



2. The Legislative Framework

The key existing International, Commonwealth and State legislation, regulations, guidelines, standards and codes of practice for the disposal and handling of quarantine and clinical wastes in the Northern Territory are described below. Further details on legislative requirements that may be triggered by this project have been considered in Appendix C, including the following:

- » **Commonwealth Legislation and Guidelines:**
 - *Native Title Act 1993*;
 - *Environment Protection and Biodiversity Conservation Act 1999*;
 - *Protection of the Sea (Powers of Intervention) Act 1981*; and
 - *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.
- » **Northern Territory Legislation**
 - *Marine Pollution Act 1999*;
 - *Waste Management and Pollution Control Act 1998*;
 - *Notifiable Diseases Act 1999*;
 - *Environmental Offences and Penalties Act 1996*;
 - *Northern Territory Aboriginal Sacred Sites Act 2004*;
 - *Territory Parks and Wildlife Conservation Act 1993*;
 - *Plant Disease Control Act 2000*; and
 - *Water Act 1991*.
- » **International Guidelines**
 - International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL);
 - Stack Emissions Criteria;
 - Stockholm Convention on Persistent Organic Pollutants;
 - United Nations Convention on Biological Diversity;
 - United Nations Convention on the Law of the Sea (UNCLOS); and
 - United Nations Framework Convention on Climate Change.

2.1 Commonwealth Legislation and Guidelines

Both the Commonwealth and Northern Territory Governments have jurisdiction over the environmental assessment of the East Arm Port Incinerator project. The relevant Commonwealth legislation and guidelines for the project are described in Sections 2.1.1 – 2.1.6 below.

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

Under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), any development requires assessment if they have the potential to affect one or more of seven matters of National Environmental Significance (NES). The matters of NES include:

- » World heritage properties;



- » National heritage places;
- » Wetlands of international importance (Ramsar wetlands);
- » Threatened species and ecological communities;
- » Migratory species;
- » Commonwealth marine areas; and
- » Nuclear actions (including uranium mining).

After conducting an EPBC search, it has been determined that an EPBC referral is not required for the Quarantine Waste Treatment Facility.

The site is an area that may receive migratory species, but as there is no current habitat nor adequate areas for the breeding and shelter of these species they are considered highly unlikely to occur at the proposed site.

The construction and subsequent operation of the incinerator will not adversely affect any of the seven matters of NES (see section 5.14 Other Environmental Considerations).

2.1.2 Quarantine Act 1908

Under the *Quarantine Act 1908* (administered by Australian Quarantine Inspection Service (AQIS)), quarantine officers have the power to require that shipping waste from ships entering the country be treated or disposed of appropriately.

The Commonwealth Government may enter into an arrangement with the Administrator of the Northern Territory regarding the quarantine station and the control and management of any such quarantine station.

2.1.3 Customs Act 1901

The *Customs Act 1901* controls goods (including ships) entering the country, specifically:

- » Section 63 can require removal of a ship before it discharges its cargo;
- » Section 185B gives the power to Customs to destroy a ship under certain circumstances, including it being a threat to public health; and
- » Section 206 gives Customs the power to destroy certain goods, including their being a threat to public health.

In relation to this facility, the Act is silent on the disposal method of the waste entering the country, and subsequently does not prohibit it from being burnt by the proposed incinerator.

2.1.4 Protection of the Sea (Prevention of Pollution from Ships) Act 1983

The *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* invokes the protocol from MARPOL ("MARPOL" being the International Convention for the Prevention of Pollution From Ships, 1973) that was modified in 1978 (MARPOL 73/78).

The Act requires that a ship must discharge harmful substances (specifically oil, garbage and other harmful materials) into a specified facility rather than into the sea, and imposes notification requirements on masters of ships.



The threat posed to the environment by the discharge of substances from ships involved in exercises in Australian waters and the ongoing operation of the Darwin Ports is assessed further in this PER and Appendix D. Furthermore, the Environmental Management System (EMS) for the construction of the ancillary infrastructure and the operation of the quarantine facility will include requirements to ensure compliance with this Act.

2.1.5 Hazardous Waste (Regulations of Exports and Imports) Act 1989

Section 4(E) of the *Hazardous Waste (Regulations of Exports and Imports) Act 1989* requires that hazardous waste, whether imported or exported, be managed in a manner protecting human health and the environment against any adverse effects resulting from that waste.

The Schedule to this Act invokes the 'Basel' Convention, a treaty incorporated into this Act that indicates if wastes cannot be assigned to an exporter, generator, importer or disposer, then the wastes must be disposed of as soon as possible in an environmentally sound manner. A list of the hazardous wastes that need to be controlled appears in a Schedule to the Act (URSb, 2005).

2.1.6 National Environment Protection Measures (Implementation) Act 1998

Under the *National Environment Protection Measures (Implementation) Act 1998*, the National Environmental Protection Council (NEPC) was established to set national environmental goals and standards for Australia through the development of National Environment Protection Measures (NEPMs). The NEPC is part of the Environment Protection and Heritage Council (EPHC). This Act was established to assist with the implementation of the NEPC measures across Australia (URSb, 2005).

The following NEPMs are in order of relevance in the context of this project (URSb, 2005):

- » National Pollutant Inventory (NPI), National Environment Protection Measure as varied June 2000
An initiative adopted by the NEPC in relation to the National Environmental Protection Council Act 1995 is the establishment of a NPI. This inventory has been established to provide government, industry and the community with information on the nature and levels of certain pollutants being emitted to the environment.

A preliminary assessment of NPI requirements and discussions with the EPA NRETA Office of Environment and Heritage indicate that the proposed facility will not trigger a requirement for NPI reporting.
- » Ambient Air Quality, National Environment Protection Measure, 1998
In June 1998 the NEPC agreed to set uniform standards for ambient air quality (not including indoor air). These ambient air quality guidelines will provide a useful background comparison to emissions from the proposed incinerator.
- » The Interstate Transport of Controlled Wastes, National Environment Protection Measure, 1998
The goal of this NEPM is to reduce the impact on the environment resulting from the movement of controlled wastes from one state or territory into another by establishing a nationally consistent system of tracking the waste. Under such a system, a record would be kept of each shipment of controlled wastes passing across a state or territory border. The waste generator, waste transporter, operator of the disposal facility and governments of the generating, receiving or any transit states or



territories are informed about each shipment. The measure would cover the movement of quarantine or clinical waste interstate for disposal from Darwin or into Darwin.

- » Air Toxics, National Environmental Protection Measure, 2004

The goal of this measure is to improve the information base regarding ambient air toxics within the Australian environment in order to facilitate the development of standards following a review of the measure within eight years of its making. Any toxic air emissions from the proposed incinerator would need to be recorded through ongoing monitoring and modelling, and results provided to the local environmental agency for review under this measure.

2.2 Australian Standards

The following Australian standards are relevant to clinical and quarantine waste disposal (noting that these standards do not take precedence over any Statutory Regulations that may apply):

- » Australian Standards, AS/NZS: 3816, Management of Clinical and Related Wastes: 1998 and associated handbook HB202-2000: A management system for clinical and related wastes – Guide to application of AS/NZS 3816-1998, Management of clinical and related wastes

These standards sets out requirements for the identification, segregation, handling, storage, transport, treatment and ultimate safe disposal of clinical and related wastes which may be hazardous, in an environmentally responsible manner in order to reduce the impact to human health and safety.

These standards have direct implications on this project, with regards to the management of clinical waste, veterinary, mortuary or other waste related to tattoo, body piercing or other industries where human or animal parts may be affected which may be require disposal via the incinerator (URSb, 2005).

- » Australian Standards, AS 1375-1985: SAA Standard Fuel Fired Appliance Code

This standard set out the safety principles relating to the design, installation, and operation of industrial appliances that involve the combustion of gas or oil, or other fuel in air suspension, or the generation of combustible vapours in such appliances. Therefore the detailed design of the proposed incinerator will need to be carried out in accordance with this standard.

It is noted however, that the rules for combustion safety given in this standard are applicable in principle to high energy release appliances such as large land boilers for electricity generation and for solid fuel and pulverized coal firing, and it should be recognised that appliances of such a size present unique problems that often require comparatively sophisticated control systems. Each such case should therefore be studied individually and its safety evaluated in relation to its own particular conditions (URSb 2005).

2.3 Australian Guidelines/Codes of Practice

The following Australian Guidelines/Codes of Practice are relevant to this project (URSb, 2005):

- » Best Practice Guidelines for Waste Reception facilities at Ports, Marinas, and Boat Harbours in Australia and New Zealand, 1997 Australia and New Zealand Environment and Conservation Council (ANZECC)

These guidelines are designed to assist managers of commercial ports, marinas, boat harbours, and administering authorities, to ensure the provision of facilities and services for the reception of wastes from vessels. The guidelines provide information relating to ongoing management, as well as for the



planning and establishment of new services and facilities. In relation to quarantine waste management, these guidelines will be referred to for methods of collection and separation.

- » NHMRC National Guidelines for Waste Management in the Health Industry, March 1999

These guidelines outline procedures for the classification, segregation, safe packaging (containment), labelling, storage, transport and disposal of clinical wastes. They are intended to assist authorities and practitioners, as well as other people involved (whether directly or indirectly), in determining an appropriate waste management strategy. These guidelines will be referred to for the design of the proposed incinerator with regards to the disposal of clinical waste.

- » Australia and New Zealand Clinical Waste Management Industry Group (ANZCWMIG), Industry Code of Practice for the Management of Clinical and Related Wastes, 2002 3rd Edition

The Industry Code of Practice for the Management of Clinical and Related Wastes is based on principles and information derived from a range of federal and state regulations, standards and guidelines (URSb, 2005).

- » National Occupational Health and Safety Commission, Control of Major Hazard Facilities. National Standard [NOHSC: 1014(2002)], National Code of Practice [NOHSC: 2016 (1996)], October 2002

This standard provides certain control measures to be adopted by Major Hazard Facilities. It is considered unlikely that the proposed incinerator at East Arm Wharf would be defined as a Major Hazard Facility (URSb, 2005).

2.4 Northern Territory Legislation

A Notice of Intent was submitted to the former Department of Planning, Infrastructure and Environment, Environment and Heritage office, (now NT Environment Protection Authority (EPA) Office of the Department of Natural Resources, Environment and the Arts (NRETA)) on 6 June 2005, and the Northern Territory Government subsequently issued *Guidelines for the Preparation of a Public Environmental Report, Waste Treatment Incinerator – East Arm Port* in October 2005. This PER has been prepared in accordance with these guidelines and the requirements of the *Environmental Assessment Act 1982*. Following consultation with the referral agency (EPA) and other stakeholders, an Assessment Report will be produced by the NRETA and a Ministerial decision made.

The relevant Northern Territory legislation for this facility includes:

2.4.1 Planning Act 2003

NT Planning Scheme

Section 9 of the NT Planning Scheme highlights certain provisions within the scheme that apply to the proposal (East Arm Control Plan, 1998). A development permit for the proposal is required under section 44 (a).

Determination of Development Application

Section 51 of the *Planning Act 2003* describes the requirements that are considered by the consent authority (the Minister for Infrastructure and Transport) whilst processing development applications. Section 51(g) describes the PER and its assessment by the EPA, whilst section 52 (a) highlights the requirements of the control plans under the NT Planning Scheme (section 51g).



The East Arm Control Plan indicates that the Development Zone 'DV' applies for this project. The objectives of this zone include:

- » Provide for development of major strategic industries including port related industries;
- » Provide for major industrial development of strategic importance to the future economic development of the Northern Territory; and
- » Development in this zone will be assessed having regard to, among other things, the environmental impact and effect on surrounding development from certain manufacturing processes, including method of manufacture or storage of materials.

A development application was lodged, on behalf of DPI (the proponent at that time as described in the Development Application and the NOI), by URS on 28th November 2005, with the Development Assessment Services section of the Department of Planning and Infrastructure. It was then placed on public exhibition for a two-week period. The processing of the development application is currently 'on hold' to await the outcome of the PER.

2.4.2 Darwin Port Corporation Act 1999

The *Darwin Port Corporation Act 1999* gives the DPC power to regulate and control ships, port facilities and other ancillary activities relating to tourism, commerce and recreation.

Under section 16 of the Act, functions of the Port Corporation include but are not limited to:

- » The regulation, improvement, management, operation and control of and the promotion of trade within the Port;
- » The movement of vessels within the Port;
- » The provision and maintenance of Port facilities; and
- » Recreational, tourist and commercial activities in the Port.

2.4.3 Marine Pollution Act 1999

The aim of the *Marine Pollution Act 1999* is to protect the Northern Territory's marine and coastal environment by minimising intentional and negligent discharges of ship-sourced pollutants into coastal water. The Act gives effect to certain provisions of MARPOL, specifically those dealing with pollution by oil, noxious liquid substances (including sewerage), packaged harmful substances, and by garbage. Further details of the Act are detailed in Appendix C.

Exemptions to the Act include ships under the control of the Australian Defence Force; or a warship, naval auxiliary or other ship owned or operated by a foreign country and used, for the time being, only on government, non-commercial service of the country.

In order to comply with this Act, a quarantine waste disposal service will be provided.

2.4.4 Environmental Assessment Act 1982

The *Environmental Assessment Act 1982* is to ensure, to the greatest extent practicable, that each matter affecting the environment which is, in the opinion of the NT Minister, a matter which could reasonably be considered to be capable of having a significant effect on the environment, is fully examined and taken into account in, and in relation to:



- » The formulation of proposals;
- » The carrying out of works and other projects;
- » The negotiation, operation and enforcement of agreements and arrangements (including agreements and arrangements with authorities of the Commonwealth, the States and other Territories);
- » The making of, or the participation in the making of, decisions and recommendations; and
- » Incurring of expenditure.

Under this Act, the proponent of a development must notify the Northern Territory Minister of the proposal so that an environmental assessment can be completed (including the preparation of a Notice of Intent). The EPA (who is responsible for administering this Act) also requires that a PER be submitted and exhibited for public review and comment. Any comments submitted by other government agencies must be considered before a decision is made by the Northern Territory Minister for the Environment as to whether the proposal will have, or is capable of having, a significant impact on the environment. The Minister can then request that an environmental management plan (EMP) be prepared as part of the approval process.

2.4.5 Waste Management and Pollution Control Act 1998

The purpose of the *Waste Management and Pollution Control Act 1998* is environmental protection through objectives and approvals, encouraging effective and responsible waste management and reducing and responding to pollution (see Appendix C for the key objectives of the Act). This Act facilitates the implementation of national environment protection measures made under the *National Environment Protection Council (Northern Territory) Act 1999*, and also incorporates environmental compliance plans and audits.

Section 14 of the Act establishes a process for notifying the EPA (the administering agency for the Act) about incidents causing, or threatening to cause pollution. Schedule 2 of the Act requires environment protection/licensing for certain activities. This will include licensing the quarantine incinerator to ensure it disposes of waste in the manner proposed and may attract a commercial fee for disposal of this waste.

2.5 Northern Territory Guidelines

The following Northern Territory Guidelines are relevant to this project:

- » Draft Guidelines for Waste Management for the Northern Territory Department of Health and Community Services (DHCS) Health Care Facilities (HCF), 2003

These guidelines have been developed with reference to the National Health and Medical Research Council's (NHMRC) *National Guidelines for Waste Management in the Health Care Industry, 1999*. It is noted the Draft Guidelines will replace the Interim Policy for the Disposal of Department Clinical Waste and Medical Waste, 1995, when endorsed by the DHCS' Executive. These guidelines are applicable to the disposal of clinical wastes in the proposed incinerator at the East Arm Wharf, however it must be noted that these guidelines are still in draft form and therefore not yet endorsed (URSb, 2005).

The Environmental Operations Branch, of the Northern Territory Environmental Protection Agency (NRETA) has developed these draft protocols. They provide compliance and monitoring requirements for



the proposed incinerator. The requirements will be addressed in the Environmental Management Plans prepared for the operational and construction phases of the development.

2.6 International Guidelines

The following International Guidelines are relevant to this project:

2.6.1 International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL)

The International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) concerns the prevention of pollution of the marine environment by ships from operations or accidents. Its Protocol of 1978 (MARPOL 73/78) has the greatest influence on management practices and ship equipment fits in terms of policy frameworks that dictate the management of ship-generated waste (URSb 2005). There are six technical annexes to be considered in terms of disposal of waste at sea (see Appendix C for Annex V – prevention of pollution by garbage from ships).

The two main objectives of MARPOL are to:

- » Eliminate pollution of the sea by oil, chemicals, and other harmful substances which might be discharged in the course of operations; and
- » Minimise the amount of oil that could be released accidentally in collisions or strandings by ships, or fixed or floating platforms.

MARPOL is relevant to this project as it provides an indication of the types of waste material that may be brought into Darwin Port requiring disposal. All Australian States and Territories have enacted virtually identical legislation to give effect to MARPOL in State and Commonwealth waters; the *Protection of the Sea (Prevention of Pollution From Ships) Act 1983* (Cth, see Section 2.1.4) and the *Waste Management and Pollution Control Act 1998* (see Section 2.4.5). These Acts prohibit the discharge of substances from ships (including oil, garbage and other harmful materials) and impose notification requirements on masters of ships (as described in Section 2.1.4).

The threat posed to the environment by the discharge of substances from ships involved in exercises in Australian waters and the ongoing operation of the Darwin wharfs is assessed further in this PER. The EMS for the construction of the ancillary infrastructure and the operation of the quarantine facility will include requirements to ensure compliance with the *Protection of the Sea (Prevention of Pollution From Ships) Act 1983*.

2.6.2 Stack Emission Criteria

Stack emissions will be monitored in accordance with the Draft Monitoring and Reporting Protocols for the Proposed Incinerator for East Arm Wharf (DIPE 2003). Stack emission samples will be taken as required by the Australian Standard AS 4323.1-1995 (Stationary source emissions – selection of sampling positions) and a specialist Air Quality Monitoring expert will undertake the stack monitoring.

Appendix C presents the release limits for stack emissions for contaminants consistent with Northern Territory Government draft limits.