

Authorised by: Business Unit Manager	Purpose	Refer Section 1
	Scope	Refer Section 2
	Responsibility	Refer Section 3

## 1. Purpose

- 1.1 The purpose of this procedure is to provide guidance on the systems to control and minimise waste within the Darwin Business Unit sites.

## 2. Scope

- 2.1 This procedure applies to all Toll Energy employees, contractors and tenants located on Toll Energy Darwin sites.
- 2.2 This procedure shall be read in conjunction with *TE OPS P789* Controlled Waste Management.

## 3. Responsibilities

- 3.1 Toll Energy is the Licensee and is to ensure that employees and contractors are made aware of the conditions of the Environment Protection Licence.
- 3.2 The Yard Supervisors/ Leading Hands are responsible for monitoring yard waste, ensuring that waste is properly contained to prevent discharge to the environment, organising additional recovery services as required and complying with NT EPA obligations.
- 3.3 The HSEQS Coordinator is responsible for monitoring the recycling program, maintaining all records required under the conditions of the EPL, populating the Darwin Business Unit Environmental Register and completing the NT EPA Listed Waste template each year for reporting purposes.
- 3.4 All employees are responsible for participating in recycling initiatives.

## 4. References

- 4.1 Northern Territory
- Environmental Assessment Act 1982
  - Environmental Assessment Administrative Procedures
  - Environmental Offences and Penalties Act
  - National Environment Protection Council (Northern Territory) Act
  - Waste Management and Pollution Act
  - Waste Management and Pollution Control (Administration) Regulations
  - Water Act
- 4.2 Federal
- Environmental Protection and Biodiversity Conservation Act
  - National Environmental Protection Measures (Implementation) Act 1998

## 5. Definitions

- 5.1 **Dry Waste:** All materials of industrial, general dry, kitchen, or secure documents that require management of disposal or present an environmental or quarantine risk.
- 5.2 **EPL:** Environment Protection Licence.
- 5.3 **Licensee:** Toll Energy – 12 Muramats Road Berrimah NT.
- 5.4 **Environmental Harm:** any impact on the environment as a result of human activity that has the effect of degrading the environment, whether temporarily or permanently.

- 5.5 **Environmental Nuisance:** Means environmental nuisance not authorised to be done or omitted to be done under any of the following—
- (a) an environmental protection policy;
  - (b) an environmental management program;
  - (c) an environmental protection order;
  - (d) an environmental authority;
  - (e) a development condition of a development approval.
  - (f) an emergency direction.
- 5.6 **Environmental Incident:** An unexpected occurrence, failure or loss, with the potential for harming the ecosystem or natural resources.
- 5.7 **Listed (Controlled) Waste:** Waste defined by the Waste Management and Pollution Control Regulations.
- 5.8 **NT EPA:** Northern Territory Environment Protection Authority (NT EPA)
- 5.9 **Oils and Contaminants:** All petroleum products, oils and lubricants or containers of these products.
- 5.10 **Pollution Incident:** An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.
- 5.11 **Recycling:** The re use or recycle of materials to allow re use/reclamation.
- 5.12 **Sanitation Facilities:** On site toilets, bathrooms and hygiene equipment.
- 5.13 **Waste Water:** All run off from wash down point drains and water flows.

## 6. Toll Energy Registration and Obligations

- 6.1 Toll Energy Darwin is licenced with the NT EPA as a storage facility for customer waste. All three Darwin Business Unit sites are covered under this licence; Licence Number: EPL80.
- 6.2 Obligations of the Licensee:
- Ensure waste is properly contained on premises to prevent discharge into the environment.
  - Ensure a NT EPA licenced waste contractor is engaged to remove the wastes from site.
  - Manifest all waste to be collected by the waste contractor and include quantity and type of product.
  - Ensure a docket is obtained from the waste contractor prior to the waste being transported from the premises. Dockets shall be kept for a period of five (5) years).
  - Ensure the waste is suitably contained/ packaged for the purpose of transport.
  - Display signage at all sites detailing: access restrictions, days and hours of operation, accepted wastes, EPL number and name and emergency contact number of facility operator.

## 7. Complaints

- 7.1 Any complaint received by Toll alleging an incident has occurred as a consequence of the activity causing an environmental nuisance or environmental harm shall be entered into RAMS in accordance with *TE QA P003 Non Conformance, Corrective and Preventive Action*.
- 7.2 The Corrective Action Report shall contain but not be limited to:
- Date and time of the complaint
  - The method in which the complaint was made

- The name and contact details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect
- Nature of complaint (eg: odours, water pollution, aesthetic)
- Any action taken by the licensee in relation to the complaint, including all follow-up contact with the complainant; and
- If no action taken by the licensee, the reason why no action was taken

## 8. Incidents

- 8.1 Any incident involving waste shall be entered into RISC in accordance with *TE HSE P663 Incident and Injury Reporting and Control*.
- 8.2 The Incident Report shall contain but not be limited to:
- The date, time and circumstance in which the incident became known to the licensee, or an employee or agent of the licensee
  - The known or estimated dates and times the incident commenced and ended
  - Name and contact details of the person initially reporting the incident
  - Nature of the incident
  - All directions issued by the NT EPA in response to notifications given of incident
  - The action taken by or on behalf of Toll (the Licensee) in relation to the incident
  - If no action taken by the licensee the reason why no action was taken.

## 9. Reporting

- 9.1 Toll shall report all pollution incidents strictly in accordance with section 14 of the Act by contacting the Pollution Response Line 1800 064 567 and in accordance with *TE HSE P663 Injury and Incident Reporting and Control*
- 9.2 Toll shall notify NT EPA within 48 hours of becoming aware of any failure, either by Toll or any other person, to comply with the conditions of the licence by emailing [ntepa@nt.gov.au](mailto:ntepa@nt.gov.au)
- 9.3 Toll shall abide by all the directions issued by the NT EPA in response to notifications given of non-compliance with the conditions of the licence.
- 9.4 Toll shall complete the NT EPA Listed Waste Report annually from information populated in the Environmental Register, refer to Appendix TE DWOP 020.2 for a snapshot of the Register.

## 10. Waste Management

- 10.1 Dry Waste
- 10.1.1 Internal generated dry waste shall be placed in yard bins and general refuse bins by employees or contracted cleaning services as part of normal operations.
- Note: A waste contractor collects the yard skip bins for disposal on a scheduled basis.
- Internal waste generated by Toll Energy on all Toll Energy Sites does not require reporting under the Environment Protection Licence.
- 10.1.2 Wherever possible, recyclables shall be separated from general waste and placed in bins marked recycle only for collection
- 10.1.3 On an as required basis but at least weekly, the small waste bins within Darwin Business Unit sites shall be emptied by yard personnel into the 3 mtr general waste bins as part of housekeeping procedures.
- 10.1.4 Items covered include, but are not limited to:
- Scrap metal and disused components
  - Scrap cardboard, timber and other packing materials

- Kitchen scraps
  - General yard, office and warehouse waste
  - Empty 205ltr drums.
- 10.1.5 Dry Waste received from customers shall be tracked from receipt to disposal using *TE DWF 019 Request for Waste Disposal*. The process to be followed is outlined in Appendix TE DWOP 020.1.
- 10.2 Tyres
- 10.2.1 Waste tyres shall be placed in a designated area for reuse in load outs as cushioning. Excess waste tyres shall be placed in an area for disposal and an appropriate bin shall be ordered. No other items or type of waste other than rubber belt or conveyer belt is to be mixed in this skip.
- 10.2.2 Tyres are controlled waste and shall be managed in accordance with *TE OPS P789 Controlled Waste Management*.
- 10.2.3 The quantity of tyres stored shall not exceed 100 and they shall be stored away from flammable and combustible materials.
- 10.2.4 Waste Tyres received from customers shall be treated as controlled waste and shall be tracked from receipt to disposal, recycle or reuse.
- 10.3 Waste Water
- 10.3.1 Waste water from runoff due to washing is captured by dirty water tanks and waste water separators at designated wash points. The waste separation units shall be inspected, as a minimum, monthly during site HSE Inspection and maintained/ serviced at 100 hour intervals by competent 3rd party (Express Plumbing).
- 10.3.2 No degreasers or solvents shall be used in wash down bays or applied or poured into drains or used in external wash down processes.
- 10.3.3 Waste water shall be contained in the wash down tank for pumping and disposal by waste contractor.
- 10.3.4 Storm water drains are connected to the local authority storm water services. Controls shall be implemented to insure that waste does not go down stormwater drains, refer to *TE HSE F642 Integrated HSEC Risk Register*.
- Note: For further guidance on waste water management refer to *TE DWOP 001 Management of Wash down Area*
- 10.4 Oils and Contaminants
- 10.4.1 Waste oils generated locally or received by customers shall be managed as controlled waste and a potential DG hazard, until cleared from site.
- 10.4.2 Waste oil drums shall be clearly identified by product and hazard type and stored accordingly in a bunded hard stand area.
- 10.4.3 All drums with content shall be sealed and marked with the contents and banded for transport on a pallet. Normal spill controls apply. Any transfers shall take place in a bunded area.
- 10.4.4 Waste oils shall be managed in accordance with *TE OPS P789 Controlled Waste Management*.
- 10.4.5 Oils and contaminants received from customers shall be treated as controlled waste and shall be tracked from receipt to disposal using *TE DWF 019 Request for Waste Disposal Form*.
- 10.4.6 Where a client has specific requirements for the tracking of waste oil, that are not met by the use of *TE DWF 019 Request for Waste Disposal Form*, a monthly report shall be issued by the HSEQS Coordinator from the NRETAS Waste Control Reporting Register.
- 10.5 Empty Drums
- 10.5.1 All empty drums shall be loose sealed and marked empty for transport.

- 10.5.2 Waste oil drums are controlled waste and shall only be disposed of at an approved waste facility, on an as required basis. Refer to *TE OPS P789*, Controlled Waste Management.
- 10.5.3 Empty drums, which have not contained controlled waste, shall be marked for recycling.
- 10.6 Sanitation Facilities
- 10.6.1 Onsite sanitation facilities include toilets, hand washing towels, showers and female hygiene equipment.
- 10.6.2 Contract service providers service these facilities on a weekly basis.
- 10.6.3 All kitchen and hygiene waste shall be placed into bags before placing into bins for disposal.
- 10.7 Batteries
- 10.7.1 All batteries for disposal shall be collected on a banded pallet in an appropriate area and removed by a waste contractor for recycling. They shall not be permitted to accumulate past 1 pallet before disposal.
- 10.7.2 Steel merchants accept vehicle batteries for recycle.
- 10.7.3 Batteries received from customers shall be treated as controlled waste and shall be tracked from receipt to disposal using *TE DWF 019 Request for Waste Disposal Form*.
- 10.8 Listed Waste
- 10.8.1 All ship/ customer waste is to be accompanied by a manifest in accordance with normal customer movement procedures, as they apply.
- 10.8.2 Where a manifest identifies waste as controlled, further clarification shall be sought from the Consignor as to the nature of the consignment by the Business Unit Manager.
- 10.8.3 The Business Unit Manager shall ensure appropriate hazard controls are utilised.
- 10.8.4 Where Toll Energy Darwin does not have the experience, skills or equipment to handle the material, a licensed waste contractor shall be engaged and the waste shall not enter Toll Darwin sites
- 10.8.5 Where that waste is a liquid dangerous good, the goods shall be held in a suitable area on discharge at the wharf and DGM shall be contacted for removal, the waste shall not enter Toll Darwin sites.
- 10.8.6 Listed waste received from customers shall be tracked from receipt to disposal using *TE DWF 019 Request for Waste Disposal Form*. The process to be followed is outlined in Appendix TE DWOP 020.1.
- 10.9 Recycling
- 10.9.1 The HSEQS Coordinator shall be responsible for the collection of data to allow all waste to be measured and waste management/ minimisation programs implemented to achieve continual reductions/ best practice based on recycling facilities available.
- 10.9.2 Recycling is encouraged wherever possible:
- Paper  
Paper recycling is conducted by Cleanaway on behalf of Toll.
  - Drums  
20 ltr, 60 ltr, 200 ltr steel and plastic drums shall be recycled. This is currently done through NTRS who is the agent for Drum Master in the Northern Territory.
  - Oil Filters  
Oil filters shall be recycled, this is currently done by NTRS.
  - Fluorescent Lights  
Flourescent light globes shall be recycled, this is currently done by NTRS.
  - Plastics  
Light plastics shall be recycled, this is currently done by NTRS.

- Tyres  
Tyres shall be recycled, this is currently done by Top End Tyre Recycling Pty Ltd or reused by Toll.
- Printer cartridges  
Printer cartridges shall be recycled, this can be done through Australia Post.

10.9.3 Recyclables received from customers shall be tracked from receipt to disposal using *TE DWF 019 Request for Waste Disposal Form*.

## 11. Records

11.1 The following records shall be retained in accordance with *TE QA P004 Documents, Data and Records Control*:

Record	By Whom	Retention Period
Request for Waste Disposal Form	HSEQS Coordinator	5 Years
Waste Contractor dockets		
Waste Control Reporting Register		
Any other record required to be kept by conditions of the EPL		

11.2 The Business Unit Manager shall ensure records are kept on the handling of listed waste including but not limited to:

- Origin
- Transport
- Date of collection
- Description of waste
- Quantity of waste
- Method of storage
- Destination of waste.

## Revision Status Record

Date	Description of Status or Revision
23/04/2003	Created
08/05/2003	Amendment to 2.1, 2.4, and addition of Flowchart 2.5
23/05/2003	Amendment to 1.2 for reference to Spill Clean up Procedure DWOP19
06/11/2003	Added the use of Form DF 19 into 2.2 and flowchart 2.5
27/07/2004	Amend 2.1 include Toll Energy waste disposal
06/05/2005	Amended Collex to Wastemaster
27/05/2005	Reviewed no change
11/12/2006	Changed Wastemaster -> Cleanaway. Expanded controlled waste management.
17/04/2007	Changed Cleanaway to Disposal company changed DF19 added Append I & 2
17/09/2008	Added 1.3 current contractors; added spill hazwaste to 2.1 ;amended fax request in
15/02/2010	2.2; Updated flow chart and renumbered appendix 1, 2 and 3
08/09/2010	Revised and reviewed – Updated list
22/10/2010	Revised and reviewed – Updated list
13/09/2011	Reformatted, added licence requirements and restrictions
20/02/2013	Amended wording to reflect licence in paragraphs 7, 8 and 9
10/10/2013	Reviewed. Changed 9.4 from form to procedure. Changed Senior Operations
	Manager to BU Manager, changed regulatory agency from NRETAS to NT EPA
<b>Approved by:</b>	Gerard Smallbane
<b>Date:</b>	10 October 2013



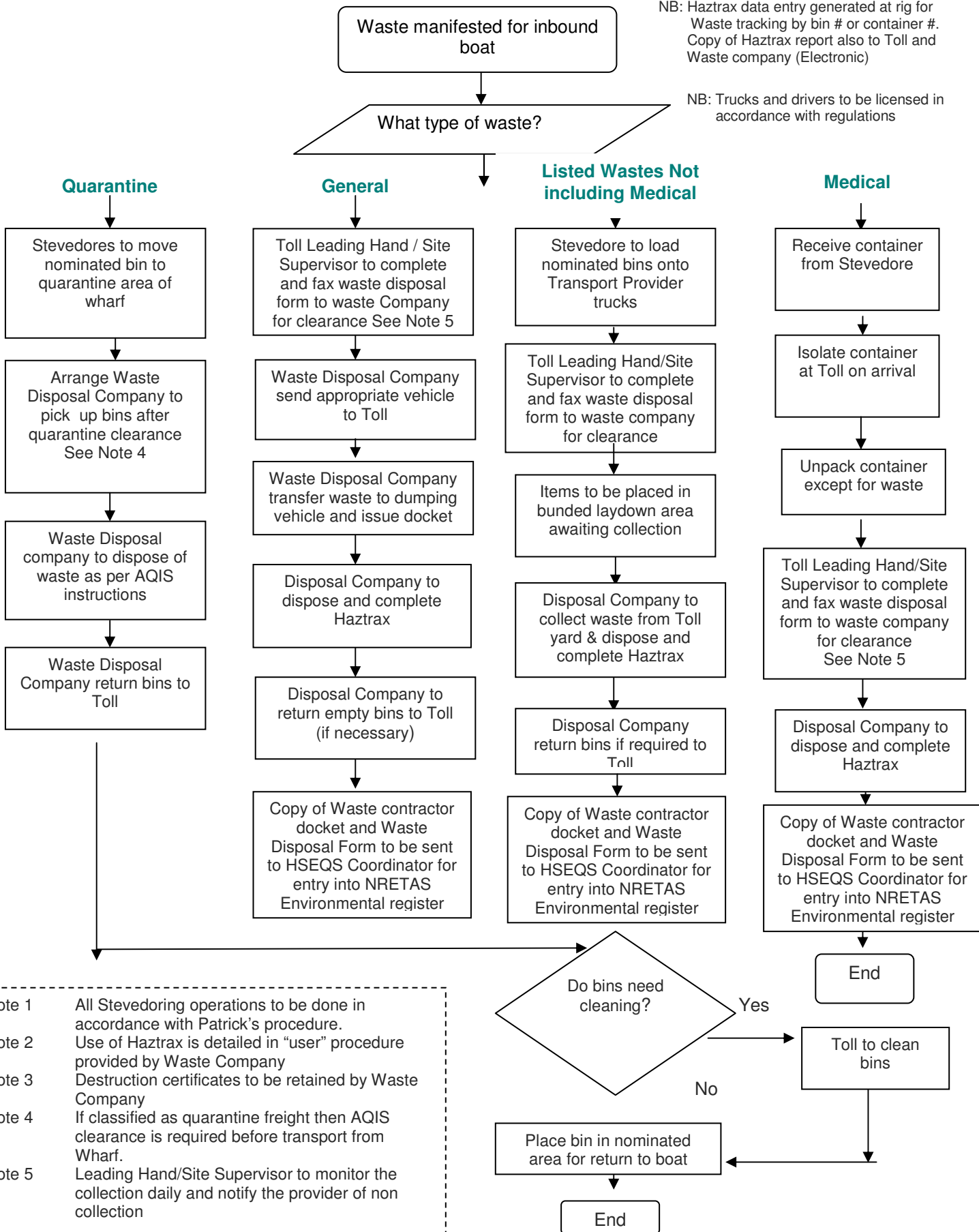
Appendix TE DWOP 020.1

Copy of manifest to Waste Company & Toll with bin # or container # and type of waste.

NB: Haztrax data entry generated at rig for Waste tracking by bin # or container #. Copy of Haztrax report also to Toll and Waste company (Electronic)

NB: Trucks and drivers to be licensed in accordance with regulations

Request for Waste Disposal Process



- Note 1 All Stevedoring operations to be done in accordance with Patrick's procedure.
- Note 2 Use of Haztrax is detailed in "user" procedure provided by Waste Company
- Note 3 Destruction certificates to be retained by Waste Company
- Note 4 If classified as quarantine freight then AQIS clearance is required before transport from Wharf.
- Note 5 Leading Hand/Site Supervisor to monitor the collection daily and notify the provider of non collection



## Example of Environmental Register

Reporting	Date	Owner	Carrier	Primary Source	Vessel	Vehicle Rego	Collection Point	Destination
Listed	14/09/2011	CoP	NT Hauliers	Boat	Lady Melinda		East Arm Wharf	O'Sullivan Crt
Recycle	15/10/2011	Stena	AI Logistics	Linehaul		123-456	Interstate	O'Sullivan Crt
General	20/03/2011	Eni	Rex Matthews	Yard Waste		789-123	Muramats Rd	Hamaura Rd

Desc 1	Desc 2	Qty	Size	Container	Storage	Qty	T	Rec Total	T
Inks, Dyes, Pigments, Paints Lacquers, Varnish	Paint	3	240 LT	Drum	Bunded Pallet	5	LT	15	LT
Plastic		2	3 M	Bin	Recycle	3	M	6	M
General Waste		3	12 M	Bin	General	12	M	36	M
								0	0

Date	Carrier	Toll Po#	Docket #	Carrier Ref #
	Veolia	DW123		
1/10/2011	Cleanaway		456789	Bob
6/08/2011	Rex Matthews			

Authorised by: National HSEQS Manager	Purpose	Refer Section 1
	Scope	Refer Section 2
	Responsibility	Refer Section 3

## 1. Purpose

- 1.1 This procedure defines the minimum requirements and responsibilities for environmental sustainability.

## 2. Scope

- 2.1 This procedure applies to each Toll Energy business unit and Toll Mermaid Logistics Broome (TMLB) and applies to all operations under the control of Toll Energy and TMLB.
- 2.2 Refer to *TE HSE P661 Environmental Impact, Assessment and Control* for requirements and responsibilities associated with assessing operational activities that may contribute to or result in an adverse impact on the environment.

## 3. Responsibilities

- 3.1 The Business Unit Manager is responsible for ensuring objectives as stated in the Environmental Policy are achieved.
- 3.2 The HSEQS Coordinator is responsible for conducting environmental impact assessments as per *TE HSE P661 Environmental Impact Assessment and Control*.
- 3.3 Environmental sustainability is the responsibility of all employees.

## 4. Definitions

- 4.1 **Environment:** Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their inter-relation.
- 4.2 **Environmental Aspect:** Any organisational activity that has the potential to impact on the environment. Aspects include for example; wastewater discharge, solid and liquid waste, noise, odour, land condition, material use, air emissions, water use, energy use, stormwater discharge, storage.
- 4.3 **Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially, resulting from an organisation's activities.
- 4.4 **WoNS:** Weeds to National Significance.

## 5. Environmental Impacts and Aspects

- 5.1 The Business Unit Manager shall ensure that an environmental risk assessment is undertaken on relevant activities conducted by all operations to identify any aspects of those activities that may have an impact on the environment, in accordance with *TE HSE P661 Environmental Impact Assessment and Control*.
- 5.2 *TE HSE F642 Integrated HSEC Risk Register* has been developed and is maintained to define any environmental aspects of each business unit activity, the potential impact to the environment of each aspect, the level of risk associated with each aspect and any control measures required to manage and reduce the risks.
- 5.3 *TE HSE F64 2Integrated HSEC Risk Register* is reviewed on an annual basis or earlier when there has been a significant change in the operations of the business unit that may contribute to an adverse environmental impact.

6. Toll Smarter Green Plan

6.1 Toll has mandated as part of our Climate Change Strategy that each operational division (Toll Energy and TMLB) is to have a “Smarter Green” Plan which will set targets for emissions abatement and develop programs by which these will be achieved.

6.2 Divisions and their Business Units must select and apply initiatives for energy conservation, examples include:

Facilities

- Implementing lights off policy, for all areas not in use and end of day routine
- Confirming air conditioning systems are regularly serviced and operate within a temperature range of 22-24 degrees where temperature controls exist
- Using only energy efficient fluorescent globes in all lights
- Removing screen savers from computers
- Shutting down PC’s and laptops at night – turn your monitor off
- Training employees in environmental awareness, refer to Section 12.

Driver Behaviour

- Smarter Green Driver (eco driving) - training drivers to minimise idling losses, improve braking and acceleration, cruising speeds etc.
- Speed limiting – reduce maximum speeds.

Fuel Savings and Emission Technology

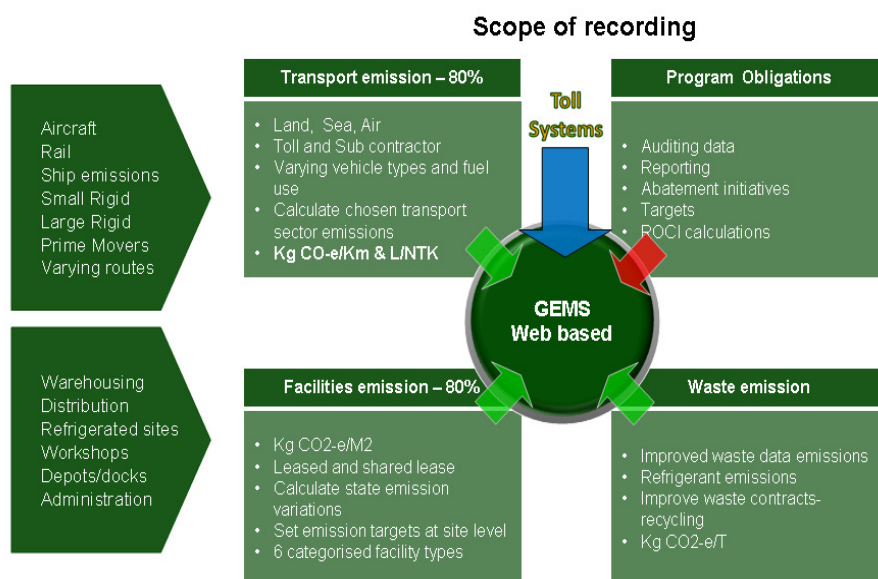
- Aerodynamics e.g. nose cones
- Lower rolling resistance tyres
- Brake adjustments – reduce friction
- Wheel alignment – can impact fuel consumption and tyre wear
- Spray down mudflaps - mudflaps that reduce road spray and increase aerodynamics.

6.3 Toll Energy has developed initiatives, targets to pledge (10% by 2013 and 20% by 2020) and structures to enable implementation of these programs.

6.4 Toll Energy shall work progressively towards minimising greenhouse gas emissions where practicable for all aspects of site operations and actively promote energy efficiency initiatives and controls.

Note: Since 2006 Toll has met the requirements of key government environmental programs including Energy Efficiency Opportunities Act 2006 and The National Greenhouse and Energy Reporting Act 2007 (NGER Act).

6.5 Greenhouse emissions data shall be reported using the Toll Group GEMS database.



## 7. Water Management

- 7.1 Environmental aspects relating to water management include usage, storage, stormwater and drainage. The associated potential impacts for the business unit's activities shall be identified, the level of risk associated with each potential environmental impact shall be assessed, and controls (conservation measures) applied in accordance with *TE HSE P661 Environmental Impact Assessment and Control*.
- 7.2 Controls for water management and conservation shall include, but not be limited to:
- Surface run-offs from work activities to be contained to prevent pollution and erosion
  - Wash down of vehicles and equipment to be prohibited on site except where undergoing quarantine or in designated areas
  - Water storage/ usage facilities to be included in site HSE inspections for evidence of leakage, algal blooms and treatment program compliance. Repairs to be arranged immediately where leaks detected
  - Stormwater present within bunding to be immediately removed after a rain event and disposed of or recycled appropriately
  - Contaminants (e.g. chemicals, hydrocarbons) shall not to be disposed to ground, drains or natural water courses.

## 8. Flora and Fauna Interaction

- 8.1 Due to the nature and diversity of Toll operations, personnel may be exposed to instances of contact with native fauna. The Business Unit Manager shall ensure that management controls are consistent with Customer requirements where applicable and the provisions of applicable Acts e.g. Environmental Protection Biodiversity Conservation Act 1999.
- 8.2 Native fauna shall not be captured, fed, harmed or disturbed.
- 8.3 No pets or other animals shall be brought onto a Toll site.
- 8.4 Where activities may affect the local flora or fauna population or habitat an Environmental Management Plan or Quarantine Management Plan (for pest and weed management) shall be established to encompass any environmental impact mitigation strategies.
- 8.5 For the processes to be followed to minimise the spread of Weeds of National Significance (WoNS) via vehicles and equipment in the Queensland region and ensure all regulatory requirements regarding wash down and transport declarations are maintained, refer to *TE QRT P810 Weeds to National Significance Control*.

## 9. Recycling and Efficient Use/ Waste Management

- 9.1 Waste management/ minimisation programs shall be implemented in each business unit to achieve continual reduction in waste/ best practice, based on recycling facilities available.
- 9.2 Waste streams, for recycling/ reuse consideration include; cardboards, paper, plastics, aluminium cans, scrap metal, tyres, batteries, computers, printer cartridges, 200litre drums, mobile phones and pallets/ wood.
- 9.3 Business units shall implement waste control standard operating procedures specific to site requirements.
- 9.4 Toll will ensure the environmentally acceptable handling, storage, treatment and transportation of waste in accordance with all legislative requirements. The requirements for controlled waste management are documented in *TE OPS P789 Controlled Waste Management*.

## 10. Purchasing Requirements

- 10.1 All Toll purchase order conditions require that any purchase of equipment, goods and services is compliant with all Occupational Health, Safety, Environmental standards and statutory requirements refer to *TE AD P310 Purchasing and Authorities*.

## 11. Maintenance Scheduling and Preventative Maintenance

- 11.1 Plant and equipment maintenance shall be undertaken in accordance with *TE OPS P782 Equipment Maintenance*, to ensure:
- Toll equipment will remain compliant with all relevant or applicable legislation, including Codes of Practice and Australian Standards and the Original Equipment Manufacturers (OEM) requirements.
  - Plant and equipment will be maintained to operate at efficient fuel and oil consumption levels.
  - Potential sources of pollution are continually reviewed and reduced where practicable (including exhaust gases, noise, hydrocarbons etc.).

## 12. Environmental Awareness Training

- 12.1 All Toll employees as identified in *TE HR F250 Skill Sets Matrix* shall be trained in environmental awareness. Available environmental awareness materials include:
- Environmental Awareness powerpoint presentation - located on the TE Intranet
  - *TE HSE F615 Environmental Awareness Quiz*.

### Revision Status Record

Date	Description of Status or Revision
31/03/2011	Initial Issue
30/09/2011	Reformatted, updated references and added Section 12 Environmental Awareness Training
30/09/2013	Periodic review; updated references; referenced WoNS and controlled waste processes

**Approved by:** Sharon Huzzard **Date:** 30 September 2013

Authorised by: National HSEQS Manager	Purpose	Refer Section 1
	Scope	Refer Section 2
	Responsibility	Refer Section 3

## 1. Purpose

- 1.1 This procedure defines the requirements and responsibilities for assessing operations in order to identify any activities that may contribute to, or result in, an adverse impact on the environment.

## 2. Scope

- 2.1 This procedure shall be followed by each Toll Energy business unit and Toll Mermaid Logistics Broome and applied to all operations under the control of Toll Energy and Toll Mermaid Logistics Broome.
- 2.2 For environmental sustainability requirements and responsibilities refer to *TE HSE P622 Environmental Sustainability*.

## 3. Responsibilities

- 3.1 The Business Unit Manager is responsible for ensuring that:
- All environmental impacts are assessed and controls implemented to mitigate the risk to as low as reasonably practicable.
  - An environmental impact assessment is undertaken, where relevant for all capital projects.
  - All employees are familiar with *TE HSE F642 Integrated HSEC Risk Register*.
- 3.2 The HSEQS Coordinator is responsible for conducting environmental impact assessments and reviewing and updating the *TE HSE F642 Integrated HSEC Risk Register* as required, ensuring that it is readily available to workers.

## 4. Definitions

- 4.1 **Environment:** Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their inter-relation.
- 4.2 **Environmental Aspect:** Any organisational activity that has the potential to impact on the environment. Aspects include for example; wastewater discharge, solid and liquid waste, noise, odour, land condition, material use, air emissions, water use, energy use, stormwater discharge, storage.
- 4.3 **Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially, resulting from an organisation's activities.

## 5. Risk Assessment

- 5.1 The Business Unit Manager shall ensure that an environmental impact assessment is undertaken on relevant activities conducted by their business unit so as to identify any aspects of those activities that may have an impact on the environment.
- 5.2 An *Integrated HSEC Risk Register (TE HSE F642)* shall be developed and maintained. The Register shall define:
- Environmental aspects of each business unit activity
  - Potential impact to the environment of each aspect
  - Level of risk associated with each aspect
  - Any control measures required to manage and reduce the risks.

Note: When defining the environmental aspects of each business unit activity, due consideration should be given to the activity being conducted under normal, abnormal, emergency situations and potential accident situations.

- 5.3 Where considered necessary an additional procedure and/ or risk assessment, usually in the form of a JHA, shall be raised to control the identified aspect.

Note 1: Where a risk or hazard is already identified in a JHA or operating procedure it is not necessary to duplicate the information in *TE HSE F642 Integrated HSEC Risk Register*.

Note 2: Where Toll is operating on a customer's site, the customer required format may be used eg KJVG - Gorgon LNG Project Barrow Island (HAZID Register).

- 5.4 When conducting an environmental impact assessment, consideration should be given to the potential impact on the environment of the following aspects:

- Descriptions and quantities of dangerous goods used, stored and transported on site.
- Descriptions and quantities of hazardous wastes, produced, stored or transported on site and the method required for disposal.
- Details of potential for groundwater contamination, location of stormwater drains, maintenance requirements, potential of run off into the drainage system and the contaminants introduced.
- Details of potential atmospheric contamination including generation of dust and the release of greenhouse gasses.
- Potential for contamination of the ocean during unloading and loading activities.
- Details on the impact of the sites operations on local flora and fauna.
- Levels of noise generated onsite and within the community.
- Traffic movements on and off the site.
- Consumption of natural resources.
- Consumption of energy.
- Generation and disposal of waste.

- 5.5 Once the environmental aspects and the associated potential impacts for the business unit's activities have been identified, the level of risk (latent risk rating) associated with each potential environmental impact shall be assessed in accordance with the Risk Assessment Tables listed in Appendix TE HSE P661.1.

- 5.6 The risk assessment should take into account the size, nature and location of the operation and any previous environmental incidents or near misses.

- 5.7 The aspect (activity), impact (unwanted event) and risk rating shall be documented on *TE HSE F642 Integrated HSEC Risk Register*.

## 6. Controls

- 6.1 Controls include, but are not limited to:

- Engineering solutions
- Substituting chemicals for less hazardous ones
- National and Site Operating Procedures
- Additions to *TE HSE P664 Crisis/ Emergency Response Plan*
- Maintenance programs
- Training
- Site HSE inspections
- Maintenance programs, including pre-start inspections
- Stop for Safety/ Behaviour Based Safety Observations.



- 6.2 When applying controls, the hierarchy of control should always be:
- Eliminate
  - Substitute
  - Reduce
  - Reuse
  - Recycle
  - Treatment
  - Disposal.
- 6.3 When controls for each aspect have been determined, the associated risks shall be re-assessed to verify that the impacts have actually been reduced to acceptable levels.
- 6.4 Any activity where the associated risk is assessed as high or significant after controls have been implemented (residual risk) requires General Manager approval before proceeding.
- 6.5 The Business Unit Manager is responsible for ensuring identified controls, to either reduce the risk of the environmental aspect (and associated impact) from occurring or to reduce the level of the associated impact, are implemented in the work place.
- 6.6 Details of the controls and any initiatives taken and the residual risk ranking shall be recorded on *TE HSE F642 Integrated HSEC Risk Register* alongside the corresponding aspect.

## 7. Review

- 7.1 *TE HSE F642 Integrated HSEC Risk Register* shall be reviewed on an annual basis or earlier when there has been a significant change in the operations of the business unit that may contribute to an adverse environmental impact.
- 7.2 The HSEQS Coordinator, in consultation with management, employees, customers and other relevant stakeholders is responsible for conducting the review and updating the *TE HSE F642.Integrated HSEC Risk Register* as required.
- 7.3 The Business Unit Manager/ National HSEQS Manager (National Office) shall sign off the completed *TE HSE F642 Integrated HSEC Risk Register*.

## 8. Capital Projects

- 8.1 The Business Unit Manager, on application for capital projects, shall ensure that an Environmental Impact Assessment is conducted to identify any adverse impacts that may potentially affect the environment.
- 8.2 The assessment shall consider all potential impacts, which may arise during each stage of the project, including planning, construction and works. The assessment shall also consider potential impacts that may arise once the project is completed and commissioned for use.
- 8.3 The assessment shall be signed off by the HSEQS Coordinator or Manager and submitted with the application for capital projects to the National Finance Manager for consideration and recommendation.

## 9. Records

- 9.1 Records shall be retained in accordance with *TE QA P004 Documents, Data and Records Control*:

Record	By Whom	Retention Period
<i>TE HSE F642 Integrated HSEC Risk Register</i>	HSEQS Coordinator/ Manager	Latest revision

## Revision Status Record

Date	Description of Status or Revision
03/02/2003	Major revisions to 2.0 Actions
13/03/2003	Revision of 2.2.3 and 2.3
30/01/2004	Re Issue of Procedure
04/06/2004	Amended 2.5.2
01/01/2005	Procedure move to intranet
01/09/2006	Procedure Reformatted and Title name changes
30/08/2009	General review and reformatted to TG requirement; changed risk matrices (Appendix TE HSE P061.1)
30/09/2010	Revised to reflect that TE HSE F021 has been replaced by TE HSE F042
30/09/2011	Reformatted and updated references
30/09/2013	Periodic review
<b>Approved by:</b>	Sharon Huzzard <span style="float: right;"><b>Date:</b> 30 September 2013</span>

## Risk Assessment Tables

Table 1: Consequence

Risk	Loss Consequence Level			
	Major	Moderate	Minor	Insignificant
<b>Health and Safety</b>	Fatality	LTI or loss of body function	Medical Treatment Alternate Work Plan	First Aid
<b>Operational, includes IT and other facilities</b>	Inability to operate for > 2 weeks	Inability to operate for > 1 week but < 2 weeks	Inability to operate for < 1 week but > 1 day	Inability to operate for <1 day
<b>Financial and Legal</b>	Prosecution or loss > AU\$750K or loss > 10% of contract value	Loss < AU\$ 750K > AU\$ 250K or <10% >5% of the contract value	Loss < AU\$ 250K > AU\$ 50K or <5% >2.5% of the contract value	Loss < AU\$ 50K or < 2.5 of the contract value
<b>Public Relations</b>	National adverse publicity	State adverse publicity	Adverse publicity within a region	Local adverse publicity
<b>Environment</b>	Extended duration, full scale response from external authorities	Short term, full scale response from authorities	Full response from internal resources	Limited response from individual or workgroup resources

Table 2: Likelihood (each time this job is done)

Level	Descriptor	Description
<b>A</b>	Almost certain	The event is expected to occur during the conduct of the activity
<b>B</b>	Likely	The event will probably occur in most circumstances during the conduct of the activity
<b>C</b>	Possible	The event could occur sometime during the course of the activity
<b>D</b>	Unlikely	The event could occur given the right conditions
<b>E</b>	Rare	This event is almost impossible and then, only in exceptional circumstances

Table 3: Qualitative Risk Analysis Matrix – Level of Risk

Consequences	Likelihood				
	A (Almost Certain)	B (Likely)	C (Possible)	D (Unlikely)	E (Rare)
<b>1 Major</b>	H	H	H	S	M
<b>2 Moderate</b>	H	H	S	M	L
<b>3 Minor</b>	H	S	M	L	L
<b>4 Insignificant</b>	S	M	L	L	L
<b>Legend</b>					
<b>H</b>	High Risk – mandatory immediate action required				
<b>S</b>	Significant Risk – mandatory action required, prior to commencing task				
<b>M</b>	Moderate Risk - senior management review needed				
<b>L</b>	Low Risk - manage by routine procedures				