessels from Brisbane and one from Melbourne to complement the two National Plan units based in the Sydney area. Considerable assistance was provided by the RAAF, the oil industry, and marine and transport authorities from Queensland and Victoria. The successful recovery operation was aided by favourable weather which encouraged the evaporation of the spilt oil.

The Italian owners of the ship accepted liability for the spill and paid compensation for the clean-up and damage.

Overall, 530 people representing 32 organisations were involved in the response.

***Sylvan Arrow*, Wilsons Promontory, Victoria - 18 December 1999**

On 18 December 1999 the tanker *Sylvan Arrow* was sighted some three nautical miles off Wilsons Promontory, Victoria, trailing what appeared to be a 16 nautical mile long slick. A New Zealand naval vessel reported the sighting, collected samples of the oil spill and photographed the incident. No clean up action was required for this spill.

OIL POLLUTION STATISTICS

Additional evidence was obtained from the *Sylvan Arrow* when it arrived in New Caledonia on 24 December. Australian Federal Police and AMSA officers boarded the *Sylvan Arrow* on its return to Melbourne on 13 January 2000 and collected further evidence. A substantial brief was prepared and submitted to the Director of Public Prosecutions.

Consequently, the master was charged with two offences relating to the illegal discharge of oil in Australian waters and the owners were also charged. An initial hearing was held in May 2000, however the case has been deferred until late 2000.

Phillip Island, Victoria - 1 January 2000

Oil was found ashore on Phillip Island, Victoria, on 1 January 2000. State response personnel spent several days removing oil from surrounding beaches. The clean up task was aided by natural dispersion from the prevailing moderate sea and swell conditions.

Approximately two hundred penguins were impacted by the oil as were an undefined number of terns. A dozen penguins died as a result of oiling.

The initial assessment of the oil by Victorian State response personnel was that it was a bunker oil, possibly from a ship's bilge. The quantity was estimated to be less than one tonne.

The Marine Board of Victoria (MBV) sought the assistance of AMSA in identifying ships that were in the vicinity of the Phillip Island area at the time of the spill. AMSA further assisted by arranging for samples to be taken from suspect ships at both interstate and overseas ports.

Comparative analysis of samples continues to be undertaken by the Victorian EPA laboratory.

***Metaxata*, Ballina NSW - 16 December 1999**

On the morning of 16 December 1999 the tanker *Metaxata* advised the ship had lost a quantity of Naptha approximately 65 nautical miles east of Ballina, New South Wales. The vessel had departed from South Australia and was enroute to Japan. The master found that the likely cause was a hole in No 7 tank. The cargo was transferred and the tank hydrostatically balanced and stabilised. The initial report was a loss of 500 tonnes, however this was later revised to approximately 1400 tonnes and was understood to have been the result of a slow leak over an unknown period of time. The ship proceeded to Port Moresby where a temporary patch was applied to the hole prior to continuing the voyage to Japan. After discharge of cargo in Japan, the *Metaxata* sailed to Singapore where permanent repairs were made.

EQUIPMENT AND TRAINING

EQUIPMENT PROCUREMENT

Small Weir Skimmers

Two small weir skimmers complete with power units and pumps were purchased and are currently stored in AMSA's Central storage facility in Brisbane prior to dispatch to ports.

Recovered Oil Storage Tanks

A total of ten recovered oil storage tanks were purchased for the following ports:

Brisbane	1 (Brings holdings to two)
Port Adelaide	1 (Brings holdings to two)
Port Lincoln	1 (Brings holdings to two)
Thevenard	2
Western Port	2
Esperance	2
Mourilyan	1 (Brings holdings to two)

Towable Storage Bladders

Seven towable storage bladders were purchased for placement in AMSA's Central storage facility. The purchase comprised four 10 m³, two 16.3 m³ and one 25 m³ units.

The purchase brought the current holding of towable storage bladders to five 10m³, two 16.3 m³, four 25 m³ and two 50 m³ units. Of these, two 10 m³ and two 25 m³ units have been relocated to Fremantle with the remaining units located at the central holding in Brisbane.

Recovered Oil Transfer Pumps

Two recovered oil transfer pumps were purchased primarily for offloading towable oil storage bladders. The pumps are stored at AMSA's Central storage facility in Brisbane.

Helicopter Spray Bucket

A dispersant spray bucket was purchased for Darwin. This purchase has brought Darwin's holdings of dispersant buckets to two.

Oil Recovery Vessel

An 8.5 metre oil recovery vessel was built under contract in Brisbane. The unit has been placed at Mackay in view of its compatibility with similar units purchased by Queensland Transport. An earlier model of the oil recovery vessel was in turn relocated from Mackay to Dampier.

VESSEL REFURBISHMENT

In addition to the procurement of new equipment, the National Plan program of ongoing maintenance included the refurbishment of the following vessels.

Oil recovery vessel *Bravo* - Sydney

The *Bravo* underwent a major refurbishment including the replacement of the existing 70 HP two stroke outboard motors with new 75 HP four stroke outboards. The deck of the vessel was recoated with a non-slip surface and the aluminium hull polished and new signage added. Both the hydraulic and electrical systems were inspected and overhauled.

GRP oil spill response workboat *Chiton* - Townsville

The *Chiton* underwent a major refurbishment including replacement of deteriorated deck segments and re-coated with a non-slip surface. The vessel's hulls were stripped, repaired and repainted. Both engines were fully serviced and drive legs overhauled. The hydraulic and electrical systems were also inspected and overhauled during the refurbishment.

GRP oil spill response workboat *Turbo* - Gladstone

During the year the *Turbo* was fully repainted and signage replaced.

NATIONAL PLAN EQUIPMENT AUDITS

During the reporting period AMSA officers carried out audits of National Plan equipment held at:

- Devonport, Launceston, Hobart and Burnie in July, 1999;

EQUIPMENT AND TRAINING

- Dampier and Fremantle in September, 1999;
- Thursday Island, Christmas Island and Weipa in October, 1999;
- Groote Eylandt, Darwin and Gove in November, 1999;
- Yamba, Bowen, Mackay, Shute Harbour, Gladstone Port Alma, Bundaberg, Southport and Brisbane in March, 2000; and
- Port Hedland, Kwinana, Useless Loop, Port Walcott, Geraldton, Bunbury, Albany, Esperance, Sydney and Port Kembla in May, 2000.



An example of well stored National Plan booms as photographed during an audit in South Australia.

EQUIPMENT AVAILABILITY

National Plan Groups	Availability Percentage
Containment Equipment	96.3
Recovery Equipment	96.6
Dispersant application Equipment	96.9

IN-SITU DISPERSANT MONITORING EQUIPMENT

Two flow-through flurometers and accessories were purchased for use in in-situ dispersant monitoring during major incidents involving the aerial application of dispersant.

AERIAL DISPERSANT SPRAYING CAPABILITY

AMSA, as managers of the National Plan, and the Australian Institute of Petroleum (AIP), through the Australian Marine Oil Spill Centre (AMOSOC), has in place a Fixed Wing Aerial Dispersant Capability (FWADC) for the aerial application of oil spill dispersant. This capability is provided through a contract with Australian Maritime Resources (AMR) based in Adelaide.

The original contract period was for the provision of services for three years with the option to extend for an additional period up to three. The initial three-year contract was due to expire in January 2000.

After operational and financial reviews conducted by AMSA and AMOSC respectively, parties to the contract agreed to take up the three-year option. This was done in time for the option to be exercised from January 2000.

The FWADC was mobilised in response to the major oil spill at the Port Stanvac refinery in June 1999. Following a review of the incident by an analysis team it was agreed that procedures relating to aerial observation and aircraft control and co-ordination procedures were in need of revision to enhance response effectiveness. This work is being undertaken in the first instance by AMSA with the support of AMR. The FWADC Working Group will review the procedures on completion.

In July and November of the reporting period the FWADC was mobilised as part of State oil spill response exercises held at Mackay and near Port Campbell, Victoria.

Aircraft loading and familiarisation training for State and industry personnel was held at Mackay, Queensland (July) and at Tyabb and Ocean Grove, Victoria (March and May respectively).

AMSA carried out audits on all sub-contractors to ensure compliance with contractual arrangements and to allow exchange of information between parties. Audits were carried out at Tintinara, South Australia and Ballarat, Victoria in November, St George, Queensland and Scone, NSW in December and Emerald, Queensland in May.

As part of its management arrangements, AMSA also carries out unannounced audits. An unannounced audit of the Scone based subcontractor was carried out in early June 2000.

EQUIPMENT AND TRAINING

This audit required the sub-contractor to prepare as it would in response to a genuine incident. The audit confirmed that the sub-contractor was able to respond in accordance with the contract requirements and within nominated timeframes. The audit did, however, identify reporting issues that need to be addressed with AMR.

TRAINING

The National Plan training programme for 1999-2000 included the courses shown in table 1 below.

Introduction of the Oil Spill Response Incident Control System (OSRICS) continues to progress with a number of States conducting introductory courses. This system has now been incorporated as part of AMSA's National Plan training courses. State/NT and industry training providers are also incorporating OSRICS modules in their courses.

AMSA personnel continue to provide support at training courses held by State government and industry agencies.

The Australian Marine Oil Spill Centre (AMOSC) conducted 19 specific workshops for 243 personnel, as set out in table 2 below.

OVERSEAS ASSISTANCE

In November 1999, officers from AMSA and the Queensland Department of Transport attended the 2nd Regional Workshop on Marine Spill Response held in Apia, Samoa. The workshop was one of a series to improve environment protection in the Pacific region.

The purpose of AMSA's attendance was to support the workshop with an officer delivering several presentations and providing advice in the area of marine pollution response. The workshop also incorporated a meeting on the implementation of PACPLAN (Regional Response Plan) which Australia supports by virtue of the South Pacific Regional Environment Program (SPREP) and the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC).

Table 1
National Plan Training Courses conducted during 1999-2000.

Course	Location	Date	Number of Participants
Oil Spill Administration	Port Kembla	November 1999	17
Marine Pollution Controller Workshop	Geelong	August 1999	13
Oil Spill Management	Fremantle	September 1999	23
ESC Workshop	Cottesloe Beach, WA	February 2000	29
Oil Spill Management	Coolangatta	April 2000	24

Table 2
Training Programs Conducted by AMOSC during 1999-2000.

Course	Date	Number of Participants
Management Overview	September 1999	5
Response	November 1999	17
	March 1999	19
	June 2000	18
Operators	July 1999	5
	October 1999	10
	May 2000	13
Shoreline Cleanup	August 1999	7
Client specific programs (11)		149

EQUIPMENT AND TRAINING

INTERNATIONAL TRAINING

As part of the Government Sector Linkages Program between Australia and Indonesia, five Indonesian officers from the Indonesian Coast Guard and Directorate General of Sea Communication were provided with two weeks familiarisation training with AMSA.

The first week was mainly spent in Canberra where the officers were provided an overview of activities undertaken by AMSA's Environment Protection Group and Environment Protection Standards unit. The opportunity was also taken for officers from other sections of AMSA to explain the workings of their particular groups. The

officers also visited the Australian Marine Oil Spill Centre at Geelong to inspect Centre facilities and be briefed on its role.

During the second week the Indonesian officers visited Brisbane to familiarise themselves with Queensland Transport's and Port of Brisbane Corporation's oil spill response operations, travelling to Southport on completion. For the remainder of the week they participated in an Oil Spill Management Course convened at Southport by AMSA. The visiting officers returned to Indonesia on completion of the course. All officers commented favourably on the fortnight's activities.

ENVIRONMENTAL AND SCIENTIFIC ISSUES

OIL SPILL RESPONSE ATLAS

The Federal Government announced in late 1998 that under its 'Coast and Clean Seas' initiative as part of the Natural Heritage Trust (NHT), \$1 million would be provided to AMSA for the fast tracking, integration and expansion of a National Oil Spill Response Atlas (OSRA).

The major outcome of this NHT funded project has been to produce a uniform National Oil Spill Response Atlas for Australia in a computerised Geographic Information System format that will be able to be conveniently accessed and operated by spill response organisations, planning, clean up teams, environmental and wildlife agencies.

The project was substantively completed on December 31, 1999 and is in operation on PC based ArcView GIS systems in all Australian States and Territories. The main aims of the project were to:

- develop a mutually agreed national specification for the proposed atlas to assure consistency and comparability;
- fast track the collation, capture and conversion of all relevant geographical and textual data into a standard digital GIS format for the majority of Australia's maritime and coastal environments (particularly for highly sensitive environments); and
- integrate diverse environmental atlases Australia wide to create a uniform and National GIS structure for use during maritime oil and chemical spill incidents, with the capability of linking to other systems, spill trajectory models and equipment /resource databases.

The NHT phase of the project was to ensure all World Heritage Areas, marine parks and particularly environmentally sensitive marine and coastal areas/regions of Australia are covered as far as practical in the atlas, as well as areas designated as high risk for oil spills under the National Plan.

The project comprised two distinct phases:

Phase 1 - Review of existing data sets nationally and the development of the OSRA Data Specification and data acquisition program for each State/NT; and

Phase 2 - National data acquisition program and a customised OSRA application 'front end' to quickly generate a range of user friendly information products identified in Phase 1.

The OSRA project now provides Australian spill response organisations with vital environmental, wildlife and logistical information in a direct and easily managed form to allow a more efficient and effective response to oil and hazardous chemical spills at sea and in coastal regions.

OSRA datasets include:

- Biological, environmental and wildlife resources present Australia wide;
- Geomorphological mapping and shoreline sensitivity to oil spills;
- Human-use resource considerations;
- Satellite imagery and selected scanned photography;
- Nautical and topographical charts; and
- Logistical and infrastructure information to support a spill response.



Figure 3 - Example of OSRA output for Hinchinbrook region of Queensland

The OSRA project through States/NT agencies will be providing non-strategic environmental layers for distribution through the Australian Coastal Atlas (ACA) State/NT nodes provided by the Environmental Resource Information Network (ERIN). The completed computerised Atlas will be primarily of benefit to the spill response community but will be of benefit to the whole Australian community through linkages with ERIN and the Australian Coastal Atlas program.

ENVIRONMENTAL AND SCIENTIFIC ISSUES

OIL SPILL TRAJECTORY MODELLING

In near-shore marine environments the tracking of oil spills, which are likely to impact the shoreline, is of prime importance in the effective deployment of oil spill response personnel and equipment to protect environmentally sensitive areas and in clean-up planning.

Over past few years, and in conjunction with AMSA's Australian Search & Rescue unit (AusSAR), the National Plan has developed a joint Search and Rescue/Oil Spill Trajectory Model (SAR/OSTM) technical specification. The specification system provides for the provision of near real time meteorological and oceanographic data as well as drift and trajectory modelling capabilities for Australian waters. The project is called the Net Water Movement project and was split into two main phases incorporating several major software developments in meteorological and oceanographic (metocean) modelling.

Phase 1 of the project has been completed and the OSTM system is in place for the National Plan. This system now provides state-of-the-art modelling of water movement (hydrodynamics) in the coastal continental shelf region of Australia not affected by ocean circulation currents as well as the trajectory modelling oil spills.

Phase 2 of the OSTM/Net Water Movement project which will incorporate the automatic feeding of metocean data from the Bureau of Meteorology's systems to the AMSA computer network is scheduled for completion by early 2001.

The OSTM model provides the:

- Prediction of weathering and surface/sub surface transport of oil slicks;
- Prediction of the probability of key coastal/marine areas being impacted from a given site;
- Backtracking of the model to determine the likely spill site position;
- Updating of predictions with overflight data at spill scene;
- Incorporation of boom-oil interaction;
- Plotting of spill dispersant application zones;

- Performing risk assessments for important shorelines and environmental resources; and
- Use of the Automated Data Inquiry for Oil Spills (ADIOS) database of nearly 1,000 oils for weathering calculations and also the incorporation of chemical/physical properties of oils produced and imported into Australia.

Figure 4, a typical screen output from the OILMAP software, is shown for a scenario in the Spencer Gulf near Port Lincoln of a spill of a medium grade crude oil over a 24 hour period. The system allows animation of the spill trajectory and display of prevailing/predicted winds, oil weathering and fate, and shows oil/shoreline impact.



Figure 4 - Spill Trajectory output from OILMAP showing area swept by oil and shoreline impacts, wind direction and oil fate for a hypothetical spill scenario in Spencer Gulf, SA.

NATIONAL PLAN R&D PROJECTS

During 1999-2000 a contract was negotiated with Sydney University Centre for Research on Ecological Impacts to undertake a project - "Research into the Use and Application of Biodegradable and Nutrient Enriched Oil Spill Sorbents in Sensitive and Remote Oiled Foreshores". The main deliverable of phase 1 of this project is an independent review of the current scientific literature on the use of such sorbents in oil spills worldwide. With a final detailed report being provided to the National Plan Research, Development and Technology (NPRDT) Committee and AMSA on the use of biodegradable and nutrient enriched oil spill sorbents.

ENVIRONMENTAL AND SCIENTIFIC ISSUES

ENVIRONMENTAL AND SCIENTIFIC COORDINATORS WORKSHOP

The National Plan, with assistance from Environment Australia, funded the 9th Environmental and Scientific Coordinators (ESC) Workshop in Cottesloe Beach, WA in February 2000.

ESCs from all States and Territories attended the workshop as well as representatives from the oil and shipping industries.

Topics covered at the 9th Workshop included:

- State/NT/industry reports of incidents and exercises;
- National Plan Review;
- Chemplan Update;

- Shoreline Clean up Evaluation System;
- Incident Control System (ICS)/Oil Spill Response Incident Control System (OSRICS);
- Dispersant use and monitoring;
- Indemnities Against Oil Spill and Cost Recovery;
- Implications of the Size of Oil Spills to Response Planning;
- Use of Thermal Imagery for Monitoring Oil Spills; and
- Oil Spill Response Atlas (OSRA)/Oil Spill Trajectory Modelling (OSTM) awareness training.

Six formal recommendations were agreed at the workshop, mostly related to developing the professional capacity of the ESCs.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

VICTORIA



SIGNIFICANT INCIDENTS

There were no major spills in Victoria during the reporting period.

There were 96 minor marine pollution incidents reported throughout the State. It was established that 23 spills originated from vessels, although in many cases, the offending vessel could not be identified. A further 19 spills originated from land with oil being carried into the marine environment by drains or other means. In the other 54 cases, the source was not determined and a further 18 cases did not involve oil.

Clean up action was necessary in 52 of these incidents. Included in the 96 incidents, there were two spills of significance. These were:

- Discharge of oil or an oily mixture in Bass Strait off Phillip Island, which had a considerable effect on the local penguin colony. In excess of 200 penguins were hospitalised with at least 12 fatalities. A shoreline cleanup of the area around Phillip Island Nature Park was required over several days.
- A diesel spill of approximately 1000 litres from a wave-piercing catamaran at Station Pier. The spill resulted from bunkering operations from a road tanker when a blanking cap was left off a crossover line. The diesel was boomed off and recovered by absorbents.

LOCAL TRAINING

During the year over two hundred personnel from a wide variety of agencies have undergone training. Courses included oil spill response management, foreshore cleanup strategies, administrative support and equipment operation. Additionally, the Marine Board funded two fixed wing aircraft dispersant loading courses conducted by AMSA and AMR at Tyabb and Barwon Heads respectively.

EXERCISES

A major State plan exercise was conducted in November 1999. The scenario involved structural damage to a tanker off Warrnambool that resulted in the discharge of up to 5000 tonnes of crude oil. The State Plan was activated together with the Portland region.

OSRA - OIL SPILL RESPONSE ATLAS

Substantial enhancement of Oil Spill Response Atlas for the State's coastline was completed during the year with grants from the Natural Heritage Trust fund. The Marine and Fresh Water Institute (MAFRI) at Queenscliff were involved in this work.

NEW SOUTH WALES



SIGNIFICANT INCIDENTS

On the evening of the 3 August 1999, the Italian registered oil tanker, *Laura D'Amato*, lost approximately 250-300 tonnes of Murban crude oil into Sydney Harbour. The spill occurred while the ship was berthed at the Shell Terminal at Gore Bay. The spill came from two valves on the side of the ship, under the water, which were fixed in the open position.

The spill occurred at night, so it was not possible for emergency response team to immediately assess the full extent of the spill. Sydney Ports Corporation is the agency charged with leading the response to this type of spill.

More than 500 people from 30 organisations were involved in the clean up.

Within six days the bulk of the floating oil had been recovered and the *Laura D'Amato* checked, cleaned and cleared to leave.

Before departure, Sydney Ports Corporation secured from the vessel's insurers a bond of \$8 million against possible cost of clean up and fines.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

The shoreline clean up continued for several weeks. As Sydney was entering the season of high spring tides, clean up crews were kept on alert for further oil that may have washed from wharves or rocky shores and batters.

Sydney Ports Corporation mounted a prosecution of the vessel owner, Master and Chief Officer under the *Marine Pollution Act, 1987*.

In December 1999, the Captain, Chief Officer and owners of the *Laura D'Amato*, Fratelli D'Amato, pleaded guilty to breaches of the *Marine Pollution Act, 1987* in relation to the incident. On 16 March 2000 Justice Talbot, in the NSW Land and Environment Court, fined the vessel owner \$510000 and the Chief Officer \$110000. The offence was proved against the Captain, but the charge was dismissed under section 556a of the *Crimes Act 1900*, and he was not fined.

During the case the court was told costs and expenses totalling \$4.5 million associated with the clean up had been met by the owners insurers.

LOCAL TRAINING

During May the NSW Department of Transport (DOT) developed and presented two courses following recommendations from the State's Technical Working Group. The first was an information day on oil spills for twelve media officers of key government and oil industry agencies. The purpose of developing this course was to give media officers a fuller appreciation of the issues that face the combat agency during response operations. The information day was held on 25 May 2000 and key topics discussed included the following:

- National Plan arrangements and incident management;
- Oil spill response options and limitations;
- Media issues/lessons learned from previous spills around Australia;
- The *Laura D'Amato* experience and media officer preparedness; and
- The Public Information Plan under the NSW Disaster Plan.

The second course presented was a practical workshop in the use of the upgraded NSW Oil Spill Response Atlas. This course, held on 30 May 2000, was attended by six personnel from the three port corporations (Newcastle, Sydney and Port Kembla), the Environment Protection Authority and the National Parks & Wildlife Service and included both theory and practical exercises.

Newcastle Port Corporation (NPC) held an Oil Spill Response Course from 17 - 19 May which incorporated a half-day equipment deployment exercise. Port Kembla Port Corporation (PKPC) conducted a training course on the OSRICS in Port Kembla on 14 March while Caltex, at the Kurnell Refinery, held an equipment maintenance day for 17 oil spill response crew. Sydney Ports Corporation conducted an in-house training program that consists of 10 different modules of differing levels designed specifically for its work-group teams.

EQUIPMENT ACQUISITION

Sydney Ports Corporation procured 1800 metres of GP 500 fence boom and four brush skimmers during this time.

EXERCISES

As part of the District Contingency Planning Program a number and range of exercise were held throughout the coastal region.

A table-top exercise was conducted in October in Tweed Heads to activate and test the Northern Rivers Oil Spill Contingency Plan and a table-top and equipment deployment exercise was held in May to test the NPC Oil Spill Countermeasure Arrangements and Resources plan.

The NPC Operations Manager was an umpire for the, Queensland National Plan State Committee Oil Spill Response Exercise 'Cumberland' held in Mackay in July. Exercise 'Rolands', a Tier 2 equipment deployment exercise, was held in Newcastle in March in conjunction with Sydney Ports Corporation and foreshore assessment and clean up exercises were conducted in Newcastle in September and Port Macquarie in April.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

An Incident Control Centre desktop exercise of the Port Kembla Marine Oil and Chemical Spill Contingency Plan was held on 9 May and another was held to test the Twofold Bay Marine Oil and Chemical Spill Contingency Plan on 21 June. An equipment deployment exercise was held in Port Kembla on 18 January and the Corporation's Operations Coordinator is on the National Plan Exercise Writing Team for Exercise 2000.

On 20 October SPC held a major chemical emergency exercise to test the Port Botany Emergency Plan and on 16 November the local Disaster Plan was exercised with a major oil and chemical emergency at the Caltex Kurnell Refinery. Activation of the Marine Disaster Plan and the City of Sydney Disaster Plan was tested with an hypothetical incident on a chemical tanker at berth in the Sydney CBD on 15 December.

The Caltex Refinery at Kurnell carried out a number of exercises. In September a field deployment exercise was held, based on spill from the fixed berth, involving 260m of boom and two workboats. Another in November was based on a spill from the submarine berth and involved 500m of deep water boom using magnetic attachment to a tanker and three boats. Finally in March a field exercise based on oil loss from the cooling water return to Botany Bay during which boom was deployed around the cooling water return and deflection boom deployed at Quibray Bay.

NEW OR UPDATED CONTINGENCY PLANS

The NSW Marine, Oil Spill Contingency Plan was redrafted to include the Oil Spill Response Incident Control System (OSRICS). All District level contingency plans were redrafted to incorporate chemical spill arrangements and the OSRICS. Of these plans, those covering the south coast have been distributed and the plans covering the north coast are in final draft.

Shell re-issued their contingency plan for the Gore Bay oil terminal at the end of July.

COASTAL RESOURCE ATLAS

The NSW Coastal Resource Atlas underwent a major upgrade during the year with funding provided from the Commonwealth's Natural Heritage Trust. The new *NSW Oil Spill Response Atlas (OSRA)* has a significant amount of new information in it and is held by the three port corporations, the Department of Transport, Environment Protection Authority and National Parks and Wildlife Service.

SOUTH AUSTRALIA



SIGNIFICANT INCIDENTS

There were no significant oil pollution incidents in South Australian waters during this period.

LOCAL TRAINING

A total of 48 personnel attended three Shoreline Cleanup Workshops conducted during the period, two in Adelaide and one in Mount Gambier. A total of 38 personnel attended two Equipment Operator workshops, one in Adelaide and one in Port Lincoln.

EQUIPMENT AQUISITION

A five tonne canflex storage tank was provided by AMSA and stored in Port Adelaide. The following equipment was purchased by the Department of Transport and located in Port Adelaide:

- 2 GPS, portable fitted with differential units.
- Sat phone coms package.
- 8 x VHF hand held phones.
- 1 x 6.5 metre response/survey/marine safety vessel.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

EXERCISES

A successful exercise was held in Port Lincoln following the Equipment Operator's in November. The exercise was carried out on deployment of booms, using booms effectively and the use of skimmers and pumps. The two main outcomes from the exercise were:

- The need to train a core set of people from various regions, in addition to the basic operator's course; and
- Exercises need to be held in the Whyalla region to familiarise Marine Group staff as well as local industry people with the deployment of equipment. Such an exercise is planned for the 2000/2001 financial year.

NEW OR UPDATED CONTINGENCY PLANS

The South Australian Marine Pollution Contingency Action Plan (SAMSCAP) is in the process of being updated.

PROSECUTIONS

A prosecution in respect of the Port Stanvac spill in June 1999 is being carried out under the Pollution of Waters by Oil and Noxious Substances Act and the Environmental Protection Act. An incident involving the discharge of heavy fuel oil in the Gulf of St Vincent is also being investigated with a view to prosecution.

TASMANIA



SIGNIFICANT INCIDENTS

There were no significant oil pollution incidents in Tasmanian waters during the period.

On 22 March 2000, the vessel *Bunga Teratai Dua* collided with a wharf at Burnie during berthing operations, however no oil was spilled.

On 30 April 2000, the tanker *AI-Deerah* grounded at Garden Island in the Tamar River. The vessel

was loaded with refined petroleum products (30,000 tonnes total). Some ballast tanks were holed, however there was no oil spill. The vessel had a double hull and only the outer hull was damaged.

LOCAL TRAINING

Training courses run by the Department of Primary Industries, Water and Environment during this period were:

- Equipment Operator, Devonport - November 1999 (18 participants);
- Shoreline Clean Up, Hobart - October 1999 (19 participants);
- Equipment Operator Refresher, Devonport - April 2000 and Bell Bay - May 2000 (12 participants);
- OSRICS Training, Hobart - December 1999 and March 2000, Devonport - December 1999 (24 participants); and
- Media Training, Hobart - September 1999 (8 participants).



Deploying a boom during the Equipment Operators Course in Devonport, Tasmania, November 1999. Photo courtesy John Dobson, Department of Primary Industries, Water and Environment, Tasmania.

ADMINISTRATIVE CHANGES TO STATE RESPONSE ARRANGEMENTS

Dr Frank Cattell, Manager Environmental Operations, Environment Planning Scientific Services Division in the Department of Primary industries, Water and Environment is now the alternate chairperson of the statutory State Marine Pollution Committee.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

EQUIPMENT ACQUISITIONS

The following additional National Plan equipment was allocated to Tasmania during this period:

- A dispersant transfer pump for each of the two helicopter spray buckets located at Devonport and Hobart.
- 5000 litres of dispersant for helicopter application located at Hobart.

NEW OR UPDATED CONTINGENCY PLANS

Tasmania proposes to update its contingency plans once the role of the ports is confirmed.

PROSECUTIONS

Two Environmental Infringement Notices were issued under the *Environmental Management and Pollution Control Act 1994* and both imposed a \$500 fine (the maximum penalty which can be imposed by an Environmental Infringement Notice).

One notice was issued on the master of the Antarctic resupply vessel *L' Astrolabe* as a result of a spill of 300 litres of diesel fuel during bunkering operations in Hobart. The other was issued on the owner of a vessel on a slipway at Coles Bay for the discharge of diesel fuel.

QUEENSLAND



SIGNIFICANT INCIDENTS

While no significant incidents occurred in Queensland or Great Barrier Reef waters during the year, fifty-eight (58) minor incidents were reported to authorities and all were responded to in an appropriate manner.

LOCAL TRAINING

In total, five hundred and ninety-four (594) people attended one or more of the twenty-seven (27) oil spill response courses delivered by Queensland Transport during the year. Courses offered

included a number of Equipment Operator, Shoreline Cleanup, Administrative Support, Investigations and OSRICS Transition workshops and these were conducted in the ports of Brisbane, Bundaberg, Gladstone, Mackay, Townsville, Cairns, Thursday Island and Weipa from September 1999 to May 2000. Queensland Transport also assisted with delivery of an AMSA Oil Spill Management Course on the Gold Coast in April 2000.

ADMINISTRATIVE CHANGES TO STATE RESPONSE ARRANGEMENTS

A Memorandum of Understanding (MOU) between Queensland Transport and the Environmental Protection Agency (EPA) concerning response to land sourced oil spills impacting Queensland coastal waters was endorsed by the Directors General of both Departments in January 2000.

Two key components of the MOU are:

- Queensland Transport has agreed to respond to oil pollution from,
 - (a) initially unknown sources; and
 - (b) from land based sources into Queensland coastal waters.
- EPA has agreed to reimburse Queensland Transport for the costs of oil spill response and cleanup where the pollution is determined to be from land based sources from non-devolved environmentally relevant activities.



National Plan equipment being deployed by trainees during the practical segment of an Equipment Operators Workshop at Bundaberg in April 2000.

Photo courtesy John Wright, Department of Transport, Queensland.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

The spirit of cooperation fostered by this MOU will further enhance the cost-effective management of oil spill response activities in Queensland.

NEW OR UPDATED CONTINGENCY PLANS

Oil spill contingency plans for the ports of Gladstone, Cairns and Weipa were updated during the year.

EXERCISES

Two major desktop exercises were conducted in Queensland. Exercise "Cumberland", based on a spill of 150 tonnes of fuel oil in waters offshore from Mackay was conducted on 28 July 1999. The exercise was successful in testing state and national activation procedures.

A second major exercise, Exercise "Brisbane", was held on 30 November 1999. The exercise was designed to test lines of communication as well as operational plans and procedures for the port of Brisbane.

SUCCESSFUL PROSECUTIONS

During the year Queensland Transport was successful in prosecuting the owners of three vessels and the master of another in relation to oil spills that had previously occurred within Queensland coastal waters.

The owners of the *Trinity Bay 11*, Sea Swift Pty Ltd, received a fine of \$30,000 plus costs of \$3378 in relation to a spill of 700 litres of fuel oil at Cairns in August 1998. The company had previously paid \$20553 in clean up costs following the incident.

In another case involving the oil product tanker *Palmerston* the owners received a fine of \$25000 plus costs of \$2713 in relation to a discharge of 3000 litres of lubricating oil stock into the Brisbane River in August 1998. The company had previously paid cleanup costs of \$28487 following the incident.

A particularly significant prosecution followed a discharge of between 160 and 200 litres of hydraulic oil from the fishing vessel *Rexandra* into Mooloolaba Boat Harbour in April 1998. The

owners of the vessel, Aquapalm Pty Ltd, who had previously paid \$4460 in cleanup costs, were fined \$20000 and ordered to pay costs of \$1760 in relation to the incident.

A lesser penalty of \$2000, in addition to court costs of \$1390, was imposed on the master of the fishing vessel *Wavedancer 11* following a spill of between 200 and 300 litres of diesel fuel at Mackay in September 1999. The master had previously paid cleanup costs of \$3892 and a number of mitigating circumstances were taken into account by the court in handing down the penalty.

WESTERN AUSTRALIA



SIGNIFICANT INCIDENTS

During 1999-2000 there were a total of 41 reported incidents of marine oil pollution. Most were minor discharges with the amount spilt being less than 300 litres.

There were four incidents which resulted in a significant amount of oil entering the marine environment.

- July 1999. Approximately 25 cubic metres of light crude oil was spilled from a subsea pipe line at Varanus Island when a valve was broken off when the submarine hose was being lifted onto a tanker. No response was required other than monitoring. A full investigation was undertaken.
- October 1999. A malfunction in a fuel line at the HMAS Stirling naval base was caused by a faulty valve. The resultant leak caused approximately 4 tonnes of F76 diesel to be spilled into the service tunnel with 2 tons entering the water. This was contained and recovered with suction pumps.
- October 1999. Approximately 60 tonnes of diesel fuel was spilled from the Goodwin Platform on the North West Shelf. The resultant which

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

dispersed naturally and was assisted with propeller agitation. Monitoring of the slick was carried out over a two day period.

- January 2000. A pipe failure on board the *Mermaid Arrow* resulted in 1300 litres of oil being discharged overboard at the East Spar field, approximately 100kms North of Onslow. The oil dispersed naturally and there was no response required.

LOCAL TRAINING

During the period the Department of Transport conducted eight Equipment Operators courses, four Foreshore Cleanup courses and four OSRICS familiarisation courses. A total of 125 personnel attended these courses. In addition, an Oil Spill Management Course was conducted in Perth by AMSA with the total of 25 attendees from both Western Australia and interstate.

AMOSC conducted a Oil Spill Response course at Cottesloe on behalf of Mobil. This course had 24 participants.

The Department of Transport held a workshop for ports and Port Authorities in Fremantle to introduce representatives to the draft new State Plan and the concept of reducing port plans by calling up the State Plan. This was well supported and received.

A very successful ESC workshop was held in Western Australia during February 2000.

ADMINISTRATIVE CHANGES TO STATE RESPONSE ARRANGEMENTS

The National Plan State Committee has been restructured in accordance with the recommendations of the review of oil pollution arrangements in Western Australia undertaken during 1999.

The Executive Director of Transport is the new State Chair, the committee now comprises representatives from Emergency Management, Port Authorities, Department of Minerals and Energy Petroleum Division, AMSA and an Industry representative all at Director or higher

level. The intention is to provide a more strategic approach to oil pollution arrangements within the State.

The former Technical Advisory Committee is now known as the Executive Response Group. It has two additional members, a representative from the WA Municipality Association representing local government and one from Worksafe WA. The coordinator of this group will serve as Executive Officer to the State Committee.

Within Transport an Environment Protection Unit is being put in place, it is envisaged that it will be composed of a manager, a person whose principle responsibility is the equipment and one who will be mainly involved in training. Managers and other staff within Transport have received appropriate levels of training in oil pollution in order to broaden the number of people who could respond in a crisis.

During this period the Transport administration unit in conjunction with the Dampier Port Authority and a consultant developed check lists, paperwork and operating systems for use during marine oil pollution incidents. They have been incorporated into the State Plan and it is hoped they will be widely adopted. It is intended to encourage their use during training and exercises in the future.

EQUIPMENT ACQUISITION

Western Australia acquired several new items of response equipment during the year all of which were supplied under the National Plan.

EXERCISES

Three desktop exercises were held in the Dampier-Karratha and Port Walcott area. Two exercises 'Sherwood' and 'Elsie Creek' were held in conjunction with the Dampier Port Authority. Exercise 'Sloppy Joe' was held in conjunction with Robe River Mining Co Pty Ltd. This was the first exercise of this type to be run in conjunction with a privately operated port.

ACTIVITIES IN STATES AND THE NORTHERN TERRITORY

NEW OR UPDATED CONTINGENCY PLANS

The Western Australian Marine Oil Pollution Emergency Management Plan was completely re-written and issued in May. It incorporates the new arrangements within Transport Marine Safety and the OSRICS system. A decision was made to include reference material and a generic paperwork system and checklists in the plan. The intention is to reduce the need for this type of material in port and terminal plans. The State Plan has been fully integrated into the Western Australian Emergency Management arrangements for the first time. A Transport contingency plan has also been prepared and will be distributed during July 2000.

AUDIT

AMSA personnel conducted National Plan equipment audits at Port Hedland, Port Walcott, Useless Loop, Geraldton, Kwinana, Bunbury, Albany and Esperance.

The equipment was found to be satisfactory with only minor deficiencies reported.

NORTHERN TERRITORY



SIGNIFICANT INCIDENTS

There were no major spills in the Northern Territory during the reporting period.

LOCAL TRAINING

An Equipment Operator's Course was held in Darwin. The course was run by AMSA with assistance provided by the Darwin Port Corporation and the Department of Transport and Works.

ADMINISTRATIVE CHANGES TO NORTHERN TERRITORY RESPONSE ARRANGEMENTS

Mr David Rolland, Deputy Secretary of Transport & Works, replaced Mr Chris Bigg as the State Marine Pollution Controller.

EQUIPMENT ACQUISITION

The Port Corporation has purchased and equipped two fully enclosed oil spill trailers. One is located at Fort Hill Wharf and the other at the new East Arm Port facility. Woodside has installed a container of oil spill response equipment on East Arm Wharf and has given the Darwin Port Corporation approval to use the equipment at any time.

EXERCISES

The Darwin Port Corporation held an oil spill exercise prior to the operation of its new East Arm Port facility. The exercise involved AMSA, NT Government Agencies, NABALCO and Groote Eylandt personnel.

NEW OR UPDATED CONTINGENCY PLANS

The Darwin Port Corporation has funding to update its contingency plan. This will be done in conjunction with a revision of the Northern Territory Plan to be carried out by the Department of Transport & Works (Marine Branch).

FINANCIAL STATEMENTS



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INDEPENDENT REVIEW REPORT TO THE BOARD MEMBERS OF THE AUSTRALIAN MARITIME SAFETY AUTHORITY

Scope

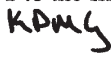
We have reviewed the financial report of the National Plan to Combat Pollution of the Sea by Oil ("the National Plan") for the year ended 30 June 2000, being a special purpose financial report, consisting of the statement of revenues and expenses, balance sheet, statement of cash flows, and accompanying notes to the financial statements. Management of the Australian Maritime Safety Authority ("the Authority") are responsible for the preparation and presentation of the financial report and the information contained therein. Management have determined that the accounting policies used and described in Note 1 to the financial statements are appropriate to meet the needs of members. We have performed the review of the financial report in order to state whether, on the basis of the procedures described, anything has come to our attention that would indicate that the financial statements are not presented fairly in accordance with accounting policies used and described in Note 1 to the financial statements. No opinion is expressed as to whether the accounting policies used, and described in Note 1, are appropriate to the needs of the members.

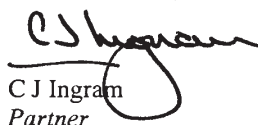
The financial report has been prepared from the books and records of the Authority and for distribution to members of the National Plan Advisory Committee to account for the cost of National Plan administration by the Authority. We disclaim any assumption of responsibility for any reliance on this review report or on the financial report to which it relates to any persons other than the Board Members of the Authority or the members of the National Plan Advisory Committee.

Our review has been conducted in accordance with Australian Auditing Standards applicable to review engagements. A review is limited primarily to inquiries of Authority personnel and analytical procedures applied to the financial data. These procedures do not provide all the evidence that would be required in an audit, thus the level of assurance provided is less than given in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Statement

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the financial statements of the National Plan to Combat Pollution of the Sea by Oil for the year ended 30 June 2000 does not present fairly the National Plan's financial position and the results of its operations and cashflows for the year then ended in accordance with the basis of accounting described in Note 1 to the financial statements.


KPMG
Chartered Accountants


C J Ingram
Partner

Canberra
12 October 2000



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FINANCIAL STATEMENTS

**AUSTRALIAN MARITIME SAFETY AUTHORITY
NATIONAL PLAN
STATEMENT OF REVENUES AND EXPENSES
for the year ended 30 June 2000**

	Notes	2000 \$	1999 \$
Income			
Protection of the sea levy		3,609,744	3,599,234
Equipment hire		140,061	59,510
Incident recovery	3	477,857	16,111
Interest		53,881	72,041
Other revenue		64,298	47,058
Total Income	4	4,345,841	3,793,954
Expenses			
Staff costs	5	895,575	720,868
Travel and transport		178,768	182,956
Materials and services	6	1,328,168	875,302
Communications expenses		35,300	46,130
Occupancy costs	7	100,210	84,506
Administrative expenses		111,681	109,854
Overheads	8	548,889	613,919
Depreciation		1,390,231	1,534,001
Incident costs	3	267,890	90,555
Loss on sale of assets		1,858	190
Write down of assets		53,542	0
Total Expenses		4,912,113	4,258,281
Operating surplus/(deficit)		(566,272)	(464,327)
Accumulated surpluses at start of financial year		1,502,891	1,987,003
Aggregate of amounts transferred from reserves	18	65,120	(19,785)
Accumulated surpluses at end of financial year	18	1,001,739	1,502,891

The above Statement of Revenues and Expenses should be read in conjunction with the notes to the financial statements set out in the following pages.

FINANCIAL STATEMENTS

AUSTRALIAN MARITIME SAFETY AUTHORITY NATIONAL PLAN BALANCE SHEET AS AT 30 JUNE 2000

	Notes	2000 \$	1999 \$
Current Assets			
Cash	9	792,054	1,307,922
Receivables	10	88,673	209,959
Inventories	11	0	0
Other	12	16,923	79,524
Total Current Assets		897,650	1,597,405
Non Current Assets			
Property, plant and equipment	13	7,195,285	7,607,093
Total Assets		8,092,935	9,204,498
Current Liabilities			
Creditors	14	212,202	1,006,844
Provisions	15	68,106	105,872
Total Current Liabilities		280,308	1,112,716
Non Current Liabilities			
Provisions	15	125,717	146,147
Total Liabilities		406,025	1,258,863
Net Assets		7,686,909	7,945,635
Equity			
Accumulated surpluses	18	1,016,013	1,502,891
Reserves	18	6,670,896	6,442,744
Total Equity		7,686,909	7,945,635

The above Statement of Revenues and Expenses should be read in conjunction with the notes to the financial statements set out in the following pages.

FINANCIAL STATEMENTS

AUSTRALIAN MARITIME SAFETY AUTHORITY NATIONAL PLAN STATEMENT OF CASH FLOWS for the year ended 30 June 2000

	Notes	2000 \$	1999 \$
OPERATING ACTIVITIES			
Cash received			
Levies, fees and charges received		3,935,389	3,636,916
Interest received		53,881	72,041
Incident costs re-imbursed		477,857	16,111
Total cash received		4,467,127	3,725,068
Cash used			
Cash paid to employees and suppliers		(4,256,719)	(2,911,369)
Total cash used		(4,256,719)	(2,911,369)
Net cash from operating activities	16	210,408	813,699
INVESTING ACTIVITIES			
Cash received			
Proceeds from disposal of equipment		2,302	39,737
Total cash received		2,302	39,737
Cash used			
Payments for work in progress		(604,375)	(1,232,693)
Payments for property, plant and equipment		(124,203)	(152,286)
Total cash used		(728,578)	(1,384,979)
Net cash used by investing activities		(726,276)	(1,345,242)
Net increase (decrease) in cash held		(515,868)	(531,543)
Cash at the beginning of the reporting period		1,307,922	1,839,465
Cash at the end of the reporting period		792,054	1,307,922
Cash as per Balance Sheet		792,054	1,307,922

The above Statement of Revenues and Expenses should be read in conjunction with the notes to the financial statements set out in the following pages.

FINANCIAL STATEMENTS

AUSTRALIAN MARITIME SAFETY AUTHORITY NATIONAL PLAN NOTES TO THE FINANCIAL STATEMENTS for the year ended 30 June 1999

Note 1 Statement of Significant Accounting Policies

1.1 *Basis of Accounting*

The financial statements have been prepared on a full accrual accounting basis, in accordance with relevant Australian Accounting Standards, Accounting Guidance Releases, the Consensus Views of the Urgent Issues Group and other mandatory professional reporting requirements. Except for certain assets which, as noted, are at valuation, the financial statements are prepared in accordance with the historical cost convention.

The financial statements have been extracted from the books and records of the Australian Maritime Safety Authority, and they represent the Authority's income and expenditure, and assets and liabilities in managing the National Plan. They do not include the income, expenses, assets or liabilities of third parties involved in National Plan activities.

1.2 *Property, plant and equipment*

Property plant and equipment are stated at carrying amounts not exceeding their recoverable values. In assessing recoverable amounts, the relevant cashflows have not been discounted to their present values.

Depreciation

Depreciation is provided on a straight line basis on all Property, Plant and Equipment at rates calculated to allocate the cost or valuation of those assets over their estimated useful lives.

The estimated useful lives applying to each class of depreciable assets are as follows:

	1999	1998
Furniture and fittings	4 – 10 years	4 – 10 years
Plant and equipment	3 – 30 years	3 – 30 years
Office and computer equipment	3 – 16 years	3 – 16 years
Vessels and amphibians	10 – 20 years	10 – 20 years
Vehicles	6 – 12 years	6 years

Acquisition of Assets

All acquisitions of assets are accounted for at cost. Cost is determined as the fair value of the assets at date of acquisition plus costs incidental to the acquisition.

Valuations

Assets are revalued every three years using the "deprival" method of valuation. The valuation base is net current replacement cost.

Disposal of revalued assets

The gain or loss on disposal of revalued assets is calculated as the difference between the carrying amount of the asset at the time of disposal and the proceeds on disposal and is included in the results in the year of disposal.

Any related revaluation increment standing in the asset revaluation reserve at the time of disposal is transferred back to accumulated results.

FINANCIAL STATEMENTS

Note 1 Statement of Significant Accounting Policies (continued)

1.3 Inventories

Inventories are managed stores which are expected to be used within twelve months, less a provision for slow moving stock. These items are not held for resale and are valued at weighted average cost.

1.4 Liability for Employee Entitlements

The liability for employee entitlements encompasses provisions for annual leave and long service leave which is accrued from an employee's date of commencement. No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken by employees is less than the annual entitlement for sick leave.

The provision for annual leave reflects the value of total annual leave entitlements of all employees at 30 June 1999 and is recognised at its nominal value, including costs attributable to workers' compensation insurance.

The liability for long service leave is recognised and measured at the present value of the estimated future cash flows to be made in respect of all employees at 30 June 1999. In determining the present value of the liability, attrition rates and pay increases through promotion and inflation have been taken into account.

1.5 Receivables

All receivables are recognised at the nominal amounts due less any provision for bad and doubtful debts. Credit terms are usually 30 days. (1999: 30 days).

Bad debts are written off during the year in which they are identified. A provision is raised for doubtful debts based on a review of outstanding accounts at year end.

1.6 Trade Creditors

Creditors and accruals represent liabilities for goods and services provided prior to the end of the financial year and which are unpaid. The amounts are unsecured and usually paid within 30 days of recognition.

1.7 Reclassification of comparatives

Where necessary, comparative figures have been adjusted to conform with changes in presentation in these financial statements.

Note 2 Contingencies

In the normal course of operations, the Authority is responsible for the provision of funds necessary to meet the clean up costs arising from ship sourced marine pollution. The Commonwealth has agreed that the Authority's responsibility should be limited to a maximum outlay of \$10 million. The Authority has a stand by loan facility for this purpose. In the event of costs above that limit, funds will be provided by the Commonwealth. In all circumstances, the Authority is responsible in accordance with the National Plan Administrative Arrangements for making appropriate efforts to recover the costs of any such incidents.

Note 3 Incident Costs and Recoveries

Incidents in the financial year ended 30 June 2000 consisted of a number of minor incidents committed by unidentified parties. Therefore, incident recoveries are lower this financial year in comparison to the previous financial year where the polluters had been identified.

FINANCIAL STATEMENTS

	Notes	2000 \$	1999 \$
Note 4 Revenue			
Rendering of services		4,291,960	3,721,913
Interest		53,881	72,041
		4,345,841	3,793,954

Note 5 Staff costs

Staff costs include the estimated proportion of the Marine Environment Protection Services Business Unit's staff costs attributable to National Plan activities.

In addition to salaries and wages, staff costs includes all associated staff on costs, including superannuation, staff development and fringe benefits tax.

Note 6 Materials and services

In the financial year ended 30 June 2000, materials and services expense included an increase in the provision made for slow moving dispersant stock of \$308,863 (refer note 11).

Note 7 Occupancy costs

Occupancy costs include storage costs of equipment and accommodation costs of National Plan staff.

Note 8 Overheads

Overheads are the estimated share of the Authority's corporate and head office costs attributable to National National Plan activities. This includes the proportion of actual expenditures for the Board, Internal Audit, as well as the Business Units comprising Strategic Development, Corporate and Commercial Services, and the Executive.

Note 9 Cash

Cash		792,054	381,960
Monies held in trust (refer note 17)		0	925,962
		792,054	1,307,922

FINANCIAL STATEMENTS

	2000	1999
	\$	\$
Note 10 Receivables		
Trade debtors	78,087	40,051
Accrued revenue	10,586	169,908
	88,673	209,959
 Note 11 Inventory		
Oil dispersant stocks	716,098	407,235
Provision slow moving stock	(716,098)	(407,235)
	(0)	0
 Note 12 Other		
Prepayments	16,923	79,524
	16,923	79,524
 Note 13 Property, plant and equipment		
<i>Plant and equipment:</i>		
- independent valuation 2000	5,377,047	6,601,066
Accumulated depreciation	(37,850)	(2,295,004)
	5,339,197	4,306,062
- cost	563,954	1,942,481
Accumulated depreciation	(17,306)	(212,049)
	546,648	1,730,432
Total plant and equipment	5,885,845	6,036,494
<i>Office and computer equipment:</i>		
- independent valuation 2000	52,942	27,346
Accumulated depreciation	(1,852)	(24,209)
	51,090	3,137
- cost	0	100,586
Accumulated depreciation	0	(16,608)
	0	83,978
Total office and computer equipment	51,090	87,115
<i>Furniture and fittings:</i>		
- independent valuation 2000	49,657	10,611
Accumulated depreciation	(528)	(2,480)
	49,129	8,131
- cost	0	78,072
Accumulated depreciation	0	(8,780)
	0	69,292
Total furniture and fittings	49,129	77,423

FINANCIAL STATEMENTS

	2000 \$	1999 \$
Note 13 Property, plant and equipment (continued)		
<i>Vehicles:</i>		
- independent valuation 2000	0	82,782
Accumulated depreciation	0	(24,393)
	0	58,389
- cost	0	4,184
Accumulated depreciation	0	(1,046)
	0	3,138
Total vehicles	0	61,527
 <i>Vessels and amphibians:</i>		
- independent valuation 1998	1,319,829	1,321,419
Accumulated depreciation	(464,656)	(256,585)
	855,173	1,064,834
- cost	378,961	0
Accumulated depreciation	(24,913)	0
	354,048	0
Total vessels and amphibians	1,209,221	1,064,834
Capital works in progress	0	279,700
Total property, plant and equipment	7,195,285	7,607,093

Property, plant and equipment is valued in accordance with the revaluation policy as described in Note 1. Plant and equipment, office and computer equipment, vehicles and furniture and fittings were revalued in the financial year ended 30 June 2000. Vessels and amphibians were revalued in the financial year ended 30 June 1998.

Additions to assets since revaluation have been included in their respective classes at cost less accumulated depreciation.

Note 14 Creditors

Trade creditors	167,202	81,549
Other creditors and accruals	45,000	30,993
Monies held in trust (refer Note 17)	0	894,302
	212,202	1,006,844
	212,202	1,006,844

FINANCIAL STATEMENTS

	2000 \$	1999 \$
Note 15 Provisions		
<i>Current</i>		
Long service leave	36,973	39,389
Annual leave	31,133	66,483
	68,106	105,872
<i>Non Current</i>		
Long service leave	106,783	146,147
Annual leave	18,934	0
	125,717	146,147

Note 16 Reconciliation of operating surplus/(deficit) to net cashflows from operating activities

Operating surplus/(deficit)	(566,272)	(464,327)
Depreciation	1,390,231	1,534,001
Asset write downs	53,542	190
Loss on disposal of non-current assets	1,858	0
Changes in assets and liabilities:		
(Increase)decrease in trade debtors	0	38,160
(Increase)decrease in accrued revenue	121,286	(107,046)
(Increase)decrease in inventories	0	0
(Increase)decrease in prepayments	62,600	(8,541)
(Decrease)increase in trade creditors and other creditors	(794,642)	(183,114)
(Decrease)increase in annual leave/long service leave	(58,196)	4,376
Net cash flows from operating activities	210,408	813,699
Balance per cash flow statement	210,408	813,699

Note 17 Trust monies

In May 1998, the National Plan has received monies from Environment Australia to fast track the development of Coastal Resource Atlases. Monies received were placed in a special bank account and will only be expended on the research project specified in the terms of the agreement. These monies are not available for other purposes of the National Plan. In accordance with the project management plan agreed by Environment Australia, these funds were expended from the project in the financial years ended 30 June 1999 and 30 June 2000.

Balance 1 July	894,302	1,000,868
Add: Receipts during the year	0	0
Add: Interest received	17,321	51,086
Less: Expenditure	(911,623)	(157,652)
Balance 30 June	0	894,302

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Note 18 Equity

Item	Accumulated surpluses \$'000	Asset revaluation reserve \$'000	Total reserves \$'000	TOTAL EQUITY \$'000
Balance 1 July 1999	1,502,891	6,442,744	6,442,744	7,945,635
Surplus/(deficit)	(566,272)	293,272	293,272	(273,000)
Asset transfers	14,274	0	0	14,274
Transfers to/(from) reserves	65,120	(65,120)	(65,120)	0
Balance 30 June 1998	1,016,013	6,670,896	6,670,896	7,686,909

Accumulated surpluses

The accumulated surpluses represent the equity of the National Plan used to fund the working capital costs of the National Plan and to purchase property plant and equipment assets to deliver a response capability. As such, the accumulated surpluses can only be realised as cash upon cessation of the National Plan.

Asset revaluation reserve

The National Plan property plant and equipment assets were revalued in accordance with Australian Accounting Standard Statement No. 10 which requires the value of non current assets to be reassessed on a progressive basis.

The revaluation has been undertaken using the "deprival" value method as measured by the replacement costs necessary to obtain an equivalent or identical asset which will provide the same level of service benefits currently provided by that asset, taking into account its condition and remaining useful life.

The asset revaluation reserve represents the net increase in asset values between book values and the revalued amounts upon revaluation and as such cannot be realised as cash until the sale of the assets.

FINANCIAL STATEMENTS

	2000	1999
	\$	\$
Note 19 Commitments		
BY TYPE		
CAPITAL COMMITMENTS		
Infrastructure, plant and equipment	0	53,893
Total capital commitments	0	53,893
OTHER COMMITMENTS		
Operating leases	5,191	12,396
Other commitments	9,900	116,389
Total other commitments	15,091	128,785
COMMITMENTS RECEIVABLE	(1,372)	0
 Net commitments	 13,719	 128,785
BY MATURITY		
 All net commitments		
One year or less	13,719	177,959
From one to two years	0	4,719
Total commitments	13,719	182,678
OPERATING LEASE COMMITMENTS		
One year or less	4,719	7,677
From one to two years	0	4,719
Net operating lease commitments	4,719	12,396