

**AUSTRALIA'S REPORT ON THE CONVENTION FOR THE PROTECTION OF THE
NATURAL RESOURCES AND ENVIRONMENT OF THE SOUTH PACIFIC REGION
AND RELATED PROTOCOLS
(NOUMEA/SPREP CONVENTION)**

2014 - 2015

1. What are the main issues and priorities concerning marine pollution for your country? You can attach relevant sections of annual reports, policy documents etc.

The broad issues and priorities concerning marine pollution in Australia are set out in the report *A National Approach to Addressing Marine Biodiversity Decline*. This report was released by Federal, State and Territory Environment Ministers (through the Natural Resource Management Ministerial Council) in April 2008.

The aim of the report was to identify the threats and causes of marine biodiversity decline and to identify high-level gaps in information. The report identified the five most significant, broad-scale threats to marine biodiversity which included marine pollution as well as land-based impacts (e.g. diffuse pollution from urban and agricultural areas, point source emissions and solid wastes).

Australian waters may be affected by marine pollutants such as sewage, marine debris, pesticides, nutrients (e.g. agricultural fertilisers and nutrients from finfish farming), residues in industrial wastewater, antifoulants, antibiotics, metals, radioactive waste and thermal pollution. The activities that cause marine pollution generally include shipping, boating (e.g. vessel maintenance activities and littering), oil and gas exploration, mineral resource extraction, stormwater run-off and poor land management practices. The Australian Government implements the *Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life 2009* to help prevent harmful marine debris from entering the oceans. This plan supports actions to facilitate the prevention, removal, mitigation and monitoring of marine debris. The plan also contains actions to strengthen relations at a regional and international level to address sources and impacts of marine debris. A five year review on progress under the plan took place in 2015. A revised plan should be completed in 2016.

Land-based sources of marine pollution impact on inshore waters, with the water quality in Australian bays and estuaries varying considerably. Particular problem areas are those near large coastal population centres and those receiving waters from highly modified agricultural catchments. In these areas, the ongoing effects from existing activities and additional impacts from new development place greater pressure on marine ecosystems and on the economic and social services they support.

For further Information see:

- *A National Approach to Addressing Marine Biodiversity Decline*
(<http://www.environment.gov.au/resource/national-approach-addressing-marine-biodiversity-decline-report-natural-resource-management>)
- *Australia's National Programme of Action for the Protection of the Marine Environment from Land-based Activities*
(<http://www.environment.gov.au/coasts/pollution/npa/index.html>)

The Australian Maritime Safety Authority (AMSA) is responsible for implementing MARPOL (International Convention for the Prevention of Pollution from Ships) annexes and any

amendments in domestic legislation and monitoring compliance. The Department of Agriculture is responsible for ballast water policy and the Australian Government has recently passed the *Biosecurity Act 2015*, which contains a standalone chapter providing a framework for Australia to manage biosecurity risks in accordance with the *International Convention for the Control and Management of Ships' Ballast Water and Sediments* (Ballast Water Management Convention). This will come into effect on 16 June 2016 and will enable Australia's ratification of the Ballast Water Management Convention. The International Maritime Organization (IMO) has begun a comprehensive review of the *Guidelines for approval of ballast water management systems* (G8 Guidelines) as well as a study on the implementation of the ballast water performance standard described in regulation D-2 (D-2 standard) of the Ballast Water Management Convention, which aims to assess the performance of Type Approved Ballast Water Management Systems in routine operation on board ships. Australia is participating in this work and AMSA contributed AUD\$30,000 towards the study on implementation of the D-2 standard.

Assistance has been provided to SPREP with the development of regional arrangements for the provision of facilities to receive waste from shipping, in line with the Marine Environment Protection Committee (MEPC) Resolution MEPC.221(63). Australia also engages in MEPC work on the development of measures to reduce air emissions from ships, including the development of a data collection system to benchmark emissions of international shipping and considering ship-based options for measures to further reduce emissions.

Recent achievements at MEPC concerning marine pollution include contributing to the finalisation of the mandatory International Code for Ships Operating in Polar Waters (Polar Code) and subsequent implementation through amendments to MARPOL and the extension of the existing Great Barrier Reef/Torres Strait Particularly Sensitive Sea Area (PSSA) to the South West Coral Sea and associated ship routing measures.

2. What measures generally have you initiated to implement this Convention and Protocols?

Through 2014-2015, Australia has implemented the Noumea Convention through a range of activities.

Commonwealth marine reserves

Australia, through the Director of National Parks, manages 59 Commonwealth marine reserves that are proclaimed under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Commonwealth marine reserves are situated in Commonwealth waters. These waters generally extend from three nautical miles off the coast to the outer limit of Australia's Exclusive Economic Zone (200 nautical miles), with individual states and the Northern Territory being responsible for conservation measures within the first three nautical miles. Commonwealth marine reserves protect examples of all the different marine ecosystems and habitats found in the oceans around Australia. Of specific interest to the Parties to the Convention are the reserves in the Temperate East and South-east networks and the Coral Sea Commonwealth Marine Reserve. Additionally, with regards to the Coral Sea, a "Declaration of Intentions" in relation to bilateral collaboration on Coral Sea conservation has been signed with France-New Caledonia—more details are provided in section 7.

Management Plans prepared under the EPBC Act guide management of Commonwealth marine reserves. The Australian Government is undertaking a review of the management

arrangements for Commonwealth Marine Reserves in the North, North-west, South-west and Temperate East Networks and the Coral Sea Commonwealth Marine Reserve. The management plans that were scheduled to come into effect in July 2014 for the above reserves have been set aside and new management plans will be prepared following the review. Until new management plans come into effect, transitional management arrangements are in place. Under these transitional arrangements, there are no changes “on the water” for users of the Commonwealth Marine Reserve estate.

The South-east Commonwealth Marine Reserves Network is not subject to the review and the *South-east Commonwealth Marine Reserves Network Management Plan 2013–23* came into effect on 1 July 2013.

The Director of National Parks manages the Commonwealth marine reserves estate consistent with Australia’s obligations under international agreements including those relating to the prevention of marine pollution. The Director also works in partnership with other Australian Government and state agencies to identify and respond to ghost net incidents within and adjacent to Commonwealth marine reserves.

Information about Commonwealth marine reserves and management arrangements can be found on the Department of the Environment’s website at www.environment.gov.au/marinereserves

Coastal Wetland Conservation

Australia has listed 65 Wetlands of International Importance under the Ramsar Convention, of which 34 are coastal, estuarine or island wetlands. The ecological character of these sites is a matter of national environmental significance, which is protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (see further details in Questions 4c and 6).

The EPBC Act establishes a framework for managing Ramsar wetlands. Under Schedule 6 of the EPBC Regulations, general principles are outlined for the management of wetlands of international importance, to guide the preparation of Ramsar site management plans, including actions to respond to risks associated with pollution and nutrient input. Thirty-five Ramsar sites have current management plans in place or plans in preparation.

The services wetlands provide in improving water quality and mitigating natural hazards are documented in Ecological Character Descriptions and Ramsar Information Sheets, and promoted in the publications *Wetlands Australia*, *Celebrating Australia’s wetlands* and in World Wetland Day activities.

Investment in natural resource management

The Australian Government will be investing more than \$2 billion over four years in managing our natural resources, which will help communities take practical action towards improving their local environment and promote the long term sustainability and management of Australia’s biodiversity.

The Government’s investment will be administered through a number of key initiatives and complementary grass roots programs. The National Landcare Programme, including the 20 Million Trees Programme, the Green Army Programme, Reef 2050 Plan, Working on

Country and continuing investment through the Land Sector Package will help rebuild and protect our precious natural resources.

The \$1 billion National Landcare Programme is based on the principles of simple, local and long-term and supports communities to take practical action to protect and manage Australia's nationally and internationally significant assets, including wetland sites. The National Landcare Programme is comprised of a regional stream and a national stream. Under the regional stream, \$450 million is being provided to Australia's 56 regional natural resource management organisations and they, in consultation with local community groups, have a greater say in determining local and regional priorities that align with the Programme's strategic objectives and outcomes.

In addition, the Australian Government is providing \$9.4 million in funding under the national stream of the National Landcare Programme for the Coastal River Recovery Project. The project involves a range of on-ground, education and community engagement activities to improve the water quality and habitat of five of Australia's most iconic waterways.

There is also up to \$600,000 in funding available under the national stream of the National Landcare Programme for the Clean up Australia and Keep Australia Beautiful Grants. The funding will support projects that reduce and discourage littering in waterways and the marine environment.

In 2014, the Australian Government committed to recognise OceanWatch as one of the 56 regional natural resource management organisations across the country. OceanWatch will be able to apply for funding under the regional stream of the National Landcare Programme for activities that aim to enhance fish habitats and improve water quality.

A further \$140 million has been committed to the Reef Trust to provide strategic, targeted investment focused on improving water quality, restoring coastal ecosystem health and enhancing species protection across the Great Barrier Reef. Further details on the Reef Trust and associated Reef 2050 Long-Term Sustainability Plan are provided against question 4.

The Australian Government has committed more than \$700 million over four years from 1 July 2015 to the Green Army Programme. The Green Army is an exciting opportunity for young people to work on local environment projects that have a clear environment or heritage conservation focus, including projects in marine and coastal environments, and projects aimed at regenerating wetlands in urban, rural and remote areas.

The Australian Government is working with the community to plant 20 million trees by 2020, to re-establish green corridors and urban forests. Projects are underway in coastal and riparian environments.

The National Water Quality Management Strategy (NWQMS)

The National Water Quality Management Strategy (NWQMS) was introduced by the Commonwealth, state and territory governments in 1992 as a response to growing community concern about the condition of the nation's water bodies and the need to manage them in an environmentally sustainable way. The NWQMS comprises a suite of technical documents and key framework documents outlining guiding principles, policies and processes to improve water quality and reduce pollution to receiving waters (for further details visit

www.environment.gov.au/topics/water/water-quality/national-water-quality-management-strategy).

While the NWQMS is non-mandatory, it is utilised by all state and territory governments in establishing their own guidelines, regulations, policies, processes and standards for managing the quality and supply of water that is fit for purpose.

A key document under the NWQMS is the *Australia and New Zealand Guidelines for Fresh and Marine Water Quality 2000* (the Guidelines). This was developed to cover issues across the whole of the water cycle including fresh and marine waters from inland catchments to estuaries and oceans – including ambient water quality, groundwater, aquatic ecosystems, monitoring, and some rural uses. The aim of the Guidelines is to help the community, catchment managers, environment protection agencies and water authorities protect water quality, including the marine environment, by informing the development local action plans for water quality management. The Guidelines are currently being revised to incorporate substantial new data, information and methods, correct errors in the 2000 Guidelines and make better use of the interactive capabilities of internet delivery. The technical revision is due to be completed by June 2016.

Through the application of the NWQMS, states and territories can develop water quality improvement plans. In coastal areas, these plans often focus on reducing pollution being released into marine and estuarine areas. The plans are consistent with the *Framework for Marine and Estuarine Water Quality Protection* (the Framework). The Framework focuses on environmental protection through the reduction of land-based pollution. The key components of the Framework include identification of:

- the environmental values of those coastal waters;
- the water quality issues and pollutants of concern;
- water quality objectives for the coastal waters;
- the total maximum pollutant concentrations and loads required to meet the water quality objectives;
- the allocation of pollutant loads to diffuse and point sources;
- river flow objectives;
- management measures and control actions, their time lines and costs to protect the designated environmental values and objectives; and
- a monitoring, evaluation and reporting program.

Marine Debris

As noted in question one of this report, the Australian Government implements the *Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life* (the Plan) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Threat abatement plans focus on strategic approaches to reduce the impacts of key threatening processes that jeopardise the long-term survival of native species and ecological communities. This Plan provides a framework for the abatement of injury and fatality to marine species caused by harmful marine debris.

The Plan also addresses the Australian Government's response to the Natural Resource Management Ministerial Council's *A National Approach to Addressing Marine Biodiversity Decline*, which recognises marine pollution as a significant threat to the health of listed species. The Australian Government is working in close cooperation with state and territory

governments to implement the Plan. A five year review on progress under the Plan took place in 2015. A revised plan should be completed in 2016.

A copy of the Plan and the review is available at:

<http://www.environment.gov.au/biodiversity/threatened/publications/tap/marine-debris.html>

3. Give details of new or amended legislation that covers marine pollution beyond internal waters including any definition of ‘pollution’ and the institutions responsible.

On 28 February 2014, amendments to the *Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009* (Environment Regulations) came into effect. The amendments were made:

- to facilitate streamlining of environmental approvals for offshore petroleum and greenhouse gas activities in Commonwealth waters under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGs Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act); and
- to implement the findings of a review of the Environment Regulations.

In February 2014, the Minister for the Environment approved under the EPBC Act all petroleum and greenhouse gas activities taken in Commonwealth waters which are assessed in accordance with the environmental management authorisation process for petroleum and greenhouse gas activities administered by NOPSEMA under the OPGGS Act. The amendments to the Environment Regulations reflected this authorisation process, including the introduction of a new environmental assessment process for large-scale petroleum developments, mandatory public consultation, and an acceptance criterion for environment plans whereby the Regulator cannot accept an environment plan for an activity or part of an activity being undertaken in any part of a declared World Heritage property.

Additionally, in 2012, the Australian Government began a review of the Environment Regulations to assess the efficiency and effectiveness of their operation and to ensure they continue to represent leading practice for objective-based environmental management regulation. The amendments strengthened and clarified the objects of the Environment Regulations by including specific reference to the core concepts of ensuring that all offshore petroleum and greenhouse gas activities are carried out in a manner by which environmental impacts and risks will be reduced to as low as reasonably practicable and are of an acceptable level.

The amendments to the Environment Regulations also provided clarification of oil spill response arrangements, by transferring the responsibility for environmental management under the Environment Regulations from the operator to the titleholder. This amendment ensures the Environment Regulations align with the OPGGS Act, which places responsibility on the titleholder to control, clean up and remediate any resulting damage to the environment if there is an escape of petroleum in relation to a petroleum activity being carried out in the titleholder's title area (the ‘polluter pays’ principle). The amended regulations also include new provisions outlining the content requirements for the Oil Pollution Emergency Plans and clarification of reporting and environmental monitoring requirements. These amendments assist titleholders to understand the requirements for Oil Pollution Emergency Plans, and better enable the Regulator to determine the appropriateness of oil spill preparedness and response arrangements.

The Department of Industry and Science (DoIS) administers the OPGGS Act and associated regulations. NOPSEMA is responsible for the oversight of response actions to oil pollution events in areas of Commonwealth jurisdiction.

4. What is the estimated volume/type or marine pollution per year in the Convention area from the following sources; the number of permits/licence issued; and any other measures taken to *prevent, reduce and control* such pollution:

a. Vessels (Article 6)

The number of oil discharge sightings and oil spills in Australian waters reported to AMSA as from (or potentially from) vessels during 2014-15 was 98. This includes all incidents, confirmed and unconfirmed, regardless of the amount reported spilled. There is no data available on the volume spilled, as very few reports include such information and/or required only a local clean-up. There were no national responses during this time.

Measures taken to prevent and reduce such pollution are primarily based on active administration and enforcement of International Maritime Organization conventions, such as the International Convention for the Prevention of Pollution from Ships (MARPOL) through mechanisms such as port State control.

In regard to prevention, Australia's National Plan for Maritime Environmental Emergencies (see 8 below) includes national arrangements for emergency towage capability (ETC), managed by AMSA, and is supported by arrangements with States and the Northern Territory to manage the risks within their respective jurisdictions. This involves three levels of capability:

- a dedicated emergency towage vessel operating in Far North Queensland and the Torres Strait – this is provided by the vessel *Coral Knight*, based in Cairns;
- contracted port towage around the other major Australian ports, capable of undertaking open water towage operations; and
- vessels of opportunity that can be directed or contracted to assist, when required.

AMSA assesses all reported vessel incidents to determine whether preventative action is required. In FY14/15 there were a total of 606 incidents of vessels reporting machinery failure, main engine breakdowns, unscheduled engine repairs or collisions. Of that, 30 required further investigation (such as liaison with state authorities, the subject vessel or other stakeholders), eight of which required intervention (directions or towage) by AMSA.

In June 2015, an extension the Great Barrier Reef/Torres Strait Particularly Sensitive Sea Area (PSSA) to the South West Coral Sea entered into force internationally. Associated protective measures will reduce the risk of vessel incidents, - an area to be avoided by international shipping, due to shallow water coral reefs and shoals, and two adjacent 'two way routes' – will enter into force in December 2015.

b. Land based sources (Article 7)

The Australian and Queensland governments released the Reef 2050 Long-Term Sustainability Plan in March 2015, which includes a number of ambitious targets to reduce pollution in the Great Barrier Reef catchment from land based sources. By 2018, we are aiming to achieve:

- at least a 50 per cent reduction in anthropogenic end-of-catchment dissolved inorganic nitrogen loads in priority areas, on the way to achieving up to an 80 per cent reduction in nitrogen by 2025
- at least a 20 per cent reduction in anthropogenic end-of-catchment loads of sediment in priority areas, on the way to achieving up to a 50 per cent reduction by 2025
- at least a 20 per cent reduction in anthropogenic end-of-catchment loads of particulate nutrients in priority areas
- at least a 60 per cent reduction in end-of-catchment pesticide loads in priority areas.

The Reef 2050 Plan outlines a number of actions to achieve these targets, one of which is to implement innovative management approaches through the Reef Trust. This action is supported by an Australian Government funding commitment of \$140 million to the Reef Trust to provide strategic, targeted investment focused on improving water quality, restoring coastal ecosystem health and enhancing species protection.

The Reef Trust is one of the key mechanisms assisting in the delivery of the Reef 2050 Long-Term Sustainability Plan, and will focus on known critical areas for investment – improving water quality and coastal habitat along the Great Barrier Reef, controlling the current outbreak of crown-of-thorns starfish, and protecting threatened and migratory species, particularly dugongs and turtles.

The Reef Trust will be delivered by the Australian Government, in collaboration with the Queensland Government, and the Great Barrier Reef Marine Park Authority. Further information can be found at <http://www.environment.gov.au/marine/gbr/reef-trust>.

The Reef Trust is being developed and implemented in a phased approach. Seven projects with funding totalling \$15 million are currently being delivered through the first phase of Reef Trust investment. Three projects with funding totalling \$15.4 million have been announced for delivery under phase two commencing in 2015-16.

These projects focus on improving water quality and species protection. Water quality projects focus on reducing the amount of sediment and nitrogen lost to the reef from broad scale land use through erosion control in priority grazing regions, improving fertiliser efficiency on sugar cane farms and improving grazing land management practices. Species protection projects being delivered to prevent, reduce and control pollution include controlling crown of thorns starfish on high value tourism reefs and marine debris clean-up activities across beaches and waterways throughout the reef catchments. Marine debris clean-up activities will be co-ordinated across relevant community groups and industry, and an education campaign will target human behaviour to eliminate marine debris at its source.

c. Mining and coastal erosion, i.e. dredging, land reclamation (Article 13)

As part of the Reef 2050 Plan, the Australian Government has signed off regulations to implement the ban on the disposal of capital dredge material in the Great Barrier Reef Marine Park, and the Queensland Government has introduced the *Sustainable Ports Development Bill 2015*, which will increase the ban on the disposal of capital dredge material to the entire World Heritage Area. Further information on actions to reduce the impact of ports and dredging can be found at www.environment.gov.au/reef2050.

Through the Reef Trust phase two, the Reef Trust Gully Erosion Control Programme will address sediment loads derived from extensive and active gullied areas and delivered to the Great Barrier Reef lagoon. This Programme will commence in 2015-16: \$5.4 million is committed to address gully erosion issues in priority areas in the Great Barrier Reef catchments.

Management of Australia's coastal areas is a responsibility of both the States and the Commonwealth. The Commonwealth has in place a range of programs and policies designed to minimise the environmental impact of, amongst other things, land based sources of marine pollution. Examples include:

- The Regional Delivery component of the National Landcare Programme (an ongoing programme) supports implementation of integrated natural resource management (NRM) regional plans. NRM regional plans address a range of natural resource management issues, including coastal restoration and the protection of coastal ecosystems.
- The NRM regional plans are currently being updated around Australia to include planning for climate change. For many coastal regions, these updates this will include consideration of the impact of storm surges and sea level rise on coastal morphology and coastal vegetation, coastal wetlands and estuarine environments.
- Investment has also occurred in a range of projects to improve water quality and the natural environment at priority coastal hotspots. This included investment to develop Water Quality Improvement Plans and investment to implement components of these plans such as in the Swan and Canning River system.

The Australian Government has pursued a range of measures to improve the community's awareness of coastal acid sulfate soils, and to develop and demonstrate effective management strategies such as the development of the *National Atlas of Australian Acid Sulfate Soil*.

In addition, a new national project investigating a number of key issues relating to the identification and management of acid sulfate soils has commenced. The project will provide clear, non-prescriptive, practical guidance to assist water and natural resource managers, planners, policymakers and the primary / development industries to manage the risks and challenges associated with acid sulfate soils in landscapes and aquatic environments; in particular risks and challenges associated with water quality deterioration and asset degradation. Based on the principles of identifying, avoiding, minimising and managing disturbance, the project will deliver new guidance on dewatering activities and other groundwater related activities that may disturb acid sulfate soils; management of monosulfidic black ooze accumulation in waterways; and dredging acid sulfate soil sediments and associated dredge spoil management. The project will be consistent with and complement existing guidance such as the *National Strategy for the Management of Coastal Acid Sulfate Soils* and the *National Guidance for the Management of Acid Sulfate Soils in Inland Aquatic Ecosystems*. Furthermore, to assist in the use of guidance material, the project will produce an overarching synthesis that will draw together all relevant guidance, both existing and the new, and provide a decision-support 'tool' to assist users to determine which (one or more) of the guidance documents should be consulted, based on the management needs and specific circumstances of the problem at hand. These guidelines are due for completion by 30 June 2016.

d. Sea-bed and sub-soil activities (Article 8)

The Department of Industry and Science (DoIS) administers all environmental aspects of offshore petroleum activities in Commonwealth waters through the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGs Act), and the *Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009* (Environment Regulations). State and Northern Territory legislation applies similar arrangements to coastal and inland waters.

No offshore petroleum activity can take place in Commonwealth waters without an accepted Environment Plan in force under the Environment Regulations. The Environment Plan is a fundamental part of the objectives-based regulatory regime in place for the offshore petroleum sector. The regime serves to safeguard environmental interests in offshore areas and to ensure industry best practice.

The development of an Environment Plan requires a duty holder to identify the potential environmental impacts and risks for an activity and to demonstrate how those risks will be managed and reduced to as low as reasonably practicable. Individual Environment Plans differ depending on the activity, as well as the location and the time of year in which the activity will take place. All Environment Plans must contain an up-to-date emergency response procedure which includes an oil pollution emergency plan (OPEP), detailed response and investigative arrangements and incident recording and reporting protocols. Moreover, in the course of developing an Environment Plan duty holders are obliged to consult with relevant persons whose functions, interest or activities may be affected by an activity. A titleholder must document all consultation, including the response received in their environment plan. NOPSEMA cannot accept an Environment Plan that does not demonstrate the required consultation, including ongoing consultation where appropriate.

e. Discharges into atmosphere (Article 9)

The Australian Government considers air pollution to be a serious environmental and human health issue, principally in urban settings. The Australian Government is working cooperatively with State and Territory Governments to improve air quality with a focus on tackling the major sources of air pollution, including motor vehicles industry and disperse sources as well as specific pollutants that pose threats to human health and the environment. While the potential impact of air pollution on the Convention Area from Australian sources is likely to be minimal, actions being taken in Australia to reduce emissions of pollutants will help ensure there are no adverse consequences for the marine environment.

The current strategy for improving air quality in Australia is the development and implementation of a National Clean Air Agreement between the Commonwealth, State and Territory governments. On 15 July 2015, environment Ministers endorsed in-principle the Agreement and committed to finalise the Agreement and its initial work plan before the end of 2015. The Agreement will deliver actions to reduce air pollution and establish a new process for jurisdictions to work cooperatively to address emerging air quality issues, to ensure Australians continue to enjoy clean air into the future.

The Agreement's initial work plan will see a range of actions taken over the next two years to address priority issues of concern, including reviewing and strengthening air quality monitoring and reporting standards, targeted measures to reduce emissions from key sources of air pollution, improving access to air quality information for communities and fostering partnerships with industry.

The Agreement will work in concert with existing structures, such as the National Environment Protection Measure for Ambient Air Quality (AAQ NEPM), which was established to set up monitoring and reporting requirements for six common air pollutants: particles, ground-level ozone, carbon monoxide, lead, nitrogen dioxide and sulfur dioxide. Ministers have signalled their in-principle support for varying the NEPM to implement strengthened reporting standards for airborne fine particles, taking into account the latest scientific evidence of the health impacts of airborne particles. Preliminary work is also being undertaken to review the standards for ozone, nitrogen dioxide and sulfur dioxide. This review will consider new evidence on the health effects of these pollutants.

Australia also has in place the National Environment Protection (Air Toxics) Measure, which was established to monitor pollutants that may be hazardous at concentrations not readily detected at general ambient levels. There are currently 5 listed air toxics - benzene; formaldehyde; benzo(a)pyrene as a marker for Polycyclic Aromatic Hydrocarbons; toluene; and xylenes. Other pollutants are currently being considered for possible future inclusion as listed air toxics.

Overall, air pollution in our major cities is now at levels which meet national human health based standards for pollutants like carbon monoxide, nitrogen oxides, lead and sulfur dioxide. Other pollutants like ozone, particulates and certain point sources of air toxics remain of concern in some large cities and regional areas

Any impacts to the marine environment from air pollutants are likely to be restricted to local settings dominated by commercial shipping and to a lesser extent from marine outboard motors used in recreation or pleasure crafts, particularly engines using two stroke fuels. Emissions from floating liquefied natural gas facilities in Commonwealth waters are managed by NOPSEMA.

On 15 July, Ministers agreed in-principle the introduction of emission standards for new non-road spark ignition engines (including marine outboard motors). The introduction of new standards will bring Australia into line with existing international standards, particularly those in place in North America and consistent with those in Europe and parts of Asia.

With regard to emissions from shipping, Annex VI of MARPOL entered into force for Australia on 10 November 2007. This Annex sets out regulations to reduce air emissions from ships and deals with sulfur oxides, nitrogen oxides, ozone depleting substances and emissions from shipboard incineration of waste. From 1 January 2013, this Annex also includes regulations dealing with technical and operations aspects of greenhouse gas emissions from shipping.

f. Dumping and disposal from vessels, aircraft, man-made structures of waste including radioactive waste or matter (Article 10)

The Australian Government regulates the disposal of waste materials at sea under the *Environment Protection (Sea Dumping) Act 1981* (Sea Dumping Act), which implements Australia's obligations under the *1996 Protocol to the Convention on the Prevention of Marine Pollution by dumping of Wastes and Other Matter, 1972* (London Protocol), refer to section 5 and section 6 for further discussion on the Sea Dumping Act and the London Protocol. The Sea Dumping Act prohibits ocean disposal of radioactive waste, in accordance with the provisions

of the London Protocol. In Australia sea dumping permits are most commonly issued for disposal at sea of dredged material and for placement of artificial reefs. Information on permits issued under the Sea Dumping Act is provided to the London Protocol Secretariat. A summary of items disposed in Australia in 2013 can be found in the following table:

Material	Permits issued this year	Number active permits (including those issued this year)	Volume/amount permitted this year	Actual volume/amount disposed
Dredged material	8	35	48,107,500 m ³ (over the life of the permits issued in 2013)	15,518,374 m ³
Vessels, platforms or manmade objects	0	1	0	4
Treated sewage	3	4	28,880 m ³ + 416,000L (over the life of the permits issued in 2013)	1,167 m ³ + 391,000L
Organic material of natural origin (human burials)	2	2	2	2
Total	13	42		

g. The storage of toxic and hazardous wastes, including radioactive wastes or matter (Article 11)

The Commonwealth and each state and territory have passed laws establishing a regulatory framework for the acquisition, use, storage, transfer and disposal of material (including radioactive waste) to help ensure that storage of toxic and hazardous wastes is conducted in a manner that will protect human health and the environment. In addition to controlling storage facilities, there are requirements for appropriate labelling, handling, packaging and transport of these wastes. The tools used to promote sound storage practices include legislation, codes of practice, permits and licences.

For further information see:

1. <http://www.infrastructure.gov.au/transport/australia/dangerous/index.aspx>
2. <http://www.safeworkaustralia.gov.au/sites/swa/whs-information/hazardous-chemicals/dangerous-goods/pages/hazardous-substances>
3. <http://www.environment.gov.au/topics/environment-protection/hazardous-waste>
4. <http://www.amsa.gov.au/environment/index.asp>

h. Testing of nuclear devices (Article 12)

Australia does not test any nuclear devices, and has signed and ratified the Comprehensive Test Ban Treaty (CTBT). We firmly support the entry into force of the CTBT and establishment of a fully effective treaty verification system. Australia is also a signatory to the South Pacific Nuclear Free Zone Treaty, which prohibits the use, testing, and possession of nuclear weapons within the borders of the treaty zone.

5. Have you prohibited the storage and disposal of radioactive waste in the Convention area and the continental shelf beyond the Convention area? If so, what is the legislative provision and what is the penalty (Article 10)

The Sea Dumping Act prohibits ocean disposal of radioactive waste, in accordance with the provisions of the London Protocol.

6. What technical guidelines and legislation do you have concerning EIA of development activities likely to impact on the marine environment (Article 16)? How many assessments occurred, what were the measures adopted to prevent pollution and what was the extent of public involvement.

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), in its environmental impact assessment process, assesses the potential effects of proposed actions on the Commonwealth marine environment. The EPBC Act provides for extensive public consultation in deciding whether an action requires approval, and during the environmental assessment process. All proposals submitted for environmental impact assessment are made available on the internet for public viewing and comment.

The operation of the EPBC Act is delivering important benefits for the Australian community. Under the EPBC Act, environment assessments are undertaken to enable environment and heritage protection and biodiversity conservation.

Any proposed action that could have a significant impact on a matter of national environmental significance must be referred to the Minister for the Environment. The Minister or a departmental delegate will then decide whether the activity needs an environmental impact assessment to determine whether, and under what conditions, it can proceed.

The EPBC Act also provides for an integrated approach to the conservation of biodiversity. Public consultation is required under the EPBC Act in relation to the preparation of management plans for protected areas, recovery plans for threatened species, wildlife conservation plans and threat abatement plans for key threatening processes.

When deciding if a proposed action should be approved, and what conditions to impose, the minister will consider the impacts of the proposed action on matters protected by the EPBC Act and other economic and social matters. In considering these matters, the Environment Minister must take into account the principles of ecologically sustainable development.

From 28 February 2014, it is no longer a requirement that offshore petroleum and greenhouse gas activities undertaken in Commonwealth waters be referred for approval under the EPBC Act. As part of the Australian Government's ongoing commitment to streamline environmental management regulation for the offshore petroleum sector, in 2014 the Minister for the Environment endorsed, under Part 10 of the EPBC Act, the environmental management authorisation process administered by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

Subsequently, the Minister for the Environment approved a class of actions for all activities undertaken in accordance with the authorisation process. Approval means that duty holders seeking to undertake offshore petroleum or greenhouse gas activities in Commonwealth waters no longer need to refer those activities for assessment under the EPBC Act, and moreover had

the effect of making NOPSEMA the sole designated environmental regulator for offshore petroleum activities within Commonwealth jurisdiction.

Where exploration and exploitation of the seabed (other than from offshore petroleum and greenhouse gas activities undertaken in Commonwealth waters, discussed above) is likely to have significant impact on the environment (*Article 8: Pollution from Sea-bed Activities*), these are referred and assessed under the EPBC Act. Seismic exploration proposals are assessed in accordance with the EPBC Act Policy Statement 2.1: Interaction between offshore seismic exploration and whales (<http://www.environment.gov.au/resource/epbc-act-policy-statement-21-interaction-between-offshore-seismic-exploration-and-whales>).

The EPBC Act also requires that each Commonwealth managed fishery and state export fishery undergoes an independent assessment to determine whether it is being managed in an ecologically sustainable way. The Department of the Environment is conducting these assessments on behalf of the Australian Government, to ensure that, over time, all fisheries are ecologically sustainably managed. These assessments are ongoing, with decisions reviewed every three to ten years, or when management arrangements change, or as new export markets for fisheries are established.

The assessment is conducted against the *Guidelines for the Ecologically Sustainable Management of Fisheries* (the Guidelines), which outline specific principles and objectives designed to ensure a strategic and transparent way of evaluating the ecological sustainability of fishery management arrangements.

To date, the assessment process has been driving positive environmental change in our fisheries and has acted as a catalyst to shift fisheries management away from a target species only focus towards an ecosystem-based approach. Bycatch issues and impacts on protected species and ecological communities are increasingly being addressed. The end results are real ecological benefits and increased certainty for the fishing industry.

Under the Sea Dumping Act, Australia implements the London Protocol. In accordance with the London Protocol, the only wastes that Australia will consider permitting for ocean disposal, following a rigorous assessment process, are:

1. dredged material;
2. sewage sludge;
3. fish waste, or material resulting from industrial fish processing operations;
4. vessels and platforms or other man-made structures at sea;
5. inert, inorganic geological material;
6. organic material of natural origin;
7. bulky items primarily comprising iron, steel, concrete and similarly unarmful materials for which the concern is physical impact, and limited to those circumstances where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping; and
8. Carbon dioxide streams from carbon dioxide capture processes for sequestration.

Applications for sea dumping of dredged material are assessed in accordance with the National Assessment Guidelines for Dredging (<http://www.environment.gov.au/marine/publications/national-assessment-guidelines-dredging->

2009). These guidelines were approved in March 2009 and guide dredging and sea dumping assessments under the EPBC Act and the Sea Dumping Act.

7. Outline the cooperation/coordination with the other Contracting Parties in implementing the Convention and Protocols (such as agreements for protection, development or management of the marine environment, information sharing, research, monitoring and technical assistance, protection against threat and effects of ‘pollution incidents’ (Articles 4, 17 and 18).

“Declaration of Intentions” in relation to bilateral collaboration on Coral Sea conservation

In 2009 Australia and France-New Caledonia signed a “Declaration of Intentions” in relation to bilateral collaboration on Coral Sea conservation. The declaration seeks to support the conservation of biodiversity in the Coral Sea through strengthening: the scientific framework for collaboration; long term collaboration between institutions on management of marine resources; and regional capacity building efforts, notably in the areas of managing marine pollution and debris, shipping accidents, and human uses such as fishing and tourism.

Other cooperation

Australia is an active participant in the Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN), developed as part of the SPREP Pacific Ocean Pollution Prevention Programme (PACPOL). PACPLAN was updated in 2013. Australia was also an active participant in the review of PACPOL in 2014.

An AMSA officer has recently completed a two year secondment to SPREP in the Waste Management and Pollution Control Division. The secondment was funded under the Australian Aid Public Sector Linkages Program, aiming to increase regional capacity to manage and prevent the environmental consequences of marine pollution, oil spills, and the trans-boundary movement of hazardous wastes.

Australia provided technical assistance to SPREP in preparation of a regional reception facilities plan for ships’ waste. To assist SPREP in developing the plan, Australia provided technical experts to conduct waste reception facility gap analyses in Samoa, Papua New Guinea, Fiji, New Caledonia and Tahiti. The plan was developed in accordance with relevant MARPOL regulations and guidelines, and will assist the Pacific Islands to meet their obligations to provide adequate port waste reception facilities via a regional approach. The plan was introduced to MEPC at its 68th session in May 2015 and broadly supported.

8. How many ‘pollution incidents’ have there been and what were the laws, regulations, institutions and operational procedures used in each? (Protocol on Pollution Emergencies)

See answer to question 7. The number of pollution incidents in Australian waters reported to AMSA for the 2014-15 financial year was 107.

The National Plan for Maritime Environmental Emergencies (National Plan) was updated in 2014. The National Plan provides a single, national, comprehensive and integrated response arrangement to minimise the impacts of marine pollution from vessel casualties and spills from offshore petroleum facilities, as well as other environmental impacts arising from a maritime environmental emergency, upon the Australian community, environment, cultural and heritage resources, economy and infrastructure.

AMSA manages the National Plan, working with Commonwealth, State, and Northern Territory governments, along with the shipping, ports, oil, salvage, exploration and chemical industries, and emergency services nationwide, to maximise Australia's marine pollution response capability. It sets out national arrangements, policies and principles for the management of maritime environmental emergencies. Marine pollution plans prepared by all the Australian government jurisdictions, port corporations, industry and operators of offshore petroleum facilities underpin the National Plan. It provides policy and guidance on the following key elements to ensure national consistency:

- Governance and strategic management
- Casualty prevention
- Planning for incident response
- Response plans, systems and processes
- Recovery and community support
- Cost recovery and financial arrangements

9. What are the reporting requirements regarding ‘pollution incidents’ of:

- a) Government officials;**
- b) Masters of vessels flying your flag; and**
- c) Masters of all vessels and pilots of all aircraft in the vicinity of your coasts (Article 5).**

- a) As a signatory to the International Convention for the Prevention of Pollution from Ships (MARPOL), Australia is required to provide an annual report to IMO, which includes information on significant pollution incidents. This obligation can be found in Article 11 of the Convention. In respect of domestic reporting, under the National Plan, Australian States and the Northern Territory report pollution incidents to AMSA.
- b) Under Australian legislation applying the regulations of MARPOL, masters of Australian vessels must comply with the reporting requirements set out in the Convention. Article 8 and Protocol I of MARPOL contain comprehensive requirements for the nearest coastal State to be notified, without delay, of incidents involving:
 - a discharge or probable discharge of oil or chemicals resulting from damage to a ship;
 - a discharge or probable discharge of harmful substances in packaged form; and
 - a discharge during the operation of a ship of oil or noxious liquid substances in excess of the rate permitted under the Convention.

A report also must be made when an incident involves damage, failure or breakdown of a ship (15 metres in length or more) that:

- affects the safety of the ship, including but not limited to collision, grounding, fire, explosion, structural failure, flooding and cargo shifting; or
- results in the impairment of the safety of navigation, including but not limited to failure or breakdown of steering gear, propulsion plant, electrical generating system and essential shipborne navigational aids.

The master or other person having charge of any ship involved in an incident is required to make the report. If this cannot be done, then the owner/charterer/manager/operator of the ship, or their agent is responsible for making the report.

- c) The same obligations as set out in (b) above apply to all ships in Australian waters, regardless of flag. The obligations do not formally apply to aircraft, although it is understood reporting pollution incidents is part of standard operating procedure for commercial pilots.

1 September 2015
Canberra