Port of Port Elizabeth

Waste Management Plan

Revision 5: January 2017

Prepared for

Transnet National Ports Authority

Prepared by SRK Consulting in 2010

Revised and updated by Nancy Oosthuizen Consulting in 2016/ 2017

NANCY OOSTHUIZEN CONSULTING
39 Gainsford Place, La Lucia, 4051
Cell 0824933059 Tel 031-5722852 Fax 0880315722852 Email nancy@nanco.co.za

January 2017

Preface and Scope of Waste Management Plan

The purpose of this Waste Management Plan (**WMP**) is to provide a framework to guide all Port related waste management activities in the Port of Port Elizabeth (**PE**) in a well-planned and coordinated manner from waste avoidance, waste generation, reuse and recycling, to waste storage, waste handling, waste transportation and waste disposal to ensure that all Port waste management activities are legally compliant thereby avoiding or minimising adverse impacts on the environment.

To aid in the practical implementation of this plan, it is divided into four parts as follows:

- Part 1: WMP applicable to the Port of PE in respect of the roles and responsibilities of TNPA.
- Part 2: Specific WMP for the management of ship generated waste.
- Part 3: Specific WMP applicable to terminal operators/tenants/other Port users.
- Part 4: Specific WMP for use by Waste Management Contractors.

The WMP applies to operations within the Port of PE, including but not limited to TNPA, Port users, tenants, terminal operators, all contractors operating within the Port boundaries as well as other relevant Port stakeholders. This WMP also applies to vessels calling at or operating within the Port of PE, with the exception of warships, naval auxiliary or other ships used on a government non-commercial service.

The WMP is aimed at addressing all waste generated within the Port, or received at Waste Reception Facilities (WRFs) from registered and/or visiting vessels, and over which TNPA has a responsibility in terms of the National Environmental Management: Waste Act, No 59 of 2008 (NEM: WA) and the MARPOL Convention to manage. It should be noted that this WMP, in line with the NEM:WA, does not provide measures for the following classes of waste, which the Port may under exceptional circumstances be required and/or requested to manage:

- Radioactive waste that are regulated by the Hazardous Substances Act, 1973 (Act No. 15 of 1973), the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999), and the Nuclear Energy Act, 1999 (Act No. 46 of 1999).
- The disposal of explosives, regulated by the Explosives Act, 2003 (Act No. 15 of 2003).

TABLE OF CONTENTS

PART 1. WASTE MANAGEMENT PLAN APPLICABLE TO THE PORT OF PORT ELIZABETH IN RESPECT OF THE ROLES AND RESPONSIBILITIES OF TNPA

1.1 AIMS AND OBJECTIVES

The purpose of this Waste Management Plan (**WMP**) is to co-ordinate, plan, provide, and seek to improve the waste reception and handling facilities for the legal management of waste generated or off-loaded within the Port of Port Elizabeth (**PE**). The primary objective is to maintain safe and healthy working conditions and on-going protection of the biophysical environment.

Part 1 (this Part) of the WMP is intended specifically to present the overall responsibilities of Transnet National Ports Authority (**TNPA**) within the Port of PE with regards to waste management. Part 1 provides adequate detail, as a stand-alone document, for all employees of TNPA who have a waste management role as well as to provide guidance on the overall management of waste within the Port. The aim of Part 1 of the WMP is to ensure that, on implementation, all waste arising as a result of operations at the Port of PE is managed in compliance with all relevant international treaties, national, provincial and local legislation, and the rules and regulations as set out by the Transnet National Waste Management Strategy.

In pursuance of the foregoing stated aims of the WMP, the TNPA, who with due regard for its role as landlord for the Port, and acknowledging its responsibility for the efficient and satisfactory operation of the Port of PE, has adopted the policies of waste minimisation, reuse and recycling of waste wherever possible and practical, as described in the National Environmental Waste Management: Waste Act (Act No. 59 of 2008) and will encourage, and where necessary compel, other Port users to do likewise.

It is important to note that there is a total **prohibition** on the disposal of any form of waste overboard from any vessel located anywhere within the area of jurisdiction of the Port of PE or by land operators into the harbour or into the sea at any time. This prohibition is strictly enforced and severe penalties are imposed which include substantial fines.

1.2 GLOSSARY

The following acronyms and definitions are used within the document-

Abbreviations

DEA	Department of Environmental Affairs
IMO	International Maritime Organisation
KPIs	Key Performance Indicators
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
NEM:WA	National Environmental Management Waste Act (Act No 59 of 2008)
NMBM	Nelson Mandela Bay Municipality
PE	Port Elizabeth
SANS	South African National Standard
TNPA	Transnet National Ports Authority
TPT	Transnet Port Terminals

WMP	Waste Management Plan
WRFs	Waste Reception Facilities

Definitions

Adequacy	Waste Reception Facilities are considered adequate when they meet the needs of ships using the ports without causing undue delay.
Building and demolition waste	Means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition, which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded wood, glass and plastic (c) discarded metals (d) discarded soil, stones and dredging spoil (e) Other discarded building and demolition waste (Source: NEM: Waste Amendment Act 26 of 2014).
Chandling	The provision of stores and supplies.
Disposal	Means the burial, deposit, discharge, dumping, placing or release of any waste material into, or onto, any air, land or water (source: NEM: Waste Act 2008).
Disposal Facility	A facility for the burial, deposit, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land.
Domestic waste	Means waste, excluding hazardous waste that emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation, purposes, which include: (a) garden and park waste (b) municipal waste (c) food waste (source: NEM: Waste Amendment Act 16 of 2014)
Flag State	Flag State refers to the authority under which a country exercises regulatory control over the commercial vessel which is registered under its flag. This involves the inspection, certification, and issuance of safety and pollution prevention documents.
Galley Waste	Means waste originating from the kitchen of a ship.

General waste	Means waste that does not pose an immediate hazard or threat to health or to the environment, and includes— (a) domestic waste; (b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under section 69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition waste...refer to Annexure Three Category B of NEM: Waste Amendment Act 16 of 2014.
Hazardous waste	Means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles... refer to Annexure Three Category A of NEM: Waste Amendment Act 16 of 2014.
Health Care Risk Waste	The portion of the health care waste that is hazardous and including- (a) laboratory waste; (b) anatomical waste; (c) genotoxic/cytotoxic waste; (d) infectious waste; (e) sharps waste; (f) sanitary waste; (g) nappy waste; (h) low-level radioactive waste; and (i) pharmaceutical waste. (Source Draft Health Care Risk Waste Regulations published by the Department of Environmental Affairs - GG 35405, GNR 452 on 1st June 2012).
Hull Cleaning Waste	Waste removed during hull cleaning which could include material hazardous to marine biosecurity.

Inert Waste	Means waste that- (a) does not undergo any significant physical, chemical or biological transformation after disposal; (b) does not burn, react physically or chemically biodegrade or otherwise adversely affect any other matter or environment with which it may come into contact; and (c) does not impact negatively on the environment, because of its pollutant content and because the toxicity of its leachate is insignificant and which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded glass (c) discarded soil, stones and dredging spoil (source: NEM: Waste Act Amendment Act 26 of 2014)
Inspection Authority	A member of the TNPA Port of Port Elizabeth environmental management department, or duly authorised and trained representative, with the responsibility for auditing and inspecting waste management activities.
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
Minimisation	When used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of (source NEM: Waste Act 2008).
Oily waste:	For the purposes of this Waste Management Plan, oily waste means waste that contains a significant amount of oil, such as bilge mop socks, oil filters, oily rags, oil cans, and oil contaminated plastic bags and paper materials. Waste oil means oil and oil sludge in liquid form.
Recovery	Means the controlled extraction of a material or the retrieval of energy from waste to produce a product (source NEM: Waste Act 2008).
Recycle	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material (source NEM: Waste Act 2008).

Re-use	Means to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles (source NEM: Waste Act 2008).
Secondary containment	A level of containment that is external to and separate from primary containment. Secondary containment is a method of preventing unintended releases of toxic or hazardous liquids into the surrounding area. An example of secondary containment is bunding.
Ships waste	Waste and residues generated during the service of the ship which fall into the definition of garbage, oil and oily mixtures. These can include hazardous waste (e.g. Chemical waste, paints, batteries, galley waste), hazardous oil containing waste (e.g. sludge, bilge water, cargo slops/dirty, ballast), noxious liquid waste (e.g. cargo residues, pre-washings), sewage, general waste (e.g. paper, plastic, glass, cans/metal) (TNPA Waste Management Strategy, 2014).
Storage	Means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste (source NEM: Waste Act 2008).
Waste	Means: (a) any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all waste as defined in Schedule 3 to this Act; or (b) any other substance, material or object that is not included in Schedule 3 that may be defined as a waste by the Minister by notice in the Gazette, but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste— (i) once an application for its re-use, recycling or recovery has been

	approved or, after such approval, once it is, or has been re-used, recycled or recovered; (ii) where approval is not required, once a waste is, or has been re-used, recycled or recovered; (iii) where the Minister has, in terms of section 74, exempted any waste or a portion of waste generated by a particular process from the definition of waste; or (iv) where the Minister has, in the prescribed manner, excluded any waste stream or a portion of a waste stream from the definition of waste. (Source: NEM: Waste Act Amendment Act 26 of 2014)
Waste Reception Facility	Any fixed, floating or mobile facility capable of receiving MARPOL residues/waste from ships and fit for that purpose. Waste Reception Facilities are distinguished from Waste Transfer Sites in that Waste Reception Facilities are intended for the reception of ship generated waste at the Port, for removal and disposal by a waste management contractor.
Waste Transfer Site	Means a facility that is used to accumulate and temporarily store waste before it is transported to a recycling, treatment or waste disposal facility (NEM: Waste Act 2008). Waste Transfer Sites are distinguished from Waste Reception Facilities in that Waste Transfer Sites are intended for the collection of land generated waste at a central point for removal and disposal by a waste management contractor.

1.3 INTRODUCTION

This WMP has been prepared under the provisions of all the relevant legislation of the Republic of South Africa, particularly the National Environmental Management: Waste Act (Act No. 59 of 2008); the Republic of South Africa's National Ports Act (Act No 12 of 2005), the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008), and applicable international instruments, especially, MARPOL.

It is the intention of TNPA to work with all users of the Port of PE in what is a collective responsibility with regard to legally compliant and efficient waste management practises. If clarity with regards to the interpretation and identification of individual responsibilities regarding waste management is required, all TNPA employees are invited to contact the Port of PE Harbour Authority (Table 1-1).

Table 1-1: Port of PE Harbour Authority Contact Details

Designation	Telephone
TNPA Port Control	+27 (0)41 507 1909/10/11
TNPA SHEQ Manager	+27 (0)41 507 1951
TNPA Assistant Environmental Manager	+27 (0)41 507 1907
TNPA Environmental Officer	+27 (0)41 507 1708
TNPA Port Engineering	+27 (0)41 507 1565
TNPA Marine Safety and Environment Officer	+27 (0)41 507 1925

1.3.1 Port Limits

The jurisdictional area of the TNPA, Port of PE is reflected Figure 1-1.

1.3.2 Biophysical Setting

The Strategic Environmental Assessment of the Port of PE reported that there are no sensitive aquatic zones within the Port confines (Coastal & Environmental Services, 2006). The Port is however situated within Algoa Bay which is a sensitive ecological zone where Southern Right whales calve and nurse their young, endangered sea turtles feed and a multitude of waterfowl feed and nest. The approach and exit shipping lanes travel through this area. There is therefore a risk that illegal disposal and/or poor control of waste would endanger this sensitive region.

The Port is located near the junction of temperate (winter rainfall) and subtropical (summer rainfall) climate regimes and experiences a warm temperate climate. The area has a bimodal rainfall pattern, with peaks in spring and autumn, totalling approximately 600 mm per year. Port Elizabeth is subject to strong gradient winds with a strong prevalence from the west and west- south-west (41% combined frequency) all year round, and east (15%) from October through to March. Windblown litter, particularly items such as plastic bags, is of concern as it is known to lead to the death of certain species through entanglement, suffocation, and/or ingestion. The control of litter, and prevention of windblown litter, is therefore one of the important objectives of this WMP. Water quality within the Port has been monitored regularly since 2006 and the results have shown evidence of periodical contamination by petroleum hydrocarbons, and almost continual contamination from *E. coli* and related faecal coliform bacteria. The correct handling and storage of waste will assist in eliminating potential sources of these, and other, contaminants. When taking into considering the climatic conditions in PE as well as the Port's water quality, it becomes crucial to institute proper waste management practices both on land and in water to counteract any potential negative environmental impacts. This WMP intends to assist all Port users to realise this collective responsibility.

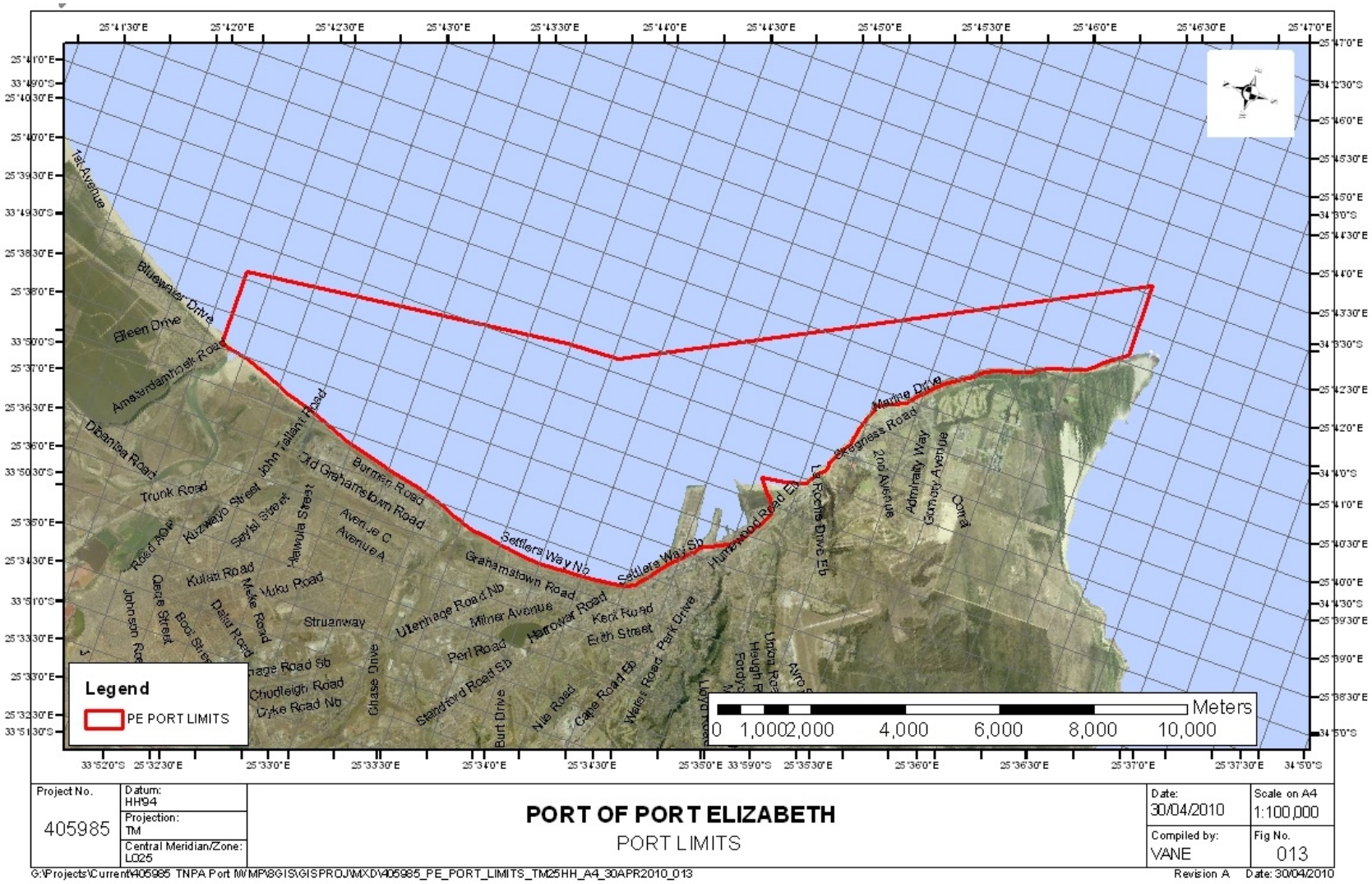

Figure 1-1: Port of Port Elizabeth Port Limits

1.4 LEGAL FRAMEWORK GOVERNING WASTE IN THE PORT OF PORT ELIZABETH

A summary description of applicable legislation is included Appendix 1-A of Part 1 for ease of reference.

1.5 POTENTIAL SOURCES OF WASTE

Sources of waste in the Port of PE can be broadly categorised by the following Port user groups. Note that a detailed waste inventory for the Port of PE is presented in Appendix 1-B.

1.5.1 Visiting Vessels

Visiting vessels are ships which have travelled from foreign waters and are not licensed in the Port of PE. According to current practice in all South African Ports, **galley waste** arising from visiting vessels is to be treated as **hazardous** waste due to the potential presence of contagious organisms. The following is a summary of the waste types that are expected to arise from visiting vessels:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Incinerator ash.
- Small items of health care risk waste arising from first aid activities.

Note: In 2020 with the implementation of Annex VI, there will possibly be various liquid waste streams for disposal, for example, sulphuric acid from fuel scrubbing plants and ash from exhaust scrubbers (this could contain large quantities of sulphur).

1.5.2 Vessels Registered in the Port

Vessels registered in the Port are typically tugs, fishing and pleasure boats which do not travel to foreign destinations. The following is a summary of the waste types that are expected to arise from vessels registered in the Port:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, or waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Fish residue and fish waste.
- Empty refrigerant containers.
- Small items of health care risk waste arising from first aid activities.
- Sandblasting waste arising from vessel maintenance activities.

1.5.3 TNPA Facilities

TNPA facilities in the Port include the administration buildings, the engineering and civils yards (workshops), the repair slipway, the canteens/kitchens, the clinic, roads and pedestrian walkways. The following is a summary of the waste types that are expected to arise from these facilities and their associated operations:

- General waste including paper, plastic, cardboard, glass, litter etc.
- Organic kitchen waste.
- Oily waste and used engine oils.
- Hazard substances containers.
- Health care risk waste.
- Sewage.
- Hull cleaning waste.
- Waste tyres.
- Sandblasting waste.

1.5.4 Tenants and Terminal Operators

Tenant and Terminal Operators facilities in the Port are varied and include administration buildings, clinic, workshops, canteens, warehouses, cold storage facilities, oil separators, petroleum products, storage bunkers, manganese bulk storage facilities, etc. The following is a summary of the waste types that are expected to arise from these facilities and their associated operations:

- General waste including paper, plastic, cardboard, tins, glass, litter, etc.
- Organic kitchen waste.
- Oily waste and used engine oil.
- Empty hazard substances containers.
- Health care risk waste.
- Sewage.
- Hull cleaning waste.
- Manganese waste.

1.6 ROLES AND RESPONSIBILITIES FOR TNPA DEPARTMENTS

TNPA has a number of roles in the Port of PE, including that of landlord. As such TNPA is responsible for ensuring that the Port environment does not become contaminated due to poor waste management practices (or any other reason), and must ensure that adequate facilities are available for the storage and removal of waste. In practice this will be achieved through the delegation of responsibilities, for example, to Waste Management Service Providers for the removal and disposal of waste and to terminal operators for the provision of Waste Reception Facilities for ship generated waste. As with each of the stakeholders within the Port, TNPA also has a responsibility to minimise waste generated as a result of its own activities.

This section outlines the overall roles and responsibilities for various departments within TNPA while the sections that follow will also contain specific roles allocated to each particular activity.

1.6.1 Port Environmental Department

The Port Environmental Department is responsible and accountable for facilitating the implementation of this WMP. The Port Environmental Department is required to:

- Establish and maintain the WMP and procedures in line with legal and other requirements.
- Develop associated documents and tools to ensure implementation of the WMP.
- Issue to WMP to the various stakeholders.
- Maintain a register of stakeholders to whom the Port WMP was issued as well as the date of issue and the WMP revision status.
- Maintain a register of tenant EMPs / WMPs developed by tenants including the date the document was approved.
- Maintain an audit schedule of all TNPA registered Waste Management Service Providers, tenants, terminal operators and other parties as necessary.
- Maintain a register of all permits, licenses and authorisations applicable to each Waste Management Service Provider licensed by TNPA.
- Monitor compliance of the PoPE to the WMP and associated procedures.
- Ensure non-conformances raised are investigated and closed out.
- Assist with the development of waste minimisation and recycling initiatives by engaging with the relevant Waste Management Service Providers.
- Maintain a centralised Waste Information System for the Port, including information from:
  - ✓ waste notification forms,
  - ✓ alleged inadequacies of Waste Reception Facilities forms, and
  - ✓ waste manifest documents and safe disposal certificates,

  as obtained from all Port users and integrate all waste management records.
- Ensure thresholds for waste licensing activities are not exceeded.
- Ensure thresholds for waste storage activities are not exceeded.
- Review the WMP records on a regular basis (i.e. disposal records, recycling records, incident management etc).
- Provide environmental specialist support services to other Port departments with respect to waste management.
- Provide general and hazardous Waste Transfer Facilities for land-based generated waste at various key locations around the Port.
- Provide guidance on waste management and the use of the Waste Reception/Transfer Facilities including the need to separate at source and place into applicable container/storage area.
- Identify training needs for waste management and implement a training programme where required.
- Develop and monitor waste management Key Performance Indicators (KPIs) to measure waste management performance.
- Form part of the Port Oversight Committee.

1.6.2 Harbour Master/Port Control

The Harbour Master has the overall responsibility to ensure the implementation of marine related activities. The Harbour Master is required to:

- Work closely with Shipping Agents, Terminal Operators, Port Engineering and the Port Environmental Department regarding waste notification forms, waste collection, management of the Waste Reception Facilities, monitoring and the enforcement of requirements for vessel generated waste.
- Keep a register of Captains / Vessel Agents who were issued the WMP as well as the respective WMP revision number.
- Refuse entry to the Port until the Advance Notification Form is satisfactorily completed and received by Port Control.
- Ensure the Finance Department is provided with an up to date register of vessels that are registered in the PoPE.
- Ensure that the Finance Department is provided with an up to date register of visiting vessels.
- Assist the Finance Department with the recovery of costs for the provision of Waste Reception Facilities for waste generators.
- Ensure that the Waste Reception Facilities for vessels are left in the same state in which they were found before authorising a vessel to leave the quay.
- Ensure that all records regarding waste originating from visiting vessels are captured on the Port Waste Information System.
- Form part of the Port Oversight Committee.
- Provide monthly reports relating to visiting vessels to the Port Environmental Department. The monthly reports shall be compiled in liaison with Port Engineering and shall include the following information:
  - ✓ The number of visiting vessels using the Port.
  - ✓ Types and quantities of waste generated.
  - ✓ Details of any and all incidents regarding waste management activities and processes.
  - ✓ Copies of final waste manifests and safe disposal certificates.

1.6.3 Marine Pollution Control Officer

The Marine Pollution Control Officer is required be the Marine Waste Management Champion and to:

- Assist Harbour Master/Port Control and Port Engineering with the management of waste arising from visiting vessels.
- Inspect Waste Reception Facilities for use by visiting vessels.
- Report issues related to the Waste Reception Facilities to Port Control, Port Engineering and Port Environmental Department.
- Form part of the Port Oversight Committee.

1.6.4 Port Engineering

The Port Engineering Department will be responsible for the day to day management of waste generated within the Port.

Port Engineering is required to:

- Collect galley waste from visiting vessels and transfer the waste to the dedicated galley Waste Reception Facility either directly or through the appointment of a Waste Management Service Provider.
- Manage the collection of other wastes from visiting vessels through the Ship's Agent.
- Ensure that galley waste is disposed at the appropriately licensed waste disposal facility.
- Comply with the consignor requirements for the dispatch of hazardous waste.
- Sign the waste manifest documents for hazardous waste removal at the time of service and provide the appropriate safety data sheet to the transporter.
- Keep an up to date register of all waste consignments and ensure that they are captured on to the Port Waste Information System.
- Together with the Harbour Master/Port Control sign off all information provided to the Environmental Department.
- Provide monthly reports relating to visiting vessels to the Port Environmental Department. The monthly reports shall be compiled in liaison with the Harbour Master and shall include the following information:
  - ✓ The number of visiting vessels using the Port.
  - ✓ Types and quantities of waste generated including data on waste actually reused and recycled, or which can be re-used and recycled.
  - ✓ Details of any and all incidents regarding waste management activities and processes.
  - ✓ Collate copies of final waste manifests and safe disposal certificates. These documents must be reconciled by Port Engineering together with the Port Marine Pollution Control Officer.
- Provide suitable type and size waste receptacles at TNPA administration centres i.e. TNPA office buildings, Port control tower, security offices and tugboat jetty.
- Report any inadequacies relating to WRFs or Waste Transfer Facilities provided for use in the Port to the Environment Department.
- Ensure that building waste is removed within 14 days of a project being completed.
- Ensure that builders' rubble is disposed to a licensed facility unless the municipality has given written consent that it can be used for land reclamation or recycling.
- In consultation with the Port Environmental Department, address non-routine hazardous waste, such as waste from electrical and electronic equipment (e-waste), transformer oils, etc. on a case by case basis.
- Extend the provision of general and hazardous waste collection to tenants or Port users who request it, and in accordance with contractual agreements that may have been entered into between TNPA and the tenants / Port users and keep the required records as detailed above.
- Plan, design and site future Waste Reception Facilities with the assistance of the Port Environmental Department.
- Form part of the Port Oversight Committee.

1.6.5 Port Finance Department

The Port Finance Department is required to:

- Assist the responsible department (either Port Control/Port Environmental Department/Port Engineering) with the determination and allocation of a specific budget for the management of waste generated within the Port of PE for which TNPA is responsible.
- Establish a Waste Management General Ledger Account in each Cost Centre involved in waste management.
- Collate an overall Port expenditure to ensure that the actual costs of waste management are accurately recorded, recovered and budgeted for.
- Assist in the development and implementation of the cost recovery system.
- Ensure that waste management reporting is incorporated into the annual financial statements.

The Harbour Master, Port Control, Port Engineering and the Port Environmental Department will assist the Port Finance Department in setting waste management tariffs for Port users.

In terms of the NEM:WA, the removal and safe disposal of waste generated by land based Port users other than TNPA is the responsibility of the waste generator. The costs of managing land waste generated on land will in effect be covered by the waste generator directly.

1.6.6 Port Property Department

The Port Property Department is required to:

- Assist the Port Engineering and Port Environmental Department in the planning and siting of WRFs.
- Ensure that a copy of the relevant section of the WMP forms part of the conditions of the lease agreements with all tenants.
- Assist the Port Environmental Department with the management of tenant non-conformances as provided for in the lease agreements with tenants.
- Ensure that the Facilities Management section assists the Port Environmental Department by inspecting waste management facilities on tenant properties during formalised facility inspections.
- Report any inadequacies relating to Waste Transfer Facilities provided for use in the Port to the Environment Department.
- Ensure that tenants submit the annual waste returns as required in Part 3 for capture on the Port Waste Information System
- Form part of the Port Oversight Committee.

1.6.7 Marine Operations Manager

The Marine Operations Manager is responsible for all matters pertaining to the management of the TNPA Marine Fleet. The Marine Operations Manager is required to manage all waste generating activities within the activities of the TNPA fleet in accordance with the requirements of the WMP.

1.6.8 Senior Operations Manager

The Senior Operations Manager is required to:

- Ensure compliance of vessels registered in the Port and all licensed waste management contractors' providing services to any user of the Port. [Waste Management Service Providers will include sewage removal contractors, used oil removal contractors, recycling contractors, health care risk waste contractors and any other waste removal contractor required by Port users].
- Ensure all waste service providers comply with their license conditions and with the relevant legal requirements.
- Form part of the Port Oversight Committee.

1.6.9 Licensing Manager

The Licensing Manager is required to:

- Request copies of all permits, licenses and authorisations applicable to each waste service provider licensed by TNPA.
- Facilitate licensing of Waste Service Providers.
- Submit to the Environmental Department a register of all permits, licenses and authorisations applicable to each Waste Management Service Provider licensed by TNPA.
- Form part of the Port Oversight Committee.

1.6.10 Procurement and Legal Department

The Port Legal and Procurement Departments are required to:

- Assist in the drafting and managing of request for quotation specifications and contract documents for Waste Management Service Providers.
- Assist in enforcing the requirements of the WMP where required.
- Assist in determining any applicable fees as well as any liabilities/claims issues that may arise.
- Ensure that when Waste Management Service Providers are appointed directly by TNPA a condition of the appointment is that the service provider will provide records of the waste handled by them along with the required safe disposal certificates and waste manifests. This information should be sent to either Port Engineering or the Port Environmental Department on a monthly basis for capture onto the Port waste information system.
- Form part of the Port Oversight Committee.

1.6.11 Port Security

Port Security is required to:

- Assist the Port Environmental Department in the enforcement and monitoring of non-conformances to the WMP.
- Conduct random inspections of vehicles transporting waste before they leave the Port to ensure that relevant legal requirements for transporting waste are adhered to.
- Report illegal dumping of waste within the Port Boundaries.
- Report the results of inspections / monitoring of waste management activities to the Port Environmental Department as and when deviations are found.
- Deny entry to the Port by Waste Management Service Providers who are not licensed to operate in the Port.
- Ensure that any new Security personnel are inducted trained on their relevant WMP responsibilities.
- Provide chemical toilets for security stations where required and to ensure that these facilities are provided/serviced by a TNPA-licensed Waste Management Service Providers.
- Ensure that all disposal/treatment certificates are provided to the Port Environmental Department on a monthly basis for capture on the Port Waste Information System.
- Report any inadequacies relating to Waste Transfer Facilities provided for use in the Port to the Environment Department.
- Form part of the Port Oversight Committee.

1.6.12 Medical/Occupational Health Practitioner

The Medical / Occupational Health Practitioner may, during the course of her/his duties, generate small quantities of health care risk waste. The Medical / Occupational Health Practitioner will be required to:

- Ensure the safe (temporary) storage of health care risk waste which will include: sharps waste, infectious waste and expired pharmaceuticals.
- Ensure that a licensed Waste Management Service Provider is appointed for the collection, transportation, treatment and disposal of such waste at suitable intervals.
- Keep waste manifests for all consignments of health care risk waste treated and disposed of and ensuring that copies of these are forwarded to the Port Environmental Department.
- Capture the information from the manifests on the Port Waste Information System.

1.6.13 Slipway Manager

The Port Slipway Manager is required to:

- Ensure that waste reception facilities are available at the slipway at all times.
- Ensure that waste generated during the operations at the slipway is disposed of into the appropriate waste reception facilities.
- Ensure that Waste Transfer Facilities are emptied before they overfill.

- Ensure that Waste Transfer Facilities are adequate and do not leak to the environment.
- Report inadequate Waste Transfer Facilities to the Port Environmental Department.
- Ensure that all users of the slipway are informed of the requirements for waste management at the slipway
- Ensure that all users of the slipway are compliant with the requirements of the WMP at all times.

1.6.14 Senior Manager: Enterprise Architecture

The Senior Manager: Enterprise Architecture is required to:

- Ensure that the WMP is available on the TNPA website to ensure that is it accessible to the various port stakeholders.
- Ensure that the web-based WMP is made available on the server in a locked PDF format so that no changes can be made.
- Ensure that the WMP is marked as a copyrighted document.
- Ensure that the most recent revision of the waste inventory is available on the TNPA website.
- Ensure that the TNPA Safety, Health, Environment and Quality Risk Management Policy statement is available on the TNPA website to ensure that is it accessible to the various port stakeholders.

1.6.15 Berthing Master

The Berthing Master is required to:

- Ensure vessels arriving at the quayside have made arrangements as per the WMP for the removal of waste.
- Monitor waste management activities occurring at the quayside.
- Ensure only TNPA-licensed Waste Management Service Providers are providing services to the Port.
- Assist with inspecting waste management activities occurring on the quayside and the issuing and closing out of non-conformances.
- Ensure that the quayside and waste reception facilities are in good order before permitting the vessel to depart.

1.7 MANAGEMENT OF SHIP GENERATED WASTE

The management of ship generated waste is presented in detail in Part 2 of this WMP. Included herewith is a summary of the roles and responsibilities of TNPA with regard to management of ship generated waste.

1.7.1 Visiting Vessels

Visiting vessels (or their Ships Agents) are required to notify the Harbour Master and Port Control 72 hours in advance of the vessel arriving in the Port of their requirement for waste removal services using the Advance Notification Forms presented in Appendix 2D of Part Two. Entry to the Port must be refused by the Harbour Master until these forms are satisfactorily completed and received by Port Control. Port Control will notify Port Engineering by supplying copies of the completed advance notification forms. Port Engineering will arrange for suitable

waste receptacles to be provided (for galley waste) and/or liaise with Ships agent for the appointment of a Waste Management Service Provider licensed to operate in the Port to provide suitable receptacles for general solid waste and liquid/sludge waste. **All galley waste** from visiting vessels is to be regarded as **hazardous** and placed into a hazardous waste skip for removal and disposal by the appointed TNPA service provider. Port Engineering (with the assistance of the Marine Pollution Control Officer) will ensure that all waste management records (including disposal certificates and waste manifests) are obtained and copies provided to the relevant visiting vessel or the Ship Agent as required and to the Port Environmental Department for record keeping purposes.

1.7.2 Vessels Registered in Port

The Port Environmental Department is to ensure that waste reception facilities including hazardous and general waste skips, used oil receptacles and recycling stations are available at the berths where the vessels registered in the Port are permitted to operate. The Port Environmental Department must ensure that these facilities are serviced by the TNPA-licensed Waste Management Service Providers on a regular basis and that all waste records related to these facilities are maintained and captured on the Port Waste Information System.

1.8 MANAGEMENT OF TNPA LAND-GENERATED WASTE

The management of TNPA land-generated waste is presented in detail in Part 3 of this WMP. Included herewith is a summary of the roles and responsibilities of TNPA with regard to management of TNPA land-generated waste.

Port Engineering, with guidance from the Port Environmental Department, is to provide the necessary recycling facilities, general and hazardous waste skips and used oil receptacles at determined locations for use by TNPA departments. Port Engineering must provide all waste records related to these facilities (including disposal certificates and waste manifests) to the Port Environmental Department for capture on the Port Waste Information System.

Port Security is to provide chemical toilets for security stations where required and to ensure that these facilities are provided/serviced by a TNPA-licensed Waste Management Service Provider and that all disposal/treatment certificates are provided to the Port Environmental Department on a monthly basis for capture on the Port Waste Information System.

1.9 MANAGEMENT OF TENANT-GENERATED WASTE

The management of tenant-generated waste is presented in detail in Part 3 of this WMP. Included herewith is a summary of the roles and responsibilities of TNPA with regard to management of tenant-generated waste.

The Property Department is to ensure that the requirements for responsible and legal waste management (including a copy of this WMP) is included in all Lease Agreements with tenants and that waste compliance audits are conducted as part of the facilities management audits.

Any new tenants requesting to establish in the PoPE, will be provided with the relevant section of this WMP. The tenant must sign acceptance of the Port WMP.

Port Engineering may provide waste removal or recycling services to tenants on request, but must ensure that the tenant is charged for the service, that they are provided with disposal certificates and waste manifests, and that such documents are also forwarded to the Port Environmental Department for capture on the Port Waste Information System.

Where tenants are to provide their own waste management services, they will do so as per Part 3 of this waste management plan. Tenants are required to conduct their own audits on compliance with the WMP which shall be made available to the Port Environmental Department on request. The Port Environmental Department will review these as part of the Oversight Audits.

The Property Department is to ensure that tenants submit the annual waste returns as required in Part 3 for capture on the Port Waste Information System.

1.10 MANAGEMENT OF WASTE MANAGEMENT SERVICE PROVIDERS

1.10.1 General Requirements

The WMP for Waste Management Service Providers is presented in detail in Part 4 of this WMP. Included herewith is a summary of the roles and responsibilities of TNPA with regard to management of these service providers:

All departments must ensure that only TNPA Waste Management Service Providers licensed by the Chief Executive offer waste management services in the Port of PE.

The Procurement Department and the Port Environmental Department are to ensure that when Waste Management Service Providers are appointed directly by TNPA, a condition of the appointment is that the service provider will provide records of the waste handled by them along with the required safe disposal certificates and waste manifests. This information should be sent to either Port Engineering or the Port Environmental Department on a monthly basis for capture onto the Port Waste Information System.

The Port Environmental Department will audit Waste Management Service Providers on a scheduled basis (as part of the Oversight Audits) to ensure that their actions comply with the WMP and the relevant waste legislation.

1.10.2 Requirements for the Licensing of Waste Management Service Providers

The Procurement Department, Port Engineering, Port Environmental Department, the Harbour Master and the Licensing Manager are responsible for ensuring Waste Management Service Providers are selected, licensed and appointed as per the following guidelines:

"*Guidelines for Agreements, Licenses and Permits in terms of the National Ports Act No. 12 of 2005*". The document includes a number of criteria for the selection of Waste Management Service Providers who wish to operate within the Port. The criteria have been modified to incorporate elements of the NEM:WA (Refer Table 1-2).

The Oversight Committee will preside over the licenses and make recommendation to the Chief Executive whether to grant a license or to reject the application.

In the selection and appointment of Waste Management Service Providers, TNPA must comply with the requirements of Chapter 6 of the National Ports Act (Act No. 12 2005). These requirements state that:

- The Port Authority must, in the Terms of Reference specify:
  - ✓ The kind of service in respect of which applications are invited.
  - ✓ The form in which applications must be submitted, including any applicable fee, upon submission of an application.
  - ✓ The manner in which it is contemplated that the service must be provided.
  - ✓ The place where, and times when, any application form or relevant document must be obtained from the Authority.
  - ✓ The period within which such applications must be lodged.
- The Terms of Reference for the waste disposal service provider (licensed operator) must detail the following information:
  - ✓ The duration of the license.
  - ✓ The types of services or facilities to be provided by the licensed operator.
  - ✓ The annual license fee payable by the licensed operator.
  - ✓ The duties and obligations of the licensed operator in respect of the services or facilities provided by it.
- The Terms of Reference must also state that the Port Authority may monitor and annually review the performance of the contractor against the performance standard specified in the agreement.
- Once applications have been received the Port Authority must, within six weeks, issue a license subject to the terms of reference, or refuse to issue a license with reasons for the refusal.

Table 1-2: Criteria for Selection of Waste Management Contractors[1]

Criterion	Yes	No
Ability to provide service		
Provides evidence of adequate resources to fulfil the specific contract, including: Vehicles; Suitably qualified personnel; Premises; Financial resources & systems; and Environmental Management Systems.		
Occupational Health & Safety		
Demonstrates availability of the following protective clothing for each		

[1] Modified from Guidelines for Agreements, Licenses and Permits in terms of the National Ports Act No. 12 of 2005

Criterion	Yes	No
personnel member (South African National Standards certified): Hard hat; Safety shoes / boots and gloves; Reflective jacket; and Self-inflating life jacket. Demonstrates compliance with the requirements of the Occupational Health & Safety Act.		
Qualifications and competencies of personnel		
Provides proof of the qualifications and training records of all personnel		
Memberships, permits and registrations		
Provides copies of the following documents: Proof of registration with the Nelson Mandela Bay Municipality as a Waste Transporter; Waste management licenses for all facilities involved in the, transfer, recycling, recovery, treatment, or disposal of waste, as may be required in terms of the list of activities requiring a Waste Management License (the most recent list is dated 29th November 2016 (GNR 921, GG 37083) as these relate to the waste management service to be provided. Copies of registrations for waste storage areas as applicable (as per the National Norms and Standards for Waste Storage, 2013). Copies of registered S20 landfill site permits where such permits have not been converted to waste management licenses; Proof of membership with an applicable Waste Management Institution.		
Tax Clearance Certificate		
Valid Letter of Good Standing		
Applicants will be required to provide valid SARS tax clearance certificates.		
Insurance		
Has Public Liability Insurance, or, if a new operator, qualifies for Public Liability Insurance.		
Environmental Impairment Insurance		
Broad Based Black Economic Empowerment		
Submits a verification certificate from an accredited verification agency, indicating the B-BBEE contributor level of the applicant.		

1.11 IMPLEMENTING THE WASTE MANAGEMENT HIERARCHY

The Port Environmental Department will be responsible to ensure that the principles of the waste management hierarchy are considered and where practically possible, implemented in the Port.

As part of the overall review of the WMP, the Port Environmental Department should identify the current waste management practices and measure the types and amounts of waste generated in order to identify opportunities to reduce, reuse or recycle the waste.

The Port Environmental Department will be required to:

- Implement systems within TNPA to bring about waste prevention, material reuse, waste minimisation and recycling.
- Identify an environmental champion in each TNPA office/department, or a core group to assist in identifying waste streams that could be segregated (e.g. paper, cans, printer toner cartridges),
- Prepare awareness material on the benefits of waste minimisation, and recycling.
- Formally distribute waste awareness material to all department and tenants and other Port users.
- Facilitate the establishment of materials recycling facilities at selected locations within the Port that can be utilised by TNPA tenants.
- Encourage tenants to implement waste minimisation systems within their own organisations and to utilise the TNPA-provided materials recycling facilities.
- Manage the Waste Management Service Providers appointed to service the materials recycling facilities.
- Ensure that waste minimisation information is included on tenants' annual waste returns and is captured into the Port Waste Information System.
- Ensure waste minimisation carried out by TNPA departments is obtained and captured into the Port Waste Information System.
- Report annually on the waste minimisation statistics.

All other TNPA Departments are responsible for ensuring:

- That they separate waste for recycling, investigate and implement options for waste minimisation through product changes and reuse.
- That they comply with any instructions received from the Port Environmental Department regarding waste minimisation.
- That they manage any appointed contractors to ensure waste minimisation is practised.

1.12 ADEQUACY OF WASTE RECEPTION FACILITIES AND WASTE TRANSFER FACILITIES

The Port Environmental Department, Port Engineering, the Property Department, the Security Department and the Harbour Master are responsible for ensuring that the Waste Reception Facilities and Waste Transfer facilities provided for use in the Port are adequate.

The Harbour Master will be responsible for receiving and acting on inadequacies reported by vessels and ship agents.

The Port Environmental Department will be responsible for inspecting land based Waste Transfer Facilities to highlight inadequacies and take corrective action as required.

The long term effectiveness of facilities and procedures associated with this WMP can only be achieved through full and constructive dialogue between and amongst the Port Authority, Terminal Operator, Tenant and the regular Port users, as to what facilities should be provided and improved to meet their general needs for disposing of all types and quantities of waste, and for any special requirements that may occur. On-going dialogue is particularly necessary for the PoPE as it is expected that there will be rapid growth in the number and variety of stakeholders, and consequently also in the understanding waste management compliance responsibilities.

1.13 WASTE INVENTORY

The Port Environmental Department is responsible to ensure that the waste inventory for the Port is updated on an annual basis by interrogating the waste data captured on the Port Waste Information System and including any new waste into the inventory.

Port Engineering is responsible for reporting their waste information through to the Port Environmental Department on a regular basis by capturing the information on the Port Waste Information System.

All TNPA Departments are responsible to notify the Port Environmental Department in the event that they are generating a new waste not previously recorded and to provide as much information as possible about the waste i.e. how generated, quantities, handling requirements etc.

As new tenants take occupation and utilise the waste management services provided by the Port, in accordance with this WMP, such tenants are also required to report on their waste types and volumes on an annual basis to the Port Environmental Department. Irrespective of whether tenants utilise TNPA waste management services or not, tenants are required to retain all relevant information relating to waste practices, in a format that can be included in the Port's Waste Information System, such that TNPA is in a position to provide the data should this be required in terms of the NEM: WA.

1.14 WASTE CLASSIFICATION

The Port Environmental Department is responsible to ensure that all waste generated and handled by TNPA is classified in terms of the Waste Classification and Management Regulations of 2013. In terms of the legal requirements waste classifications must be repeated every five years or when the process generating the waste changes.

1.15 WASTE LICENSING / REGISTRATION

The Port Environmental Department must monitor waste activities to ensure that any-

- Waste recycling or treatment activities do not exceed the thresholds that would require a waste management license to be obtained.
- Waste storage activities do not exceed the thresholds that would require a storage registration to be submitted.

For further information refer to Part 4 of the WMP.

1.16 DREDGING ACTIVITIES

Dredging in the Port of PE is undertaken as required by the Harbour Master to maintain sufficient depth for vessels calling on the PoPE. The Port maintains a current license (renewed annually) issued by the National Department of Environmental Affairs. This license authorises that disposal of dredged material at a specific location at sea. It is the responsibility of the Harbour Master and the Chief Engineering Technician to ensure that the conditions of the license are met.

The Harbour Master, with the assistance of the Port Environmental Department must ensure that an alternative disposal/treatment plan is in place should it be determined that the dredged sediment is contaminated and cannot be dumped at sea.

Waste debris collected from the seabed (not sediment) of the Port must be stored on site in adequate receptacles before being transported by a TNPA-licensed Waste Management Service Provider to a legally approved disposal/treatment facility. Waste disposal records must be maintained and a copy of the records sent to the Port Environmental Department for entering in the Port Waste Information System.

1.17 EFFLUENT DISCHARGE

TNPA maintains a valid permit to discharge industrial effluent to sewer to the NMBM sewer reticulation system. The permit is issued by the NMBM and is renewed as required. The Port Environmental Department must monitor the discharge to ensure that the conditions are complied with and that the permit is renewed when necessary.

1.18 SPILLS AND EMERGENCY RESPONSE

TNPA has licensed Waste Management Service Providers with the skills to attend to spills and to manage the waste generated by these spills. A spills and emergency response procedure is in place. The Port Environmental Department is responsible for ensuring the waste information generated by a spill or emergency situation is captured on the Port Waste Information System.

1.19 WASTE FINANCING, TARIFFS, AND BUDGETING

The Harbour Master, Port Control, Port Engineering and the Port Environmental Department will assist the Port Finance Department in setting waste management tariffs for Port users (Refer to Section 1.6.4 for the roles and responsibilities of the Finance Department).

In terms of the NEM:WA, the removal and safe disposal of waste generated by land based Port users other than TNPA is the responsibility of the waste generator. The costs of managing land waste generated on land will in effect be covered by the waste generator directly.

1.20 WASTE INFORMATION AND RECORD KEEPING

The custodian of waste information and waste records is the Port Environmental Department. All waste information will be captured on a regular basis into the Port Waste Information System by the various Departments as outlined under their areas of responsibility. The Port Waste Information System will include information on:

- Waste managed by TNPA.
- Annual waste returns provided by terminal operators, tenants and other Port users.
- A waste inventory (updated as required).
- Waste quantity data relating to minimisation, reuse, recycling, treatment, and disposal.

The Port Waste Information System must assist the Port Environmental Department to:

- Keep waste manifest documents and waste disposal certificates on record as evidence that all waste that is destined for disposal, has been safely disposed of at an appropriately licensed facility. In this regard it is noted that waste manifests for hazardous waste must be retained for a 5 year period.
- Capture all waste types and quantities from all generators within the Port Jurisdictional area including Port tenants.
- Maintain records of waste minimisation and recycling initiatives along with disposal or treatment records to show due diligence with regard to implementing the waste management hierarchy.

1.21 MONITORING, COMPLIANCE AND ENFORCEMENT

1.21.1 Monitoring Compliance with WMP

The Port Environmental Department will be responsible for auditing the following user groups for compliance with the WMP as part of the Oversight Audits.

- TNPA Waste Management Service Providers assisted by Port Engineering.
- Terminal operators and tenants Waste Management Service Providers and Waste Transfer Facilities assisted by the Property Department and Port Engineering.
- All WRFs assisted by Port Engineering and the Marine Pollution Control Officer.
- Selection of visiting vessels assisted by Port Engineering and the Marine Pollution Control Officer.
- Selection of vessels registered in the Port assisted by Port Engineering and the Marine Pollution Control Officer.

1.21.2 Enforcement

Enforcement of the WMP will be carried out initially through the audit process identifying non-conformances followed up by corrective actions and close out of corrective actions.

In the instances where non-conformances are not closed out, or are continually repeated, the Port Environmental Department with the assistance of the Harbour

Master, Property Department, Port Engineering and the Legal Department will ensure the enforcement action is taken with the relevant offender either through penalties or termination of licenses. This process can be managed through the forum of the Port Oversight Committee.

1.22 WASTE MANAGEMENT AWARENESS

The Port Environmental Department will ensure that awareness on the requirements of the WMP is maintained within TNPA, terminal operators, tenants, Waste Management Service Providers and all other Port users on an ongoing basis.

The Port Environmental Department will also ensure that waste awareness posters shall also be displayed at various locations in the Port environment.

TNPA will ensure that the WMP constitutes an item on the agenda of existing stakeholder Forums. It is intended that such item on the agenda will include, but not be limited to:

- Changes with continuously changing circumstances to current waste management practices in accordance with legislation and best practices and in the light of updated information.
- Adequacy of facilities (Waste Reception Facilities and Waste Transfer Facilities).
- The results of waste monitoring/inspection activities.
- Initiatives for waste minimisation, including potential "waste exchange" opportunities.

This will provide a platform for sharing of waste management resources and/or experiences, e.g. a directory of waste recyclers.

1.23 REVIEW OF THE WASTE MANAGEMENT PLAN

The Port Environmental Department is responsible for managing the review of the WMP.

The WMP has been developed primarily but not exclusively against the background of current legislation and regulations relating to waste management in the Republic of South Africa and the current waste generation trends in the PoPE. The document may be reviewed from time to time as required. It is the responsibility of TNPA departments to ensure that they are in possession of the latest revision of the WMP and that it is readily available to their staff.

The principal PoPE tenants/users/shipping agents are required to complete annual returns (or more frequently as changing circumstances dictate) for their waste operations. The information received will be used to assess and introduce any needed modifications in the overall WMP.

Amendments to the WMP can be brought about through one or a combination of the following circumstances:

- Changes in TNPA waste management policy(ies).
- Changes in legal requirements pertaining to waste management.
- Changes in customer needs or new customers.
- Adverse changes in weather conditions.

- After a review of waste data including-
  - ✓ monthly waste reports;
  - ✓ waste notification forms;
  - ✓ Waste Reception Facility alleged inadequacies forms; and
  - ✓ any complaints, criticisms or compliments.
- After waste inspections and oversight audits.
- On the identification of opportunities for waste minimisation.
- After an assessment as to the degree to which the objectives of this WMP have been met and identification of possible areas of improvement.
- Any other condition that TNPA may see fit to necessitate such a change.

PART 1: APPENDICES

APPENDIX 1-A: SUMMARY OF LEGAL REQUIREMENTS APPLICABLE TO WASTE MANAGEMENT IN THE PORT OF PORT ELIZABETH

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
MARPOL Convention and associated regulations	• The main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. • Vessels must not discharge wastes into the sea. It provides the international standard regarding Port Waste Reception Facilities for ship generated waste.
	<u>Annex I Regulations for the Prevention of Pollution by Oil</u> • Vessels are prohibited from discharging oil or oily mixtures into the sea, except in specified conditions. • Ports must supply adequate waste reception facilities. • Oil and oily sludge must be removed and disposed / recycled to a licensed facility.
	<u>Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk</u> • Vessels are prohibited from discharging of residues containing noxious substances is 12 miles of the nearest land (normally from tank cleaning activities). • Ports must supply adequate waste reception facilities. • Slops must be removed and disposed / recycled to a licensed facility.
	<u>Annex IV Prevention of Pollution by Sewage from Ships</u> • Ports must supply adequate waste reception facilities. • Sewage must be removed and discharged to a licensed treatment facility.
	<u>Annex V Prevention of Pollution by Garbage from Ships</u> • All ships of > 400 gross tonnage and above and every ship certified to carry 15 persons or more must carry a Garbage Management Plan, to include written procedures for collecting, storing, processing and disposing of garbage, including the use of any relevant equipment fitted on-board (incinerators, compactors, etc). • The Garbage Record Book must record all disposal and incineration operations. • Every ship of 12 metres or more in length must also display placards notifying passengers and crew of the relevant disposal requirements. • Ports must provide reception facilities for garbage without causing undue delay.

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
	Annex VI Prevention of Air Pollution from Ships From 2020 this will potentially give rise to disposal requirements from scrubber systems.
International Health Regulations, 2005	The competent authorities shall- ♦ Be responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal dejecta, wastewater and any other contaminated matter from a conveyance. ♦ Take all practicable measures to monitor and control the discharge by ships of sewage, refuse, ballast water and other potentially disease-causing matter which might contaminate the waters of a port, river, canal, strait, lake or other international waterway.
Stockholm Convention on Persistent Organic Pollutants, 2001	Global treaty to protect the environment by reducing / eliminating the use of persistent organic pollutants. Eg. Polychlorinated biphenyl - PCB.
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004	Global treaty to protect the environment from the transfer of harmful organisms in ballast water carried by ships.
Basel Convention on the Transboundary Movement of Hazardous Wastes	Controls the movement of hazardous waste between parties to the convention. Various notifications and permissions are required.
The London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972	Controls pollution of the sea by the dumping of wastes and other material.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Constitution of South Africa Act 108 of 1996	• Waste activities must be undertaken in such a manner that is not harmful to the health or well-being of SA citizens.
National Ports Act 12 of 2005	• In order to provide a waste management service in the Port, a license must be obtained from TNPA. • The Harbour Master can give written or verbal instructions with respect to removal of waste and the use of the Port Reception Facilities.
Notice to Apply for a Waste Management License Gazette Notice No 275, Gov Gazette No 34253 of 6th May 2011	Port Waste Management Service Providers must apply to TNPA for a license.
The Ports Rules of 2009	• 72 hours' written notice of arrival must be given to the Harbour Master. Notification must include details of the waste on board. • All persons in the Port must prevent pollution and protect the environment. TNPA can take remediation measures in the event that pollution is caused. The polluter will need to pay for the costs of remediation. • No harmful matter including oil can be discharged into the harbour. • Vessels berthed along a quayside must have all valves closed or covered to prevent inadvertent discharges. • Clean-up of spills must be done in accordance with the Port Contingency Plan. • Terminal Operators and vessels must make use of Port Reception Facilities for waste from vessels. • TNPA may require a vessel to procure waste services from a licensed provider if the berth is not operated by a Terminal Operator. • TNPA can direct a Terminal Operator who does not have adequate waste reception facilities to procure them within a specified time period. • Galley waste must be handled in accordance with the Port Waste Management Plan. • Owners, masters or agents must comply with their Vessel Waste Management Plan. • No discharge from tank or hatch cleaning activities is allowed into the Port.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986	• Incorporates the requirements of the MARPOL Convention into law.
Second-Hand Goods Act 6 of 2009 **Regulations for Accreditation of Second-Hand Goods Dealers' Associations, 2010** **Regulations for Dealers and Recyclers, 2012**	• Dealers and recyclers of listed controlled metals must be registered with the South Africa Police Service (SAPS). • Applies to scrap metal dealers and recyclers of scrap.
Import Permits	An import permit must be obtained from the International Trade Administration Commission of South Africa (ITAC) to bring controlled goods into the country – includes waste and scrap.
The International Health Regulations Act 28 of 1974	Every Port must be provided with an effective system for the removal and safe disposal of excrement, refuse, waste water, condemned food, and other matter dangerous to health.
Animal Diseases Act 35 of 1984	Refers to infectious material which must be burnt in an incinerator, or which must be disposed of in any other manner which the director may determine.
National Environmental Management: Integrated Coastal Management Act 24 of 2008	• Waste must not be imported into SA for dumping or incineration within the coastal zone or exclusive economic zone. This includes general waste, sewage, oils, slops etc. • Waste must not be dumped on incinerated within the coastal zone or exclusive economic zone. • Waste cannot be exported to be dumped or incinerated at sea unless authorised by a permit. • The permit process must be adhered to for the dumping of various waste including: dredged material and sewage sludge.
National Environmental Management Act 107 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated. • Incidents that fall into the definition must be reported and managed according to the requirements: for example in the event of an oil spill into the Port.
National Water Act 36 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
National Environmental Management: Waste Amendment Act 59 of 2008 and National Environmental Management: Waste Amendment Act 26 of59 of 2008	The Act contains extensive provisions for the management of waste, including - • Wastes must be avoided where possible, or minimised, reused and recycled before disposal to landfill is selected as the appropriate management measure. • Disposal must be to a licensed facility. This includes general waste, sewage, oils, slops etc. • Storage activities must not present a risk to the environment and no nuisance must be created: for example odours and windscatter. • Employees must be prevented from contravening the Act. • Waste must not be used for an unauthorised purpose. • Gazetted waste activities are subject to a waste management license. • Owners of public land to which the public has access must provide sufficient waste containers for public use. • Waste transporters must be registered (normally in terms of the local bylaws). • Waste must not be spilt during transport. • Waste transporters must check whether the disposal facility is licensed before offloading. • If hazardous waste is transported for purposes other than disposal, the person transporting the waste must before offloading the waste ensure that the authorisations are in place. Written confirmation that the waste has been accepted must be obtained. • The Minister can call on categories of persons to produce industry waste management plans. [At the time of the TNPA WMP update (November 2016) the only government approved waste management plan is the Recycling and Economic Development Initiative of South Africa Integrated Industry Waste Tyre Management Plan.] • DEA must be notified in the event of the identification of contaminated land. This may be necessary for example: in the event that substandard waste management storage and handling activities causes soil pollution and rehabilitation is necessary.
Norms and Standards for the Remediation of Contaminated Land and Soil Quality, 2014	Reporting and remediation requirements must be followed.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Notice 921 of 23rd November 2013 listing activities that require a waste management license.	Various waste management activities are detailed including recycling, treatment and disposal. Thresholds are provided. • Category A activities require a basic assessment. • Category B activities require a full EIA. • Category C activities require compliance with norms and standards.
National Norms and Standards for the Storage of Waste 2013	Registration and compliance with the norms and standards is required to store waste in excess of the thresholds- 100m^3 general waste or 80 m^3 hazardous waste [At the time of the TNPA WMP update (November 2016) no areas requiring registration were identified.]
Waste Tyre Regulations of 2009	• Tyres must be disposed at a licensed facility. • Tyres must be cut into quarters before disposal. • Plans must be in place for tyre storage areas.
National Waste Information Regulations, 2012	• Hazardous waste generators must register with DEA if they generate more than 20kg of hazardous waste per day - there are no reporting requirements for generators. • A number of other persons must register with DEA including: operators of landfill sites, recyclers, importers etc. • Quarterly reporting is required.
National Pricing Strategy for Waste Management, 2016	This strategy contains guiding methodologies for the setting of waste management charges, aimed at funding the re-use, recycling or recovery of waste and the implementation of industry waste management plans (IndWMP) for those activities that generate specific waste streams.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Asbestos Regulations, 2001 – promulgated in terms of the Occupational Health and Safety Act **Regulations for the Prohibition of the Use, Manufacturing, Import and Export of Asbestos and Asbestos Containing Materials published in terms of the Environmental Conservation Act**	Asbestos must be disposed to the correct class landfill site. Persons handling asbestos for disposal must have the required PPE and must have had training in line with the requirements of the Regulations.
Waste Act: Admission of Guilt Fine Regulations, 2015	Contains a schedule with the maximum applicable fine attached to a number of waste related offenses.
National Road Traffic Act 93 of 1996 **National Road Traffic Regulations of 2000 (Regulation 273A).** **SANS documents for the transportation of Dangerous Goods**	♦ Consignments of dangerous goods must only be transported in compliance with the requirements. ♦ The dispatch of hazardous goods includes hazardous wastes such as galley waste; oil sludges; slops; and mixed contaminated waste. ♦ Dangerous goods declarations must be used. ♦ Loading must be supervised by a responsible person. ♦ The vehicle must be registered as a dangerous goods carrier. ♦ The driver must be trained, have a professional drivers permit for dangerous goods, and must be in possession of the correct TREMCARD.
Waste Classification and Management Regulations 2013	♦ All wastes must be classified in terms of SANS 10234 except for those listed in Annexure 1 to the regulations which are regarded as pre-classified- ✓ Annexure 1 part one includes general wastes. ✓ Annexure 1 part 2 includes hazardous wastes such (2)(b)(ii) : *General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals*. This can be referenced to contaminated waste such as oily rags etc. These wastes can be regarded as pre-classified waste however they must be disposed to a hazardous waste landfill site and a safety data sheet must be prepared. ♦ Hazardous wastes that are removed from site must be accompanied by a waste manifest that contains all the details in Annexure 2 of the regulations. The final manifest reflecting three signatures (generator, transporter and waste disposal / recycling facility) must be retained on

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
	file for a five year period. • Wastes must be disposed within 18 months of generation. • Specific labelling requirements must be complied with.
National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013	Any wastes that are to be disposed to landfill (other than the pre-classified wastes) must be assessed according to these standards to determine which class landfill they can be disposed at.
National Norms and Standards for Disposal of Waste to Landfill, 2013	Contains a schedule which has timeframe for the phase out for certain wastes streams to landfill. A number of streams are listed including- • Waste compressed gases – from 23rd August 2013 • Lead acid batteries – from 23rd August 2013 • Other batteries – from 23rd August 2021 • Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes – from 23rd August 2017 • Re-usable, recoverable or recyclable used or spent solvents – from 23rd August 2018 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps - from 23rd August 2016 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Other – from 23rd August 2021. • Waste tyres: Whole – from 23rd August 2013 • Waste tyres: Quartered – from 23rd August 2018 • Liquid waste- (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment-from 23rd August 2019
Hazardous Chemical Substances Regulations of 1995 promulgated in terms of the Occupational Health and Safety Act	• Wastes containing hazardous chemical substances must be recycled wherever possible. • Waste hazardous chemical substances must be disposed to the correct class landfill site. • Employees must have the required PPE.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Hazardous Substances Act 15 of 1973	♦ The act classifies chemicals into four different groups. ♦ Group I and II = Substances are those dangerous to humans due to their toxic nature. ♦ Group III = Various electronic products. ♦ Group IV = Radioactive products. ♦ Hazardous waste generated in the PoPE generally fall into Group II substances for which no regulations are in place (as far as the HSA is concerned).

PROVINCIAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Eastern Cape Environmental Conservation Act of 2003	♦ One of the aims is to regulate waste management in the province. ♦ The Minister has the power to make regulations with respect to waste management. No regulations to this effect have been gazetted.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Waste Management Bylaws, 2010	♦ All commercial waste service providers must be registered with the local authority. ♦ Users of commercial service providers must ensure that the waste collector is registered and that they comply with the bylaws. ♦ Waste transporters must: not allow waste to escape from the container / vehicle; maintain clean vehicles and equipment; and ensure that waste is disposed to the appropriately licensed facility. ♦ Garden waste must be disposed to a licensed site. ♦ Building waste must be removed within 14 days of the project being completed and must be disposed to a licensed facility unless the municipality has given written consent that it can be used for land reclamation or recycling. ♦ Littering, dumping and the burning of waste is prohibited by the bylaws.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Water and Sanitation Services Bylaws, 2010	♦ Persons transporting and disposing of sewage by road haulage must have prior written agreement from the municipality. ♦ The agreement must state: source of domestic sewage, day, time and point of delivery.

APPENDIX 1-B: DETAILED WASTE INVENTORY – NOV 2016

PORT OF PORT ELIZABETH WASTE INVENTORY		
TERMINOLOGY		
Waste Category	Categorisation in terms of the National Waste Information Regulations, 2012. Categories applicable to PoPE.	
	GW1001	Commercial and Industrial Waste.
	GW2001	Garden waste.
	GW2101	Sewage.
	GW2002	Organic waste, food waste.
	GW2003	Wood.
	GW3001	Construction and demolition waste.
	GW5004	Paper, mixed grades.
	GW5106	Plastic, other.
	GW5201	Glass.
	GW5301	Metals, ferrous.
	GW5302	Metals, non-ferrous.
	GW5401	Tyres.
	GW9901	Miscellaneous.
	HW0301	Lead batteries.
	HW0307	Mixed batteries.
	HW0601	Asbestos containing waste.
	HW0701	Waste oils.
	HW1805	Waste of Electric and Electronic Equipment (WEEE), lighting equipment.
	HW1808	Waste of Electric and Electronic Equipment (WEEE), lighting equipment, mixed WEEE.
	HW1902	Health Care Risk Waste, infectious waste and sharps.
	HW9901	Miscellaneous.
Waste Classification	Classification must be done in terms of the Waste Classification and Management Regulations of 2013 and the associated norms and standards.	

PORT OF PORT ELIZABETH WASTE INVENTORY	
TERMINOLOGY	
Pre-Classified Waste	Annexure One to the above regulations contains a list of pre-classified waste. These do not need to be classified in terms of SANS 10234 but must have a safety data sheet. Waste in Annexure One part 2 must be disposed to a hazardous waste landfill site
SDS	Safety Data Sheet must be provided for hazardous waste.
Waste Type	Waste Type as determined by the National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013. Type 0 (no landfilling). Type 1 (Class A landfill) Type 2 (Class B landfill) Type 3 (Class C landfill) Type 4 (Class D landfill). The waste type only need to be determined for- Waste not on the pre-classified list and waste that need to be disposed to landfill.
SANS 10228	Class for the transport of dangerous goods / hazardous waste.
NMBM	Nelson Mandela Bay Municipality.
HCRW	Health Care Risk Waste.
ACW	Asbestos cement waste – such as roof sheets, gutters, down pipes that contain asbestos fibre.
PCB contaminated	Any article that has in excess of 50 ppm polychlorinated biphenyl in the lubricating oil.

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Metal / Scrap Ferrous	Maintenance activities	GW5301	General	General	n/a	Skip containers for scrap metals/ redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Metal / Scrap Non-Ferrous	Maintenance activities	GW5302	General	General	n/a	Skip containers for scrap metals/ redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Organic waste	Canteens Admin buildings Local vessels	GW2002	General	General	n/a	Small intermediate containers. Transferred to general waste skip containers.	Landfill – general or hazardous		No
Plastics	All areas Local vessels	GW5106	General	General	n/a	Small intermediate containers Transferred to designated recycling areas	Recycler	Best practise to separate into individual types at recycling areas.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Glass	All areas Local vessels	GW5201	General	General	n/a	Small intermediate containers. Transferred to designated recycling areas.	Recycler		No
Paper and cardboard	All areas Local vessels	GW5004	General	General	n/a	Small intermediate containers Transferred to designated recycling areas.	Recycler	Best practise to separate into individual types at recycling areas.	No
Wood waste	All areas Local vessels	GW2003	General	General	n/a	Transferred to designated recycling areas.	Recycler	Store away from flammables.	No
Garden waste	All areas	GW2001	General	General	n/a	Removed from site as part of the garden service.	Licensed compost operation except for alien vegetation		No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Tyres	Maintenance activities Worn fender tyres	GW5401	General	General	n/a	Transferred to designated tyre storage area.	Landfill – general or hazardous	Must be CUT into quarters before removal to landfill. **PROHIBITED** from landfilling after 23rd August 2018 and must be recycled.	No
							Recycler		
Empty drums and plastic containers – containing non-hazardous chemicals	All areas	GW9901	General	General	n/a	Transferred to designated recycling areas	Recycler	Only if the containers did not contain hazardous substances.	No
Construction and demolition waste, excluding hazardous materials	All areas	GW3001	General	General	n/a	Preferably skip containers. Temporary storage areas to be agreed with Port Environmental Department.	Landfill or other area provided WRITTEN approval is obtained from NMBM.	To be cleared 14 days after construction work is complete.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Mixed general waste not suitable for recycling	All areas Local vessels	GW1001	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids to prevent windblown litter.	No
Fish waste	Fishing vessels	GW2002	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids and to be emptied on a regular schedule so as to prevent odour nuisances.	No
Pressurised gas containers	Various including- Fire Dept – extinguishers Fishing vessels – refrigerants	GW9901	General as they will be gas free after cutting	General	n/a	Temporary storage area to be agreed with Port Environmental Dept, Risk Dept and Fire Dept.	Return to supplier		No
						Skip containers for scrap metals.	Recycler or return to supplier	Containers must be cut in half before placing in scrap container.	
Ropes / working lines Scrap conveyor belts.	Vessels Terminal operators	GW9901	General	General	n/a	General waste skip containers.	Landfill	Check recycling potential **BEFORE** landfilling.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
						Designated recycling area.	Recycler	Containers must be cut in half before placing in scrap container.	
Hull cleaning waste	Vessels Yachts	GW9901	General	n/a	n/a	General waste skip containers.	Landfill		No
Expired pyrotechnics	Vessels	HW9901	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 0	Class 1 Various UN numbers	Storage area designated by the Port Environmental Department.	Return to supplier or destroyed by the Police.	Marine Notice 9 of 1996 gives the instruction that these items are to be handed to Ports of Entry Police.	Yes
Sewage	Vessels	HW2101		Hazardous Type 0	Class 9 UN 3082	n/a	NMBM disposal point	Transporter to be licensed and have permission from NMBM to discharge.	No
E-Waste – including printer cartridges (without hazardous components removed)	Admin activities	HW1808	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Storage area designated by the Port Information Systems Department.	Specialised recycler	SDS if possible for example for printer cartridges	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Sandblasting waste	Maintenance activities	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes
Contami-nated soil	Incidents Spills Remediation sites	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Empty drums and plastic containers - containing non-hazardous chemicals	All areas	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling	Recycler	Generator to sign nominally empty packing certificate to certify containers are empty. Must be done before removal from site.	Yes
						Skip containers / Designated storage areas	Hazardous waste landfill / Class A	SDS for empty hazardous chemical containers	
Asbestos Containing Waste	Land based maintenance activities	HW0601	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Asbestos	Hazardous Type 1	Class 9 UN 2212	Special order skip container.	Hazardous waste landfill / Class A	Asbestos cement waste (roof sheeting etc). **NOT TO BE BROKEN UP DURING HANDLING.**	Yes
Fluorescent tubes and other lamps.	Maintenance activities	HW1805	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Special storage boxes from service provider.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Lamps to be kept intact during storage.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Health Care Risk Waste	Clinic First aid – land and vessels	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised HCRW containers- Yellow plastic containers for sharps waste Boxes with red plastic insert for infectious waste Green plastic containers for pharmaceuticals	Treated by incineration / sterilisation before landfilling		No
Sanitary waste	Ablutions	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised containers provided by service provider.	Treated by incineration / sterilisation before landfilling	Alternative methods to be agreed with Port Environmental and Risk Department and to have DEA approval.	No
Lead acid batteries	Maintenance activities	HW0301	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 8 UN 2794	Temporary storage areas to be agreed with Port Environmental Department.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Batteries to be stored with secondary containment to prevent acid spills.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Other batteries including- Mercury Ni/Cd Manganese dioxide and alkali Lithium and lithium ion Nickel metal hydride	All areas	HW0307	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling.	Recycler		Yes
						Hazardous waste skip containers	Hazardous waste landfill / Class A	SDS for individual batteries	
Waste oils	Land based maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacles. OR Tankers / super suckers.	Recycler	NO solid material allowed to be deposited into the used oil receptacles.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Transformer Oils	Maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacles OR Tankers / super suckers.	Recycler	It is understood that all TNPA transformers have been tested and they all are **under 50ppm PCB oil.**	Yes
Galley waste from vessels/ yachts having been outside of SA	Vessels Yachts	HW9901	Hazardous	Hazardous Type 1	Class 6.2 UN 2900	Polycarts transferred to galley waste container (to be subject to strict access control. Containers to be subject to disinfection procedure.	Hazardous waste landfill / Class A	Waste to be treated with lime on arrival and covered immediately. **ONLY TO BE REMOVED BY APPOINTED GALLEY WASTE CONTRACTOR**	Yes
Dredging waste– sediment	Port services	HW9901	Hazardous	Hazardous Type 1	n/a	n/a	Dumped at sea	Subject to valid permit and as per the permit conditions	No
Incinerator ash	Vessels services	To be determined	To be determined	To be determined	To be determined	n/a	Landfilled Class to be determined.	Classification requirements of this waste stream to be discussed and agreed.	TBD

PART 2. WASTE MANAGEMENT PLAN APPLICABLE TO THE PORT OF PORT ELIZABETH IN RESPECT OF SHIPS, BOATS AND ALL FORMS OF WATER CRAFT ENTERING THE PORT AREA FROM THE SEAWARD SIDE OF THE PORT ENTRANCE.

2.1 AIM AND OBJECTIVES

The purpose of this Waste Management Plan (WMP) is to co-ordinate, plan, provide, and seek to improve the waste reception and handling facilities for the legal management of waste generated or off-loaded within the Port of Port Elizabeth (PE). The primary objective is to maintain safe and healthy working conditions and on-going protection of the biophysical environment.

Part 2 (this Part) of the WMP is intended specifically for the receipt, handling, and the transportation of waste to places of treatment, recycling, re-use, or final disposal, for ship generated waste. Part 2 provides adequate detail, as a stand-alone document, for controllers of vessels entering the Port, and/or their Agents, regarding their obligations, and the procedures and specifications relevant to their activities.

The aim of Part 2 of the WMP is to ensure that, on implementation, all waste arising from ships arriving at the Port of PE is managed in compliance with all relevant international treaties, national, provincial and local legislation, and the rules and regulations as set out by the Transnet National Waste Management Strategy.

It is important to note that there is a **total prohibition** on the disposal of any form of waste overboard from any vessel located anywhere within the area of jurisdiction of the Port of PE or by land operators into the harbour or into the sea at any time. This prohibition is strictly enforced and severe penalties are imposed which include substantial fines.

It is a condition of entry of all such craft that the Part 2 of the WMP be formally acknowledged by the Captain of the craft or the appointed Ship Agent. The issue of such receipt constitutes an undertaking to comply with all the provisions contained in this document and to complete the relevant forms contained in Part 2 of the WMP as applicable both diligently and timeously.

The Harbour Master must keep a register of Captains / Vessel Agents who were issued the WMP as well as the respective WMP revision number.

2.2 GLOSSARY

The following acronyms and definitions are used within the document-

Abbreviations

DEA	Department of Environmental Affairs
IMO	International Maritime Organisation
KPIs	Key Performance Indicators
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
NEM:WA	National Environmental Management Waste Act (Act No 59 of 2008)
NMBM	Nelson Mandela Bay Municipality
PE	Port Elizabeth
SANS	South African National Standard
TNPA	Transnet National Ports Authority

TPT	Transnet Port Terminals
WMP	Waste Management Plan
WRFs	Waste Reception Facilities

Definitions

Adequacy	Waste Reception Facilities are considered adequate when they meet the needs of ships using the ports without causing undue delay.
Building and demolition waste	Means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition, which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded wood, glass and plastic (c) discarded metals (d) discarded soil, stones and dredging spoil (e) Other discarded building and demolition waste (source: NEM: Waste Amendment Act 26 of 2014).
Chandling	The provision of stores and supplies.
Disposal	Means the burial, deposit, discharge, dumping, placing or release of any waste material into, or onto, any air, land or water (source: NEM: Waste Act 2008).
Disposal Facility	A facility for the burial, deposit, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land.
Domestic waste	Means waste, excluding hazardous waste that emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation, purposes, which include: (a) garden and park waste (b) municipal waste (c) food waste (source: NEM: Waste Amendment Act 16 of 2014)
Flag State	Flag State refers to the authority under which a country exercises regulatory control over the commercial vessel which is registered under its flag. This involves the inspection, certification, and issuance of safety and pollution prevention documents.

Galley Waste	Means waste originating from the kitchen of a ship.
General waste	Means waste that does not pose an immediate hazard or threat to health or to the environment, and includes— (a) domestic waste; (b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under section 69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition waste as outlined below – refer to Annexure Three Category B of NEM: Waste Amendment Act 16 of 2014 .
Hazardous waste	Means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles. Refer to Annexure Three Category A of NEM: Waste Amendment Act 16 of 2014 .2014.
Health Care Risk Waste	The portion of the health care waste that is hazardous and including- (a) laboratory waste; (b) anatomical waste; (c) genotoxic/cytotoxic waste; (d) infectious waste; (e) sharps waste; (f) sanitary waste; (g) nappy waste; (h) low-level radioactive waste; and (i) pharmaceutical waste. (Source Draft Health Care Risk Waste Regulations published by the Department of Environmental Affairs - GG 35405, GNR 452 on 1st June 2012).

Hull Cleaning Waste	Waste removed during hull cleaning which could include material hazardous to marine biosecurity.
Inert Waste	Means waste that- (a) does not undergo any significant physical, chemical or biological transformation after disposal; (b) does not burn, react physically or chemically biodegrade or otherwise adversely affect any other matter or environment with which it may come into contact; and (c) does not impact negatively on the environment, because of its pollutant content and because the toxicity of its leachate is insignificant and which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded glass (c) discarded soil, stones and dredging spoil (source: NEM: Waste Act Amendment Act 26 of 2014)
Inspection Authority	A member of the TNPA Port of Port Elizabeth environmental management department, or duly authorised and trained representative, with the responsibility for auditing and inspecting waste management activities.
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
Minimisation	When used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of (source NEM: Waste Act 2008).
Oily waste:	For the purposes of this Waste Management Plan, oily waste means waste that contains a significant amount of oil, such as bilge mop socks, oil filters, oily rags, oil cans, and oil contaminated plastic bags and paper materials. Waste oil means oil and oil sludge in liquid form.
Recovery	Means the controlled extraction of a material or the retrieval of energy from waste to produce a product (source NEM: Waste Act 2008).

Recycle	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material (source NEM: Waste Act 2008).
Re-use	Means to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles (source NEM: Waste Act 2008).
Secondary containment	A level of containment that is external to and separate from primary containment. Secondary containment is a method of preventing unintended releases of toxic or hazardous liquids into the surrounding area. An example of secondary containment is bunding.
Ships waste	Waste and residues generated during the service of the ship which fall into the definition of garbage, oil and oily mixtures. These can include hazardous waste (e.g. Chemical waste, paints, batteries, galley waste), hazardous oil containing waste (e.g. sludge, bilge water, cargo slops/dirty, ballast), noxious liquid waste (e.g. cargo residues, pre-washings), sewage, general waste (e.g. paper, plastic, glass, cans/metal) (TNPA Waste Management Strategy, 2014).
Storage	Means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste (source NEM: Waste Act 2008).
Waste	Means: (a) any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all waste as defined in Schedule 3 to this Act; or b) any other substance, material or object that is not included in Schedule 3 that may be defined as a waste by the Minister by notice in the Gazette, but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste— (i) once an application for its re-use, recycling or recovery has been approved or, after such approval, once it is, or has been re-used, recycled or recovered;

(ii) where approval is not required, once a waste is, or has been re-used, recycled or recovered;

(iii) where the Minister has, in terms of section 74, exempted any waste or a portion of waste generated by a particular process from the definition of waste; or

(iv) where the Minister has, in the prescribed manner, excluded any waste stream or a portion of a waste stream from the definition of waste. (source: NEM: Waste Act Amendment Act 26 of 2014).

Waste Reception Facility	Any fixed, floating or mobile facility capable of receiving MARPOL residues/waste from ships and fit for that purpose. Waste Reception Facilities are distinguished from Waste Transfer Sites in that Waste Reception Facilities are intended for the reception of ship generated waste at the Port, for removal and disposal by a waste management contractor.
Waste Transfer Site	Means a facility that is used to accumulate and temporarily store waste before it is transported to a recycling, treatment or waste disposal facility (NEM: Waste Act 2008). Waste Transfer Sites are distinguished from Waste Reception Facilities in that Waste Transfer Sites are intended for the collection of land generated waste at a central point for removal and disposal by a waste management contractor.

2.3 INTRODUCTION

This Waste Management Plan has been prepared under the provisions of all the relevant legislation of the Republic of South Africa, particularly the National Environmental Management: Waste Act (Act No. 59 of 2008); the Republic of South Africa's National Ports Act (Act No 12 of 2005), the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008), and applicable international instruments, especially, MARPOL. This legislation is cited here as having particular reference and applicability to ships, boats and all water craft entering the PoPE via the seaward side Port entrance.

It is the intention of TNPA to work with all users of the Port of PE in what is a collective responsibility with regard to legally compliant and efficient waste management practises. If clarity with regards to the interpretation and identification of individual responsibilities regarding waste management is required, all TNPA employees are invited to contact the Port of PE Harbour Authority (Table 2-1).

Table 2-1: Port of Port Elizabeth Contact Details

Designation	Telephone
TNPA Port Control	+27 (0)41 507 1909/10/11
TNPA SHEQ Manager	+27 (0)41 507 1951
TNPA Assistant Environmental Manager	+27 (0)41 507 1907
TNPA Environmental Officer	+27 (0)41 507 1708
TNPA Port Engineering	+27 (0)41 507 1565
TNPA Marine Safety and Environment Officer	+27 (0)41 507 1925

2.3.1 Port Limits

The jurisdictional area of the TNPA, PoPE is reflected in Figure 2-1.

2.3.2 Biophysical setting

The Strategic Environmental Assessment of the Port found that there are no sensitive aquatic zones within the Port confines (Coastal & Environmental Services, 2006). The Port is however situated within Algoa Bay which is a sensitive ecological zone where Southern Right whales calve and nurse their young, endangered sea turtles feed and a multitude of waterfowl feed and nest. The approach and exit shipping lanes travel through this area. There is therefore a risk that illegal disposal and/or poor control of waste would endanger this sensitive region.

The PoPE is located near the junction of temperate (winter rainfall) and subtropical (summer rainfall) climate regimes and experiences a warm temperate climate. The area has a bimodal rainfall pattern, with peaks in spring and autumn, totalling approximately 600 mm per year. Port Elizabeth is subject to strong gradient winds with a strong prevalence from the west and west- south-west (41% combined frequency) all year round, and east (15%) from October through to March. Windblown litter, particularly items such as plastic bags, is of concern as it is known to lead to the death of certain species through entanglement, suffocation, and/or ingestion. The control of litter, and prevention of windblown litter, is therefore one of the important objectives of this WMP.

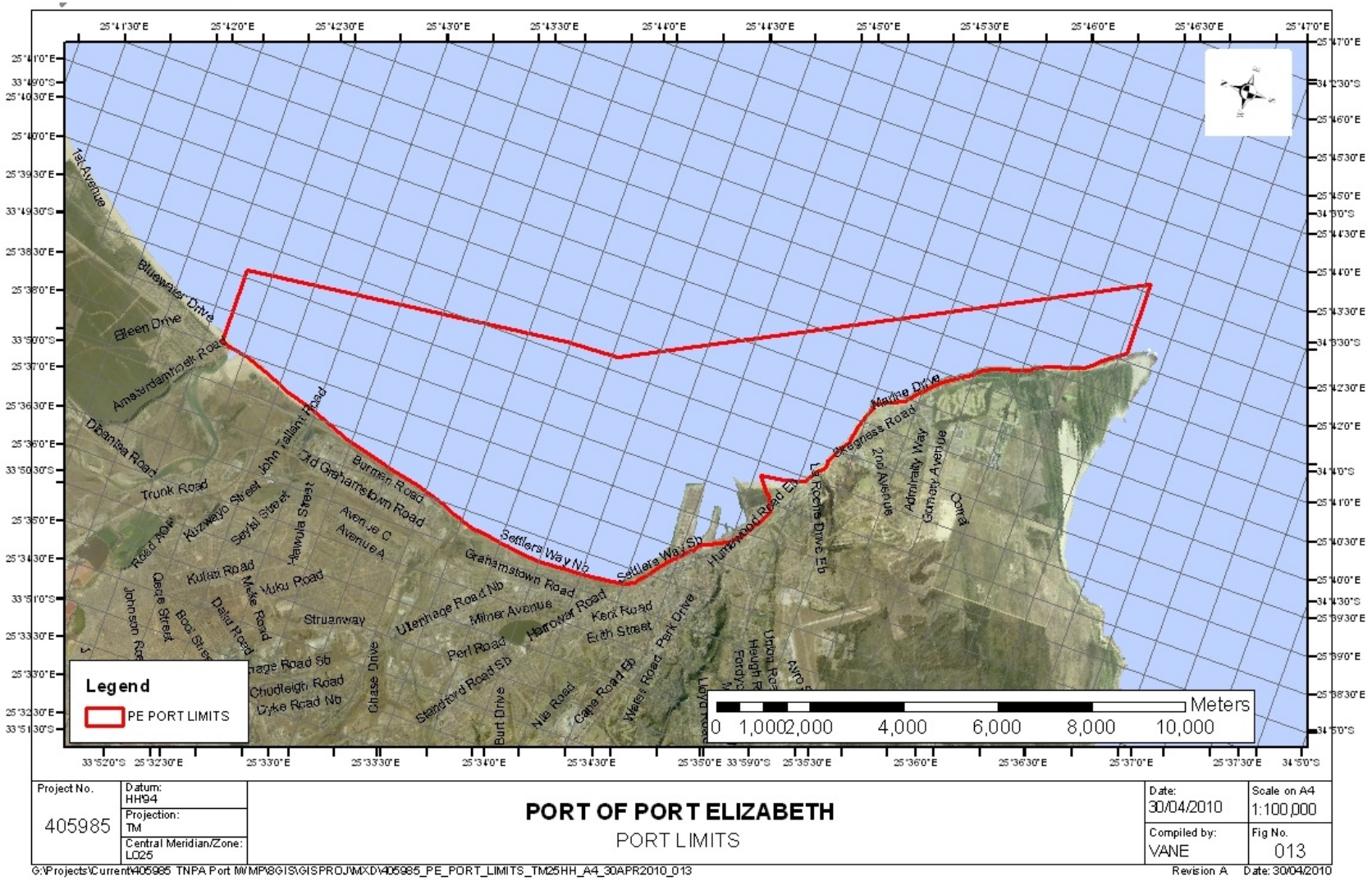

Figure 2-1: Port of Port Elizabeth Port Limits

Water quality within the Port is monitored regularly and the SEA (Coastal & Environmental Services, 2006) reported that these results show periodical contamination by petroleum hydrocarbons, and almost continual contamination from *E. Coli* and related faecal coliform bacteria. The correct handling and storage of waste will assist in eliminating potential sources of these, and other, contaminants. When taking into considering the climatic conditions in PE as well as the Port's water quality, it therefore becomes crucial to institute proper waste management practices both on land and in water to counteract any potential negative environmental impacts. This WMP intends to assist all Port users to realise this collective responsibility.

2.4 LEGAL FRAMEWORK GOVERNING WASTE IN THE PORT OF PE

A summary description of applicable legislation is included Appendix 2-A of Part 2 for ease of reference.

The requirements of the MARPOL Convention and its associated Regulations are summarised as follows:

2.4.1 MARPOL Convention and Associated Regulations

The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. The MARPOL Convention was adopted as the international standard regarding ship generated waste and as RSA is a signatory to the convention. The provisions of the MARPOL Convention are binding on all Port of PE users.

The legal requirement for the provision of Waste Reception Facilities, as well as guidance on their type, location and capacity, originates from the MARPOL Convention. The international community of maritime states is mandated to put in place measures to ensure that ships do **not engage** in the unacceptable practice of discharging their waste and cargo residues at sea. The Convention includes regulations aimed at preventing and minimising pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes:

Table 1-2: MARPOL Waste Annexes

Annex I	Regulations for the Prevention of Pollution by Oil
Annex II	Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk
Annex III	Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form
Annex IV	Prevention of Pollution by Sewage from Ships
Annex V	Prevention of Pollution by Garbage from Ships
Annex VI	Prevention of Air Pollution from Ships

The Annexes referred to above oblige Governments to ensure the provision of suitable and acceptable facilities at ports and terminals for the reception of these types of waste.

The requirements of the MARPOL convention are also addressed through various items of legislation on the Republic of South African (RSA) statute book, including (but not limited to) the Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986, and the Reception Facilities for Garbage from Ships Regulations, (GNR 1491, 1992). In order to fulfil its obligations under the Convention, the Republic of South Africa enforces the provisions of the MARPOL Convention through the National Ports Act and the Port Rules. In this way it is intended to provide adequate Waste Reception Facilities at all South African harbours, ports and terminals for ship generated waste with a view to minimizing /eliminating all undue delay and inconvenience to shipping personnel.

2.5 POTENTIAL SOURCES OF WASTE

The detailed waste inventory (October 2016) for the Port of PE is presented in Appendix 2-B. Sources of waste from vessels in the Port of PE are broadly described in the sections below.

2.5.1 Visiting Vessels

Visiting vessels are ships which have travelled from foreign waters and are not licensed in the Port of PE. According to current practice in all South African Ports, **all galley waste** arising from visiting vessels is to be treated as **hazardous** waste due to the potential presence of contagious organisms. The following is a summary of the waste types that are expected to arise from visiting vessels:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Incinerator ash.
- Small items of health care risk waste arising from first aid activities.

Note: In 2020 with the implementation of Annex VI, there will possibly be various liquid waste streams for disposal, for example, sulphuric acid from fuel scrubbing plants and ash from exhaust scrubbers (this could contain large quantities of sulphur).

Waste should be handled as per the instructions presented in the Waste Inventory in Appendix 1-B.

2.5.2 Vessels Registered in the Port

Vessels registered in the Port are typically tugs, fishing and pleasure boats which do not travel to foreign destinations. The following is a summary of the waste types that are expected to arise from vessels registered in the Port:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, or waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Fish residue and fish waste.
- Empty refrigerant containers.
- Small items of health care risk waste arising from first aid activities.
- Sandblasting waste arising from vessel maintenance activities.

Waste should be handled as per the instructions presented in the Waste Inventory in Appendix 1-B.

2.6 LARGE VISITING VESSELS (Foreign Vessels or Vessels having been in foreign waters)

2.6.1 Waste Notification and Receipt

Visiting vessels requiring waste removal services are required to notify Port Control (041 507 1910) 72 hours in advance. This notification must be undertaken by the Captain of the vessel or the appointed Ship Agent. Port Control is operational day and night and vessels can therefore call anytime. As part of the vessel application procedure for Port entry it is essential that the Waste Advance Notification Forms (Appendix 2-C) are completed by each vessel prior to the ship gaining permission for entry to the Port. Entry to the Port of PE will be refused by the Harbour Master until such forms are satisfactorily completed and receipted by Port Control. Where the information has not been completed, the Terminal Operator or the Agent will be notified by the Harbour Master. The potential delays in the off-loading of waste from vessels docking at the Port of PE will be minimised by following the above-mentioned advance notification procedures.

Once the form has been received, Port Control will notify Port Engineering to assist with service provision.

It is the intention of TNPA to work with all users of the Port of PE in what is a collective responsibility with regard to legally compliant and efficient waste management practises. If clarity with regards to the interpretation and identification of individual responsibilities regarding waste management is required, all TNPA employees are invited to contact the Port of PE Harbour Authority (Table 2-1) who will arrange for suitable receptacles to be provided and/or contact a TNPA-licensed waste service provider for suitable /receptacles for liquid waste to be available at the berth. **All galley waste from visiting vessels is considered hazardous and may only be removed by Port Engineering.**

General waste (excluding galley waste), scrap metal, bilge, sewage, oily wastes, scrubber and other liquid waste may be removed by TNPA-licensed Waste Management Service Providers arranged for either by Port Engineering or the Ship Agent.

In the instance where waste receptacles are not provided by TNPA (i.e. sewage or bilge waste removal), Port Control must make contact details of the TNPA-licensed waste service provider available to vessels and their Ship Agents, for them to contact the contractors directly to request the necessary receptacles. In this instance, the Captain of the vessel or the Ship Agent must provide proof to the Port Control that the handling and disposal of the waste was legally compliant (safe disposal certificates and a waste manifest bearing all the required signatures). Port Control and Port Engineering will be responsible for the collation of documents and the capturing of information onto the Port Waste Information System. Copies of documents must be forwarded to the Port Environmental Department.

2.6.2 Location of Waste Reception Facilities and Ease of Use

In the instance of galley waste generated on visiting vessels, Port Engineering will be responsible to ensure adequate receptacles are available at the berth as required. These receptacles will be transported to a skip dedicated for MARPOL Annex V (garbage) located at the position shown on Figure 2-2.

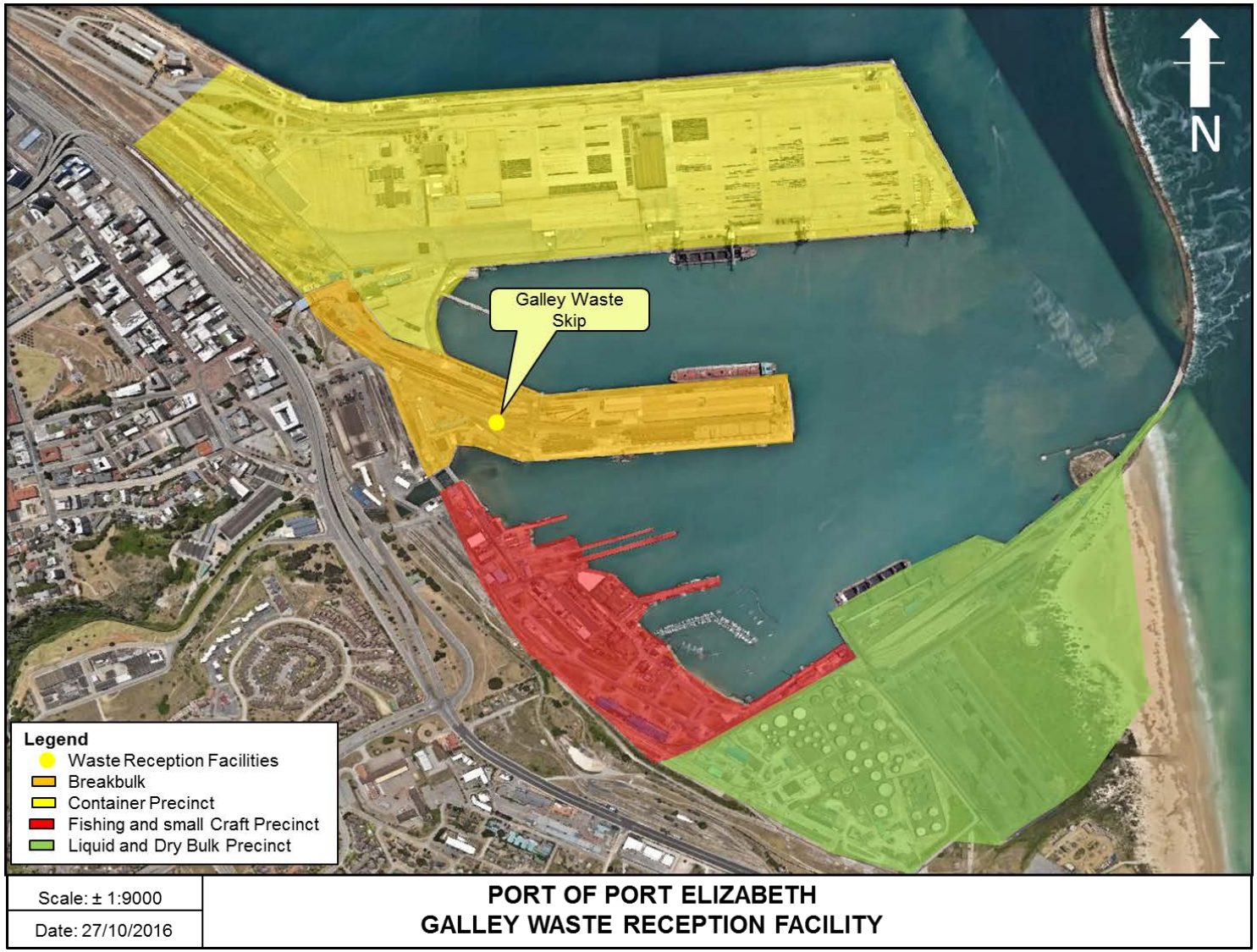

Figure 2-2: Location of Galley Waste Reception Facilities for Visiting (Foreign) Vessels

Receptacles for liquid waste from vessels, viz. MARPOL Annex I (oils), Annex II (Noxious Liquid Substances) and Annex IV (Sewage) in the form of a suitable vessel will be provided at the berth by the relevant TNPA-licensed waste service provider.

2.6.3 Inadequacies in the Provision of Waste Disposal Facilities

To minimise shortcomings, users and potential users of waste disposal facilities for ship generated waste are to report any alleged lack of facilities, deficiencies or other shortcomings of waste disposal facilities to the TNPA Port of PE Harbour Master using the Alleged Waste Reception Facility Inadequacy Form (Appendix 2-E).

The Harbour Master will investigate any reported or alleged lack of facilities, deficiencies or other shortcomings in waste disposal facilities. All findings will be pursued with the complainants and improvements effected as considered necessary.

2.6.4 Roles and Responsibilities

Notwithstanding TNPA's roles and responsibilities, the owners and/or master of a vessel have individual and general responsibilities regarding waste management. Specific roles and responsibilities described in terms of this WMP do not override, or absolve individuals/companies from their responsibilities in terms of their legal responsibilities with regard to waste management.

The Harbour Master is required to:

- Provide the vessel owner, master or ship agent with the Waste Advance Notification Forms (Appendix 2-C) and the Alleged Waste Reception Facility Inadequacy Form (Appendix 2-D).
- Request the vessel owner, master or ship agent to submit the completed Waste Advance Notification Forms (Appendix 2-C) as part of advance notification prior to entry into Port (72 hours in advance).
- Notify Port Engineering to arrange for the collection of the waste by providing them with a copy of the Waste Advance Notification Form(Appendix 2-C); and

Port Engineering is required to:

- Ensure that sufficient receptacles are available at the quay to accept waste as per the Waste Advance Notification Forms.
- Advise the waste management contractor regarding timely removal of waste in terms of type and respective quantities.
- Providing the master of the ship with the completed Waste Delivery Receipt (Appendix 2-E).

The Birthing Master is required to:

- Ensure vessels arriving at the quayside have made arrangements as per the WMP for the removal of waste.
- Monitor waste management activities occurring at the quayside.
- Ensure only TNPA-licensed Waste Management Service Providers are providing services to the Port.
- Assist with inspecting waste management activities occurring on the quayside and the issuing and closing out of non-conformances.

- Ensure that the quayside and waste reception facilities are in good order before permitting the vessel to depart.

The vessel owner, master or Ship Agent is required to:

- Comply with all waste related legislation, policies and procedures and the requirements of this section of the WMP.
- Ensure that waste is transported by a licensed carrier and is destined for disposal to the appropriately licensed disposal/treatment/recycling facility for the particular waste type.
- Ensure that goods and materials are handled and stored in a way that avoids damage and prevents goods and materials from becoming waste.
- Ensure that ship generated waste is handled in accordance with the Port of PE WMP.
- Maintain a high standard of housekeeping.
- Pay for the waste management services provided by TNPA in accordance with the schedule of charges.
- Ensure that all solid waste generated on the vessel is treated as hazardous waste.
- Obtain written confirmation that waste was disposed of at a licensed and legally compliant facility (waste manifest reflecting three signatures) in those cases where waste management services are to be obtained directly by the ship's agent/owner. The documents must be provided by the Vessel's owner or agent to Port Engineering or Port Control.
- Complete the Waste Advance Notification Form (Appendix 2-C) which concerns type and quantities of waste on board for off-loading and delivery to Waste Reception Facilities. This information is required in a minimum time of 72 hours before scheduled time of arrival at the PoPE.
- Retain the Waste Delivery Receipt (or Waste Manifest) on record for a minimum of 5 years from date of delivery.
- Ensure copies of the safe disposal certificates / waste manifests are forwarded to the Port Engineering or Port Control (in the instance where the master of the ship or the ship agent utilises a private waste contractor for waste removal).

In the event that the Master of a ship encounters difficulties in discharging waste to the Waste Reception Facilities, he/she is requested to complete the Alleged Waste Reception Facility Inadequacy Form (Appendix 2-D) and forward same, together with any supporting documentation, to the Harbour Master and the administration of the ship's flag State. The ship's flag State will confirm notification to the IMO and TNPA of the occurrence.

This notification should be made immediately following the completion of the alleged inadequacies reporting format procedure and must include a copy of the Master's report and all supporting documentation.

In the event of an alleged and accepted inadequacy, the Harbour Master will initiate a corrective and preventive action request for investigation. The findings of the investigation and the measures taken to correct the underlying cause will be reported

to the IMO. It is at the discretion of the TNPA to notify the administration of the reporting flag state as deemed necessary.

2.7 SMALL PRIVATE VESSELS (Foreign Vessels or Vessels having been in foreign waters)

Small private vessels will typically be yachts which intend to berth at the local yacht club facilities.

2.7.1 Waste Notification and Receipt

On arrival at the yacht club, the owner or captain of the private vessel will notify the yacht club management of their intention to dispose of waste.

For the removal of sewage and used oil or oily waste, the yacht club management will provide the list of TNPA-licensed Waste Management Service Providers to the owner of the private vessel and the owner will, at his/her own cost, arrange for removal of the these waste.

Galley waste will be treated as hazardous waste. The yacht club will notify Port Engineering of the requirement to have such waste removed utilising the Advanced Notification Form in Appendix 1-D. Port Engineering will provide the cost of the service and then arrange to have the waste removed for disposal in the appropriate TNPA waste skips. Port Engineering will provide the master of the yacht with the completed Waste Delivery Receipt (Appendix 1-E).

Other general waste, not considered hazardous or originating in the galley, will be disposed of in the general waste reception facilities provided by the yacht or TNPA on the quayside.

2.7.2 Roles and Responsibilities

The yacht club management is required to:

- Notify the boat owner of the requirements around waste disposal.
- Provide the boat owner with the list of TNPA- licensed Waste Management Service Providers for the removal of sewage and oily waste.
- Assist the boat owner with the completion of the Advanced Notification Form (Appendix 2-C) for the removal of galley waste and the submission of the form to the Harbour Master and Port Engineering.

Port Engineering is required to:

- Ensure that sufficient receptacles are available at the yacht quay to accept waste as per the Waste Advance Notification Forms.
- Advise the Waste Management Service Provider regarding timely removal of waste in terms of type and respective quantities.
- Provide the master of the ship with the completed Waste Delivery Receipt (Appendix 2-E).
- Ensure copies of the waste delivery receipt, waste disposal certificates and waste manifests are forwarded to the Port Environmental Department after they have been captured into the Port Waste Information System.

2.7.3 Inadequacies in the Provision of Waste Reception Facilities

To minimise shortcomings, users and potential users of Waste Reception Facilities for yacht generated waste must report any alleged lack of facilities, deficiencies or other shortcomings to the yacht club management who in turn will notify Port Engineering who will undertake an investigation into the inadequacies and carry out corrective action where necessary.

2.8 VESSELS REGISTERED IN THE PORT OF PE (Local Vessels)

Vessels registered in the PoPE are typically the local fishing boats, private yachts and ocean going vessels and tugs.

2.8.1 Waste Separation and Recycling

Where possible, the vessel master or captain must ensure that solid waste generated on board is separated into the various recyclable fractions (i.e. paper, glass, plastic etc) and deliver the recyclable waste to the Port provided recycling stations.

2.8.2 Waste Receipt

Vessels registered in the Port are also subject to MARPOL and as such, while the need for advance notification prior to entry to the point is **not** required, vessels are **not permitted** to dispose of any waste at sea, and must use the waste reception facilities provided by the Environmental Department at various locations around the Port, as shown on Figure 2-3.

In those instances when vessels will not use the waste reception facilities provided by TNPA, such vessels must arrange adequate reception facilities in advance with the TNPA-licensed waste service providers. If the vessel cannot make the aforementioned arrangements, then TNPA, through Port Control and Port Engineering, will organise the required facilities at the vessels' expense. Furthermore, where direct services are to be procured, written confirmation that waste was disposed of or treated at a licensed and legally compliant facility (waste disposal certificates and waste manifests) must be provided by the Vessel's owner or agent to the Port Control and Port Engineering, who will forward these documents on a monthly basis to the Port Environmental Department after capturing on the Port Waste Information System.

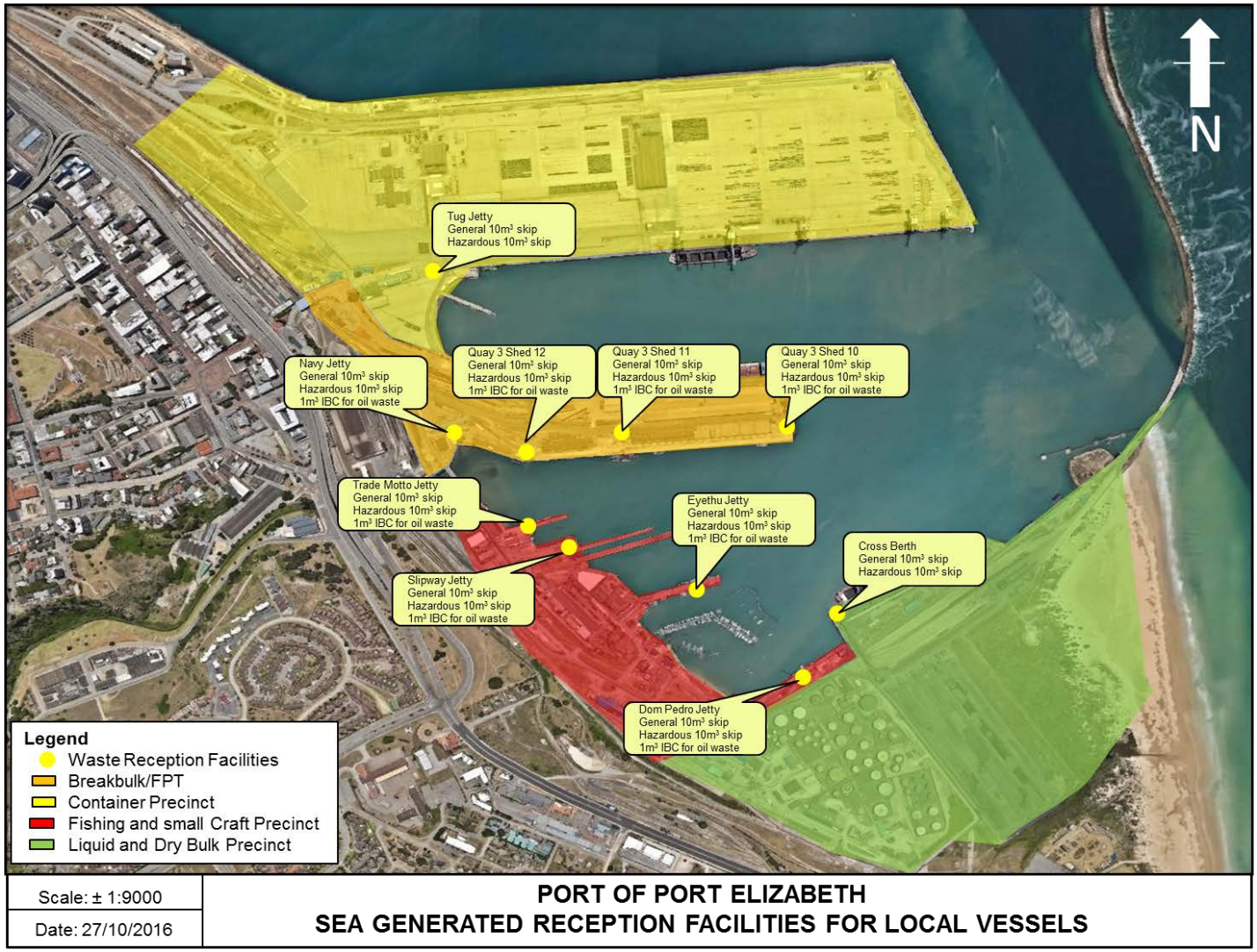

Figure 2-3: Location of Waste Reception/Transfer Facilities provided by the Environmental Department for Vessels Registered in the Port (Local)

2.8.3 Roles and Responsibilities

Notwithstanding TNPA's roles and responsibilities, the owners and/or master of a vessel have individual and general responsibilities regarding waste management. Specific roles and responsibilities described in terms of this WMP do not override, or absolve individuals/companies from their responsibilities in terms of compliance with relevant waste management legislation.

The vessel owner, master of, or agent for local vessels is required to:

- Comply with all waste related legislation, policies and procedures;
- Ensure that waste is handled by TNPA-licensed Waste Management Service Provider and is destined for disposal to a licensed disposal/treatment/ recycling facility for the waste type.
- Minimise waste in accordance with the waste hierarchy (reduce, reuse, recycle, dispose).
- Ensure goods and materials are handled and stored in a way that avoids damage and prevents goods and materials becoming waste.
- Ensure that ship generated waste is handled in accordance with this WMP.
- Segregate waste to facilitate recycling opportunities and to separate general and hazardous waste.
- Maintain a high standard of housekeeping.
- Pay for the cost of waste management services provided by TNPA in accordance with the schedule of charges. In those cases where waste management services are to be obtained directly by the ship's agent / owner, then written confirmation that waste was disposed of at a licensed and legally compliant facility (e.g. safe disposal certificate) must be provided by the Vessel's owner or agent to the Port Marine Pollution Control Officer.
- Ensure that all vessel staff are aware of the requirements of the WMP where relevant to their activities e.g. waste separation etc.

TNPA, through its appointed Waste Management Service Provider, is responsible for providing recycling stations at selected locations throughout the Port.

2.8.4 Types and Capacity of Waste Reception/Transfer Facilities for Local Vessels

Waste Reception/Transfer Facilities for ship generated waste from local vessels are provided by the Port Environmental Department as shown in Figure 2-3. Once waste has been off-loaded from the ship, the skips or used oil receptacle (as the case may be) are removed by the appointed Port licensed Waste Management Service Provider for disposal / treatment / recycling at a licensed facility.

2.8.5 Location of Waste Reception/Transfer Facilities and Ease of Use

Waste Reception / Transfer Facilities have been located according to convenience of access. Waste Reception / Transfer Facility locations, as well as the specific types of waste each receptor is intended to receive, are presented in Figure 2-3.

2.8.6 Inadequacies in the Provision of Waste Reception Facilities

To minimise shortcomings, users and potential users of waste reception/transfer facilities for ship generated waste are to report any alleged lack of facilities, deficiencies or other shortcomings of waste disposal facilities to Port Engineering, the Harbour Master or the Port Environmental Department.

Port Engineering, the Harbour Master or Port Environmental Department will investigate any reported or alleged lack of facilities, deficiencies or other shortcomings in waste disposal facilities. All findings will be pursued with the complainants and corrective action taken where necessary.

2.9 COSTS OF WASTE MANAGEMENT FACILITIES AND SERVICES PROVIDED BY TNPA

TNPA reserves the right to provide waste management services to the various Port users, tenants, and visiting vessels and for which a separate refuse storage and removal tariff will be applied based on type, volume and frequency of service.

Tariffs for the receipt and disposal of waste are set annually by TNPA and are available upon application at the Port.

2.10 SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY (SHEQ) RISK MANAGEMENT POLICY STATEMENT AND NECESSITY FOR COMPLIANCE AT ALL TIMES

All Port tenants/users are to be in full compliance at all times with the TNPA SHEQ Risk Management Policy statement which is available on the TNPA website (http://www.transnetnationalportsauthority.net/) and is updated from time to time.

2.11 ONGOING CONSULTATION WITH SHIP AGENTS AND OTHER PORT USERS

On-going consultation between TNPA and Captains, Ship Agents and Port users with regard to waste management in the Port of PE is invited through contact with the TNPA representatives specified in Table 2-1.

As the influx and establishment of routine and repeated visits by sea going vessels and the numbers of land based tenants/users changes, consultation is envisaged as a periodic and frequent on-going process. The distribution and compilation of data derived from the use of the standard MARPOL forms (Appendices 1-C, 1-D and 1-E) will assist TNPA in this regard.

Ship Masters, ship agents, vessel staff and other Port users will be required to partake in waste management awareness programmes as issued from time to time by the Port Environmental Department.

2.12 REVIEW

The WMP has been developed primarily but not exclusively against the background of current legislation and regulations relating to waste management in the Republic of South Africa and the current waste generation trends in the PoPE. The document may be reviewed from time to time as required. It is the responsibility of the various

Port users to ensure that they are in possession of the latest revision of the Waste Management Plan which will be available on:

http://www.transnetnationalportsauthority.net/

2.13 COMPLIANCE AND ENFORCEMENT

TNPA will undertake audits reviewing waste management practises from time to time as determined by a planned audit schedule. TNPA reserves the right to audit both visiting and local vessels. TNPA will implement enforcement action against vessels where non-compliances with the WMP are not rectified as required.

PART 2: APPENDICES

APPENDIX 2-A: SUMMARY OF LEGAL REQUIREMENTS APPLICABLE TO WASTE MANAGEMENT IN THE PORT OF PORT ELIZABETH

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
MARPOL Convention and associated regulations	• The main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. • Vessels must not discharge wastes into the sea. It provides the international standard regarding Port Waste Reception Facilities for ship generated waste.
	Annex I Regulations for the Prevention of Pollution by Oil • Vessels are prohibited from discharging oil or oily mixtures into the sea, except in specified conditions. • Ports must supply adequate waste reception facilities. • Oil and oily sludge must be removed and disposed / recycled to a licensed facility.
	Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk • Vessels are prohibited from discharging of residues containing noxious substances is 12 miles of the nearest land (normally from tank cleaning activities). • Ports must supply adequate waste reception facilities. • Slops must be removed and disposed / recycled to a licensed facility.
	Annex IV Prevention of Pollution by Sewage from Ships • Ports must supply adequate waste reception facilities. • Sewage must be removed and discharged to a licensed treatment facility.
	Annex V Prevention of Pollution by Garbage from Ships • All ships of > 400 gross tonnage and above and every ship certified to carry 15 persons or more must carry a Garbage Management Plan, to include written procedures for collecting, storing, processing and disposing of garbage, including the use of any relevant equipment fitted on-board (incinerators, compactors, etc). • The Garbage Record Book must record all disposal and incineration operations. • Every ship of 12 metres or more in length must also display placards notifying passengers and crew of the relevant disposal requirements. • Ports must provide reception facilities for garbage without causing undue delay.

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
	Annex VI Prevention of Air Pollution from Ships From 2020 this will potentially give rise to disposal requirements from scrubber systems.
International Health Regulations, 2005	The competent authorities shall- ♦ Be responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal dejecta, wastewater and any other contaminated matter from a conveyance. ♦ Take all practicable measures to monitor and control the discharge by ships of sewage, refuse, ballast water and other potentially disease-causing matter which might contaminate the waters of a port, river, canal, strait, lake or other international waterway.
Stockholm Convention on Persistent Organic Pollutants, 2001	Global treaty to protect the environment by reducing / eliminating the use of persistent organic pollutants. Eg. Polychlorinated biphenyl - PCB.
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004	Global treaty to protect the environment from the transfer of harmful organisms in ballast water carried by ships.
Basel Convention on the Transboundary Movement of Hazardous Wastes	Controls the movement of hazardous waste between parties to the convention. Various notifications and permissions are required.
The London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972	Controls pollution of the sea by the dumping of wastes and other material.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Constitution of South Africa Act 108 of 1996	• Waste activities must be undertaken in such a manner that is not harmful to the health or well-being of SA citizens.
National Ports Act 12 of 2005	• In order to provide a waste management service in the Port, a license must be obtained from TNPA. • The Harbour Master can give written or verbal instructions with respect to removal of waste and the use of the Port Reception Facilities.
Notice to Apply for a Waste Management License Gazette Notice No 275, Gov Gazette No 34253 of 6th May 2011	Port Waste Management Service Providers must apply to TNPA for a license.
The Ports Rules of 2009	• 72 hours' written notice of arrival must be given to the Harbour Master. Notification must include details of the waste on board. • All persons in the Port must prevent pollution and protect the environment. TNPA can take remediation measures in the event that pollution is caused. The polluter will need to pay for the costs of remediation. • No harmful matter including oil can be discharged into the harbour. • Vessels berthed along a quayside must have all valves closed or covered to prevent inadvertent discharges. • Clean-up of spills must be done in accordance with the Port Contingency Plan. • Terminal Operators and vessels must make use of Port Reception Facilities for waste from vessels. • TNPA may require a vessel to procure waste services from a licensed provider if the berth is not operated by a Terminal Operator. • TNPA can direct a Terminal Operator who does not have adequate waste reception facilities to procure them within a specified time period. • Galley waste must be handled in accordance with the Port Waste Management Plan. • Owners, masters or agents must comply with their Vessel Waste Management Plan. • No discharge from tank or hatch cleaning activities is allowed into the Port.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986	• Incorporates the requirements of the MARPOL Convention into law.
Second-Hand Goods Act 6 of 2009 **Regulations for Accreditation of Second-Hand Goods Dealers' Associations, 2010** **Regulations for Dealers and Recyclers, 2012**	• Dealers and recyclers of listed controlled metals must be registered with the South Africa Police Service (SAPS). • Applies to scrap metal dealers and recyclers of scrap.
Import Permits	An import permit must be obtained from the International Trade Administration Commission of South Africa (ITAC) to bring controlled goods into the country – includes waste and scrap.
The International Health Regulations Act 28 of 1974	Every Port must be provided with an effective system for the removal and safe disposal of excrement, refuse, waste water, condemned food, and other matter dangerous to health.
Animal Diseases Act 35 of 1984	Refers to infectious material which must be burnt in an incinerator, or which must be disposed of in any other manner which the director may determine.
National Environmental Management: Integrated Coastal Management Act 24 of 2008	• Waste must not be imported into SA for dumping or incineration within the coastal zone or exclusive economic zone. This includes general waste, sewage, oils, slops etc. • Waste must not be dumped on incinerated within the coastal zone or exclusive economic zone. • Waste cannot be exported to be dumped or incinerated at sea unless authorised by a permit. • The permit process must be adhered to for the dumping of various waste including: dredged material and sewage sludge.
National Environmental Management Act 107 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated. • Incidents that fall into the definition must be reported and managed according to the requirements: for example in the event of an oil spill into the Port.
National Water Act 36 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
National Environmental Management: Waste Amendment Act 59 of 2008 and National Environmental Management: Waste Amendment Act 26 of59 of 2008	The Act contains extensive provisions for the management of waste, including - • Wastes must be avoided where possible, or minimised, reused and recycled before disposal to landfill is selected as the appropriate management measure. • Disposal must be to a licensed facility. This includes general waste, sewage, oils, slops etc. • Storage activities must not present a risk to the environment and no nuisance must be created: for example odours and windscatter. • Employees must be prevented from contravening the Act. • Waste must not be used for an unauthorised purpose. • Gazetted waste activities are subject to a waste management license. • Owners of public land to which the public has access must provide sufficient waste containers for public use. • Waste transporters must be registered (normally in terms of the local bylaws). • Waste must not be spilt during transport. • Waste transporters must check whether the disposal facility is licensed before offloading. • If hazardous waste is transported for purposes other than disposal, the person transporting the waste must before offloading the waste ensure that the authorisations are in place. Written confirmation that the waste has been accepted must be obtained. • The Minister can call on categories of persons to produce industry waste management plans. [At the time of the TNPA WMP update (November 2016) the only government approved waste management plan is the Recycling and Economic Development Initiative of South Africa Integrated Industry Waste Tyre Management Plan.] • DEA must be notified in the event of the identification of contaminated land. This may be necessary for example: in the event that substandard waste management storage and handling activities causes soil pollution and rehabilitation is necessary.
Norms and Standards for the Remediation of Contaminated Land and Soil Quality, 2014	Reporting and remediation requirements must be followed.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Notice 921 of 23rd November 2013 listing activities that require a waste management license.	Various waste management activities are detailed including recycling, treatment and disposal. Thresholds are provided. • Category A activities require a basic assessment. • Category B activities require a full EIA. • Category C activities require compliance with norms and standards.
National Norms and Standards for the Storage of Waste 2013	Registration and compliance with the norms and standards is required to store waste in excess of the thresholds- 100m^3 general waste or 80 m^3 hazardous waste [At the time of the TNPA WMP update (November 2016) no areas requiring registration were identified.]
Waste Tyre Regulations of 2009	• Tyres must be disposed at a licensed facility. • Tyres must be cut into quarters before disposal. • Plans must be in place for tyre storage areas.
National Waste Information Regulations, 2012	• Hazardous waste generators must register with DEA if they generate more than 20kg of hazardous waste per day - there are no reporting requirements for generators. • A number of other persons must register with DEA including: operators of landfill sites, recyclers, importers etc. • Quarterly reporting is required.
National Pricing Strategy for Waste Management, 2016	This strategy contains guiding methodologies for the setting of waste management charges, aimed at funding the re-use, recycling or recovery of waste and the implementation of industry waste management plans (IndWMP) for those activities that generate specific waste streams.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Asbestos Regulations, 2001 – promulgated in terms of the Occupational Health and Safety Act **Regulations for the Prohibition of the Use, Manufacturing, Import and Export of Asbestos and Asbestos Containing Materials published in terms of the Environmental Conservation Act**	Asbestos must be disposed to the correct class landfill site. Persons handling asbestos for disposal must have the required PPE and must have had training in line with the requirements of the Regulations.
Waste Act: Admission of Guilt Fine Regulations, 2015	Contains a schedule with the maximum applicable fine attached to a number of waste related offenses.
National Road Traffic Act 93 of 1996 **National Road Traffic Regulations of 2000 (Regulation 273A).** **SANS documents for the transportation of Dangerous Goods**	♦ Consignments of dangerous goods must only be transported in compliance with the requirements. ♦ The dispatch of hazardous goods includes hazardous wastes such as galley waste; oil sludges; slops; and mixed contaminated waste. ♦ Dangerous goods declarations must be used. ♦ Loading must be supervised by a responsible person. ♦ The vehicle must be registered as a dangerous goods carrier. ♦ The driver must be trained, have a professional drivers permit for dangerous goods, and must be in possession of the correct TREMCARD.
Waste Classification and Management Regulations 2013	♦ All wastes must be classified in terms of SANS 10234 except for those listed in Annexure 1 to the regulations which are regarded as pre-classified- ✓ Annexure 1 part one includes general wastes. ✓ Annexure 1 part 2 includes hazardous wastes such (2)(b)(ii) : *General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals*. This can be referenced to contaminated waste such as oily rags etc. These wastes can be regarded as pre-classified waste however they must be disposed to a hazardous waste landfill site and a safety data sheet must be prepared.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
	• Hazardous wastes that are removed from site must be accompanied by a waste manifest that contains all the details in Annexure 2 of the regulations. The final manifest reflecting three signatures (generator, transporter and waste disposal / recycling facility) must be retained on file for a five year period. • Wastes must be disposed within 18 months of generation. • Specific labelling requirements must be complied with.
National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013	Any wastes that are to be disposed to landfill (other than the pre-classified wastes) must be assessed according to these standards to determine which class landfill they can be disposed at.
National Norms and Standards for Disposal of Waste to Landfill, 2013	Contains a schedule which has timeframe for the phase out for certain wastes streams to landfill. A number of streams are listed including- • Waste compressed gases – from 23rd August 2013 • Lead acid batteries – from 23rd August 2013 • Other batteries – from 23rd August 2021 • Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes – from 23rd August 2017 • Re-usable, recoverable or recyclable used or spent solvents – from 23rd August 2018 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps - from 23rd August 2016 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Other – from 23rd August 2021. • Waste tyres: Whole – from 23rd August 2013 • Waste tyres: Quartered – from 23rd August 2018 • Liquid waste- (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment-from 23rd August 2019.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Hazardous Chemical Substances Regulations of 1995 promulgated in terms of the Occupational Health and Safety Act	• Wastes containing hazardous chemical substances must be recycled wherever possible. • Waste hazardous chemical substances must be disposed to the correct class landfill site. • Employees must have the required PPE.
Hazardous Substances Act 15 of 1973	• The act classifies chemicals into four different groups. • Group I and II = Substances are those dangerous to humans due to their toxic nature. • Group III = Various electronic products. • Group IV = Radioactive products. • Hazardous waste generated in the PoPE generally fall into Group II substances for which no regulations are in place (as far as the HSA is concerned).

PROVINCIAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Eastern Cape Environmental Conservation Act of 2003	• One of the aims is to regulate waste management in the province. • The Minister has the power to make regulations with respect to waste management. No regulations to this effect have been gazetted.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Waste Management Bylaws, 2010	• All commercial waste service providers must be registered with the local authority. • Users of commercial service providers must ensure that the waste collector is registered and that they comply with the bylaws. • Waste transporters must: not allow waste to escape from the container / vehicle; maintain clean vehicles and equipment; and ensure that waste is disposed to the appropriately licensed facility. • Garden waste must be disposed to a licensed site. • Building waste must be removed within 14 days of the project being completed and must be disposed to a licensed facility unless the municipality has given written consent that it can be

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
	used for land reclamation or recycling. ♦ Littering, dumping and the burning of waste is prohibited by the bylaws.
Nelson Mandela Bay Metropolitan Municipality: Water and Sanitation Services Bylaws, 2010	♦ Persons transporting and disposing of sewage by road haulage must have prior written agreement from the municipality. ♦ The agreement must state: source of domestic sewage, day, time and point of delivery.

APPENDIX 2-B: DETAILED WASTE INVENTORY – NOVEMBER 2016

PORT OF PORT ELIZABETH WASTE INVENTORY		
TERMINOLOGY		
Waste Category	Categorisation in terms of the National Waste Information Regulations, 2012. Categories applicable to PoPE.	
	GW1001	Commercial and Industrial Waste.
	GW2001	Garden waste.
	GW2101	Sewage.
	GW2002	Organic waste, food waste.
	GW2003	Wood.
	GW3001	Construction and demolition waste.
	GW5004	Paper, mixed grades.
	GW5106	Plastic, other.
	GW5201	Glass.
	GW5301	Metals, ferrous.
	GW5302	Metals, non-ferrous.
	GW5401	Tyres.
	GW9901	Miscellaneous.
	HW0301	Lead batteries.
	HW0307	Mixed batteries.
	HW0601	Asbestos containing waste.
	HW0701	Waste oils.
	HW1805	Waste of Electric and Electronic Equipment (WEEE), lighting equipment.
	HW1808	Waste of Electric and Electronic Equipment (WEEE), lighting equipment, mixed WEEE.
	HW1902	Health Care Risk Waste, infectious waste and sharps.
	HW9901	Miscellaneous.
Waste Classification	Classification must be done in terms of the Waste Classification and Management Regulations of 2013 and the associated norms and standards.	

PORT OF PORT ELIZABETH WASTE INVENTORY	
TERMINOLOGY	
Pre-Classified Waste	Annexure One to the above regulations contains a list of pre-classified waste. These do not need to be classified in terms of SANS 10234 but must have a safety data sheet. Waste in Annexure One part 2 must be disposed to a hazardous waste landfill site
SDS	Safety Data Sheet must be provided for hazardous waste.
Waste Type	Waste Type as determined by the National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013. Type 0 (no landfilling), Type 1 (Class A landfill) Type 2 (Class B landfill) Type 3 (Class C landfill) Type 4 (Class D landfill). The waste type only need to be determined for- Waste not on the pre-classified list and waste that need to be disposed to landfill.
SANS 10228	Class for the transport of dangerous goods / hazardous waste.
NMBM	Nelson Mandela Bay Municipality.
HCRW	Health Care Risk Waste.
ACW	Asbestos cement waste – such as roof sheets, gutters, down pipes that contain asbestos fibre.
PCB contaminated	Any article that has in excess of 50 ppm polychlorinated biphenyl in the lubricating oil.

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Metal / Scrap Ferrous	Maintenance activities	GW5301	General	General	n/a	Skip containers for scrap metals/ redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Metal / Scrap Non-Ferrous	Maintenance activities	GW5302	General	General	n/a	Skip containers for scrap metals / redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Organic waste	Canteens Admin buildings Local vessels	GW2002	General	General	n/a	Small intermediate containers. Transferred to general waste skip containers.	Landfill – general or hazardous		No
Plastics	All areas Local vessels	GW5106	General	General	n/a	Small intermediate containers Transferred to designated recycling areas	Recycler	Best practise to separate into individual types at recycling areas.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Glass	All areas Local vessels	GW5201	General	General	n/a	Small intermediate containers. Transferred to designated recycling areas.	Recycler		No
Paper and cardboard	All areas Local vessels	GW5004	General	General	n/a	Small intermediate containers Transferred to designated recycling areas.	Recycler	Best practise to separate into individual types at recycling areas.	No
Wood waste	All areas Local vessels	GW2003	General	General	n/a	Transferred to designated recycling areas.	Recycler	Store away from flammables.	No
Garden waste	All areas	GW2001	General	General	n/a	Removed from site as part of the garden service.	Licensed compost operation except for alien vegetation		No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Tyres	Maintenance activities Worn fender tyres	GW5401	General	General	n/a	Transferred to designated tyre storage area.	Landfill – general or hazardous	Must be CUT into quarters before removal to landfill. **PROHIBITED** from landfilling after 23rd August 2018 and must be recycled.	No
							Recycler		
Empty drums and plastic containers – containing non-hazardous chemicals	All areas	GW9901	General	General	n/a	Transferred to designated recycling areas	Recycler	Only if the containers did not contain hazardous substances.	No
Construction and demolition waste, excluding hazardous materials	All areas	GW3001	General	General	n/a	Preferably skip containers. Temporary storage areas to be agreed with Port Environmental Department.	Landfill or other area provided WRITTEN approval is obtained from NMBM.	To be cleared 14 days after construction work is complete.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT^{N}**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Mixed general waste not suitable for recycling	All areas Local vessels	GW1001	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids to prevent windblown litter.	No
Fish waste	Fishing vessels	GW2002	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids and to be emptied on a regular schedule so as to prevent odour nuisances.	No
Pressurised gas containers	Various including- Fire Dept – extinguishers Fishing vessels – refrigerants	GW9901	General as they will be gas free after cutting	General	n/a	Temporary storage area to be agreed with Port Environmental Dept, Risk Dept and Fire Dept.	Return to supplier		No
						Skip containers for scrap metals.	Recycler or return to supplier	Containers must be cut in half before placing in scrap container.	
Ropes / working lines Scrap conveyor belts.	Vessels Terminal operators	GW9901	General	General	n/a	General waste skip containers.	Landfill	Check recycling potential **BEFORE** landfilling.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
						Designated recycling area.	Recycler	Containers must be cut in half before placing in scrap container.	
Hull cleaning waste	Vessels Yachts	GW9901	General	n/a	n/a	General waste skip containers.	Landfill		No
Expired pyrotechnics	Vessels	HW9901	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 0	Class 1 Various UN numbers	Storage area designated by the Port Environmental Department.	Return to supplier or destroyed by the Police.	Marine Notice 9 of 1996 gives the instruction that these items are to be handed to Ports of Entry Police.	Yes
Sewage	Vessels	HW2101		Hazardous Type 0	Class 9 UN 3082	n/a	NMBM disposal point	Transporter to be licensed and have permission from NMBM to discharge.	No
E-Waste – including printer cartridges (without hazardous components removed)	Admin activities	HW1808	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Storage area designated by the Port Information Systems Department.	Specialised recycler	SDS if possible for example for printer cartridges	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Sandblasting waste	Maintenance activities	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes
Contami-nated soil	Incidents Spills Remediation sites	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Empty drums and plastic containers - containing non-hazardous chemicals	All areas	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling	Recycler	Generator to sign nominally empty packing certificate to certify containers are empty. Must be done before removal from site.	Yes
						Skip containers / Designated storage areas	Hazardous waste landfill / Class A	SDS for empty hazardous chemical containers	
Asbestos Containing Waste	Land based maintenance activities	HW0601	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Asbestos	Hazardous Type 1	Class 9 UN 2212	Special order skip container.	Hazardous waste landfill / Class A	Asbestos cement waste (roof sheeting etc). **NOT TO BE BROKEN UP DURING HANDLING.**	Yes
Fluorescent tubes and other lamps.	Maintenance activities	HW1805	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Special storage boxes from service provider.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Lamps to be kept intact during storage.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Health Care Risk Waste	Clinic First aid – land and vessels	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised HCRW containers- Yellow plastic containers for sharps waste Boxes with red plastic insert for infectious waste Green plastic containers for pharmaceuticals	Treated by incineration / sterilisation before landfilling		No
Sanitary waste	Ablutions	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised containers provided by service provider.	Treated by incineration / sterilisation before landfilling	Alternative methods to be agreed with Port Environmental and Risk Department and to have DEA approval.	No
Lead acid batteries	Maintenance activities	HW0301	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 8 UN 2794	Temporary storage areas to be agreed with Port Environmental Department.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Batteries to be stored with secondary containment to prevent acid spills.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Other batteries including- Mercury Ni/Cd Manganese dioxide and alkali Lithium and lithium ion Nickel metal hydride	All areas	HW0307	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling.	Recycler		Yes
						Hazardous waste skip containers	Hazardous waste landfill / Class A	SDS for individual batteries	
Waste oils	Land based maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	NO solid material allowed to be deposited into the used oil receptacle.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Transformer Oils	Maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	It is understood that all TNPA transformers have been tested and they all are **under 50ppm PCB oil.**	Yes
Galley waste from vessels/ yachts having been outside of SA	Vessels Yachts	HW9901	Hazardous	Hazardous Type 1	Class 6.2 UN 2900	Polycarts transferred to galley waste container (to be subject to strict access control. Containers to be subject to disinfection procedure.	Hazardous waste landfill / Class A	Waste to be treated with lime on arrival and covered immediately. **ONLY TO BE REMOVED BY APPOINTED GALLEY WASTE CONTRACTOR**	Yes
Dredging waste– sediment	Port services	HW9901	Hazardous	Hazardous Type 1	n/a	n/a	Dumped at sea	Subject to valid permit and as per the permit conditions	No
Incinerator ash	Vessels services	To be determined	To be determined	To be determined	To be determined	n/a	Landfilled Class to be determined.	Classification requirements of this waste stream to be discussed and agreed.	TBD

APPENDIX 2-C: WASTE ADVANCE NOTIFICATION FORMS

TRANSNET
national ports authority

GALLEY WASTE REMOVALS FOR MISCELLANEOUS SERVICE NOTES

SHIPS NAME: _____

SHIPS AGENT: _____ TEL: _____
CEL: _____

ACCOUNT NUMBER: _____

W.O. NUMBER: _____

DATE: _____

PLACE: _____

SLOPS CART PROVIDED _____ @ R_____ per slop cart (1.8 cub m).

TOTAL COST: R _____ (Vat exclude)

_____ _____
SIGNATURE OF AGENT/SHIP REP SIGNATURE OF DRIVER

NAME PRINT: _____

FAX TO: 041-5071561
CONTACT PERSON: 0835905589 (D. Hough)

FOR OFFICE USE:

MISCELLANEOUS NO: _____

TRANSNET
national ports authority

HAZARDOUS LIQUID WASTE REMOVALS FOR MISCELLANEOUS SERVICE NOTES

SHIPS NAME: _____

SHIPS AGENT: _____ TEL: _____
CEL: _____

ACCOUNT NUMBER: _____

W.O. NUMBER: _____

DATE: _____

PLACE / BERTH: _____

DOCKING TIME & DATE: _____

SLUDGE _____tank *BLACK WATER* _____tank *GREY WATER* _____tank

TANKER PROVIDED _____ @ _____ per 10 000L load (tank)

OWN WASTE PIPE Yes / No
Extra R_____ charged for vessels without own waste pipes (waste pipe from ship to tank)

TOTAL COST: R _____ (Vat excluded)

_____ _____
SIGNATURE OF AGENT/SHIP REP SIGNATURE OF DRIVER

NAME PRINT: _____

FAX TO: 041-5071561
CONTACT PERSON: 0835905589 (D. Hough)

FOR OFFICE USE:

MISCELLANEOUS NO: _____

Request must be booked least 48hrs before ship docks

APPENDIX 2-D: ALLEGED WASTE RECEPTION FACILITY INADEQUACY FORM

Format for reporting alleged waste reception facility inadequacies

The Master of a ship having encountered difficulties in discharging waste to reception facilities should forward the information below, together with any supporting documentation, to the Administration of the flag State and, if possible, to the competent Authorities in the port State. The flag State shall notify the IMO and the port State of the occurrence. The port State should consider the report and respond appropriately informing IMO and the reporting flag State of the outcome of its investigation.

1 SHIP'S PARTICULARS

1.1 Name of ship: _____

1.2 Owner or operator: _____

1.3 Distinctive number or letters: _____

1.4 IMO Number[1]: _____

1.5 Gross tonnage: _____

1.6 Port of registry: _____

1.7 Flag State[2]: _____

1.8 Type of ship:

☐ Oil tanker ☐ Chemical tanker ☐ Bulk carrier ☐ Other cargo ship

---

2 PORT PARTICULARS

2.1 Country: _____

2.2 Name of port or area: _____

2.3 Location/terminal name: _____
(e.g., berth/terminal/jetty)

2.4 Name of company operating
the reception facility (if applicable): _____

2.5 Type of port operation:

☐ Unloading port ☐ Loading port ☐ Shipyard

☐ Other (specify) _____

2.6 Date of arrival: __/__/____ (dd/mm/yyyy)

2.7 Date of occurrence: __/__/____ (dd/mm/yyyy)

2.8 Date of departure: __/__/____ (dd/mm/yyyy)

---

1 In accordance with the IMO ship identification number scheme adopted by the Organization by Assembly resolution A.600 (15).

2 The name of the State whose flag the ship is entitled to fly.

Type of waste	**Amount for discharge (m^3)**	**Amount not accepted (m^3)**	**Problems encountered** Indicate the problems encountered by using one or more of the following code letters, as appropriate. A No facility available B Undue delay C Use of facility technically not possible D Inconvenient location E Vessel had to shift berth involving delay/cost F Unreasonable charges for use of facilities G Other (please specify in paragraph 3.2)
MARPOL Annex I-related Type of oily waste:			
Oily bilge water			
Oily residues (sludge)			
Oily tank washings (slops)			
Dirty ballast water			
Scale and sludge from tank cleaning			
Other (please specify .....)			
MARPOL Annex II-related Category of NLS[3] residue/water mixture for discharge to facility from tank washings:			
Category X substance			
Category Y substance			
Category Z substance			
MARPOL Annex IV-related **Sewage**			
MARPOL Annex V-related Type of garbage:			
Plastic			
Floating dunnage, lining, or packing materials			
Ground paper products, rags, glass, metal, bottles, crockery, etc.			
Cargo residues, paper products, rags, glass, metal, bottles, crockery, etc.			
Food waste			
Incinerator, ash			
Other (please specify .....)			
MARPOL Annex VI-related			
Ozone-depleting substances and equipment containing such substances			
Exhaust gas-cleaning residues			

Additional information with regard to the problems identified in the above table.

_____

[3] Indicate, in paragraph 3.2, the proper shipping name of the NLS involved and whether the substance is designated as 'solidifying' or 'high viscosity' as per MARPOL Annex II, regulation 1, paragraphs 15.1 and 17.1 respectively.

_____
_____
_____
_____

3.3 Did you discuss these problems or report them to the port reception facility?

☐ Yes ☐ No

If yes, with whom (please specify)

_____
_____

If yes, what was the response of the port reception facility to your concerns?

_____
_____

3.4 Did you give prior notification (in accordance with relevant port requirements) about the vessel's requirements for reception facilities?

☐ Yes ☐ No ☐ Not applicable

If yes, did you receive confirmation on the availability of reception facilities on arrival?

☐ Yes ☐ No

4 ADDITIONAL REMARKS/COMMENTS

_____
_____
_____
_____

_____

Master's signature Date: __/__/____ (dd/mm/yyyy)

APPENDIX 2-E: WASTE DELIVERY RECEIPT FORM

STANDARD FORMAT FOR THE WASTE DELIVERY RECEIPT FOLLOWING A SHIP'S USE OF PORT RECEPTION FACILITIES (MEPC.1/Circ.645)

The designated representative of the reception facility provider should provide the following form to the master of a ship that has just delivered waste.
This form should be retained on board the vessel along with the appropriate Oil RB, Cargo RB or Garbage RB

1. RECEPTION FACILITY AND PORT PARTICULARS

1.1 Location/Terminal name:	
1.2 Reception facility provider(s):	
1.3 Treatment facility provider(s) – if different from above:	
1.4 Waste Discharge Date and Time from:	to

2. SHIP PARTICULARS

2.1 Name of ship:	2.5 Owner or operator:
2.2 IMO number:	2.6 Distinctive number or letters:
2.3 Gross tonnage:	2.7 Flag State:
2.4 Type of ship: ☐ Oil tanker ☐ Chemical tanker ☐ Bulk carrier ☐ Container ☐ Other cargo ship ☐ Passenger ship ☐ Ro-ro ☐ Other (specify)	

3. TYPE AND AMOUNT OF WASTE RECEIVED

MARPOL Annex I – Oil	**Quantity (m^3)**
Oily bilge water	
Oily residues (sludge)	
Oily tank washings	
Dirty ballast water	
Scale and sludge from tank cleaning	
Other (please specify)	
MARPOL Annex II – NLS	**Quantity (m^3)/Name**
Category X substance	
Category Y substance	
Category Z substance	
OS – other substances	
MARPOL Annex IV – Sewage	**Quantity (m^3)**

MARPOL Annex V – Garbage	**Quantity (m^3)**
Plastic	
Floating dunnage, lining, or packing materials	
Ground paper products, rags, glass, metal, bottles, crockery	
Cargo residues, paper products, rags, glass, metal, bottles, crockery, etc.	
Food waste	
Incinerator ash	
Other wastes (specify)	
MARPOL Annex VI – related	**Quantity (m^3)**
Ozone-depleting substances and equipment containing such substances	
Exhaust gas-cleaning residues	

On behalf of the port facility I confirm that the above wastes were delivered.

Signature: ..... Full Name and Company Stamp: .....

PART 3. WASTE MANAGEMENT PLAN APPLICABLE TO PORT OF PORT ELIZABETH TERMINAL OPERATORS/TENANTS/USERS

3.1 AIM AND OBJECTIVES

The purpose of this Waste Management Plan (WMP) is to co-ordinate, plan, provide, and seek to improve the waste reception and handling facilities for the legal management of waste generated or off-loaded within the Port of Port Elizabeth (PE). The primary objective is to maintain safe and healthy working conditions and on-going protection of the biophysical environment.

Part 3 (this Part) of the WMP is intended specifically for the receipt, handling, and transportation of waste to licensed treatment, or landfill facilities, for waste generated by terminal operators, tenants and other land-based Port users.

The aim of Part 3 of the WMP is to ensure that, on implementation, all waste arising as a result of operations at the Port of PE is managed in compliance with all relevant international treaties, national, provincial and local legislation as well as the rules and regulations as set out by Transnet National Waste Management Strategy.

In pursuance of the foregoing stated aims of the WMP, the TNPA, who with due regard for its role as landlord for the Port, and acknowledging its responsibility for the efficient and satisfactory operation of the Port of PE, has adopted the policies of waste minimisation, reuse and recycling of waste wherever possible and practical, as described in the National Environmental Waste Management: Waste Act (Act No. 59 of 2008) and will encourage, and where necessary compel, other Port users to do likewise.

It is important to note that there is a total prohibition on the disposal of any form of waste from vessels or land based activities into the Port. This prohibition is strictly enforced and severe penalties are imposed which include substantial fines.

3.2 GLOSSARY

The following acronyms and definitions are used within the document-

Abbreviations

DEA	Department of Environmental Affairs
IMO	International Maritime Organisation
KPIs	Key Performance Indicators
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
NEM:WA	National Environmental Management Waste Act (Act No 59 of 2008)
NMBM	Nelson Mandela Bay Municipality
PE	Port Elizabeth
SANS	South African National Standard
TNPA	Transnet National Ports Authority
TPT	Transnet Port Terminals
WMP	Waste Management Plan
WRFs	Waste Reception Facilities

Definitions

Adequacy	Waste Reception Facilities are considered adequate when they meet the needs of ships using the ports without causing undue delay.
Building and demolition waste	Means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition, which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded wood, glass and plastic (c) discarded metals (d) discarded soil, stones and dredging spoil (e) Other discarded building and demolition waste (source: NEM: Waste Amendment Act 26 of 2014).
Chandling	The provision of stores and supplies.
Disposal	Means the burial, deposit, discharge, dumping, placing or release of any waste material into, or onto, any air, land or water (source: NEM: Waste Act 2008).
Disposal Facility	A facility for the burial, deposit, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land.
Domestic waste	Means waste, excluding hazardous waste that emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation, purposes, which include: (a) garden and park waste (b) municipal waste (c) food waste (source: NEM: Waste Amendment Act 16 of 2014)
Flag State	Flag State refers to the authority under which a country exercises regulatory control over the commercial vessel which is registered under its flag. This involves the inspection, certification, and issuance of safety and pollution prevention documents.
Galley Waste	Means waste originating from the kitchen of a ship.

General waste	Means waste that does not pose an immediate hazard or threat to health or to the environment, and includes— (a) domestic waste; (b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under section 69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition waste as outlined below – refer to Annexure Three Category B of NEM: Waste Amendment Act 16 of 2014 .
Hazardous waste	Means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles. Refer to Annexure Three Category A of NEM: Waste Amendment Act 16 of 2014.
Health Care Risk Waste	The portion of the health care waste that is hazardous and including- (a) laboratory waste; (b) anatomical waste; (c) genotoxic/cytotoxic waste; (d) infectious waste; (e) sharps waste; (f) sanitary waste; (g) nappy waste; (h) low-level radioactive waste; and (i) pharmaceutical waste. (Source Draft Health Care Risk Waste Regulations published by the Department of Environmental Affairs - GG 35405, GNR 452 on 1st June 2012).

Hull Cleaning Waste	Waste removed during hull cleaning which could include material hazardous to marine biosecurity.
Inert Waste	Means waste that- (a) does not undergo any significant physical, chemical or biological transformation after disposal; (b) does not burn, react physically or chemically biodegrade or otherwise adversely affect any other matter or environment with which it may come into contact; and (c) does not impact negatively on the environment, because of its pollutant content and because the toxicity of its leachate is insignificant and which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded glass (c) discarded soil, stones and dredging spoil (source: NEM: Waste Act Amendment Act 26 of 2014)
Inspection Authority	A member of the TNPA Port of Port Elizabeth environmental management department, or duly authorised and trained representative, with the responsibility for auditing and inspecting waste management activities.
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
Minimisation	When used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of (source NEM: Waste Act 2008).
Oily waste:	For the purposes of this Waste Management Plan, oily waste means waste that contains a significant amount of oil, such as bilge mop socks, oil filters, oily rags, oil cans, and oil contaminated plastic bags and paper materials. Waste oil means oil and oil sludge in liquid form.
Recovery	Means the controlled extraction of a material or the retrieval of energy from waste to produce a product (source NEM: Waste Act 2008).

Recycle	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material (source NEM: Waste Act 2008).
Re-use	Means to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles (source NEM: Waste Act 2008).
Secondary containment	A level of containment that is external to and separate from primary containment. Secondary containment is a method of preventing unintended releases of toxic or hazardous liquids into the surrounding area. An example of secondary containment is bunding.
Ships waste	Waste and residues generated during the service of the ship which fall into the definition of garbage, oil and oily mixtures. These can include hazardous waste (e.g. Chemical waste, paints, batteries, galley waste), hazardous oil containing waste (e.g. sludge, bilge water, cargo slops/dirty, ballast), noxious liquid waste (e.g. cargo residues, pre-washings), sewage, general waste (e.g. paper, plastic, glass, cans/metal) (TNPA Waste Management Strategy, 2014).
Storage	Means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste (source NEM: Waste Act 2008).
Waste	Means: (a) any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all waste as defined in Schedule 3 to this Act; or (b) any other substance, material or object that is not included in Schedule 3 that may be defined as a waste by the Minister by notice in the Gazette, but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste— (i) once an application for its re-use, recycling or recovery has been approved or, after such approval, once it is, or has been re-used, recycled or recovered;

(ii) where approval is not required, once a waste is, or has been re-used, recycled or recovered;

(iii) where the Minister has, in terms of section 74, exempted any waste or a portion of waste generated by a particular process from the definition of waste; or

(iv) where the Minister has, in the prescribed manner, excluded any waste stream or a portion of a waste stream from the definition of waste. (source: NEM: Waste Act Amendment Act 26 of 2014)

Waste Reception Facility	Any fixed, floating or mobile facility capable of receiving MARPOL residues/waste from ships and fit for that purpose. Waste Reception Facilities are distinguished from Waste Transfer Sites in that Waste Reception Facilities are intended for the reception of ship generated waste at the Port, for removal and disposal by a waste management contractor.
Waste Transfer Site	Means a facility that is used to accumulate and temporarily store waste before it is transported to a recycling, treatment or waste disposal facility (NEM: Waste Act 2008). Waste Transfer Sites are distinguished from Waste Reception Facilities in that Waste Transfer Sites are intended for the collection of land generated waste at a central point for removal and disposal by a waste management contractor.

3.3 INTRODUCTION

This WMP has been prepared under the provisions of all the relevant legislation of the Republic of South Africa, particularly the National Environmental Management: Waste Act (Act No. 59 of 2008); the Republic of South Africa's National Ports Act (Act No 12 of 2005), the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008), and applicable international instruments, especially, MARPOL.

It is the intention of TNPA to work with all users of the Port of PE in what is a collective responsibility with regard to legally compliant and efficient waste management practises. If clarity with regards to the interpretation and identification of individual responsibilities regarding waste management is required, all TNPA employees are invited to contact the Port of PE Harbour Authority (Table 3-1).

Table 3-1: Port of Port Elizabeth Contact Details

Designation	Telephone
TNPA Port Control	+27 (0)41 507 1909/10/11
TNPA SHEQ Manager	+27 (0)41 507 1951
TNPA Assistant Environmental Manager	+27 (0)41 507 1907
TNPA Environmental Officer	+27 (0)41 507 1708
TNPA Port Engineering	+27 (0)41 507 1565
TNPA Marine Safety and Environment Officer	+27 (0)41 507 1925

3.3.1 Port Limits

The jurisdictional area of the TNPA, Port of Port Elizabeth is depicted in Figure 3-1.

3.3.2 Biophysical setting

The Strategic Environmental Assessment of the Port found that there are no sensitive aquatic zones within the Port confines (Coastal & Environmental Services, 2006). The Port is however situated within Algoa Bay which is a sensitive ecological zone where Southern Right whales calve and nurse their young, endangered sea turtles feed and a multitude of waterfowl feed and nest. The approach and exit shipping lanes travel through this area. There is therefore a risk that illegal disposal and/or poor control of waste would endanger this sensitive region.

The PoPE is located near the junction of temperate (winter rainfall) and subtropical (summer rainfall) climate regimes and experiences a warm temperate climate. The area has a bimodal rainfall pattern, with peaks in spring and autumn, totalling approximately 600 mm per year. The PoPE is subject to strong gradient winds with a strong prevalence from the west and west- south-west (41% combined frequency) all year round, and east (15%) from October through to March. Windblown litter, particularly items such as plastic bags, is of concern as it is known to lead to the death of certain species through entanglement, suffocation, and/or ingestion. The control of litter, and prevention of windblown litter, is therefore one of the important objectives of this WMP.

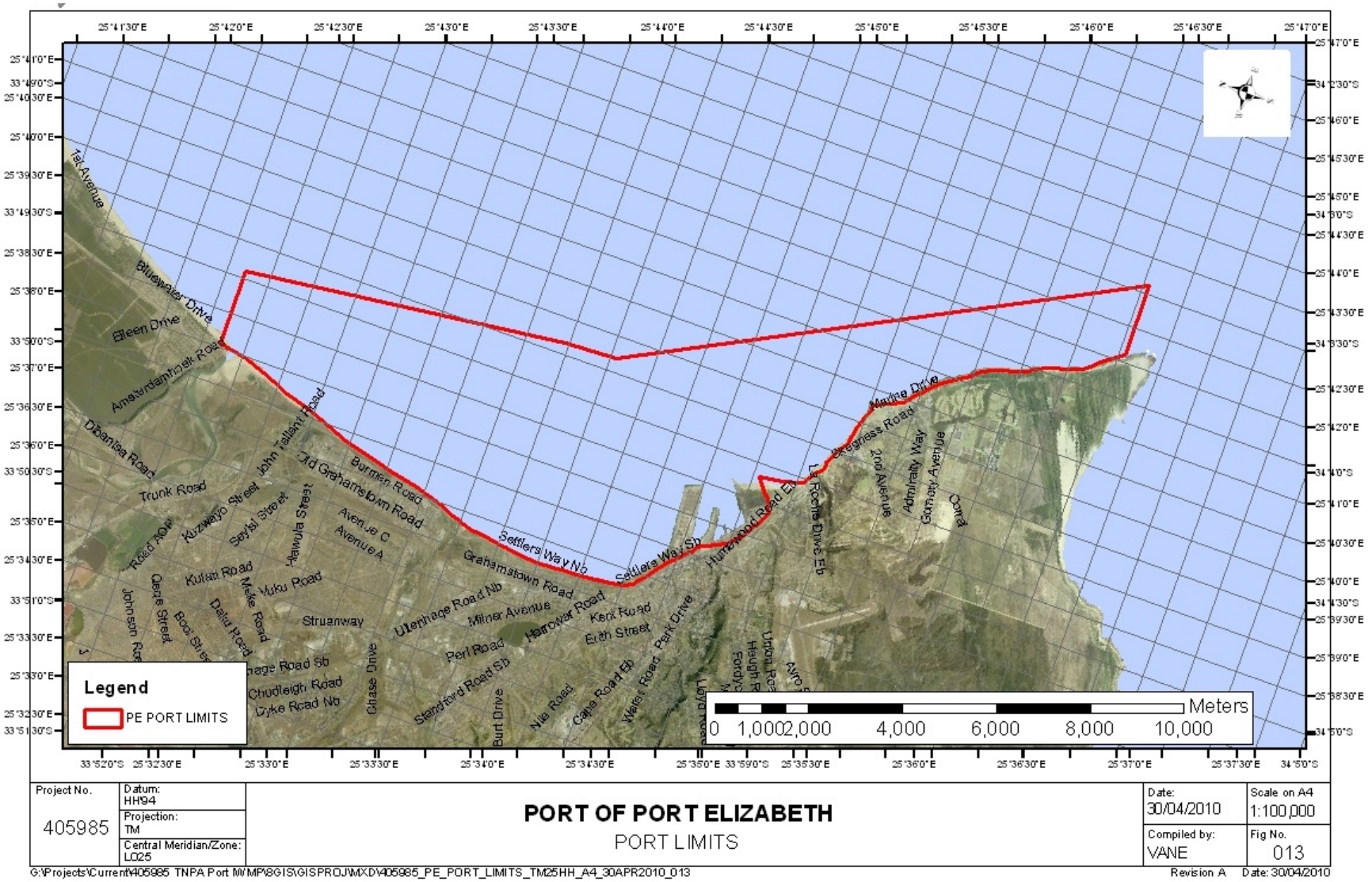

Figure 3-1: Port of Port Elizabeth Port Limits

Water quality within the Port is monitored regularly and the SEA (Coastal & Environmental Services, 2006) reported that these results show periodical contamination by petroleum hydrocarbons, and almost continual contamination from *E. Coli* and related faecal coliform bacteria. The correct handling and storage of waste will assist in eliminating potential sources of these, and other, contaminants. When taking into considering the climatic conditions in PE as well as the Port's water quality, it therefore becomes crucial to institute proper waste management practices both on land and in water to counteract any potential negative environmental impacts. This WMP intends to assist all Port users to realise this collective responsibility.

3.4 LEGAL FRAMEWORK GOVERNING WASTE IN THE PORT OF PORT ELIZABETH

A summary description of applicable legislation is included Appendix 3-A of Part 3 for ease of reference.

3.5 POTENTIAL SOURCES OF WASTE

Tenant facilities in the Port are varied and include administration buildings, clinics, workshops, canteens, warehouses, cold storage, oil separators, petroleum products storage bunkers, manganese bulk storage facilities etc. The types of waste generated include:

- General waste
- Organic kitchen waste
- Oily waste and used engine oils
- Hazard substances containers
- Health care risk waste
- Sewage
- Hull cleaning waste
- Manganese waste
- Sandblasting waste from maintenance activities.

These waste should be handled as per the information presented in the Waste Inventory included in Appendix 3-B.

3.6 ROLES AND RESPONSIBILITIES

Tenants and other Port users have a collective responsibility for the maintenance of legally compliant waste management practices. Depending on the volumes and types of waste generated by the individual tenants, and on the contractual relationship existing between the Port authorities and the tenant or Port user, the tenant or Port user may either use the waste management services established and operated by TNPA, or may opt to manage their waste independently or in terms of contract arrangements with TNPA-licensed waste service providers. In either case, both the tenants and Port users have a collective responsibility to:

- Comply with all waste related legislation, policies and procedures.
- Comply with the TNPA WMP as per the Port Rules, the Lease Agreements entered into with TNPA as well as the Terminal Operators' Licenses.
- Provide TNPA with a copy of their Environmental Management Plans which include a section on waste management.

- Ensure that their waste is transported by a TNPA-licensed Waste Management Service Provider and that it is recycled / treated / disposed at a licensed facility for the waste type involved. This includes the conducting of audits on Waste Management Service Providers.
- Minimise waste in accordance with the accepted hierarchy of waste management (avoid where possible, reduce, reuse, recycle, and dispose to landfill as a last resort).
- Ensure the correct segregation of waste so that the different waste types can be handled as legally required (hazardous versus general and recyclable).
- Ensure that general waste and recyclable materials are not placed in hazardous waste containers (thereby increasing the volume of hazardous waste for disposal to landfill). This incurs additional cost to the tenant/TNPA.
- Ensure that hazardous waste is not placed in general waste containers (thereby resulting in the whole container being removed and charged as hazardous waste). This incurs additional cost to the tenant/TNPA.
- Observe 'good housekeeping practices' in all their daily operational activities.
- Pay for the cost of waste management services provided by TNPA, in cases where the lessee or Port user makes use of this service in accordance with the published tariff of charges.
- Avoid littering in all its forms by using the litter bins and encourage others to do so.
- Establish Waste Reception / Waste Transfer Facilities within their area of responsibility and appoint and manage one or more TNPA-licensed Waste Management Service Providers to collect, transport and dispose of waste from these facilities.
- Ensure Waste Reception / Waste Transfer Facilities are registered (where required) and maintained in accordance to the Port Rules, environmental legislation, and any other requirements specified by the Harbour Master, including (but not limited to) avoiding nuisances and windblown litter.
- Pump / transfer all waste oil, oily water, noxious liquids into the correct storage facilities.
- Report all incidents of spillages and leakages and take immediate remedial action in accordance with standing instructions. Ensure actions are taken to prevent a future occurrence of a similar nature.
- Appoint and manage one or more TNPA-licensed waste service providers to collect, transport and dispose of waste if not making use of the TNPA-provided Waste Reception/Transfer Facilities.
- Keep records of waste volumes, types of waste, and disposal and recycling of waste and forward annual waste returns (Appendix 3-C) to the Port Environmental Department for capture on the Port Waste Information System.
- Ensure that the requirements of the WMP are communicated to and complied with by any subcontractors under their control.
- Ensure that senior management attends the relevant forums held in the Port where waste management issues are on the Agenda.

Tenant waste management practices must comply with the provisions of this Part of the WMP, and the activities of the tenants' Waste Management Service Provider, with Part 4 of the WMP.

3.7 TYPES AND CAPACITY OF WASTE RECEPTION FACILITIES AND FREQUENCY OF SERVICING

Waste Reception / Waste Transfer Facilities must be-

- Of a design adequate for the type of waste being stored for removal.
- Sufficient to store the volumes of waste anticipated to be generated.
- Serviced timeously to prevent the facilities from becoming overfilled.

Waste reception/transfer facilities are provided by TNPA in common use areas at the locations shown on Figure 3-2.

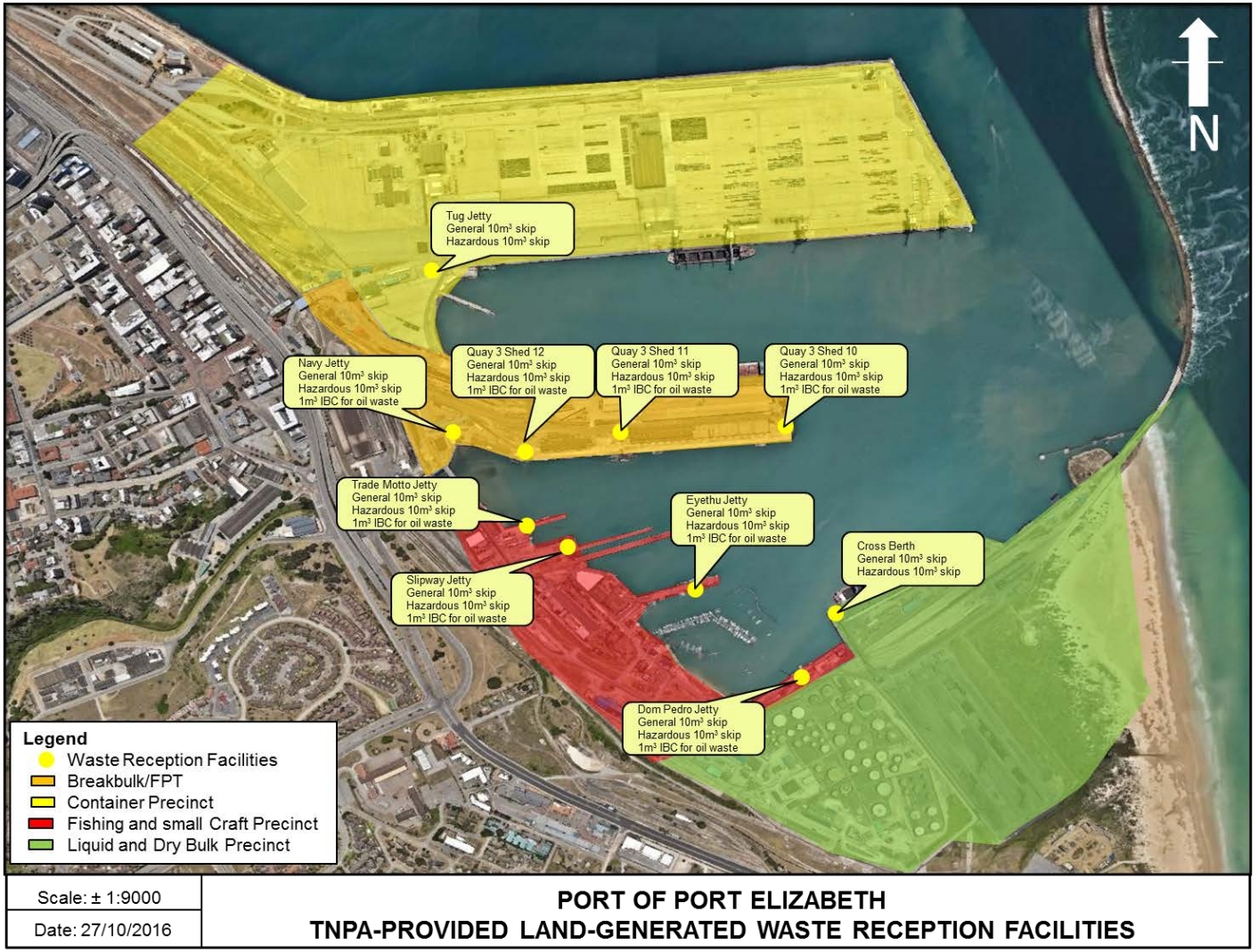

Figure 3-2: Location of Waste Reception/Transfer Facilities provided by TNPA for waste generated by land-based activities

3.8 LOCATION OF WASTE RECEPTION FACILITIES AND EASE OF USE

Waste reception/transfer facilities have been located in accordance with the current needs of waste generators. As the need for Waste Reception / Waste Transfer Facilities transform, changes will be catered for by the extension / modification of existing facilities and / or the relocation and increase in size and number of waste receptacles.

All land-based waste reception/transfer facilities will only be located in convenient locations within the jurisdictional area of the Port of PE.

The existing Waste Reception/ Waste Transfer Facilities locations and the respective waste types are presented in Figure 3-2.

3.9 INADEQUACIES IN THE PROVISION OF WASTE RECEPTION FACILITIES

To minimise shortcomings, users and potential users of waste reception/transfer facilities for ship generated waste are to report any alleged lack of facilities, deficiencies or other shortcomings of waste disposal facilities to Port Engineering, the Harbour Master or the Port Environmental Department.

Port Engineering, the Harbour Master or Port Environmental Department will investigate any reported or alleged lack of facilities, deficiencies or other shortcomings in waste disposal facilities. All findings will be pursued with the complainants and corrective action taken where necessary.

3.10 WASTE INVENTORY

The Port has a waste inventory (updated November 2016), a copy of which is include in Appendix 3-B.

Port terminal operators and tenants must ensure that they have a copy of the updated waste inventory and must ensure that their waste is listed on the waste inventory.

The terminal operators and tenants must ensure that they manage their waste as per the waste inventory. The waste inventory will be updated from time to time and the Terminal operators and tenants must ensure that they obtain the latest revision from the TNPA website (http://www.transnetnationalportsauthority.net/).

Should the terminal operators or tenants generate a waste that is not on the most current revision of the waste inventory, the terminal operator or tenant must make records and information relevant to that waste stream available to the Port Environmental Department so that the waste inventory can be updated.

3.11 COSTS OF WASTE MANAGEMENT FACILITIES AND SERVICES PROVIDED BY TNPA

All tenants have to manage waste generated within the operational area under their lease at their own cost as provided for in the respective Lease Agreements signed with TNPA. In the instances where tenants elect to appoint TNPA to handle their waste, TNPA will appoint TNPA licensed Waste Management Service Providers and will charge the tenant for the service.

TNPA reserves the right to provide waste management services to the various Port users and tenants, and for which a separate waste storage and removal tariff will be applied based on type, volume and frequency of service.

3.12 SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY (SHEQ) RISK MANAGEMENT (SHEQ) POLICY STATEMENT AND NECESSITY FOR COMPLIANCE AT ALL TIMES

All Port tenants/users are to be in full compliance at all times with the TNPA SHEQ Risk Management Policy statement which is available on the TNPA website (http://www.transnetnationalportsauthority.net/) and is updated from time to time.

3.13 ONGOING CONSULTATION WITH PORT USERS

On-going consultation between TNPA and terminal operators and tenants with regard to waste management in the Port of PE is invited through contact with the TNPA representatives specified in Table 3-1.

As the influx and establishment of routine and repeated visits by sea going vessels and the numbers of land based tenants/users changes, consultation is envisaged as a periodic and frequent on-going process. The compilation of annual waste returns (Appendix 3-C) by tenants will assist TNPA in this regard.

TNPA terminal operators and tenants will be required to partake in waste management awareness programmes as issued from time to time by the Port Environmental Department.

3.14 REVIEW

The WMP has been developed primarily but not exclusively against the background of current legislation and regulations relating to waste management in the Republic of South Africa and the current waste generation trends in the PoPE. The document may be reviewed from time to time as required. It is the responsibility of the various Port users to ensure that they are in possession of the latest revision of the Waste Management Plan which will be available on:

http://www.transnetnationalportsauthority.net/

3.15 COMPLIANCE AND ENFORCEMENT

TNPA will undertake audits reviewing waste management practises from time to time as determined by a planned audit schedule. TNPA reserves the right to undertake such audits on both terminal operators and tenants. TNPA will implement enforcement against terminal operators and tenants where non-compliances with the WMP are not rectified as required.

PART 3: APPENDICES

APPENDIX 3-A: SUMMARY OF LEGAL REQUIREMENTS APPLICABLE TO WASTE MANAGEMENT IN THE PORT OF PORT ELIZABETH

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
MARPOL Convention and associated regulations	• The main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. • Vessels must not discharge wastes into the sea. It provides the international standard regarding Port Waste Reception Facilities for ship generated waste.
	<u>Annex I Regulations for the Prevention of Pollution by Oil</u> • Vessels are prohibited from discharging oil or oily mixtures into the sea, except in specified conditions. • Ports must supply adequate waste reception facilities. • Oil and oily sludge must be removed and disposed / recycled to a licensed facility.
	<u>Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk</u> • Vessels are prohibited from discharging of residues containing noxious substances is 12 miles of the nearest land (normally from tank cleaning activities). • Ports must supply adequate waste reception facilities. • Slops must be removed and disposed / recycled to a licensed facility.
	<u>Annex IV Prevention of Pollution by Sewage from Ships</u> • Ports must supply adequate waste reception facilities. • Sewage must be removed and discharged to a licensed treatment facility.
	<u>Annex V Prevention of Pollution by Garbage from Ships</u> • All ships of > 400 gross tonnage and above and every ship certified to carry 15 persons or more must carry a Garbage Management Plan, to include written procedures for collecting, storing, processing and disposing of garbage, including the use of any relevant equipment fitted on-board (incinerators, compactors, etc). • The Garbage Record Book must record all disposal and incineration operations. • Every ship of 12 metres or more in length must also display placards notifying passengers and crew of the relevant disposal requirements. • Ports must provide reception facilities for garbage without causing undue delay.

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
	Annex VI Prevention of Air Pollution from Ships From 2020 this will potentially give rise to disposal requirements from scrubber systems.
International Health Regulations, 2005	The competent authorities shall- • Be responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal dejecta, wastewater and any other contaminated matter from a conveyance. • Take all practicable measures to monitor and control the discharge by ships of sewage, refuse, ballast water and other potentially disease-causing matter which might contaminate the waters of a port, river, canal, strait, lake or other international waterway.
Stockholm Convention on Persistent Organic Pollutants, 2001	Global treaty to protect the environment by reducing / eliminating the use of persistent organic pollutants. Eg. Polychlorinated biphenyl - PCB.
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004	Global treaty to protect the environment from the transfer of harmful organisms in ballast water carried by ships.
Basel Convention on the Transboundary Movement of Hazardous Wastes	Controls the movement of hazardous waste between parties to the convention. Various notifications and permissions are required.
The London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972	Controls pollution of the sea by the dumping of wastes and other material.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Constitution of South Africa Act 108 of 1996	• Waste activities must be undertaken in such a manner that is not harmful to the health or well-being of SA citizens.
National Ports Act 12 of 2005	• In order to provide a waste management service in the Port, a license must be obtained from TNPA. • The Harbour Master can give written or verbal instructions with respect to removal of waste and the use of the Port Reception Facilities.
Notice to Apply for a Waste Management License Gazette Notice No 275, Gov Gazette No 34253 of 6th May 2011	Port Waste Management Service Providers must apply to TNPA for a license.
The Ports Rules of 2009	• 72 hours' written notice of arrival must be given to the Harbour Master. Notification must include details of the waste on board. • All persons in the Port must prevent pollution and protect the environment. TNPA can take remediation measures in the event that pollution is caused. The polluter will need to pay for the costs of remediation. • No harmful matter including oil can be discharged into the harbour. • Vessels berthed along a quayside must have all valves closed or covered to prevent inadvertent discharges. • Clean-up of spills must be done in accordance with the Port Contingency Plan. • Terminal Operators and vessels must make use of Port Reception Facilities for waste from vessels. • TNPA may require a vessel to procure waste services from a licensed provider if the berth is not operated by a Terminal Operator. • TNPA can direct a Terminal Operator who does not have adequate waste reception facilities to procure them within a specified time period. • Galley waste must be handled in accordance with the Port Waste Management Plan. • Owners, masters or agents must comply with their Vessel Waste Management Plan. • No discharge from tank or hatch cleaning activities is allowed into the Port.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986	• Incorporates the requirements of the MARPOL Convention into law.
Second-Hand Goods Act 6 of 2009 **Regulations for Accreditation of Second-Hand Goods Dealers' Associations, 2010** **Regulations for Dealers and Recyclers, 2012**	• Dealers and recyclers of listed controlled metals must be registered with the South Africa Police Service (SAPS). • Applies to scrap metal dealers and recyclers of scrap.
Import Permits	An import permit must be obtained from the International Trade Administration Commission of South Africa (ITAC) to bring controlled goods into the country – includes waste and scrap.
The International Health Regulations Act 28 of 1974	Every Port must be provided with an effective system for the removal and safe disposal of excrement, refuse, waste water, condemned food, and other matter dangerous to health.
Animal Diseases Act 35 of 1984	Refers to infectious material which must be burnt in an incinerator, or which must be disposed of in any other manner which the director may determine.
National Environmental Management: Integrated Coastal Management Act 24 of 2008	• Waste must not be imported into SA for dumping or incineration within the coastal zone or exclusive economic zone. This includes general waste, sewage, oils, slops etc. • Waste must not be dumped on incinerated within the coastal zone or exclusive economic zone. • Waste cannot be exported to be dumped or incinerated at sea unless authorised by a permit. • The permit process must be adhered to for the dumping of various waste including: dredged material and sewage sludge.
National Environmental Management Act 107 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated. • Incidents that fall into the definition must be reported and managed according to the requirements: for example in the event of an oil spill into the Port.
National Water Act 36 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
National Environmental Management: Waste Amendment Act 59 of 2008 and National Environmental Management: Waste Amendment Act 26 of59 of 2008	The Act contains extensive provisions for the management of waste, including - • Wastes must be avoided where possible, or minimised, reused and recycled before disposal to landfill is selected as the appropriate management measure. • Disposal must be to a licensed facility. This includes general waste, sewage, oils, slops etc. • Storage activities must not present a risk to the environment and no nuisance must be created: for example odours and windscatter. • Employees must be prevented from contravening the Act. • Waste must not be used for an unauthorised purpose. • Gazetted waste activities are subject to a waste management license. • Owners of public land to which the public has access must provide sufficient waste containers for public use. • Waste transporters must be registered (normally in terms of the local bylaws). • Waste must not be spilt during transport. • Waste transporters must check whether the disposal facility is licensed before offloading. • If hazardous waste is transported for purposes other than disposal, the person transporting the waste must before offloading the waste ensure that the authorisations are in place. Written confirmation that the waste has been accepted must be obtained. • The Minister can call on categories of persons to produce industry waste management plans. [At the time of the TNPA WMP update (November 2016) the only government approved waste management plan is the Recycling and Economic Development Initiative of South Africa Integrated Industry Waste Tyre Management Plan.] • DEA must be notified in the event of the identification of contaminated land. This may be necessary for example: in the event that substandard waste management storage and handling activities causes soil pollution and rehabilitation is necessary.
Norms and Standards for the Remediation of Contaminated Land and Soil Quality, 2014	Reporting and remediation requirements must be followed.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Notice 921 of 23rd November 2013 listing activities that require a waste management license.	Various waste management activities are detailed including recycling, treatment and disposal. Thresholds are provided. • Category A activities require a basic assessment. • Category B activities require a full EIA. • Category C activities require compliance with norms and standards.
National Norms and Standards for the Storage of Waste 2013	Registration and compliance with the norms and standards is required to store waste in excess of the thresholds- 100m^3 general waste or 80 m^3 hazardous waste [At the time of the TNPA WMP update (November 2016) no areas requiring registration were identified.]
Waste Tyre Regulations of 2009	• Tyres must be disposed at a licensed facility. • Tyres must be cut into quarters before disposal. • Plans must be in place for tyre storage areas.
National Waste Information Regulations, 2012	• Hazardous waste generators must register with DEA if they generate more than 20kg of hazardous waste per day - there are no reporting requirements for generators. • A number of other persons must register with DEA including: operators of landfill sites, recyclers, importers etc. • Quarterly reporting is required.
National Pricing Strategy for Waste Management, 2016	This strategy contains guiding methodologies for the setting of waste management charges, aimed at funding the re-use, recycling or recovery of waste and the implementation of industry waste management plans (IndWMP) for those activities that generate specific waste streams.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Asbestos Regulations, 2001 – promulgated in terms of the Occupational Health and Safety Act **Regulations for the Prohibition of the Use, Manufacturing, Import and Export of Asbestos and Asbestos Containing Materials published in terms of the Environmental Conservation Act**	Asbestos must be disposed to the correct class landfill site. Persons handling asbestos for disposal must have the required PPE and must have had training in line with the requirements of the Regulations.
Waste Act: Admission of Guilt Fine Regulations, 2015	Contains a schedule with the maximum applicable fine attached to a number of waste related offenses.
National Road Traffic Act 93 of 1996 **National Road Traffic Regulations of 2000 (Regulation 273A).** **SANS documents for the transportation of Dangerous Goods**	♦ Consignments of dangerous goods must only be transported in compliance with the requirements. ♦ The dispatch of hazardous goods includes hazardous wastes such as galley waste; oil sludges; slops; and mixed contaminated waste. ♦ Dangerous goods declarations must be used. ♦ Loading must be supervised by a responsible person. ♦ The vehicle must be registered as a dangerous goods carrier. ♦ The driver must be trained, have a professional drivers permit for dangerous goods, and must be in possession of the correct TREMCARD.
Waste Classification and Management Regulations 2013	♦ All wastes must be classified in terms of SANS 10234 except for those listed in Annexure 1 to the regulations which are regarded as pre-classified- ✓ Annexure 1 part one includes general wastes. ✓ Annexure 1 part 2 includes hazardous wastes such (2)(b)(ii) : *General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals*. This can be referenced to contaminated waste such as oily rags etc. These wastes can be regarded as pre-classified waste however they must be disposed to a hazardous waste landfill site and a safety data sheet must be prepared. ♦ Hazardous wastes that are removed from site must be accompanied by a waste manifest that contains all the details in Annexure 2 of the regulations. The final manifest reflecting three signatures (generator, transporter and waste disposal / recycling facility) must be retained on

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
	file for a five year period. • Wastes must be disposed within 18 months of generation. • Specific labelling requirements must be complied with.
National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013	Any wastes that are to be disposed to landfill (other than the pre-classified wastes) must be assessed according to these standards to determine which class landfill they can be disposed at.
National Norms and Standards for Disposal of Waste to Landfill, 2013	Contains a schedule which has timeframe for the phase out for certain wastes streams to landfill. A number of streams are listed including- • Waste compressed gases – from 23rd August 2013 • Lead acid batteries – from 23rd August 2013 • Other batteries – from 23rd August 2021 • Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes – from 23rd August 2017 • Re-usable, recoverable or recyclable used or spent solvents – from 23rd August 2018 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps - from 23rd August 2016 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Other – from 23rd August 2021. • Waste tyres: Whole – from 23rd August 2013 • Waste tyres: Quartered – from 23rd August 2018 • Liquid waste- (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment-from 23rd August 2019
Hazardous Chemical Substances Regulations of 1995 promulgated in terms of the Occupational Health and Safety Act	• Wastes containing hazardous chemical substances must be recycled wherever possible. • Waste hazardous chemical substances must be disposed to the correct class landfill site. • Employees must have the required PPE.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Hazardous Substances Act 15 of 1973	♦ The act classifies chemicals into four different groups. ♦ Group I and II = Substances are those dangerous to humans due to their toxic nature. ♦ Group III = Various electronic products. ♦ Group IV = Radioactive products. ♦ Hazardous waste generated in the PoPE generally fall into Group II substances for which no regulations are in place (as far as the HSA is concerned).

PROVINCIAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Eastern Cape Environmental Conservation Act of 2003	♦ One of the aims is to regulate waste management in the province. ♦ The Minister has the power to make regulations with respect to waste management. No regulations to this effect have been gazetted.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Waste Management Bylaws, 2010	♦ All commercial waste service providers must be registered with the local authority. ♦ Users of commercial service providers must ensure that the waste collector is registered and that they comply with the bylaws. ♦ Waste transporters must: not allow waste to escape from the container / vehicle; maintain clean vehicles and equipment; and ensure that waste is disposed to the appropriately licensed facility. ♦ Garden waste must be disposed to a licensed site. ♦ Building waste must be removed within 14 days of the project being completed and must be disposed to a licensed facility unless the municipality has given written consent that it can be used for land reclamation or recycling. ♦ Littering, dumping and the burning of waste is prohibited by the bylaws.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Water and Sanitation Services Bylaws, 2010	♦ Persons transporting and disposing of sewage by road haulage must have prior written agreement from the municipality. ♦ The agreement must state: source of domestic sewage, day, time and point of delivery.

APPENDIX 3-B: DETAILED WASTE INVENTORY – NOVEMBER 2016

PORT OF PORT ELIZABETH WASTE INVENTORY		
TERMINOLOGY		
Waste Category	Categorisation in terms of the National Waste Information Regulations, 2012. Categories applicable to PoPE.	
	GW1001	Commercial and Industrial Waste.
	GW2001	Garden waste.
	GW2101	Sewage.
	GW2002	Organic waste, food waste.
	GW2003	Wood.
	GW3001	Construction and demolition waste.
	GW5004	Paper, mixed grades.
	GW5106	Plastic, other.
	GW5201	Glass.
	GW5301	Metals, ferrous.
	GW5302	Metals, non-ferrous.
	GW5401	Tyres.
	GW9901	Miscellaneous.
	HW0301	Lead batteries.
	HW0307	Mixed batteries.
	HW0601	Asbestos containing waste.
	HW0701	Waste oils.
	HW1805	Waste of Electric and Electronic Equipment (WEEE), lighting equipment.
	HW1808	Waste of Electric and Electronic Equipment (WEEE), lighting equipment, mixed WEEE.
	HW1902	Health Care Risk Waste, infectious waste and sharps.
	HW9901	Miscellaneous.
Waste Classification	Classification must be done in terms of the Waste Classification and Management Regulations of 2013 and the associated norms and standards.	

PORT OF PORT ELIZABETH WASTE INVENTORY	
TERMINOLOGY	
Pre-Classified Waste	Annexure One to the above regulations contains a list of pre-classified waste. These do not need to be classified in terms of SANS 10234 but must have a safety data sheet. Waste in Annexure One part 2 must be disposed to a hazardous waste landfill site
SDS	Safety Data Sheet must be provided for hazardous waste.
Waste Type	Waste Type as determined by the National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013. Type 0 (no landfilling), Type 1 (Class A landfill) Type 2 (Class B landfill) Type 3 (Class C landfill) Type 4 (Class D landfill). The waste type only need to be determined for- Waste not on the pre-classified list and waste that need to be disposed to landfill.
SANS 10228	Class for the transport of dangerous goods / hazardous waste.
NMBM	Nelson Mandela Bay Municipality.
HCRW	Health Care Risk Waste.
ACW	Asbestos cement waste – such as roof sheets, gutters, down pipes that contain asbestos fibre.
PCB contaminated	Any article that has in excess of 50 ppm polychlorinated biphenyl in the lubricating oil.

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Metal / Scrap Ferrous	Maintenance activities	GW5301	General	General	n/a	Skip containers for scrap metals/ redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Metal / Scrap Non-Ferrous	Maintenance activities	GW5302	General	General	n/a	Skip containers for scrap metals / redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Organic waste	Canteens Admin buildings Local vessels	GW2002	General	General	n/a	Small intermediate containers. Transferred to general waste skip containers.	Landfill – general or hazardous		No
Plastics	All areas Local vessels	GW5106	General	General	n/a	Small intermediate containers Transferred to designated recycling areas	Recycler	Best practise to separate into individual types at recycling areas.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Glass	All areas Local vessels	GW5201	General	General	n/a	Small intermediate containers. Transferred to designated recycling areas.	Recycler		No
Paper and cardboard	All areas Local vessels	GW5004	General	General	n/a	Small intermediate containers Transferred to designated recycling areas.	Recycler	Best practise to separate into individual types at recycling areas.	No
Wood waste	All areas Local vessels	GW2003	General	General	n/a	Transferred to designated recycling areas.	Recycler	Store away from flammables.	No
Garden waste	All areas	GW2001	General	General	n/a	Removed from site as part of the garden service.	Licensed compost operation except for alien vegetation		No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Tyres	Maintenance activities Worn fender tyres	GW5401	General	General	n/a	Transferred to designated tyre storage area.	Landfill – general or hazardous	Must be CUT into quarters before removal to landfill. **PROHIBITED** from landfilling after 23rd August 2018 and must be recycled.	No
							Recycler		
Empty drums and plastic containers – containing non-hazardous chemicals	All areas	GW9901	General	General	n/a	Transferred to designated recycling areas	Recycler	Only if the containers did not contain hazardous substances.	No
Construction and demolition waste, excluding hazardous materials	All areas	GW3001	General	General	n/a	Preferably skip containers. Temporary storage areas to be agreed with Port Environmental Department.	Landfill or other area provided WRITTEN approval is obtained from NMBM.	To be cleared 14 days after construction work is complete.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Mixed general waste not suitable for recycling	All areas Local vessels	GW1001	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids to prevent windblown litter.	No
Fish waste	Fishing vessels	GW2002	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids and to be emptied on a regular schedule so as to prevent odour nuisances.	No
Pressurised gas containers	Various including- Fire Dept – extinguishers Fishing vessels – refrigerants	GW9901	General as they will be gas free after cutting	General	n/a	Temporary storage area to be agreed with Port Environmental Dept, Risk Dept and Fire Dept.	Return to supplier		No
						Skip containers for scrap metals.	Recycler or return to supplier	Containers must be cut in half before placing in scrap container.	
Ropes / working lines Scrap conveyor belts.	Vessels Terminal operators	GW9901	General	General	n/a	General waste skip containers.	Landfill	Check recycling potential **BEFORE** landfilling.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
						Designated recycling area.	Recycler	Containers must be cut in half before placing in scrap container.	
Hull cleaning waste	Vessels Yachts	GW9901	General	n/a	n/a	General waste skip containers.	Landfill		No
Expired pyrotechnics	Vessels	HW9901	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 0	Class 1 Various UN numbers	Storage area designated by the Port Environmental Department.	Return to supplier or destroyed by the Police.	Marine Notice 9 of 1996 gives the instruction that these items are to be handed to Ports of Entry Police.	Yes
Sewage	Vessels	HW2101		Hazardous Type 0	Class 9 UN 3082	n/a	NMBM disposal point	Transporter to be licensed and have permission from NMBM to discharge.	No
E-Waste – including printer cartridges (without hazardous components removed)	Admin activities	HW1808	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Storage area designated by the Port Information Systems Department.	Specialised recycler	SDS if possible for example for printer cartridges	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Sandblasting waste	Maintenance activities	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes
Contami-nated soil	Incidents Spills Remediation sites	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Empty drums and plastic containers - containing non-hazardous chemicals	All areas	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling	Recycler	Generator to sign nominally empty packing certificate to certify containers are empty. Must be done before removal from site.	Yes
						Skip containers / Designated storage areas	Hazardous waste landfill / Class A	SDS for empty hazardous chemical containers	
Asbestos Containing Waste	Land based maintenance activities	HW0601	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Asbestos	Hazardous Type 1	Class 9 UN 2212	Special order skip container.	Hazardous waste landfill / Class A	Asbestos cement waste (roof sheeting etc). **NOT TO BE BROKEN UP DURING HANDLING.**	Yes
Fluorescent tubes and other lamps.	Maintenance activities	HW1805	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Special storage boxes from service provider.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Lamps to be kept intact during storage.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Health Care Risk Waste	Clinic First aid – land and vessels	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised HCRW containers- Yellow plastic containers for sharps waste Boxes with red plastic insert for infectious waste Green plastic containers for pharmaceuticals	Treated by incineration / sterilisation before landfilling		No
Sanitary waste	Ablutions	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised containers provided by service provider.	Treated by incineration / sterilisation before landfilling	Alternative methods to be agreed with Port Environmental and Risk Department and to have DEA approval.	No
Lead acid batteries	Maintenance activities	HW0301	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 8 UN 2794	Temporary storage areas to be agreed with Port Environmental Department.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Batteries to be stored with secondary containment to prevent acid spills.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Other batteries including- Mercury Ni/Cd Manganese dioxide and alkali Lithium and lithium ion Nickel metal hydride	All areas	HW0307	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling.	Recycler		Yes
						Hazardous waste skip containers	Hazardous waste landfill / Class A	SDS for individual batteries	
Waste oils	Land based maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	NO solid material allowed to be deposited into the used oil receptacle.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Transformer Oils	Maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	It is understood that all TNPA transformers have been tested and they all are **under 50ppm PCB oil.**	Yes
Galley waste from vessels/ yachts having been outside of SA	Vessels Yachts	HW9901	Hazardous	Hazardous Type 1	Class 6.2 UN 2900	Polycarts transferred to galley waste container (to be subject to strict access control. Containers to be subject to disinfection procedure.	Hazardous waste landfill / Class A	Waste to be treated with lime on arrival and covered immediately. **ONLY TO BE REMOVED BY APPOINTED GALLEY WASTE CONTRACTOR**	Yes
Dredging waste– sediment	Port services	HW9901	Hazardous	Hazardous Type 1	n/a	n/a	Dumped at sea	Subject to valid permit and as per the permit conditions	No
Incinerator ash	Vessels services	To be determined	To be determined	To be determined	To be determined	n/a	Landfilled Class to be determined.	Classification requirements of this waste stream to be discussed and agreed.	TBD

APPENDIX 3-C: ANNUAL WASTE RETURN FORM

ANNUAL WASTE RETURN FORM			
NAME OF FACILITY: PORT OF PORT ELIZABETH			
COMPANY NAME:			
PERSON COMPLETING THE FORM:			
CONTACT DETAILS:			
DATE OF SUBMISSION:			
Period: From	**JANUARY 20___**	**To**	**DECEMBER 20___**
Wastes Disposed to Landfill		**Tons/ m^3**	**Waste contractor**
General waste			
Hazardous waste Please list streams-			
Builders rubble			
Garden waste			
Other. Please list streams-			
Total:			
Types of waste removed for treatment / recycling		**Tons/ m^3**	**Waste contractor**
Sewage			
Paper			
Metal			
Plastic			
Empty drums			
Oily waste			
Tyres			

Types of waste removed for treatment / recycling		
Builders rubble		
Florescent tubes		
Health Care Risk Waste		
Other. Please list streams-		
Total:		
Signature of responsible person:		

PART 4. WASTE MANAGEMENT PLAN APPLICABLE TO WASTE MANAGEMENT SERVICE PROVIDERS

4.1 AIM AND OBJECTIVES

The purpose of this Waste Management Plan (**WMP**) is to co-ordinate, plan, provide, and seek to improve the waste reception and handling facilities for the legal management of waste generated or off-loaded within the Port of Port Elizabeth (**PE**). The primary objective is to maintain safe and healthy working conditions and on-going protection of the biophysical environment.

Part 4 (this Part) of the WMP is intended specifically for the Waste Management Service Providers responsible for the provision and maintenance of Waste Reception / Waste Transfer Facilities, and the transportation of waste to places of treatment, recycling, re-use, or final disposal, as the case may be.

The aim of Part 4 of the WMP is to ensure that, on implementation, all waste arising as a result of operations at the Port of PE is managed in compliance with all relevant international treaties, national, provincial and local legislation as well as the rules and regulations as set out by Transnet National Waste Management Strategy.

In pursuance of the foregoing stated aims of the WMP, TNPA, who with due regard for its role as landlord for the Port, and acknowledging its responsibility for the efficient and satisfactory operation of the Port of PE, has adopted the policies of waste minimisation, reuse and recycling of waste wherever possible and practical, as described in the National Environmental Waste Management: Waste Act (Act No. 59 of 2008) and will encourage, and where necessary compel, other Port users to do likewise.

It is important to note that there is a total prohibition on the disposal of any form of waste overboard from any vessel located anywhere within the area of jurisdiction of the Port of PE or by land operators into the harbour or into the sea at any time. This prohibition is strictly enforced and severe penalties are imposed which include substantial fines.

4.2 GLOSSARY

The following acronyms and definitions are used within the document-

Abbreviations

DEA	Department of Environmental Affairs
IMO	International Maritime Organisation
KPIs	Key Performance Indicators
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
NEM:WA	National Environmental Management Waste Act (Act No 59 of 2008)
NMBM	Nelson Mandela Bay Municipality
PE	Port Elizabeth
SANS	South African National Standard
TNPA	Transnet National Ports Authority
TPT	Transnet Port Terminals

WMP	Waste Management Plan
WRFs	Waste Reception Facilities

Definitions

Adequacy	Waste Reception Facilities are considered adequate when they meet the needs of ships using the ports without causing undue delay.
Building and demolition waste	Means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition, which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded wood, glass and plastic (c) discarded metals (d) discarded soil, stones and dredging spoil (e) Other discarded building and demolition waste (source: NEM: Waste Amendment Act 26 of 2014).
Chandling	The provision of stores and supplies.
Disposal	Means the burial, deposit, discharge, dumping, placing or release of any waste material into, or onto, any air, land or water (source: NEM: Waste Act 2008).
Disposal Facility	A facility for the burial, deposit, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land.
Domestic waste	Means waste, excluding hazardous waste that emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation, purposes, which include: (a) garden and park waste (b) municipal waste (c) food waste (source: NEM: Waste Amendment Act 16 of 2014)
Flag State	Flag State refers to the authority under which a country exercises regulatory control over the commercial vessel which is registered under its flag. This involves the inspection, certification, and issuance of safety and pollution prevention documents.
Galley Waste	Means waste originating from the kitchen of a ship.

General waste	Means waste that does not pose an immediate hazard or threat to health or to the environment, and includes— (a) domestic waste; (b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under section 69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition waste. Refer to Annexure Three Category B of NEM: Waste Amendment Act 16 of 2014 .
Hazardous waste	Means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles. Refer to Annexure Three Category A of NEM: Waste Amendment Act 16 of 2014.
Health Care Risk Waste	The portion of the health care waste that is hazardous and including- (a) laboratory waste; (b) anatomical waste; (c) genotoxic/cytotoxic waste; (d) infectious waste; (e) sharps waste; (f) sanitary waste; (g) nappy waste; (h) low-level radioactive waste; and (i) pharmaceutical waste. (Source Draft Health Care Risk Waste Regulations published by the Department of Environmental Affairs - GG 35405, GNR 452 on 1st June 2012).
Hull Cleaning Waste	Waste removed during hull cleaning which could include material hazardous to marine biosecurity.

Inert Waste	Means waste that- (a) does not undergo any significant physical, chemical or biological transformation after disposal; (b) does not burn, react physically or chemically biodegrade or otherwise adversely affect any other matter or environment with which it may come into contact; and (c) does not impact negatively on the environment, because of its pollutant content and because the toxicity of its leachate is insignificant and which include: (a) discarded concrete, bricks, tiles and ceramics (b) discarded glass (c) discarded soil, stones and dredging spoil (source: NEM: Waste Act Amendment Act 26 of 2014)
Inspection Authority	A member of the TNPA Port of Port Elizabeth environmental management department, or duly authorised and trained representative, with the responsibility for auditing and inspecting waste management activities.
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.
Minimisation	When used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of (source NEM: Waste Act 2008).
Oily waste:	For the purposes of this Waste Management Plan, oily waste means waste that contains a significant amount of oil, such as bilge mop socks, oil filters, oily rags, oil cans, and oil contaminated plastic bags and paper materials. Waste oil means oil and oil sludge in liquid form.
Recovery	Means the controlled extraction of a material or the retrieval of energy from waste to produce a product (source NEM: Waste Act 2008).
Recycle	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material (source NEM: Waste Act 2008).

Re-use	Means to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles (source NEM: Waste Act 2008).
Secondary containment	A level of containment that is external to and separate from primary containment. Secondary containment is a method of preventing unintended releases of toxic or hazardous liquids into the surrounding area. An example of secondary containment is bunding.
Ships waste	Waste and residues generated during the service of the ship which fall into the definition of garbage, oil and oily mixtures. These can include hazardous waste (e.g. Chemical waste, paints, batteries, galley waste), hazardous oil containing waste (e.g. sludge, bilge water, cargo slops/dirty, ballast), noxious liquid waste (e.g. cargo residues, pre-washings), sewage, general waste (e.g. paper, plastic, glass, cans/metal) (TNPA Waste Management Strategy, 2014).
Storage	Means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste (source NEM: Waste Act 2008).
Waste	Means: (a) any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all waste as defined in Schedule 3 to this Act; or (b) any other substance, material or object that is not included in Schedule 3 that may be defined as a waste by the Minister by notice in the Gazette, but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste— (i) once an application for its re-use, recycling or recovery has been approved or, after such approval, once it is, or has been re-used, recycled or recovered;

(ii) where approval is not required, once a waste is, or has been re-used, recycled or recovered;

(iii) where the Minister has, in terms of section 74, exempted any waste or a portion of waste generated by a particular process from the definition of waste; or

(iv) where the Minister has, in the prescribed manner, excluded any waste stream or a portion of a waste stream from the definition of waste. (source: NEM: Waste Act Amendment Act 26 of 2014)

Waste Reception Facility	Any fixed, floating or mobile facility capable of receiving MARPOL residues/waste from ships and fit for that purpose. Waste Reception Facilities are distinguished from Waste Transfer Sites in that Waste Reception Facilities are intended for the reception of ship generated waste at the Port, for removal and disposal by a waste management contractor.
Waste Transfer Site	Means a facility that is used to accumulate and temporarily store waste before it is transported to a recycling, treatment or waste disposal facility (NEM: Waste Act 2008). Waste Transfer Sites are distinguished from Waste Reception Facilities in that Waste Transfer Sites are intended for the collection of land generated waste at a central point for removal and disposal by a waste management contractor.

4.3 INTRODUCTION

This Waste Management Plan has been prepared under the provisions of all the relevant legislation of the Republic of South Africa, particularly the National Environmental Management: Waste Act (Act No. 59 of 2008); the Republic of South Africa's National Ports Act (Act No 12 of 2005), the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008), and applicable international instruments, especially, MARPOL.

It is the intention of TNPA to work with all users of the Port of PE in what is a collective responsibility with regard to legally compliant and efficient waste management practises. If clarity with regards to the interpretation and identification of individual responsibilities regarding waste management is required, all TNPA employees are invited to contact the Port of PE Harbour Authority (Table 4-1).

Table 4-1: Port of Port Elizabeth Contact Details

Designation	Telephone
TNPA Port Control	+27 (0)41 507 1909/10/11
TNPA SHEQ Manager	+27 (0)41 507 1951
TNPA Assistant Environmental Manager	+27 (0)41 507 1907
TNPA Environmental Officer	+27 (0)41 507 1708
TNPA Port Engineering	+27 (0)41 507 1565
TNPA Marine Safety and Environment Officer	+27 (0)41 507 1925

4.3.1 Port Limits

The jurisdictional area of the TNPA, PoPE is depicted in Figure 4-1. .

4.3.2 Biophysical setting

The Strategic Environmental Assessment of the Port found that there are no sensitive aquatic zones within the Port confines (Coastal & Environmental Services, 2006). The Port is however situated within Algoa Bay which is a sensitive ecological zone where Southern Right whales calve and nurse their young, endangered sea turtles feed and a multitude of waterfowl feed and nest. The approach and exit shipping lanes travel through this area. There is therefore a risk that illegal disposal and/or poor control of waste would endanger this sensitive region.

The PoPE is located near the junction of temperate (winter rainfall) and subtropical (summer rainfall) climate regimes and experiences a warm temperate climate. The area has a bimodal rainfall pattern, with peaks in spring and autumn, totalling approximately 600 mm per year. Port Elizabeth is subject to strong gradient winds with a strong prevalence from the west and west- south-west (41% combined frequency) all year round, and east (15%) from October through to March. Windblown litter, particularly items such as plastic bags, is of concern as it is known to lead to the death of certain species through entanglement, suffocation, and/or ingestion. The control of litter, and prevention of windblown litter, is therefore one of the important objectives of this WMP.

Water quality within the Port is monitored regularly and the SEA (Coastal & Environmental Services, 2006) reported that these results show periodical contamination by petroleum hydrocarbons, and almost continual contamination from *E. Coli* and related faecal coliform bacteria. The correct handling and storage of waste will assist in eliminating potential sources of these, and other, contaminants. When taking into considering the climatic conditions in PE as well as the Port's water quality, it therefore becomes crucial to institute proper waste management practices both on land and in water to counteract any potential negative environmental impacts. This WMP intends to assist all Port users to realise this collective responsibility

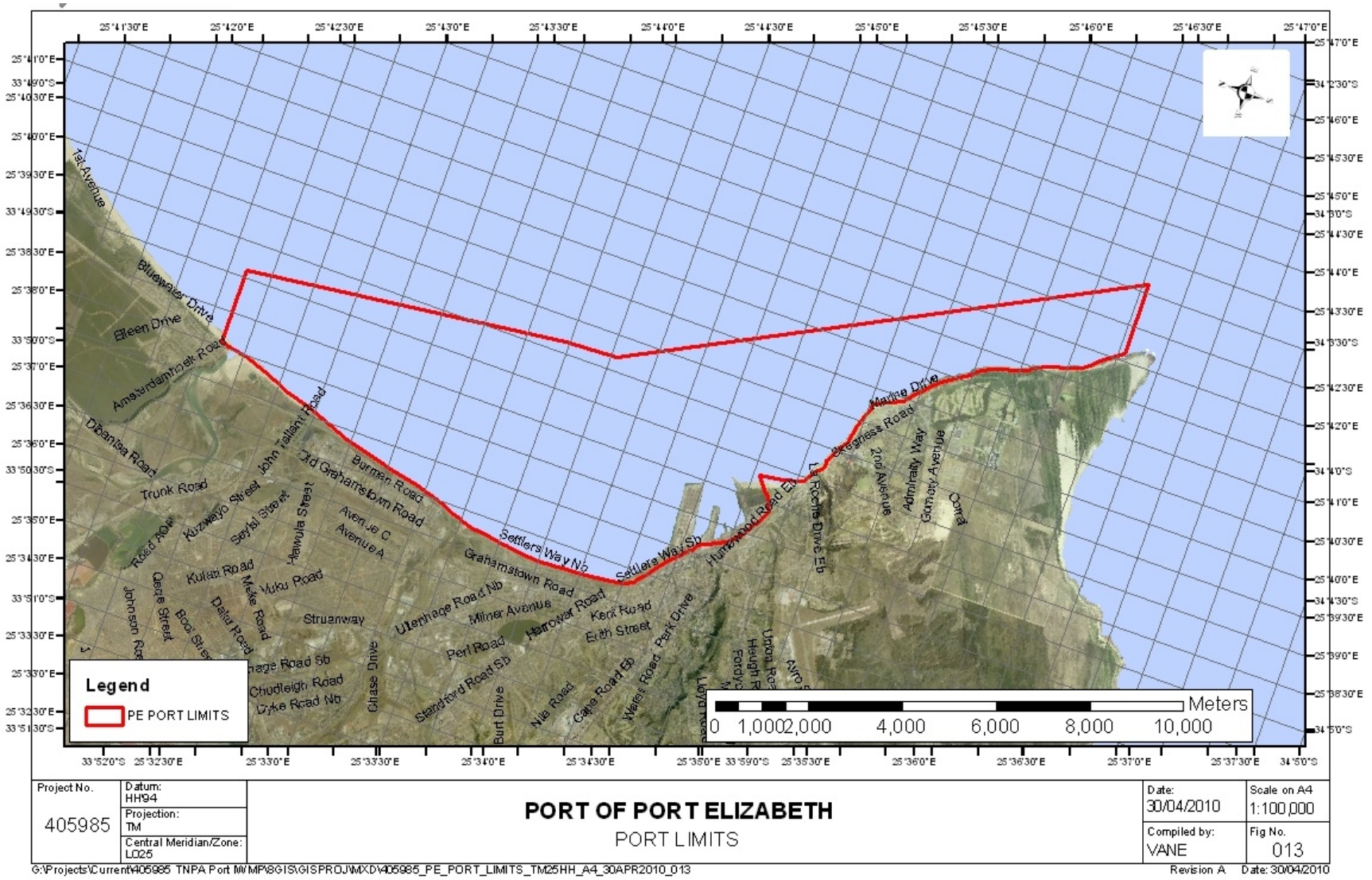

Figure 4-1: Port of Port Elizabeth Port Limits

4.4 LEGAL FRAMEWORK GOVERNING WASTE IN THE PORT OF PORT ELIZABETH

A summary description of applicable legislation is included Appendix 4-A of Part 4 for ease of reference.

4.5 POTENTIAL SOURCES OF WASTE

Sources of waste in the Port of PE can be broadly categorised by the Port user groups as detailed below. The detailed waste inventory for the Port of PE is presented in Appendix 4-B.

4.5.1 Visiting Vessels

Visiting vessels are ships which have travelled from foreign waters and are not licensed in the Port of PE. According to current practice in all South African Ports, **all galley waste** arising from visiting vessels is to be treated as **hazardous** waste due to the potential for the presence of contagious organisms. The following is a broad summary of the waste types that are expected to arise from visiting vessels:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Incinerator ash.
- Small items of health care risk waste arising from first aid activities.

Note: In 2020 with the implementation of Annex VI, there will possibly be various liquid waste streams for disposal, for example, sulphuric acid from fuel scrubbing plants and ash from exhaust scrubbers (this could contain large quantities of sulphur).

4.5.2 Vessels Registered in the Port

Vessels registered in the Port are typically fishing and pleasure boats and do not travel to foreign destinations. The following is broad a summary of the waste types that are expected to arise from visiting vessels:

- Galley waste e.g. organic waste arising in the ship's kitchen.
- General waste e.g. other ships waste that is not galley waste and which may include tins, cans, paper etc.
- Oily waste such as bilge mop socks, oil filters, oil rags, or waste oil or oil sludge in liquid form (e.g. sludge, bilge water, cargo slops, dirty ballast).
- Noxious liquid waste such as cargo residues and pre-washings.
- Sewage.
- Fish residue and fish waste.
- Empty refrigerant containers.
- Small items of health care risk waste arising from first aid activities.
- Sandblasting waste arising from vessel maintenance activities.

4.5.3 **Small Private Vessels** (Foreign Vessels or Vessels having been in foreign waters)

Small private vessels will typically be yachts which intend to berth at the local yacht club facilities. The following is broad a summary of the waste types that are expected to arise from these vessels:

- Galley waste e.g. organic waste arising in the yacht's kitchen.
- General waste e.g. other waste that is not galley waste and may include tins, cans, paper etc.
- Oily waste.
- Sewage.

4.5.4 TNPA Facilities

TNPA facilities in the Port include administration buildings, engineering and civils yard (workshops), repair slipway, canteens/kitchens, clinics, roads and pedestrian walkways. The following is therefore a summary of the waste types that are expected to arise from these facilities and their operations:

- General waste.
- Organic kitchen waste.
- Oily waste and used engine oils.
- Hazard substances containers.
- Health care risk waste.
- Sewage.
- Hull cleaning waste.
- Waste tyres.
- Sandblasting waste.

4.5.5 Tenants and Terminal Operators

Tennant facilities in the Port are varied and include administration buildings, clinics, workshops, canteens, warehouses, cold storage, oil separators, petroleum products storage bunkers, manganese bulk storage facilities etc:

- General solid waste
- Organic kitchen waste
- Oily waste and used engine oils
- Hazard substances containers
- Health care risk waste
- Sewage
- Hull cleaning waste
- Manganese waste

4.6 WASTE CATEGORISATION

Various waste types are generated in the PoPE. These can broadly be divided into two classes: general and hazardous. The Waste Information Regulations of 2012 provide the categories of waste to be used for reporting purposes on the South African Waste Information System. These are reflected overleaf.

General Waste Reporting Types-

LEVEL 1	**LEVEL 2**		**LEVEL 3**	
	No	**Name**	**No**	**Name**
GENERAL WASTE	GW01	Municipal Waste	01	
	GW10	Commercial and Industrial Waste	01	
	GW13	Brine	01	
	GW14	Fly ash and dust from miscellaneous filter sources	01	
	GW15	Bottom ash	01	
	GW16	Slag	01	Ferrous metal slag
			02	Non-ferrous metal slag
			03	Other
	GW17	Mineral Waste	01	Foundry Sand
			02	Refractory waste
			03	Other
	GW18	Waste of Electric and Electronic Equipment (WEEE) from which hazardous components / substances have been removed	01	Large household appliances
			02	Small household appliances
			03	Office, information and communication equipment
			04	Entertainment and consumer electronics and toys, leisure, sports and recreational equipment and automatic issuing machines
			05	Lighting equipment

			06	Electric and electronic tools
			07	Security and health care equipment
			08	Mixed WEEE
	GW20	Organic waste	01	Garden waste
			02	Food waste
			03	Wood
	GW21	Sewage sludge	01	Sewage sludge
	GW30	Construction and demolition waste	01	
	GW50	Paper	01	Newsprint and magazines
			02	Brown grades
			03	White grades
			04	Mixed grades
	GW51	Plastic	01	Polyethylene terephthalate (PET)
			02	Polyvinyl chloride (PVC)
			03	Low-density polyethylene (LDPE)
			04	Polypropylene (PP)
			05	Polystyrene (PS)
			06	Other
	GW52	Glass	01	
	GW53	Metals	01	Ferrous
			02	Non-Ferrous
	GW54	Tyres	01	
	GW99	Other	01	

Hazardous Waste Reporting Types-

LEVEL 1	LEVEL 2		LEVEL 3	
	No	**Name**	**No**	**Name**
HAZ WASTE	HW01	Gaseous Waste	01	Gases (excluding Greenhouse gases)
			02	Obsolete ozone depleting gases
	HW02	Mercury containing waste	01	Liquid waste containing mercury
			02	Solid Waste containing mercury
	HW03	Batteries	01	Lead batteries
			02	Mercury batteries
			03	Ni/Cd batteries
			04	Manganese dioxide and alkali batteries
			05	Lithium and Lithium ion batteries
			06	Nickel-metal hydride batteries
			07	Mixed batteries
	HW04	POP Waste	01	PCB containing waste (>50 mg/kg)
			02	Other POP containing waste
			03	Empty pesticide containers
	HW05	Inorganic waste	01	Liquid and sludge inorganic waste
			02	Solid inorganic waste
			03	Spent pot lining (inorganic)
	HW06	Asbestos containing waste	01	Asbestos containing waste
	HW07	Waste oils	01	Waste oil
	HW08	Organic halogenated and/or sulphur containing solvents	01	Solvents containing halogens and/or sulphur
	HW09	Organic halogenated solids and compounds with Sulphur	01	Solids containing halogens and/or sulphur
	HW10	Organic solvents without halogens and sulphur	01	Solvents without halogens and/or sulphur

	HW11	Other organic waste without halogens and sulphur	01	Liquid and sludge organic chemical waste
			02	Solid organic chemical waste
			03	Spent pot lining (organic)
	HW12	Tarry and Bituminous waste	01	Tarry waste
			02	Bituminous waste
	HW13	Brine	01	Brine
	HW14	Fly ash and dust from miscellaneous filter sources	01	Fly ash
	HW15	Bottom ash	01	Bottom ash
	HW16	Slag	01	Ferrous metal slag
			02	Non-ferrous metal slag
			03	Other
	HW17	Mineral waste	01	Foundry sand
			02	Refractory waste
			03	Others
	HW18	Waste of Electric and Electronic Equipment (WEEE)	01	Large Household Appliances
			02	Small Household Appliances
			03	Office, Information, and Communication Equipment
			04	Entertainment and Consumer Electronics, and Toys, Leisure, Sports & recreational Equipment, and Automatic Issuing Machines
			05	Lighting Equipment
			06	Electronic and Electric Tools
			07	Security and health care equipment
			08	Mixed WEEE
	HW19	HealthCare Risk Waste	01	Pathological waste
			02	Infectious waste and sharps
			03	Chemical waste
	HW20	Sewage sludge	01	Sewage treatment sludge
	HW99	Miscellaneous	01	Miscellaneous

Waste generators are not required to report their waste volumes to the South African Waste Information System (SAWIS). Reporting is the responsibility of the waste managers (this includes treatment facilities, recycling facilities and landfill facilities). All Waste Management Service Providers servicing the Port must ensure that they reflect the correct waste category on the waste manifest documents generated at the time of service. This will allow each waste receiving facility to record the waste against the correct waste category.

The waste categorisation is indicated in the TNPA Waste Inventory included in Annexure 4-B.

4.7 WASTE CLASSIFICATION AND ASSESSMENT

The Port Environmental Department is responsible for ensuring that all waste generated and handled by TNPA is classified in terms of the Waste Classification and Management Regulations of 2013. Safety data sheets are generated for all waste classified as hazardous in terms of SANS 10234 or those listed as hazardous Annexure One, Part 2 of the Regulations.

Waste requiring disposal to landfill will be assessed against the National Norms and Standards for the Assessment of Waste for Landfill Disposal of 2013. The outcome of the assessment will dictate the classification of the landfill site for disposal purposes.

The classification of the waste is indicated in the TNPA Waste Inventory included in Annexure 4-B.

4.8 WASTE RESTRICTIONS TO LANDFILL

The National Norms and Standards for Disposal of Waste to Landfill, 2013 provide a phase out schedule for the disposal of certain waste to landfill. The following waste streams are not allowed to be disposed to landfill (at the time the WMP was updated in November 2016)-

- Waste which, in the conditions of a landfill, is explosive, corrosive, oxidizing (according to SANS 10234 or SANS10228).
- Waste with a pH value of <6 or >12.
- Flammable waste with a closed cup flashpoint lower than 61° Celsius.
- Reactive waste that may react with water, air, acids or components of the waste, or that could generate unacceptable amounts of toxic gases within the landfill.
- Waste compressed gases (according to SANS 10234 or SANS 10228).
- Untreated Healthcare Risk Waste (HCRW).
- Lead acid batteries.
- Hazardous Waste Electric and Electronic Equipment (WEEE) – Other.

The waste contractors servicing the Port will be expected to assist TNPA with the identification of alternative disposal options for the above waste streams. They will also be expected to keep TNPA up to date with regard the management options for future streams listed for restriction in the next few years.

4.9 TRANSPORT OF HAZARDOUS WASTE

4.9.1 Placarding

Hazardous waste removed from the Port must be done in compliance with the National Road Traffic Act 93 of 1996, the National Road Traffic Regulations of 2000 and the relevant South African National Standards.

The placarding of the vehicle must reflect the correct UN number and Class as reflected in the Safety Data Sheet provided to the transporter. The various transport classes are detailed overleaf.

Table 4-3: SANS 10228 Classes for Dangerous Goods

CLASS	TYPE
1	Explosives
2	Gases
3	Flammable liquids
4	Flammable solids
5	Oxidising substances and organic peroxides
6	Toxic and infectious substances
7	Radioactive substances
8	Corrosives
9	Other miscellaneous substances

4.9.2 Waste Manifest/Dangerous Goods Declaration

The Waste Classification and Management Regulations of 2013 require that all hazardous waste loads are accompanied by a waste manifest document. The content of the manifest is prescribed as follows-

(2)(a) Information to be supplied by the Waste Generator (Consignor)-

i. Unique consignment identification number;
ii. If applicable, the SAWIS Registration number in terms of the National Waste Information Regulations, 2012;
iii. Generator's contact details (contact person, physical & postal address, phone, fax, email);
iv. Physical address of the site where the waste was generated (if different from (iii));
v. Contact number in case of an incident or after hours;
vi. Origin / source of the waste (process or activity);
vii. Classification of the waste and Safety Data Sheet;
viii. Quantity of waste by volume (m3) or weight (tons);
ix. Date of collection / dispatch;

x. Intended receiver (waste manager); and

xi. Declaration (content of the consignment is fully and accurately described, classified, packed, marked and labelled, and in all respects in proper condition for transportation in accordance with the applicable laws and regulations).

(2)(b) Information to be supplied by the Waste Transporter-

i. Name of transporter;

ii. Address and telephone number of transporter; and

iii. Declaration acknowledging receipt of the waste.

(2)(c) Information to be supplied by the Waste Manager (Consignee)-

i. Name, address and contact details;

ii. Receiving waste management facility name, address and contact details (where different);

iii. Waste management facility license number;

iv. Date of receipt;

v. Quantity of waste received by weight (tons), and volume (m3) if applicable;

vi. Type of waste management applied (re-use, recycling, recovery, treatment, disposal);

vii. Any discrepancies in information between the different holders of the waste (related

viii. to waste quantity, type, classification, physical and chemical properties);

ix. Waste management reporting description and code in terms of the National Waste Information Regulations, 2012;

x. Details on any waste diverted to another waste management facility, and details of the facility; and

xi. Certification and declaration of receipt and final management of the waste.

The above waste manifest must also include the information required for the dangerous goods declaration as follows-

a) the proper shipping name in accordance with SANS 10228;
b) the UN No.;
c) the hazard class and the packing group, where applicable;
d) the quantity and type of packaging, or the word "bulk", where applicable;
e) the gross mass, and the net mass or volume of the goods;
f) the names and contact details of the following parties (where applicable): consignor, product manufacturer, product owner, product custodian, party contracting the operator, operator and consignee;
g) the following declaration signed by the consignor:

"I hereby declare that the content of this consignment is fully and accurately described above by the proper shipping name, and is classified, packaged,

marked and labelled/placarded, and is in all respects in proper condition for transport in accordance with the relevant national legislation.";

h) the following declaration signed by the driver:

"The consignment above has been received into my vehicle. My vehicle is correctly placarded and I am in possession of all necessary transport documentation pertaining to the transport of dangerous goods, including information to be followed in the case of an emergency".

The waste contractors will be expected to use legally compliant waste manifest documents for all hazardous waste removed from the Port.

The respective class for the transport of hazardous waste is indicated in the Waste Inventory included in Annexure 4-C.

4.9.3 Waste Inventory

The Port has a waste inventory (updated October 2016), a copy of which is presented in Appendix 4-C. The Waste Management Service Providers must ensure that they have a copy of this waste inventory before supplying services to TNPA and Port Tenants or other users. The Waste Management Service Provider must ensure that they manage waste as per the waste inventory. The waste inventory will be updated from time to time and the Waste Management Service Provider must ensure that they obtain the latest revision from the TNPA website

(http://www.transnetnationalportsauthority.net/)

Should the Waste Management Service Provider encounter a waste that is not on the most current revision of the waste inventory, they must make the records and information relevant to that waste stream available to the Port Environmental Department so that the waste inventory can be updated.

4.10 AUTHORITY TO OPERATE IN THE PORT

Any Waste Management Service Provider who intends operating in the Port of PE must be licensed to do so by the Chief Executive Officer. This **includes** service providers who are appointed directly by terminal operators or tenants of the Port.

The license must be for all the waste management services the provider intends to provide in the Port i.e. waste collection, hazardous waste management, general waste management, recycling, spill response and clean-up, galley waste removal, sewage removal, bilge waste removal etc.).

Waste Management Service Providers must contact the Licensing Manager who will guide them on the TNPA Registration Process. As a minimum, the Waste Management Service Provider must be able to comply with the criteria specified in Table 4-5. The Oversight Committee will preside over the licenses and make recommendation to the Chief Executive whether to grant a license or to reject the application.

A Waste Management Service Provider will not be permitted to operate in the Port or provide services to Port tenants or other users until such time as they are in

possession of a TNPA License. Waste Management Service Providers must specify the nature of all waste management activities they intend to undertake in the Port so that those activities can be listed on the License. Licensed Waste Management Service Providers will only be authorised to conduct the specific waste management activities listed on the license.

During this licensing process, TNPA will verify through audits that the service provider is legally compliant and can comply with TNPA rules and regulations. Waste Management Service Providers who are not licensed by TNPA may not operate within the Port jurisdictional area under any circumstances.

Table 4-5: Criteria for Selection of Waste Management Contractors[2]

Criterion	Yes	No
Ability to provide service		
Provides evidence of adequate resources to fulfil the specific contract, including: Vehicles; Suitably qualified personnel; Premises; Financial resources & systems; and Environmental Management Systems.		
Occupational Health & Safety		
Demonstrates availability of the following protective clothing for each personnel member (South African National Standards certified): Hard hat; Safety shoes / boots and gloves; Reflective jacket; and Self-inflating life jacket. Demonstrates compliance with the requirements of the Occupational Health & Safety Act.		
Qualifications and competencies of personnel		
Provides proof of the qualifications and training records of all personnel		
Memberships, permits and registrations		
Provides copies of the following documents: Proof of registration with the Nelson Mandela Bay Municipality as a Waste Transporter; Waste management licenses for all facilities involved in the, transfer, recycling, recovery, treatment, or disposal of waste, as may be required in terms of the list of activities requiring a Waste Management License (the most recent list is dated 29th November 2016 (GNR 921, GG 37083.)		

[2] Modified from Guidelines for Agreements, Licenses and Permits in terms of the National Ports Act No. 12 of 2005

	Criterion	Yes	No
	as these relate to the waste management service to be provided; Copies of registrations for waste storage areas as applicable (as per the National Norms and Standards for Waste Storage, 2013. Copies of registered S20 landfill site permits where such permits have not been converted to waste management licenses; Proof of membership with an applicable Waste Management Institution.		
	Tax Clearance Certificate		
	Valid Letter of Good Standing		
	Applicants will be required to provide valid SARS tax clearance certificates.		
	Insurance		
	Has Public Liability Insurance, or, if a new operator, qualifies for Public Liability Insurance.		
	Environmental Impairment Insurance		
	Broad Based Black Economic Empowerment		
	Submits a verification certificate from an accredited verification agency, indicating the B-BBEE contributor level of the applicant.		

4.11 ROLES AND RESPONSIBILITIES OF WASTE MANAGEMENT SERVICE PROVIDERS

Waste Management Service Providers are appointed by TNPA to manage various aspects of waste within the Port. As per the requirements of the TNPA Waste Management Strategy and the Contracts Management Directive that was issued out to TNPA in 2009 by the Executive: Ports & Corporate Affairs, all TNPA departments who have a role in managing waste, must ensure that they sign a contract with Waste Management Service Providers before any service can be rendered to TNPA.

Waste Management Service Providers will be required to:

- Comply with all legislation pertaining to waste management, including the need to have a valid license / permit / authorisation for waste management activities as may be required.
- Have the applicable waste management license to operate in the Port and fulfil only the waste management function approved by the TNPA license.
- Comply with the requirements of the Port WMP.
- Comply with the relevant Occupational Health and Safety Act requirements, including the duty to inform the relevant authorities in the event of accident and the provision of personal protective and safety equipment as necessary.
- Provide general and hazardous waste leak proof containers with fixed covers.
- Provide waste reception/transfer facilities that are designed and maintained so as to prevent secondary littering or contamination.

- Provide waste reception/transfer facilities that meet the maximum demand.
- Label waste receptacles as required by legislation.
- Manage site operations to prevent pollution.
- Remove and dispose of waste to landfill or treatment recycling facilities licensed to receive/treat general and hazardous waste and which are registered on the SAWIC.
- Ensure that all hazardous waste loads are accompanied by a legally compliant waste manifest, a safety data sheet and the applicable TREMCARD.
- Ensure that the vehicle used for the transportation of hazardous waste is registered as a dangerous goods carrier, that the driver has a public driving permit for dangerous goods and the vehicle displays the applicable placards and front warning diamond.
- Investigate and implement innovative ways to encourage waste reduction and reuse and recycling.
- Provide adequate waste management awareness training (including aspects of safety management) on an on-going basis.
- Submit the following documentation to the Port Environmental Department or respective tenant / ships agent / terminal operator on a monthly basis:
  - ✓ Safe disposal certificates.
  - ✓ Waste manifests bearing the three signatures (waste generator, waste transporter and waste manager).
  - ✓ Copies of the landfill site weighbridge ticket.
  - ✓ Monthly waste data reports complying with SAWIC requirements.
  - ✓ Proof of delivery of waste sent for recycling.
- Submit waste data onto SAWIC.

In addition to the above the TNPA-appointed Waste Management Service Provider will be required to provide green guards and a site supervisor to inspect and manage waste reception/transfer facilities as per contractual agreements.

4.12 TYPES AND CAPACITY OF WASTE RECEPTION FACILITIES AND FREQUENCY OF SERVICING

All terminal operator and tenant land-generated waste is to be deposited into the appropriately sized receptacles located at the points of generation by the tenants/occupiers, for inspection, acceptance, and removal from the site by TNPA-licensed Waste Management Service Providers.

Receptacles are to be well constructed of durable materials, should be leak proof and equipped with solid lids to control vermin, prevent scavenging, avert wind-blown litter spreading on the quayside, and to prevent offensive odours. The provision of Waste Reception / Waste Transfer Facilities must not compromise the health and safety of seafarers and Port workers nor undermine the hygiene efforts executed in the Port area.

Criteria for selection of receptacle types are to include the compatibility of the receptacle in terms of unladen weight, maximum load and size in relation to the available means of transport and mechanical handling equipment such as forklifts or

cranes. Importantly, the reception of waste must not interfere with or disrupt the general business of the Port activity.

The capacity and number of waste receptacles should match the demand. Large receptacles may not be suitable due to space limitations at particular locations, while small receptacles such as bins are not entirely suitable for bulky waste. The receptacle size must be balanced by the frequency of servicing and quality/waste type with due attention being paid to seasonal and operational fluctuations.

4.13 LOCATION OF WASTE COLLECTION FACILITIES

TNPA-provided Waste Reception / Transfer Facilities are located in accordance with the needs of waste generators. As the development of the Port occurs in the future and the need for waste facilities transform, changes will be catered for by the extension/modification of existing facilities and relocation and increase in size and number of waste receptacles.

All shore-based waste reception/transfer facilities will be located only within the jurisdictional area of the Port of PE, and in convenient locations and wherever practical, visually identified and screened. The existing TNPA waste reception/transfer facilities locations for the waste categories specific types of waste receivable are presented in Figure 4-2. Tenants will provide their own locations for waste reception/transfer facilities required by them but these facilities must be located within the boundaries of the area leased by them

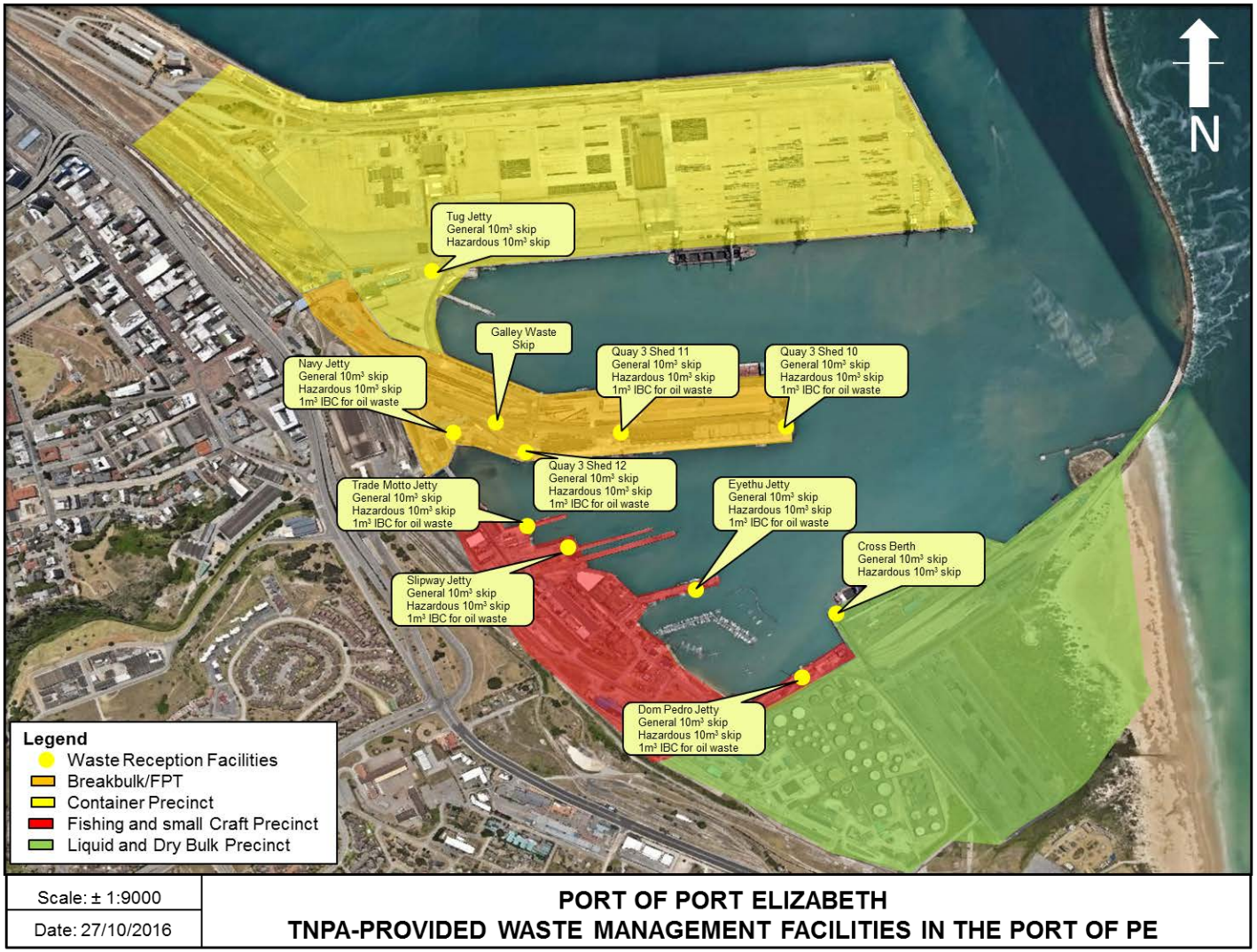

Figure 4-2: Location of Waste Reception/Transfer Facilities and Waste Transfer Sites provided by TNPA in the Port of PE

4.14 MAINTENANCE AND OPERATION OF WASTE MANAGEMENT FACILITIES

This section applies to TNPA, terminal operators and tenants as well as other Port users.

The operation and maintenance of waste reception and transfer facilities will be executed under the direction/control of an employee who has been appointed as the waste supervisor. This person will be adequately trained and provided with adequate and trained staff (if required). The person will be required to:

- Ensure the Waste Reception / Transfer Facilities are provided with clear signage which must include the following:
  - ✓ Type of waste to be placed in the container.
  - ✓ Relevant responsible Port department/tenant contact details.
  - ✓ Waste Management Service Provider contact details.
- Provide training to all personnel involved in the operation or maintenance of the Waste Reception / Transfer Facilities.
- Provide personnel who handle the waste with the appropriate protective clothing.
- Monitoring and inspect facilities on a regular basis to ensure suitability and satisfactory operation.
- Manage Incidents involving hazardous and flammable waste in accordance with the Port Environmental Management System Emergency Preparedness and Response Procedures and the Port Contingency Plan.

4.15 WASTE COLLECTION AND DISPOSAL INSPECTIONS

Regular monitoring of activities at waste reception and transfer facilities under the control of Waste Management Service Providers will be conducted by the Port Environmental Department. These inspections will:

- Be performed on a weekly basis and the findings of these inspections recorded on a standard form.
- Where appropriate (but only after suitable training has been given), be executed on a weekly basis by other departments through a process of delegation.

The purpose of these inspections will be to ascertain whether:

- Waste is being segregated correctly.
- Good housekeeping is being practiced at all times.
- Containers are in good condition, have suitable lids and that the lids are in use.
- The containers are of suitable size in relation to frequency of servicing.
- Any spills are occurring.
- There is evidence of windblown waste.
- Liquid waste storage facilities have the necessary secondary containment.
- Signage is adequate in terms of legal requirements as well as legibility.

In TNPA's role as landlord of the PoPE, regular (at least annual) audits of Waste Management Service Providers will be conducted by the Port Environmental Department and Port Engineering. The aim of such audits will be to evaluate:

- The extent of compliance with environmental legislation, and waste management legislation in particular.
- The extent of compliance with any Service Level Agreement(s).
- The extent of compliance with the WMP.

4.16 WASTE RECORDS

Waste Management Service Providers must provide waste disposal or recycling documents for all waste removed from the Port to their employer, be it TNPA, a ships agent, a vessel or a tenant.

For hazardous waste, the documentation must be compliant with the requirements of the Waste Classification and Management Regulations of 2013. A copy of the manifest must be left with Port Engineering, Port Environmental Department or the client at the time of service. The final manifest bearing the signature of the receiving facility must be returned to Port Engineering, Port Environmental Department or the client at month end. These manifests will be kept on file for a 5 year period in line with the legal requirements.

General waste must also have a removal document that:

- Includes a description of the waste, the category, and the mass / volume.
- Notes the management option for the waste e.g. recycling, treatment, landfill disposal.
- Is signed by both the transporter and the recipient of the waste upon delivery.
- Is submitted prior to, or together with, invoices for the service provided. Waste Management Service Providers invoices will only be paid after appropriate safe disposal certificate and waste manifests have been provided. The same requirement applies with respect to service rendered to Port users as TNPA inspection authority will verify these records during the Port User audits / inspections.

4.17 COST OF WASTE MANAGEMENT FACILITIES AND SERVICES

TNPA reserves the right to provide waste management services to the various Port users, tenants, and visiting vessels and for which a separate refuse storage and removal tariff will be applied based on type, volume and frequency of service.

Tariffs for the receipt and disposal of waste are set annually by TNPA and are available upon application at the Port.

In terms of the NEM: WA, the removal and safe disposal of waste generated by land-based Port users is the responsibility of the waste generator. The costs of managing waste generated on land will in effect be covered by the waste generator directly.

4.18 SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY (SHEQ) RISK MANAGEMENT POLICY STATEMENT AND NECESSITY FOR COMPLIANCE AT ALL TIMES

All Waste Management Service Providers are to be in full compliance at all times with the TNPA SHEQ Risk Management Policy statement which is available on the TNPA website (http://www.transnetnationalportsauthority.net/) and is updated from time to time.

4.19 ONGOING CONSULTATION WITH WASTE MANAGEMENT SERVICE PROVIDERS

On-going consultation between TNPA and Waste Management Service Providers with regard to waste management in the Port of PE is invited through contact with the TNPA representatives specified in Table 4-1.

As the influx and establishment of routine and repeated visits by sea going vessels and the numbers of land based tenants/users changes, consultation is envisaged as a periodic and frequent on-going procedure. This will be done with a view to obtaining a definitive assessment of the waste disposal needs of the Port of PE. The submission of waste management data from the Waste Management Service Providers via the Port Environmental Department or the relevant tenant will assist TNPA in this regard.

Waste Management Service Providers may be required to partake in waste management awareness programmes as issued from time to time by the Port Environmental Department.

4.20 REVIEW

The WMP has been developed primarily but not exclusively against the background of current legislation and regulations relating to waste management in the Republic of South Africa and the current waste generation trends in the PoPE. The document may be reviewed from time to time as required. It is the responsibility of the Waste Management Service Provider to ensure that they are in possession of the latest revision of the Waste Management Plan which will be available on: http://www.transnetnationalportsauthority.net/

4.21 COMPLIANCE AND ENFORCEMENT

TNPA will undertake audits from time to time as determined by a planned audit schedule on the operations of Waste Management Service Providers in the Port. TNPA reserves the right to undertake such audits of Waste Management Service Providers and their operations within the Port and associated disposal or treatment facilities. TNPA will implement enforcement against Waste Management Service Providers where non-compliances with the WMP are not rectified as required. On-going non-compliance will result in the termination of the license to provide services in the Port.

PART 4: APPENDICES

APPENDIX 4-A: SUMMARY OF LEGAL REQUIREMENTS APPLICABLE TO WASTE MANAGEMENT IN THE PORT OF PORT ELIZABETH

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
MARPOL Convention and associated regulations	• The main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. • Vessels must not discharge wastes into the sea. It provides the international standard regarding Port Waste Reception Facilities for ship generated waste.
	<u>Annex I Regulations for the Prevention of Pollution by Oil</u> • Vessels are prohibited from discharging oil or oily mixtures into the sea, except in specified conditions. • Ports must supply adequate waste reception facilities. • Oil and oily sludge must be removed and disposed / recycled to a licensed facility.
	<u>Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk</u> • Vessels are prohibited from discharging of residues containing noxious substances is 12 miles of the nearest land (normally from tank cleaning activities). • Ports must supply adequate waste reception facilities. • Slops must be removed and disposed / recycled to a licensed facility.
	<u>Annex IV Prevention of Pollution by Sewage from Ships</u> • Ports must supply adequate waste reception facilities. • Sewage must be removed and discharged to a licensed treatment facility.
	<u>Annex V Prevention of Pollution by Garbage from Ships</u> • All ships of > 400 gross tonnage and above and every ship certified to carry 15 persons or more must carry a Garbage Management Plan, to include written procedures for collecting, storing, processing and disposing of garbage, including the use of any relevant equipment fitted on-board (incinerators, compactors, etc). • The Garbage Record Book must record all disposal and incineration operations. • Every ship of 12 metres or more in length must also display placards notifying passengers and crew of the relevant disposal requirements. • Ports must provide reception facilities for garbage without causing undue delay.

INTERNATIONAL LEGISLATION / REQUIREMENTS	LEGAL REFERENCE APPLICABILITY
	Annex VI Prevention of Air Pollution from Ships From 2020 this will potentially give rise to disposal requirements from scrubber systems.
International Health Regulations, 2005	The competent authorities shall- ♦ Be responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal dejecta, wastewater and any other contaminated matter from a conveyance. ♦ Take all practicable measures to monitor and control the discharge by ships of sewage, refuse, ballast water and other potentially disease-causing matter which might contaminate the waters of a port, river, canal, strait, lake or other international waterway.
Stockholm Convention on Persistent Organic Pollutants, 2001	Global treaty to protect the environment by reducing / eliminating the use of persistent organic pollutants. Eg. Polychlorinated biphenyl - PCB.
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004	Global treaty to protect the environment from the transfer of harmful organisms in ballast water carried by ships.
Basel Convention on the Transboundary Movement of Hazardous Wastes	Controls the movement of hazardous waste between parties to the convention. Various notifications and permissions are required.
The London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972	Controls pollution of the sea by the dumping of wastes and other material.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Constitution of South Africa Act 108 of 1996	• Waste activities must be undertaken in such a manner that is not harmful to the health or well-being of SA citizens.
National Ports Act 12 of 2005	• In order to provide a waste management service in the Port, a license must be obtained from TNPA. • The Harbour Master can give written or verbal instructions with respect to removal of waste and the use of the Port Reception Facilities.
Notice to Apply for a Waste Management License Gazette Notice No 275, Gov Gazette No 34253 of 6th May 2011	Port Waste Management Service Providers must apply to TNPA for a license.
The Ports Rules of 2009	• 72 hours' written notice of arrival must be given to the Harbour Master. Notification must include details of the waste on board. • All persons in the Port must prevent pollution and protect the environment. TNPA can take remediation measures in the event that pollution is caused. The polluter will need to pay for the costs of remediation. • No harmful matter including oil can be discharged into the harbour. • Vessels berthed along a quayside must have all valves closed or covered to prevent inadvertent discharges. • Clean-up of spills must be done in accordance with the Port Contingency Plan. • Terminal Operators and vessels must make use of Port Reception Facilities for waste from vessels. • TNPA may require a vessel to procure waste services from a licensed provider if the berth is not operated by a Terminal Operator. • TNPA can direct a Terminal Operator who does not have adequate waste reception facilities to procure them within a specified time period. • Galley waste must be handled in accordance with the Port Waste Management Plan. • Owners, masters or agents must comply with their Vessel Waste Management Plan. • No discharge from tank or hatch cleaning activities is allowed into the Port.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986	• Incorporates the requirements of the MARPOL Convention into law.
Second-Hand Goods Act 6 of 2009 **Regulations for Accreditation of Second-Hand Goods Dealers' Associations, 2010** **Regulations for Dealers and Recyclers, 2012**	• Dealers and recyclers of listed controlled metals must be registered with the South Africa Police Service (SAPS). • Applies to scrap metal dealers and recyclers of scrap.
Import Permits	An import permit must be obtained from the International Trade Administration Commission of South Africa (ITAC) to bring controlled goods into the country – includes waste and scrap.
The International Health Regulations Act 28 of 1974	Every Port must be provided with an effective system for the removal and safe disposal of excrement, refuse, waste water, condemned food, and other matter dangerous to health.
Animal Diseases Act 35 of 1984	Refers to infectious material which must be burnt in an incinerator, or which must be disposed of in any other manner which the director may determine.
National Environmental Management: Integrated Coastal Management Act 24 of 2008	• Waste must not be imported into SA for dumping or incineration within the coastal zone or exclusive economic zone. This includes general waste, sewage, oils, slops etc. • Waste must not be dumped on incinerated within the coastal zone or exclusive economic zone. • Waste cannot be exported to be dumped or incinerated at sea unless authorised by a permit. • The permit process must be adhered to for the dumping of various waste including: dredged material and sewage sludge.
National Environmental Management Act 107 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated. • Incidents that fall into the definition must be reported and managed according to the requirements: for example in the event of an oil spill into the Port.
National Water Act 36 of 1998	• Reasonable measures must be taken to prevent pollution from occurring. • If pollution does occur the activity that is causing the pollution must stop and pollution must be remediated.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
National Environmental Management: Waste Amendment Act 59 of 2008 and National Environmental Management: Waste Amendment Act 26 of59 of 2008	The Act contains extensive provisions for the management of waste, including - • Wastes must be avoided where possible, or minimised, reused and recycled before disposal to landfill is selected as the appropriate management measure. • Disposal must be to a licensed facility. This includes general waste, sewage, oils, slops etc. • Storage activities must not present a risk to the environment and no nuisance must be created: for example odours and windscatter. • Employees must be prevented from contravening the Act. • Waste must not be used for an unauthorised purpose. • Gazetted waste activities are subject to a waste management license. • Owners of public land to which the public has access must provide sufficient waste containers for public use. • Waste transporters must be registered (normally in terms of the local bylaws). • Waste must not be spilt during transport. • Waste transporters must check whether the disposal facility is licensed before offloading. • If hazardous waste is transported for purposes other than disposal, the person transporting the waste must before offloading the waste ensure that the authorisations are in place. Written confirmation that the waste has been accepted must be obtained. • The Minister can call on categories of persons to produce industry waste management plans. [At the time of the TNPA WMP update (November 2016) the only government approved waste management plan is the Recycling and Economic Development Initiative of South Africa Integrated Industry Waste Tyre Management Plan.] • DEA must be notified in the event of the identification of contaminated land. This may be necessary for example: in the event that substandard waste management storage and handling activities causes soil pollution and rehabilitation is necessary.
Norms and Standards for the Remediation of Contaminated Land and Soil Quality, 2014	Reporting and remediation requirements must be followed.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Notice 921 of 23rd November 2013 listing activities that require a waste management license.	Various waste management activities are detailed including recycling, treatment and disposal. Thresholds are provided. • Category A activities require a basic assessment. • Category B activities require a full EIA. • Category C activities require compliance with norms and standards.
National Norms and Standards for the Storage of Waste 2013	Registration and compliance with the norms and standards is required to store waste in excess of the thresholds- 100m^3 general waste or 80 m^3 hazardous waste [At the time of the TNPA WMP update (November 2016) no areas requiring registration were identified.]
Waste Tyre Regulations of 2009	• Tyres must be disposed at a licensed facility. • Tyres must be cut into quarters before disposal. • Plans must be in place for tyre storage areas.
National Waste Information Regulations, 2012	• Hazardous waste generators must register with DEA if they generate more than 20kg of hazardous waste per day - there are no reporting requirements for generators. • A number of other persons must register with DEA including: operators of landfill sites, recyclers, importers etc. • Quarterly reporting is required.
National Pricing Strategy for Waste Management, 2016	This strategy contains guiding methodologies for the setting of waste management charges, aimed at funding the re-use, recycling or recovery of waste and the implementation of industry waste management plans (IndWMP) for those activities that generate specific waste streams.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Asbestos Regulations, 2001 – promulgated in terms of the Occupational Health and Safety Act **Regulations for the Prohibition of the Use, Manufacturing, Import and Export of Asbestos and Asbestos Containing Materials published in terms of the Environmental Conservation Act**	Asbestos must be disposed to the correct class landfill site. Persons handling asbestos for disposal must have the required PPE and must have had training in line with the requirements of the Regulations.
Waste Act: Admission of Guilt Fine Regulations, 2015	Contains a schedule with the maximum applicable fine attached to a number of waste related offenses.
National Road Traffic Act 93 of 1996 **National Road Traffic Regulations of 2000 (Regulation 273A).** **SANS documents for the transportation of Dangerous Goods**	♦ Consignments of dangerous goods must only be transported in compliance with the requirements. ♦ The dispatch of hazardous goods includes hazardous wastes such as galley waste; oil sludges; slops; and mixed contaminated waste. ♦ Dangerous goods declarations must be used. ♦ Loading must be supervised by a responsible person. ♦ The vehicle must be registered as a dangerous goods carrier. ♦ The driver must be trained, have a professional drivers permit for dangerous goods, and must be in possession of the correct TREMCARD.
Waste Classification and Management Regulations 2013	♦ All wastes must be classified in terms of SANS 10234 except for those listed in Annexure 1 to the regulations which are regarded as pre-classified- ✓ Annexure 1 part one includes general wastes. ✓ Annexure 1 part 2 includes hazardous wastes such (2)(b)(ii) : *General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals*. This can be referenced to contaminated waste such as oily rags etc. These wastes can be regarded as pre-classified waste however they must be disposed to a hazardous waste landfill site and a safety data sheet must be prepared. ♦ Hazardous wastes that are removed from site must be accompanied by a waste manifest that contains all the details in Annexure 2 of the regulations. The final manifest reflecting three signatures (generator, transporter and waste disposal / recycling facility) must be retained on

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
	file for a five year period. • Wastes must be disposed within 18 months of generation. • Specific labelling requirements must be complied with.
National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013	Any wastes that are to be disposed to landfill (other than the pre-classified wastes) must be assessed according to these standards to determine which class landfill they can be disposed at.
National Norms and Standards for Disposal of Waste to Landfill, 2013	Contains a schedule which has timeframe for the phase out for certain wastes streams to landfill. A number of streams are listed including- • Waste compressed gases – from 23rd August 2013 • Lead acid batteries – from 23rd August 2013 • Other batteries – from 23rd August 2021 • Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes – from 23rd August 2017 • Re-usable, recoverable or recyclable used or spent solvents – from 23rd August 2018 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps - from 23rd August 2016 • Hazardous Waste Electric and Electronic Equipment (WEEE) – Other – from 23rd August 2021. • Waste tyres: Whole – from 23rd August 2013 • Waste tyres: Quartered – from 23rd August 2018 • Liquid waste- (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment-from 23rd August 2019
Hazardous Chemical Substances Regulations of 1995 promulgated in terms of the Occupational Health and Safety Act	• Wastes containing hazardous chemical substances must be recycled wherever possible. • Waste hazardous chemical substances must be disposed to the correct class landfill site. • Employees must have the required PPE.

NATIONAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Hazardous Substances Act 15 of 1973	♦ The act classifies chemicals into four different groups. ♦ Group I and II = Substances are those dangerous to humans due to their toxic nature. ♦ Group III = Various electronic products. ♦ Group IV = Radioactive products. ♦ Hazardous waste generated in the PoPE generally fall into Group II substances for which no regulations are in place (as far as the HSA is concerned).

PROVINCIAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Eastern Cape Environmental Conservation Act of 2003	♦ One of the aims is to regulate waste management in the province. ♦ The Minister has the power to make regulations with respect to waste management. No regulations to this effect have been gazetted.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Waste Management Bylaws, 2010	♦ All commercial waste service providers must be registered with the local authority. ♦ Users of commercial service providers must ensure that the waste collector is registered and that they comply with the bylaws. ♦ Waste transporters must: not allow waste to escape from the container / vehicle; maintain clean vehicles and equipment; and ensure that waste is disposed to the appropriately licensed facility. ♦ Garden waste must be disposed to a licensed site. ♦ Building waste must be removed within 14 days of the project being completed and must be disposed to a licensed facility unless the municipality has given written consent that it can be used for land reclamation or recycling. ♦ Littering, dumping and the burning of waste is prohibited by the bylaws.

LOCAL LEGISLATION	LEGAL REFERENCE APPLICABILITY
Nelson Mandela Bay Metropolitan Municipality: Water and Sanitation Services Bylaws, 2010	♦ Persons transporting and disposing of sewage by road haulage must have prior written agreement from the municipality. ♦ The agreement must state: source of domestic sewage, day, time and point of delivery.

APPENDIX 4-B: DETAILED WASTE INVENTORY – NOVEMBER 2016

PORT OF PORT ELIZABETH WASTE INVENTORY		
TERMINOLOGY		
Waste Category	Categorisation in terms of the National Waste Information Regulations, 2012. Categories applicable to PoPE.	
	GW1001	Commercial and Industrial Waste.
	GW2001	Garden waste.
	GW2101	Sewage.
	GW2002	Organic waste, food waste.
	GW2003	Wood.
	GW3001	Construction and demolition waste.
	GW5004	Paper, mixed grades.
	GW5106	Plastic, other.
	GW5201	Glass.
	GW5301	Metals, ferrous.
	GW5302	Metals, non-ferrous.
	GW5401	Tyres.
	GW9901	Miscellaneous.
	HW0301	Lead batteries.
	HW0307	Mixed batteries.
	HW0601	Asbestos containing waste.
	HW0701	Waste oils.
	HW1805	Waste of Electric and Electronic Equipment (WEEE), lighting equipment.
	HW1808	Waste of Electric and Electronic Equipment (WEEE), lighting equipment, mixed WEEE.
	HW1902	Health Care Risk Waste, infectious waste and sharps.
	HW9901	Miscellaneous.
Waste Classification	Classification must be done in terms of the Waste Classification and Management Regulations of 2013 and the associated norms and	

PORT OF PORT ELIZABETH WASTE INVENTORY	
TERMINOLOGY	
	standards.
Pre-Classified Waste	Annexure One to the above regulations contains a list of pre-classified waste. These do not need to be classified in terms of SANS 10234 but must have a safety data sheet. Waste in Annexure One part 2 must be disposed to a hazardous waste landfill site
SDS	Safety Data Sheet must be provided for hazardous waste.
Waste Type	Waste Type as determined by the National Norms and Standards for the Assessment of Waste for Landfill Disposal, 2013. Type 0 (no landfilling), Type 1 (Class A landfill) Type 2 (Class B landfill) Type 3 (Class C landfill) Type 4 (Class D landfill). The waste type only need to be determined for- Waste not on the pre-classified list and waste that need to be disposed to landfill.
SANS 10228	Class for the transport of dangerous goods / hazardous waste.
NMBM	Nelson Mandela Bay Municipality.
HCRW	Health Care Risk Waste.
ACW	Asbestos cement waste – such as roof sheets, gutters, down pipes that contain asbestos fibre.
PCB contaminated	Any article that has in excess of 50 ppm polychlorinated biphenyl in the lubricating oil.

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Metal / Scrap Ferrous	Maintenance activities	GW5301	General	General	n/a	Skip containers for scrap metals/ redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Metal / Scrap Non-Ferrous	Maintenance activities	GW5302	General	General	n/a	Skip containers for scrap metals / redundant material areas. Many need to be cut on site before removal by grab truck.	Recycled at scrap vendor	Clean scrap only. Scrap that is contaminated must be cleaned before removal for recycling.	No
Organic waste	Canteens Admin buildings Local vessels	GW2002	General	General	n/a	Small intermediate containers. Transferred to general waste skip containers.	Landfill – general or hazardous		No
Plastics	All areas Local vessels	GW5106	General	General	n/a	Small intermediate containers Transferred to designated recycling areas	Recycler	Best practise to separate into individual types at recycling areas.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT^{N}**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Glass	All areas Local vessels	GW5201	General	General	n/a	Small intermediate containers. Transferred to designated recycling areas.	Recycler		No
Paper and cardboard	All areas Local vessels	GW5004	General	General	n/a	Small intermediate containers Transferred to designated recycling areas.	Recycler	Best practise to separate into individual types at recycling areas.	No
Wood waste	All areas Local vessels	GW2003	General	General	n/a	Transferred to designated recycling areas.	Recycler	Store away from flammables.	No
Garden waste	All areas	GW2001	General	General	n/a	Removed from site as part of the garden service.	Licensed compost operation except for alien vegetation		No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Tyres	Maintenance activities Worn fender tyres	GW5401	General	General	n/a	Transferred to designated tyre storage area.	Landfill – general or hazardous	Must be CUT into quarters before removal to landfill. **PROHIBITED** from landfilling after 23rd August 2018 and must be recycled.	No
							Recycler		
Empty drums and plastic containers – containing non-hazardous chemicals	All areas	GW9901	General	General	n/a	Transferred to designated recycling areas	Recycler	Only if the containers did not contain hazardous substances.	No
Construction and demolition waste, excluding hazardous materials	All areas	GW3001	General	General	n/a	Preferably skip containers. Temporary storage areas to be agreed with Port Environmental Department.	Landfill or other area provided WRITTEN approval is obtained from NMBM.	To be cleared 14 days after construction work is complete.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Mixed general waste not suitable for recycling	All areas Local vessels	GW1001	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids to prevent windblown litter.	No
Fish waste	Fishing vessels	GW2002	General	General	n/a	General waste skip containers.	Landfill – general or hazardous	Skips to have lids and to be emptied on a regular schedule so as to prevent odour nuisances.	No
Pressurised gas containers	Various including- Fire Dept – extinguishers Fishing vessels – refrigerants	GW9901	General as they will be gas free after cutting	General	n/a	Temporary storage area to be agreed with Port Environmental Dept, Risk Dept and Fire Dept.	Return to supplier		No
						Skip containers for scrap metals.	Recycler or return to supplier	Containers must be cut in half before placing in scrap container.	
Ropes / working lines Scrap conveyor belts.	Vessels Terminal operators	GW9901	General	General	n/a	General waste skip containers.	Landfill	Check recycling potential **BEFORE** landfilling.	No

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
						Designated recycling area.	Recycler	Containers must be cut in half before placing in scrap container.	
Hull cleaning waste	Vessels Yachts	GW9901	General	n/a	n/a	General waste skip containers.	Landfill		No
Expired pyrotechnics	Vessels	HW9901	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 0	Class 1 Various UN numbers	Storage area designated by the Port Environmental Department.	Return to supplier or destroyed by the Police.	Marine Notice 9 of 1996 gives the instruction that these items are to be handed to Ports of Entry Police.	Yes
Sewage	Vessels	HW2101		Hazardous Type 0	Class 9 UN 3082	n/a	NMBM disposal point	Transporter to be licensed and have permission from NMBM to discharge.	No
E-Waste – including printer cartridges (without hazardous components removed)	Admin activities	HW1808	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Storage area designated by the Port Information Systems Department.	Specialised recycler	SDS if possible for example for printer cartridges	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Sandblasting waste	Maintenance activities	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes
Contami-nated soil	Incidents Spills Remediation sites	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Special order skip container. Small volumes to permanent hazardous waste skip container.	Hazardous waste landfill / Class A	If the generator wishes the waste to be disposed at a lower class landfill site, then analysis and classification in accordance with the National Norms and Standard for the Assessment of Waste to Landfill must be done.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Empty drums and plastic containers - containing non-hazardous chemicals	All areas	HW9901	Pre-Classified Refer Annexure One, 2(b)(ii). Mixed waste- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling	Recycler	Generator to sign nominally empty packing certificate to certify containers are empty. Must be done before removal from site.	Yes
						Skip containers / Designated storage areas	Hazardous waste landfill / Class A	SDS for empty hazardous chemical containers	
Asbestos Containing Waste	Land based maintenance activities	HW0601	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Asbestos	Hazardous Type 1	Class 9 UN 2212	Special order skip container.	Hazardous waste landfill / Class A	Asbestos cement waste (roof sheeting etc). **NOT TO BE BROKEN UP DURING HANDLING.**	Yes
Fluorescent tubes and other lamps.	Maintenance activities	HW1805	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Special storage boxes from service provider.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Lamps to be kept intact during storage.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Health Care Risk Waste	Clinic First aid – land and vessels	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised HCRW containers- Yellow plastic containers for sharps waste Boxes with red plastic insert for infectious waste Green plastic containers for pharmaceuticals	Treated by incineration / sterilisation before landfilling		No
Sanitary waste	Ablutions	HW1902	Pre-Classified Annexure One, 2(b)(iii). Health care risk waste	Hazardous Type 0	Class 6.1 UN 3291	Specialised containers provided by service provider.	Treated by incineration / sterilisation before landfilling	Alternative methods to be agreed with Port Environmental and Risk Department and to have DEA approval.	No
Lead acid batteries	Maintenance activities	HW0301	Pre-Classified Annexure One, 2(b)(ii). Waste Products- Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 8 UN 2794	Temporary storage areas to be agreed with Port Environmental Department.	Specialised recycler.	**NO LANDFILLING ALLOWED.** Batteries to be stored with secondary containment to prevent acid spills.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Other batteries including- Mercury Ni/Cd Manganese dioxide and alkali Lithium and lithium ion Nickel metal hydride	All areas	HW0307	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3077	Transferred to designated recycling areas if suitable for recycling.	Recycler		Yes
						Hazardous waste skip containers	Hazardous waste landfill / Class A	SDS for individual batteries	
Waste oils	Land based maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	NO solid material allowed to be deposited into the used oil receptacle.	Yes

PORT OF PORT ELIZABETH WASTE INVENTORY									
WASTE STREAM	**ORIGIN**	**WASTE CATEGORY**	**WASTE CLASSIFICAT[N]**	**WASTE TYPE**	**TRANSPORT CLASS- (SANS 10228)**	**STORAGE**	**MANAGEMENT METHOD**	**COMMENTS**	**SDS**
Transformer Oils	Maintenance activities Vessels Yachts	HW0701	Pre-Classified Annexure One, 2(b)(ii). Waste Products-Expired, spoilt or unusable hazardous products.	Hazardous Type 1	Class 9 UN 3082	Used oil receptacle. OR Tankers / super suckers.	Recycler	It is understood that all TNPA transformers have been tested and they all are **under 50ppm PCB oil.**	Yes
Galley waste from vessels/ yachts having been outside of SA	Vessels Yachts	HW9901	Hazardous	Hazardous Type 1	Class 6.2 UN 2900	Polycarts transferred to galley waste container (to be subject to strict access control. Containers to be subject to disinfection procedure.	Hazardous waste landfill / Class A	Waste to be treated with lime on arrival and covered immediately. **ONLY TO BE REMOVED BY APPOINTED GALLEY WASTE CONTRACTOR**	Yes
Dredging waste– sediment	Port services	HW9901	Hazardous	Hazardous Type 1	n/a	n/a	Dumped at sea	Subject to valid permit and as per the permit conditions	No
Incinerator ash	Vessels services	To be determined	To be determined	To be determined	To be determined	n/a	Landfilled Class to be determined.	Classification requirements of this waste stream to be discussed and agreed.	TBD