

# Environmental Management Plan

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**QUBE Supply Base**

SHSMS-QE-13-PLN-DSB-0004

## Version control

Version	Change from previous	Date	Comment
1.0	New Plan	14/10/2014	
1.1	Changes to include conditions of EPL	04/11/2014	
1.2	Update information of when drain covers/socks required	14/04/2015	
1.3	Inclusion of Supply base 1	02/06/2015	
1.4	Change to Org chart	17/08/2015	
1.5	Change to Org Chart	05/01/2016	
1.6	Review and change to Org Chart	10/02/2019	
1.7	Annual review change	28/08/2019	
1.8	Review for NT EPA Amendment	20/09/2019	
1.9	Annual Review changes	27/01/2022	Management Signatory Changes

## Abbreviations

AQIS	Australian Quarantine and Inspection Service
AS	Australian Standards
DAFF	Australian Department of Agriculture, Fisheries and Forestry's
NGERA	National Greenhouse and Reporting Act 2007
NTEPA	Northern Territory Environmental Protection Authority

**Lance Duncan**  
**Supply Base**  
**Manager**  
**Signature**



**Date: 28/1/2022**

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## 1. Introduction

This EMP has been prepared to describe how Qube Darwin proposes to manage the environmental impact of operations at Darwin Supply Base.

In line with the Qube Environmental Management Policy the objectives of the EMP are:

- To ensure that the environmental impact of our operations are minimised;
- To ensure compliance with relevant environmental legislation and other requirements;
- To implement the Qube Safety, Health and Sustainability Management System (SHSMS);
- To sustain our environment by continually improving our environmental performance and to strive for best practice in environmental management; and
- To provide adequate training on environmental awareness at all levels.

The EMP has been developed in accordance with the Qube Corporate Environmental Management Framework and aligns with the requirements of *AS/NZS ISO 14001: Environmental Management Systems - Specification with Guidance Notes for Use*.

The EMP is to be used as a "tool" by all personnel who have duties at the site which have the potential to impact on the environment, or which are controlled by environmental laws or regulations.

## 2. Scope

This EMP applies to all operations and employees of Qube at the Darwin Supply Base.

This environmental management plan is designed to ensure compliance with Commonwealth, State and Local Council requirements pertaining to the management of QUBE Darwin's environmental issues such as waste management, emissions and other environmental impacts.

The scope of work undertaken by QUBE includes the following activities:

- Warehouse & Open Storage
- Receiving & Consolidation of Goods & Materials
- Tubular & Casing Management & Storage
- DG Transport & DG Goods Storage
- Offshore Warehouse Management
- Quarantine Management
- Provision of Management
- Labour
- Cranes
- Stevedoring & Trained Personnel to provide seamless interface between road & Sea Transport Services
- Waste Management

## 3. Objectives and Targets

Qube Darwin has established a set of objectives and targets for environmental performance at the site. Objectives and targets are based on the identified significant environmental aspects and align with the Qube Corporate SHS Plan and Business Plan.

Objectives and targets are set by the General Manager in consultation with the Supply Base Manager, SHS Advisor and National Environment Manager.

## 4. Environmental Aspects and Impacts

Environmental Aspects and Impacts are included in the site Risk Register which has been prepared in accordance with the Qube corporate Environmental Aspects and Impacts Identification Procedure SHSMS-QL-06-PR-0046

The significant environmental Aspects and Impacts identified at the site are as follows:

- Contaminated wastes
- Hazardous substances in transit
- Hazardous substances use and storage
- Noise created by Qube's workplace activities
- Vibration as a result of Qube's workplace activities
- Dust emissions as a result of Qube's workplace activities
- Exhaust smoke emissions from site vehicles and plant (mobile)
- Contractor disposed of plant waste (hydrocarbons & tyres)
- Litter control
- Recycling and reuse of waste
- Maintaining site electrical consumption to as low as practicable
- Contaminated waste water
- Transportation of site particulates with Storm water discharge
- Risk of plant or equipment fire
- Risk of fire of goods in transit
- Water discharge from fire treatment

## 5. Qube Environmental Legal Obligation List (NT)

This section summarises Qube Darwin's environmental legal obligations to Commonwealth and Northern Territory legislations as well as local Council laws, where relevant.

The relevant environmental legislation, standards and guidance applicable to the operations of Qube Darwin include:

- *Environmental Assessment Act 1982*
- *Environmental Offences and Penalties Act*
- *National Environment Protection Council Act*
- *Waste Management and Pollution Act*
- *Waste Management and Pollution Control (Administration) Regulations*
- *Waste Management and Pollution Control Act 2013: General Duties*
- *Work Health and Safety (National Uniform Legislation) Act: (Substance Spills & Damage, Storage & Handling, Safe Handling, Fire Protection, Incident Notification)*
- *Fire and Emergency Act*
- *Water Act*
- *Public Health (Nuisance Control) Regulation*
- *Efficiency Opportunities Act 2006 (Commonwealth)*
- *Motor Vehicles Act (Motor Vehicles (Standards) Regulations: visible emissions, Noise)*
- *National Greenhouse and Reporting Act 2007 (NGERA)*

Legal requirements applicable to Darwin Supply Base are managed and maintained in accordance with the SHSMS-03-SR-0030 Legislative and Regulatory Obligations Requirement.

Qube Ports & Bulk subscribes to an online Environmental Legal Obligations Directory which is accessible via the SHSMS Sharepoint.

## 6. Implementation and Operation

### 6.1 Roles and Responsibilities

All Qube employees are responsible for the maintenance of high environmental standards. Position descriptions are used to specify and communicate these responsibilities to Qube personnel. The specific responsibilities for implementation of this EMP are described below.

Title	Reports to	Responsibility
Supply Base Manager	General Manager – Qube Energy	<ul style="list-style-type: none"> <li>Participate in Management Review process</li> <li>Report to board on environmental performance</li> <li>Commitment to implementation of the EMP</li> <li>Provide resources to implement the EMP</li> <li>Responsible for site environmental performance</li> <li>Implement the EMP</li> <li>Communicate environmental performance requirements to nominated personnel</li> <li>Identify environmental training needs</li> <li>Investigate environmental incidents and implement corrective actions</li> <li>Develop task specific environmental management procedures and work instructions</li> </ul>
HSE Advisor	Supply Base Manager	<ul style="list-style-type: none"> <li>Report to management on the performance of the EMP</li> <li>Facilitate implementation of the EMP in the workplace</li> <li>Assist with provision of EMP induction training for new staff</li> <li>Establish and review aspects and impacts with site risk register</li> <li>Identify and communicate legal and other requirements</li> <li>Undertake environmental monitoring as required</li> <li>Undertake audits of the EMP</li> <li>Maintain and update EMP documentation and records</li> <li>Maintain emergency response management guidelines and monitor incidents.</li> <li>Assist with implementation of task specific environmental management procedures and work instructions</li> <li>Initiate and facilitate review and continual improvement process, including setting objectives and targets.</li> </ul>
Supervisors/Team Leader	Supply Base Manager	<ul style="list-style-type: none"> <li>Facilitate implementation of the EMP and associated procedures</li> <li>Complete records</li> <li>Facilitate environmental training of appropriate personnel</li> <li>Report environmental incidents</li> <li>Maintain relevant waste disposal records in accordance with NT EPL 244</li> </ul>
Employees	Supervisor/Team Leaders	<ul style="list-style-type: none"> <li>Conduct activities in accordance with relevant EMP Procedures.</li> <li>Be Aware of Environmental Policy</li> <li>Report environmental incidents</li> </ul>

## 6.2 Training and Awareness

Training shall be undertaken in accordance with the Safety, Health and Environment Training Procedure

Qube employees at all levels are provided with training in order to enhance their understanding of environmental issues and the impact which they and their work may have on the environmental performance of the facility. Such training is provided at the employee induction stage.

The training encompasses the following topics:

- Environmental Management Policy
- Relevant operating procedures
- Roles and responsibilities in achieving conformance with the EMS
- Emergency preparedness and response

Additional environmental training will be identified and undertaken for employees whose tasks may have a direct impact on a significant environmental aspect.

## 6.3 Communication

Environmental communications shall be undertaken in accordance with the Qube Consultation and Communication Procedure SHSMS-QH-09-PR-0058.

The main methods of communications within the site are:

- Tool box talks
- SHSMS Noticeboard
- SHSMS Intranet
- Incident reporting system

All media enquiries shall be directed to the NT Manager.

# 7. Site Specific Mitigation Measures

## 7.1 Air Quality

Air emissions may be generated from the following sources/activities:

- Exhaust gas from Vehicles, Mobile and Fixed Plant
- Atmospheric particulates from Mobile Plant and vehicle operations (disturbing site dust)
- Atmospheric particulates from Plant cleaning

Qube will ensure that all vehicles and plant are maintained in accordance with manufacturers recommendation and are compliant with all emission limits in current legislation, Codes of Practice and guidance notes.

Qube contractor management selection shall ensure that contractors are advised of requirements to have vehicles comply with prescribed standards or maximum permissible concentrations of emissions of the *Motor Vehicles Act*, Motor Vehicles (Standards) Regulations or other legislative requirements

## 7.2 Water Discharges

Water discharge may be generated from the following source:

- Stormwater run-off
- Emergency Fire Treatment
- Failed containment or transfer system of contaminated waste water.
- Vehicle/plant washing clean-down

Qube will comply with all emissions limits in the Environmental Protection Agency NTEPA.

These emissions as far as reasonably practicable will be controlled by inspection of containment systems, Fire management and ER procedures, the provision of portable 'Kitty litter' spill kits. Drain covers (socks) shall be utilised to ensure rain water and the run off of contaminants such as oils shall be utilised during the months of October to April.

Inspection of drain covers (socks) shall be undertaken by external contractor to ensure suitability and effectiveness.

Qube Safety Management system and emergency response are intended, as far as reasonably practicable, to identify potential system failures and manage outflow to mitigate environmental harm.

## 7.3 Waste Management and Minimisation

### Qube Energy Pty Ltd Registration and Obligations:

Qube Energy Pty Ltd is licenced with the NTEPA as a storage facility for client waste. All sites under the Qube Energy Supply Base are covered under this licence, **Licence Number EPL 244**.

Qube Supply Base shall comply with all licence requirements as defined in SWMS-06-QEN-0078 Waste Management Safe Work Method Statement

Qube will promote reduction in waste generation and reuse/recycle materials where possible.

Qube will not reuse, recycle, use as a source of , store, transport, treat or reprocess waste in any way or form that may result in an unfavourable environmental impact.

Qube will ensure that all regulated waste transported from the site is done so in a licensed vehicle and disposed at a suitably authorised facility.

Whenever practicable Qube will ensure the following reuse and recycling systems apply in it's production and delivery services. Recycle bins are supplied to assist in segregation of recyclable materials.

- Minimise printing and recycle un-used paper
- Encourage the recycling of drink containers
- Turn off air-conditioners and lights at the EOD
- Print in black and white

## 7.4 Dangerous Goods and Hazardous Substances

Hazardous Substance shall be risk assessed and have environmental and safety controls available to employees when required to be used.

Hazardous Substance shall be recorded in the Hazardous Substances Register SHSRG-06-DWN-0078 which is to be maintained in accordance with the Qube SHSMS Guide – Managing Dangerous Goods and Hazardous Substances SHSMS-06-GD-0077.

Hazardous Substance used by Qube will be stored in appropriate containers and provided with adequate secondary containment.

Hazardous substances storage segregations will be in compliance with relevant Australian Standards. Employees are provided safety data sheets (SDS) for substances to be used.



The condition of storage containers and bunding is included within the Workplace Environmental Inspection SHSMS-QE-14-FM-DSB-0019 Monthly DG and Haz Inspection checklist

Spill kits will be inspected monthly by external contractor and replenished as required.

Goods in transit will be managed in accordance with the *Work Health and Safety (National Uniform Legislation) Act* with guidance from AS 3846-2005, The handling and transport of dangerous cargoes in port areas.

Plant Refuelling is to be undertaken within the Qube Supply Base by External Contractors Fuel Storage handling and decanting and Diesel Refuelling of Mobile Plant or Equipment.

## 7.5 Noise Pollution

Qube and their subcontractors will undertake mobile plant risk assessments, including noise management, prior to moving any mobile plant or equipment onto site. Qube will ensure vehicle noise mitigation devices are maintained and repaired so the devices comply with prescribed standards of the Motor Vehicles Act, Motor Vehicles (Standards) Regulations or other legislative requirements. Pre check inspections of equipment shall be completed prior to operation and any defects noted shall be reported immediately to the Warehouse Supervisor to assess and notify Qube Supply Base maintenance contractor for rectification.

## 8. Emergency Preparedness

Qube Supply Base has developed a Spill Response Procedure as part of the Emergency Response Plan SHSMS-QE-13-DSB-PLN-0004 appendage H, Hazardous Substances Spill describing the actions to be taken in the event of a spill of fuel, oil or other substance or item which may have an adverse impact on the environment.

This appendage also details Qube Ports 'Duty to Notify' as required by the *Waste Management and Pollution Control Act*, s 14

Qube facilities spill kits are externally inspected 3 monthly.

Qube will ensure all employees and subcontractors are aware of the prime contractors emergency preparedness plan and procedures on site.

The emergency evacuation process, the emergency fire fighting system and the emergency plans for spillage containment will be included in all site inductions.

Emergency response drills shall be held yearly in accordance with Qube Procedures. An Environmental Emergency Drill shall be conducted yearly by Qube Supply Base and recorded for its effectiveness.

### 8.1 Risk of Fire

Appropriate fire management controls, including trained personnel and fire fighting equipment identified as required by the *Fire and Emergency Act* for the Qube site's and the Australian Standards AS3745-2009 Planning for Emergencies in Facilities

SHS Management Plan SHSMS-QE-01-PLN-DSB-0005 and Emergency Response Procedures SHSMS-QE-13-PLN-DSB-0004 for Qube Supply Base will be available in case of an emergency.

If the loss of containment of an environmentally harmful substance or fire treatment water is believed to potentially flow into the harbour, as far as reasonable practicable every attempt must be made to prevent this outflow.

This could include bunding the area and blocking drains with loose dirt using available plant and equipment.

## 9. Monitoring, Audit and Review

### 9.1 Monitoring

Environmental monitoring will be undertaken in accordance with the requirements of the Qube Environmental Monitoring Procedure SHSMS-QH-06-PR-0046

Key characteristics of the operations at QUBE Supply Base that are monitored are:

Aspect	Criteria Monitored	Frequency
NGER reporting	Fuel consumption	Monthly
Workplace inspection	Environmental Aspects	Monthly
NGER reporting	Electricity usage	Monthly
NTEPA	Listed Waste	Yearly
NGER reporting	Water usage	Monthly
NGER Reporting	Wastes	Monthly

### 9.2 Audit

Evaluation of compliance with the requirements of the EMP will be incorporated as part of the internal audit process and undertaken in accordance with the Qube SHS Management Systems Audit Requirement SHSMS-QH-10-PR-0065

An audit of the environmental system will be incorporated into the site safety audits undertaken by the Safety/Environment Representative. Should an environmental incident occur which has significant impact on the environment, including long term damage, a separate audit will be performed by an independent environmental auditor and provided to the client for review and appropriate actioning. Records of audits and monitoring will be kept in accordance with the Records Management Procedure SHSMS-QH-05-PR-0025 Records Management, Appendix B.

### 9.3 Corrective and Preventive Action

Corrective and preventative actions arising as a result of incident investigation, audits or management review shall be assessed in accordance with the Qube Corrective and Preventative Action Procedure. Corrective or preventive actions which require change in process will be recorded in this EMP as appropriate.

Environmental incidents and complaints will be recorded and investigated in accordance with the Qube Incident Management Procedure SHSMS-QH-13-PR-0126.

## 10. Records

Records will be maintained in accordance with the Qube Records Management Requirements SHSMS-QH-05-PR-0025.

Records maintained as part of the Environmental Management Plan include


- Legal, regulatory and other requirements such as licences, permits and approvals
- Corporate, regulatory and government communications regarding environmental management
- Environmental Aspects and Impacts Register
- Progress reports towards meeting objectives and targets of the environmental improvement programs
- Training records
- Audit reports
- Environmental incident reports
- Maintenance Records
- Equipment calibration records
- Environmental Complaints

Document Name	Retention Period
Environmental Aspects Register	7 yrs
Audit Reports & Corrective Actions	7 yrs
OH&S Inspection Checklist	7 yrs
Minutes of Management Reviews	7 yrs
HSE Committee Meeting Minutes	7 yrs
Maintenance and Engineering Reports	7 yrs
Training Records	7 yrs
Incident Reports	75 yrs
Incidents Investigation and Follow-up Reports	75 yrs
Reports of Emergency Response Drills	7 yrs
Workplace inspection records	7 yrs
Waste disposal / consignment notes	NT 2 yrs
Monitoring records required by environmental licence/permit conditions	NT 2 yrs
NGERS data	5 yrs
Efficiency Opportunities data	7 yrs
NRETAS Waste Control Register	2 yrs

## 11. Appendices

- Appendix A QUBE Risk Matrix
- Appendix B NT EPA Licence EPL244-01

## QUBE Risk Matrix

		First aid, near miss, hazard identified, low environmental impact	Medical treatment injury, return to work injuries, some environmental nuisance	Lost time injury, partial impairment, on-site environmental harm substantial environment nuisance	Permanent disability, single fatality, off-site environmental harm, on-site major contamination	Multiple fatalities and/or likely environmental protection agency prosecution
		Insignificant	Minor	Moderate	Major	Critical
Expected to occur in most circumstances	Almost Certain	L 8	M 14	H 19	E 24	E 25
Probably occur in most circumstances	Likely	L 7	M 13	H 18	H 21	E 23
Should occur sometime (occurs 1 to 10 times a year)	Possible	L 4	L 9	M 15	H 20	H 22
Could occur at some time (occurs once every 2 to 10 yrs.)	Unlikely	VL 3	L 5	L 10	M 16	M 17
May occur only in exceptional circumstances (occurs once every 11 to 100 yrs.)	Rare	VL 1	VL 2	L 6	L 11	L 12
<p>(VL) <b>Very Low</b> - the risk should be managed as far as reasonably practicable, work may commence and no escalation necessary</p> <p>(L) <b>Low Risk</b>- Acceptable region, should be managed routine procedures</p> <p>(M) <b>Moderate Risk</b>- Risk considerable enough for work not to commence without consideration and use of control measures (such as preparing SWMS)</p> <p>(H) <b>High Risk</b>- Risk is unacceptable, work must not commence, risk must be treated, if reasonably practicable further consideration given to whether additional control measures are required</p> <p>(E) <b>Extreme Risk</b>- Unacceptable level of risk, controls must be immediately implemented to reduce risk or the risk eliminated (i.e. cease activity).</p>						

# NT Environmental Protection Authority Licence No – EPL244-01



## ENVIRONMENT PROTECTION LICENCE

(Pursuant to section 34 of the *Waste Management and Pollution Control Act*)

<b>Licensee</b>	QUBE ENERGY PTY LTD
<b>Licence Number</b>	EPL244 - 01
<b>Registered Business Address</b>	QUBE ENERGY PTY LTD 16 Muramats Road East Arm NT 0828
<b>ABN</b>	33 006 430 039
<b>Premises Address</b>	Section 06176 Hundred of Bagot plan(s) S2009/254 and Section 06774 Hundred of Bagot plan(s) LTO2015/081A 18 MURAMATS RD, EAST ARM and 16 MURAMATS RD, EAST ARM
<b>Anniversary Date:</b>	18 June
<b>Commencement Date:</b>	18/06/2018
<b>Expiry Date:</b>	17/06/2023
<b>Scheduled Activity</b>	Collecting, transporting, storing, re-cycling, treating or disposing of a <b>listed waste</b> (as per Table 1) on a commercial or fee for service basis, other than in or for the purpose of a sewage treatment plant.  Operating <b>premises</b> , other than a sewage treatment plant, associated with collecting, transporting, storing, re-cycling, treating or disposing of a <b>listed waste</b> (as per Table 1) on a commercial or fee for service basis.
<b>Description</b>	Listed wastes are delivered to Qube Energy's premises via various licenced listed waste handlers. Qube Energy