

Environmental Management Procedure

The purpose of this procedure is to identify the environmental aspects of Shorelands operations, work activities & services in order to determine those which may have a significant impact on the environment. The relationship between environmental aspects and environmental impacts is one of 'cause and effect'.

An environmental aspect refers to an element of Shorelands operations, which can have a beneficial or adverse impact on the environment (such as a discharge, an emission, consumption or, reuse of a material, or noise). An environmental impact refers to the change that takes place in the environment as a result of the aspect (such as pollution or contamination of water, or the depletion of a natural resource).

The aspects most likely to occur through Shorelands operations are as follows:

Activity	Environmental Aspect	Environmental Impact	Risk Rating
General Office Operations	Paper waste /use	Deletion of natural resource	3
General Office Activities, i.e. meetings, training, report writing, accounts, copying, general administration	Energy usage	Excessive usage depletion of natural resource	2
	Copy/Printer Toners wastage	Pollution, ground and water contamination	3
	IT Items – discard of old computers	Pollution, ground contamination	3
	Cleaning Chemicals	Pollution, water contamination	3
	General Rubbish	Pollution, water, ground contamination	3
	Mechanical – air conditioning unclean filters	Pollution, air omissions, contamination, energy use	2
Barge, Workshop Fabrication, yard & Site Operations	Chemical Waste	Pollution, Water & ground contamination	2
General Construction works Welding / Fabricating Site Cleaning Plant & Equipment Use in Yard / on Site – servicing, repairs, wash downs, general use Barge Operations	Energy Usage	Excessive usage depletion of natural resource	2
	Waste Management	Pollution, ground & water contamination	2
	Air Quality – emissions	Air Pollution	2
	Water Quality	Pollution, water contamination	1
	Noise & Vibration	Pollution, air, ground contamination	2
	Collection & transport of Asbestos containing materials	Pollution, Ground & Water Contamination	1

Risk Rating = 1 – High 2 – Medium 3 – Low

The Risk Rating of the impact for each aspect is measured on a rating system from 1 to 3, with 3 "Negligible Impact", 2 being "Significant Impact" and 1 being the "High Impact". Considerations in determining the Risk Rating of the impacts included:

- What is the scale and/or significance of the impact?
- What is the probability and/or frequency of occurrence?
- What is the duration of the impact?
- Is there any potential regulatory or legal exposure?
- What would be the difficulty and/or cost of changing the impact?
- Is there any effect of change on other activities and processes?
- What are the concerns of the interested parties?

Objectives and Targets

Objectives and Targets are established by Management to ensure that the company meets customer and product or service requirements, legal and regulatory requirements, and continually improves its overall business performance. Environmental objectives are overall goals for environmental performance which are broken down into 4 separate categories in the Risk Register below which are

1. Conservation of Plants and Wildlife
2. Conservation of Resources
3. Pollution Control
4. Records and Reporting

Environmental targets are descriptions of how environmental objectives will be achieved within a specific timeframe and are specific and measurable.

Objectives and targets for our IMS will be reviewed and revised at least once a year and should take into consideration:

- Relevant findings from environmental reviews and audits
- Applicable legal and other requirements identification of environmental aspects and associated impacts;
- Technological, financial, operational, resources and other company requirements
- The views of employees at tool box talks, interactions with sub contractors, clients and other interested parties

Objectives and targets will be achieved through a qualified, competent and committed workforce who know, understand and support the operations of our Management System and make it work effectively on all sites and at all levels within the company.

Objectives	Targets
Reduce paper waste by 5% by 2025	Measure paper usage from July to Dec 2022 for baseline data Monitor paper utilisation reduction quarterly from Jan 2023 Reduce paper waste by up to 5% per year from July 2023
Monitor and document energy (electricity) consumption by Dec 2022	Establish monitoring baseline data by Dec 2022 Reduce energy (electricity) consumption by 5% per year from 2023 with regard to unique activities and specific projects which may substantially increase energy utilisation (e.g. Workshop activities / demand fluctuation)
Recycle of Toner Cartridges	All toner cartridges to be recycled & logged when picking up stores orders from Officeworks
Reduction of air omissions via mechanical equipment and machinery	Reduce air omissions through use of low emission fuels and effective maintenance of equipment in accordance with the manufacturers recommendations
Assessment and plan for reduction in chemical use from 2023	Identify and document all chemicals in use and their locations / labelling with SDSs available by June 2022 Reduce use of chemicals where identified as possible and reduce wastes as well as the use alternate products from 2023
Manage ground & water contamination at all times	No water contamination incidents; all waste materials are collected, transported and managed in accordance with procedures, recycling/removal statistics to be maintained from July 2022 and monitored quarterly

Environmental Management Program

Targets	Action Plan	Measurements	Who	Carried Out By
Reduce paper waste by 5% per year	Recycle all paper and cardboard Copy / Print double sided	Measure amount of paper purchased and waste collected	QHSE Management	Annually
Reduce energy consumption by 5% per year	Ensure PC's / Air Conditioners are turned off at night. Ensure energy saver is utilised on photocopiers and other applicable equipment Ensure fluoro bulbs are used for lights and lights are turned off at night Consider use of LED lighting when upgrading / repairing / replacing light fittings Clean air conditioners at least annually	Monitor of usage via electricity bill – note that various operations and workshop activities can significantly impact on this utilisation. Purchase / install of LED lighting where applicable Service providers invoice of cleaning A/Cs	QHSE Management	Annually
All toner cartridges to be recycled	Ensure all toner cartridges are taking to recycling centre's only	Nil cartridges disposed of via general rubbish – drop off at Officeworks when picking up stores Retain receipts of collections if picked up	Management	Annually
Reduce air emissions	Use of Ad Blue fuel additive Ensure air filters are cleaned every three months	Purchase of ad blue fuels Purchase of air filters Maintenance records	Management	Quarterly
Reduce chemical wastes	Identify and ensure chemical alternatives are sourced first. Choose biodegradable when possible,	Monitoring of chemicals used by cleaners	Management	Quarterly
Reduction in general waste by recycling by 10%	Recycling bins to be implemented Plastic, glass, cardboard, metal Collection bins for recycling containers for community contributions	Identify waste to be measured / monitored Measure amount of waste annually Feedback from community groups from support / donations	Management	Quarterly
No water contamination	Ensure all equipment is washed down in a designated area, clear from stormwater drains, sewers Ensure all site materials are contained and use of silt socks / other drain protection options should be considered	No cleaning of equipment which leads to waterways	Site Manager	As Required

2.4 Environmental Risk Register

Revision: January 2022

The environmental risk management objectives	The environmental risk management actions:	When action will be taken	Action actually taken (sign) and recorded (indicate where):
1. Conservation of Plant & Wildlife			
<p>Protection of trees, plant and animals</p> <p>Movement of pedestrians, materials, vehicles, plant and equipment minimise damage to the environment</p>	<input type="checkbox"/> Protect existing trees and plant at and around work sites from damage, do not remove flora without approval from the client and control weeds on the work site. <input type="checkbox"/> Protect birds, fish and animals at and around the Site from harm and do not remove fauna from the Site without the written agreement of the client <input type="checkbox"/> Minimise the use of pesticides and herbicides and ensure minimal impact on the environment <input type="checkbox"/> Use designated access routes for vehicular and plant access to and on the Site <input type="checkbox"/> Park all vehicles and locate compounds in and confine plant and equipment use to designated areas <input type="checkbox"/> Use designated access routes for all pedestrian, materials and equipment movement on/adjacent to the site	<p>Whilst on Site, and/or prior to entering site. Site Induction training to incorporate environmental risk management actions</p> <p>Site inspections shall consider environmental risk register</p>	<p><u>Site Manager</u></p> <p>Name:</p> <p>Sign:</p> <p>Date:</p>
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Management / Supervisors		

The environmental risk management objectives	The environmental risk management actions:	When action will be taken	Action actually taken (sign) and recorded (indicate where):
2. Conservation of Resources			
Integrate energy efficient measures into design, including: <ol style="list-style-type: none"> 1. Selecting systems and equipment and fuels 2. By minimizing unrecyclable materials and waste materials in design 3. In material selection generally Manage materials used under the Contract to minimise: <ol style="list-style-type: none"> 1. Resource use and waste 2. Ozone depleting effects 3. Detrimental effects on air, water and land quality Conservation of any heritage items and other physical attributes identified on the Site	<input type="checkbox"/> Use efficient materials, equipment and systems, and energy efficiency, environment enhancement and waste/impact minimization as criteria in purchasing decisions <input type="checkbox"/> Maximise the use of materials from a sustainable source, that are and/or can be, recycled <input type="checkbox"/> Use low energy usage construction, fittings and appliances (including heating and cooling and lighting) <input type="checkbox"/> Use low water demand fittings and appliances (dual flush toilets, water conserving shower hoses and taps) <input type="checkbox"/> Implement a strategy to reduce the quantity of waste, including ensuring packaging is minimized and recycled <input type="checkbox"/> Minimise the use of solvents, glues, paints and other materials which release odours or vapour <input type="checkbox"/> Comply with statutory requirements with heritage items, including obtaining any permits as required <input type="checkbox"/> Manage the conservation of all applicable physical attributes of the site, particularly (list the attributes):	Whilst on Site, and/or prior to entering site. Site Induction training to incorporate environmental risk management actions Use of sustainable sourced resources to be reviewed with suppliers by Mar 2023 Maintenance of machinery, equipment, vehicles and vessels to operate in the most efficient and sustainable way Workshop upgrade for more efficient setup and safer power installations for operations	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager:		

The environmental risk management objectives	The environmental risk management actions:	When action will be taken	Action actually taken (sign) and recorded (indicate where):
3. Pollution Control			
Vehicles and plant – minimize discharges and emissions, and damage to the environment	<input type="checkbox"/> Do not use vehicles or plant/equipment producing excessive emissions and monitor emissions <input type="checkbox"/> Use of Ad Blue fuels <input type="checkbox"/> Undertake prestart checks on plant / equipment prior to use <input type="checkbox"/> Maintain all plant and equipment and vehicles in accordance with the manufacturers specifications <input type="checkbox"/> Do not bring vehicles or plant/equipment with hydraulic fluid, fuel or oil leaks to the site <input type="checkbox"/> Wash down vehicles, plant and equipment only in controlled areas acceptable to the Principal <input type="checkbox"/> Prevent and clean up any spills from transport vehicles	Site Induction training to incorporate environmental risk management actions Checks of equipment carried out prior to use	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above:		
	Site Manager:		
Storm water is not polluted by activities and land/plants/grass are not adversely affected by discharges	<input type="checkbox"/> Use only water based, non toxic paints where possible <input type="checkbox"/> Use only water to clean paint brushes and rollers <input type="checkbox"/> Control all runoff from cleaning activities and only discharge non toxic cleaning products <input type="checkbox"/> Collect and dispose of any toxic materials for disposal by contractor and maintain records of waste removed using ISO pods with labels indicating contents	Use of licensed service providers for removal of wastes Regular site inspections	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above:		
	Site Manager :		

<p>Soil erosion is controlled</p> <p>ONLY WHERE APPLICABLE ON PROJECTS</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Identify the existing drainage lines on the Site and protect them against siltation <input type="checkbox"/> Protect vulnerable and exposed surfaces and stockpiles against scouring <input type="checkbox"/> Install the following sediment control devices prior to commencement of activities to monitor and ensure their effectiveness and remove them when no longer required: e.g. silt socks for drains, silt fences in areas of runoff, rock break rattle drains for vehicles to drive over when entering / leaving site, rock baskets / hay bales to control heavy volume runoff <input type="checkbox"/> The Contractor nominates the following additional actions: <input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: <p>Site Manager:</p>	<p>Whilst on Site, and/or prior to entering site.</p> <p>Site Induction training to incorporate environmental risk management actions</p>	<p><u>Site Manager</u></p> <p>Name:</p> <p>Sign:</p> <p>Date:</p>
<p>Soil contamination is not disturbed or released to the environment</p> <p>ONLY WHERE APPLICABLE ON PROJECTS</p> <p>(Acid Sulphate Soils) ASS</p> <p>Acid sulphate soils or sediments contain iron sulfides and/or other sulfidic minerals that when exposed to air, these sulphides oxidise to produce sulphuric acid, hence the name acid sulphate soils. These materials are characterised by bright yellow or straw coloured mottles of the mineral jarosite and often contain reddish coloured streaks.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Establish, in consultation with the client, if contaminated soil is identified in any operations prior to commencing work at the Site and manage the soil present The Contractor nominates the following additional actions: <ul style="list-style-type: none"> <input type="checkbox"/> Ensure meeting with Principal and Key Stakeholders prior to commencement on site. <input type="checkbox"/> Ensure works cease in the event of soil contamination to investigate the contamination type <input type="checkbox"/> If ASS is encountered a plan should be developed, in the interim, cease activity and cap ASS with clay with <5% porosity <input type="checkbox"/> Also ensure any excavated material that could be possible ASS is not stockpiled in large amounts and/or for long periods <input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: <p>Site Manager:</p>	<p>Meeting with principal and key stakeholders prior to commencement of works on site</p>	<p><u>Site Manager</u></p> <p>Name:</p> <p>Sign:</p> <p>Date:</p> <p><u>Site Manager</u></p> <p>Name:</p> <p>Sign:</p> <p>Date:</p>

Charging and/or disposal of refrigerants and use of dangerous goods generally meet statutory requirements eg for licensing, use and disposal	<input type="checkbox"/> Ensure procedures are used to meet statutory obligations for the charging and disposal of refrigerants and use of dangerous goods generally <input type="checkbox"/> Use appropriately trained contractors and confirm the licences required <input type="checkbox"/> Document goods identification, disposal and management, and retain documentation	Whilst on Site, and/or prior to entering site. Site Induction training to incorporate environmental risk management actions	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions: Ensure meeting with client and Key Stakeholders prior to commencement on site.		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above:		
	Site Manager and QHSE Management:		
Noise and vibration impact on neighbours, occupants and users of any nearby facility is minimised	<input type="checkbox"/> Respond to EPA/Departmentally advice relating to noise limits and conditions <input type="checkbox"/> Use equipment in good repair and condition <input type="checkbox"/> Use noise suppression equipment (eg silencers on compressors) and acoustic barriers as required <input type="checkbox"/> Do not expose workers, neighbours, visitors to excessive noise and cooperate and coordinate with any neighbouring facility operators <input type="checkbox"/> Do not expose people or property to excessive vibrations <input type="checkbox"/> Use noise monitoring devices regularly to document levels of activities e.g. grinding in workshop, alarm testing on barges, plant operating	Whilst on Site, and/or prior to entering site. Site Induction training to incorporate environmental risk management actions	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions: Ensure PPE is located on site i.e. hearing protection for visitors Schedule noisy works out of hours if possible		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above:		
	Site Manager/QHSE Management:		

Monitor and maintain Licence conditions applicable to the facility so they are not breached	<input type="checkbox"/> Ensure procedures are in place to avoid breaches of the Licence conditions (May apply to discharges from cooling water systems, condenser water systems, heating water systems, cooking facilities, engine oil / fuel discharges, where water is treated with chemicals or where large sediment loads exist)	Whilst on Site, and/or prior to entering site.	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> Use licensed sub contractors for the removal of wastes from site	Site Induction training to incorporate environmental risk management actions	
	<input type="checkbox"/> The Contractor nominates the following additional actions:	Fuel farm monitoring checks	
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager:		
Air pollution from dust and emissions is minimised whilst transporting bulk construction materials	<input type="checkbox"/> Minimise areas of exposed earth and stockpiles – contain within bulker bags prior to movement	Whilst on Site, and/or prior to entering site.	<u>Site Manager</u> Name: Sign: Date:
	<input type="checkbox"/> Cover and secure materials in open transport <input type="checkbox"/> Use water sprays and/or other means to control dust <input type="checkbox"/> Keep emissions within statutory or other required limits <input type="checkbox"/> Minimise fire risks, and prevent and control fires	Site Induction training to incorporate environmental risk management actions	
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager:		

Disposal of waste including: <ul style="list-style-type: none"> • Packaging Materials • Replaced or redundant parts or materials • Chemicals • Oil and greases from machinery and cooking and other processes • Paints and solvents including the cleaning of equipment, tools and brushes • Cleaning materials and rags • Materials unsuitable for re-use, including hazardous materials such as asbestos • Other waste in accordance with statutory requirements 	<input type="checkbox"/> Ensure all waste is considered through the three step process of reuse / repurpose / recycle prior to waste disposal options <input type="checkbox"/> Ensure appropriate procedures are used for the disposal of all waste including identification and use of lawful places for disposal, and recording and reporting on the method and location of disposal and any non conformities Either <input type="checkbox"/> Provide valid disposal certificates for each applicable item OR <input type="checkbox"/> Provide company certification of appropriate disposal of the following (list the items): <input type="checkbox"/> The Contractor nominates the following additional actions: <input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager:	Whilst on Site. Site Induction training to incorporate environmental risk management actions	<u>Site Manager</u> Name: Sign: Date:
Emergencies Incidents and spills are contained and damage to the environment with emergencies is minimised and rectified with appropriate and approved emergency response procedures Re-instatement of damaged eco – systems and features to their previous condition	<input type="checkbox"/> Ensure emergency procedures are used to manage all reasonably foreseeable harm, including spills and other environmental emergencies. Use C – C – C as described later in the plan <input type="checkbox"/> Obtain the agreement of the Principal to procedures for handling oil chemicals, and other dangerous goods before placing them on the Site, including secure storage arrangements <input type="checkbox"/> Document key contacts <input type="checkbox"/> Re-instate and clean damaged areas and features including work areas <input type="checkbox"/> The Contractor nominates the following additional actions: <input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager:	Whilst on Site. Site Induction training to incorporate environmental risk management actions	<u>Site Manager</u> Name: Sign: Date:

Compliance Audit Compliance with environmental requirements and where breaches are detected, rectification of defect within the time period set in the audit process	<input type="checkbox"/> Inspect the Site monthly to ensure the appropriate environmental controls are in place and are operating effectively and to ensure all environmental management requirements are being met <input type="checkbox"/> Cooperate with environmental audits by others <input type="checkbox"/> Rectify any environmental breaches identified within the time frame specified in an audit or by the Principal <input type="checkbox"/> Retain documentation of inspections and audits to be reviewed by management	Whilst on Site Inspections During third party audits Weekly managers meetings	<u>Site Manager / QHSE Management</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above:		
	Site Manager/QHSE Management:		

The environmental risk management objectives	The environmental risk management actions:	When action will be taken	Action actually taken (sign) and recorded (indicate where):
4. Records and Reporting			
Records Provide sufficient documentation to demonstrate appropriate environmental management including where applicable: <ul style="list-style-type: none"> • Approved environmental management plans • Training records • Valid disposal certification and/or company certification of appropriate disposal as applicable • Correspondence with regulators including notifications of non compliances/fines and evidence that the cause of non compliances has been fixed with corrective action 	<input type="checkbox"/> Update the environmental management System where applicable <input type="checkbox"/> Submit incident reports and notification to regulators where required <input type="checkbox"/> Retain waste disposal certificates or certification of appropriate disposal to the principal where applicable <input type="checkbox"/> Keep training and other records for inspection securely filed using an effective document retrieval system	Whilst on Site. Site Induction training to incorporate environmental risk management actions Compliance coordinator and management team monitor and record in Action register	<u>Site Manager / QHSE Manager</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager/QHSE Management:		
Incident Reporting All environmental incidents are immediately reported to the supervisor or manager and as otherwise required	<input type="checkbox"/> Immediately report all environmental incidents to the regulator and as otherwise required	Whilst on Site. Site Induction training to incorporate environmental risk management actions	<u>Site Manager / QHSE Management</u> Name: Sign: Date:
	<input type="checkbox"/> The Contractor nominates the following additional actions:		
	<input type="checkbox"/> The Contractor identifies the following person who will be responsible for managing the above: Site Manager/QHSE Management:		

Environmental Contacts List

Area	Phone	Email
General	08 8924 4218	ntepa@nt.gov.au
Pollution Hotline (for reporting Urgent pollution incidents requiring urgent attention)	1800 064 567	
Pollution Control	08 8924 4218	pollution@nt.gov.au
Waste and Resource Recovery	08 8924 4218	waste@nt.gov.au
Environmental Assessments	08 8924 4218	eia.ntepa@nt.gov.au
Container Deposit Scheme	1800 752 632	containerdeposit@nt.gov.au
Air Quality	08 8924 4057	pollution@nt.gov.au
National Pollutant Inventory	08 8924 4057	npi.officer@nt.gov.au
Environment Grants	08 8924 4002	environmentgrants@nt.gov.au
Due Diligence Requests	08 8924 4218	Complete the Online Due Diligence Request form NOTE: Paper/Email requests are no longer accepted