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**Queensland
Government**

DEPARTMENT OF STATE DEVELOPMENT

Preliminary Site Investigation

Abbot Point Growth Gateway Project

301001-01956 - 00-EN-REP-0006

13 July 2015

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PRELIMINARY SITE INVESTIGATION
ABBOT POINT GROWTH GATEWAY PROJECT

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PROJECT 301001-01956 - PRELIMINARY SITE INVESTIGATION

REV	DESCRIPTION	ORIG	REVIEW	WORLEY-PARSONS APPROVAL	DATE	CUSTOMER APPROVAL	DATE
0	Issued as final	 R Johns	 N Foster	 A Hanly	13-Jul-15		



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ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Description
AGE	Australian Groundwater and Environmental Consultants
AHD	Australian Height Datum
ANZECC	Australian and New Zealand Environment Conservation Council
APECs	Areas of Potential Environmental Concern
ASRIS	Australian Soil Resource Information System
ASS	Acid Sulfate Soils
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CCME	Canadian Council of Ministers of the Environment
CEMP	Construction Environmental Management Plan
CoC	Contaminants of Concern
CLR	Contaminated Land Register
DAF	Queensland Department of Agriculture, Fisheries
DEHP	Queensland Department of Environment and Heritage Protection
DMCPs	Dredged Material Containment Ponds (includes Primary and Secondary DMCPs)
DMP	Dredge Management Plan
DNRM	Department of Natural Resources and Mines
DoE	Australian Department of the Environment
DSD	Queensland Department of State Development
DSI	Detailed Site Investigation
EC	Electrical Conductivity
EIL	Ecological Investigation Level
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMR	Environmental Management Register



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Abbreviation/ Acronym	Description
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
ERA	Environmentally Relevant Activity
ESD	Ecologically Sustainable Development
GED	General Environmental Duty
ha	Hectare
HCIPL	Hancock Coal Infrastructure Pty Ltd
HILs	Health Investigation Levels
Km	Kilometre
LOR	Limit of Reporting
mBTOC	Metres Below Top of Casing
Mm ³	Million cubic meters
NEPM	Nation Environmental Protection Measure
OC/OPP	Organochlorine/Organophosphorus Pesticides
PAH	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PHC	Petroleum Hydrocarbons
PPDA	Priority Port Development Area
PSI	Preliminary Site Investigation
QA	Quality Assurance
QC	Quality Control
SDA	State Development Area
T0	Terminal 0 - coal terminal developed by Adani at Abbot Point
T1	Terminal 1 - coal terminal to be developed at Abbot Point
TRH	Total recoverable hydrocarbons
UXO	Unexploded ordinance
VOC	Volatile Organic Compound



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Abbreviation/ Acronym	Description
WRC	Whitsunday Regional Council



1 INTRODUCTION

The Abbot Point Growth Gateway Project will develop infrastructure to support development at the Port of Abbot Point. The current Project relates to the development of infrastructure to support development of planned T0. Dredging of berth pockets and arrival/departure apron is required to provide safe shipping access to the T0 offshore facility. The scope of the approved T0 project does not directly include dredging of the required berth pockets or apron areas.

The Abbot Point Growth Gateway Project involves:

- Construction of onshore Dredged Material Containment Ponds (DMCPs) within an area east of the existing coal facility
- Capital dredging of approximately 1.1 million m³ (Mm³) in situ volume of previously undisturbed seabed for new berth pockets and ship apron areas required to support the development of T0
- Relocation of the dredged material to the DMCPs and offshore discharge of return water
- Ongoing management of the dredged material including storage, treatment (if required), and beneficial reuse within the port area and the State Development Area (SDA), where appropriate.

The dredging area, dredged material and return water pipelines and DMCPs are collectively referred to as the Project study area (Figure 1-1). The property lots associated with the Project study area are referred to as the Project Investigation area (Figure 1-2).

WorleyParsons has been commissioned by the Department of State Development (DSD) to project manage and undertake studies to assess environmental values and potential environmental impacts of constructing the DMCPs, dredging activities and the transport, placement, storage and reuse of the dredging material. This includes the investigation of potentially contaminated land (this report) within the Project study area through a Preliminary Site Investigation (PSI).

This report provides a description of the works undertaken and the results of the PSI for the Abbot Point Growth Gateway Project.

1.1 Objectives

The objectives of this PSI were to:

- Assess the presence of potential soil and groundwater impacts, which may represent an environmental liability within the Project study area, through a review of site history



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- Assess the environmental impact of potentially contaminated soil and groundwater within the Project study area
- Recommend mitigation measures required to minimise the impact of potentially contaminated soil and groundwater to the Project study area and the surrounding environment.

1.2 Scope of work

The scope of work for the PSI included the following tasks:

- Undertake a review of historical information to identify areas of potential environment concern (APECs) and associated contaminants of concern (CoC)
- Utilise the findings of the Abbot Point Port and Wetland Project – Phase 1 Preliminary Site Investigation (WorleyParsons 2014) where applicable. Develop a conceptual site model to identify any potential exposure pathways for the CoC
- Outline potential contaminant management measures to be adopted during site development
- Prepare a PSI report detailing results of the assessment and recommendations for additional work (if required).

A site inspection and preliminary soil sampling program were not included as part of the scope of works. However, WorleyParsons (2014) conducted a site inspection and preliminary soil sampling which included a number of property lots associated with the Project study area.

1.3 Legislative framework

Investigations for contaminated land are regulated by the Environmental Protection Act 1994 (EP Act, 1994). The primary objective of the EP Act is to protect environmental values and human health while allowing for developments that improve the total quality of life, both now and in the future, in a way that maintains ecological processes. The EP Act accomplishes these objectives by imposing two main duties: the general environmental duty (GED) and the duty to notify.

The Queensland Government Department of Environment and Heritage Protection (DEHP) has the responsibility for overseeing the management of contaminated land as outlined in Chapter 7, Part 8 of the EP Act. DEHP has developed the Guideline for Contaminated Land Professionals (2012) to assist with the land assessment and remediation process. This guideline describes the staged process of contaminated land assessments and outlines the guidance documents relevant to contaminated land assessment in Queensland. Documents relevant to this assessment include:



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- Environmental Protection Act 1994
- Department of Environment and Heritage Protection Guideline for Contaminated Land Professionals (2012)
- National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (NEPM), National Environmental Protection Council (2013)
- Australian and New Zealand Environment and Conservation Council Assessment of On-Site Containment of Contaminated Soil (1999)
- Cooperative Research Centre for Contamination Assessment and Remediation of the Environment – Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater (Friebel and Nadebaum 2011)
- Canadian Council of Ministers of the Environment (CCME) Canada-wide standard for petroleum hydrocarbons (PHC) in soil (2008).

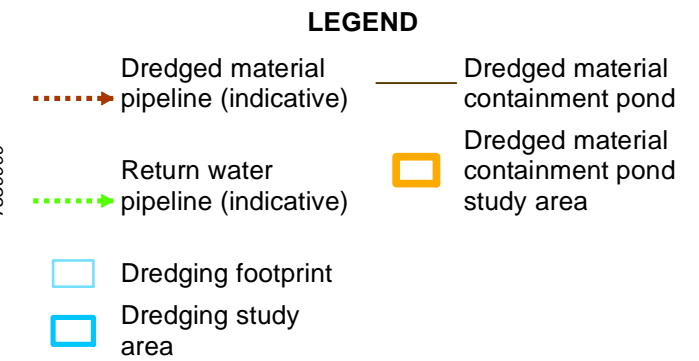
1.4 Methodology

The PSI is based on the review of desktop information gathered from historical sources such as previous environmental investigations, the Environmental Management Register (EMR) and Contaminated Land Register (CLR), relevant Queensland Government Departments, Whitsunday Regional Council (WRC), anecdotal information from previous landowners and historical aerial photographs.

Based on the review of the historical information, APECs and CoC were identified and a conceptual site model developed. An assessment of potential impacts and proposed mitigation measures was also completed.



Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom



Source information:
 Dredging study area
 Setout points derived from coordinates on NOBPAurecon figure 242770-0000-DRG-SK-0021-A supplied by NOBP
 Dredged material and return water pipelines
 Digitised from BMT JFA Drg. No. BMT JFA 275.02-50-03 A, dated 17/12/2014 and Golder Associates Drg. No. 1525905-027-002A, dated 12/06/2015, with some minor adjustments to avoid clashes with existing infrastructure visible in the 2013 aerial imagery and to avoid any potential clashes with the proposed MOF expansion
 Dredged material containment pond
 Supplied by Golder Associates 23/06/2015
 Dredged material containment pond study area
 Department of State Development, Infrastructure and Planning. (DSDIP)
 Existing transport network
 Physical Road Network - Queensland, Physical Rail Network - Queensland
 Queensland Government - Department of Environment and Resource Management
 2013 Imagery
 Queensland Government - Department of State Development, Infrastructure and Planning 2015

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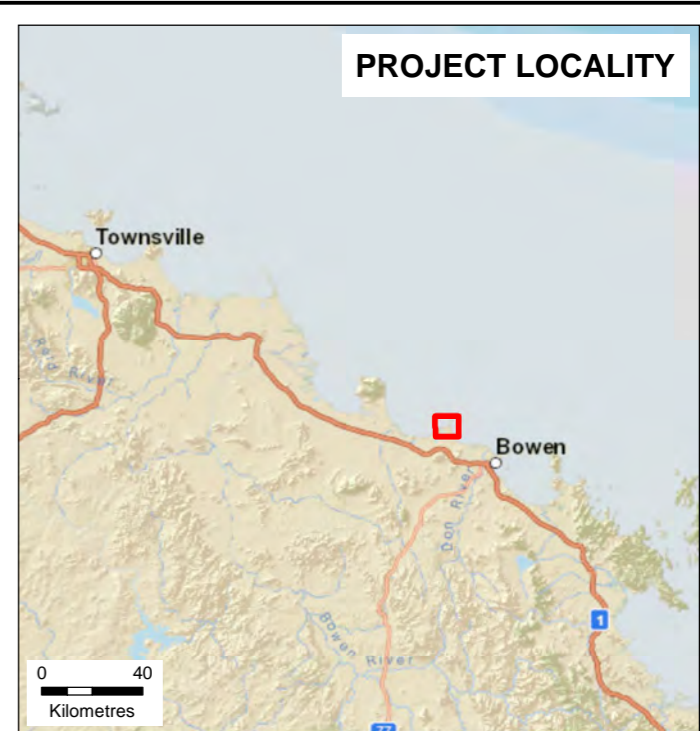
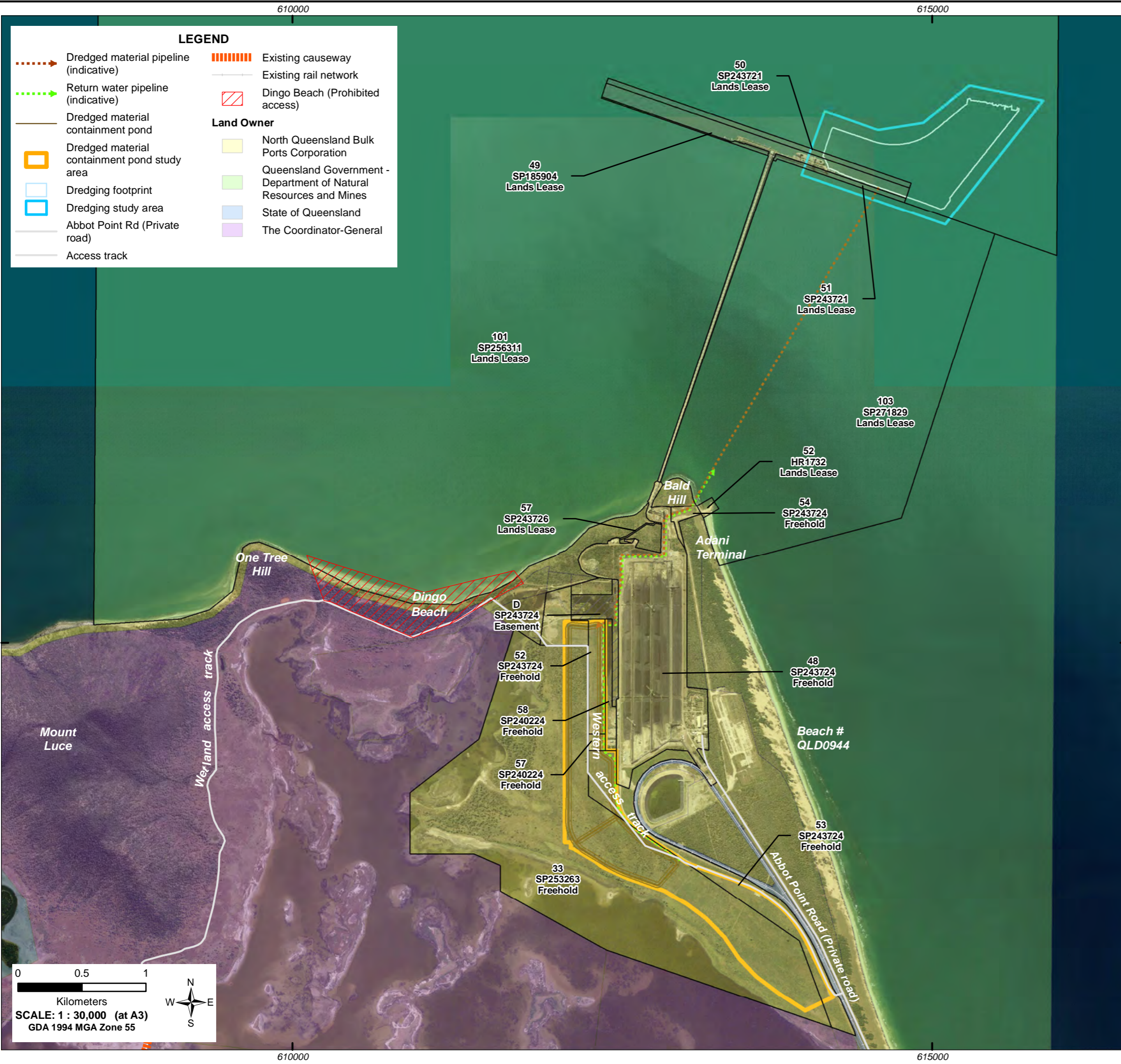

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Figure 1-1
Project Locality

Figure: 301001-01956-00-GM-SKT-0012 Rev: 0

\\labrivp02\brisbane\Projects\301001\01956 PROJ - Abbot Point Growth Gateway\10.0 Engineering\10_GM-Geomatics\Output\301001-01956-00-GM-SKT-0060-0 (Land CL Sampling Locations).mxd



Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

Source information:
 Dredging study area
 Setout points derived from coordinates on NQBP/Aurecon figure 242770-0000-DRG-SK-0021-A supplied by NQBP
 Dredged material and return water pipelines
 Digitised from BMT JFA Drg. No. BMT JFA 275.02-50-03 A, dated 17/12/2014 and Golder Associates Drg. No. 1525905-027-002A, dated 12/06/2015, with some minor adjustments to avoid clashes with existing infrastructure visible in the 2013 aerial imagery and to avoid any potential clashes with the proposed MOF expansion
 Dredged material containment pond
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 Department of State Development, Infrastructure and Planning, (DSDIP)
 Existing transport network
 Physical Road Network - Queensland, Physical Rail Network - Queensland
 Queensland Government - Department of Environment and Resource Management
 2013 Imagery
 Queensland Government - Department of State Development, Infrastructure and Planning 2015
 Cadastral Boundaries
 Downloaded 08/06/2015 - [http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid=\(4091CAF1-50E6-4BC3-B3D4-229AA318231A\)](http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid=(4091CAF1-50E6-4BC3-B3D4-229AA318231A))
 Queensland Government - Department of Natural Resources and Mines
 Australian Maritime Boundaries - 2006
 Geoscience Australia
 Port Limits - 2008
 Maritime Safety Queensland
 Abbot Point Strategic Port Land
 Digitised from "Plan 1 - Port of Abbot Point Land Use Plan Designations"
 North Queensland Bulk Ports Corporation Limited -Port of Abbot Point Land Use Plan - October 2010
 Contaminated Land Sampling Locations
 Site survey undertaken by WorleyParsons Nov 2014

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Figure 1-2 Site Plan

Figure: 301001-01956-00-GM-SKT-0060 Rev: 0



2 SITE INFORMATION

2.1 Property description and land use

The footprint of the Project study area is located across 16 property lots and one easement (Figure 1-2). The boundaries of the associated property lots form the investigation area. Table 2-1 provides a summary of the real property descriptions of each lot, current landowner, zoning and current and future land use.

Table 2-1: Property description, zoning and land use

Real property description	State zoning	Regional council zoning	Current land use	Proposed land use
L22 SP271830	Abbot Point State Development Area	Special Purposes	Industrial land use	Dredged material delivery, pipeline, return water pipelines
L33 SP253263	Abbot Point State Development Area	Special Purposes	Undeveloped land including wetlands	DMCPs, return water pipelines
L53 SP243724	Abbot Point State Development Area	Special Purposes	Industrial land use	DMCPs, return water pipelines
L57 SP240224	Abbot Point State Development Area	Special Purposes	Industrial land use	DMCPs, return water pipelines
L52 SP243724 (incl. easement D)	Abbot Point State Development Area	Special Purposes	Industrial land use	DMCPs, dredged material delivery pipeline, return water pipelines
L57 SP243726	Abbot Point State Development Area	Special Purposes	Industrial land use	Dredged material delivery pipeline, return water pipelines
L33 SP124849	Abbot Point State Development Area	Special Purposes	Roads and grass lands	DMCPs
L48 SP243724	Abbot Point State Development Area	Special Purposes	Industrial land use	Dredged material delivery pipeline, return water pipelines
L54 SP243724	Abbot Point State Development Area	Special Purposes	Industrial land use	Dredged material delivery pipeline, return water pipelines
L58 SP240224	Abbot Point State Development Area	Special Purposes	Industrial land use	DMCPs, return water pipelines



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L103 SP271829	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredged material delivery pipeline, return water pipelines
L101 SP256311	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredging footprint
L52 HR1732	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredged material delivery pipeline, return water pipelines
L49 SP185904	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredging footprint, dredged material delivery pipeline
L50 SP243721	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredging footprint
L51 SP243721	Abbot Point State Development Area	Special Purposes	Offshore natural marine environment	Dredged material delivery pipeline

2.2 Surrounding land use

The Project investigation area is bordered by the Pacific Ocean to the north and east, the Caley Valley Wetland to the south and west and the NQBP Abbot Point coal Terminal (T1) to the east.

2.3 Nearby sensitive receptors

Sensitive receptors located within close proximity of the site include the following:

- Caley Wetlands – located adjacent to the west and south boundaries of the Project study area
- Dingo Beach – located approximately 750 m north west of the site
- Great Barrier Reef – located approximately 750 m north and 1 km east of the Project study area respectively.



3 SITE HISTORY

The historical information review included previous environmental studies, historical aerial photographs, searches of the EMR / CLR, searches of relative Queensland Government departments and WRC records and anecdotal information provided by previous landowners. This information is summarised below.

3.1 Summary of previous investigations

A number of studies have been completed within the vicinity of the Project area describing the existing soil and groundwater conditions. Of these studies, four included specific information relating to contaminated land within the Project study area. Each of these reports are discussed separately below. In addition, a review of bore logs drilled in May 2015 by Golder Associates, as part of a geotechnical investigation within the DMCPs footprint, did not indicate the presence of waste material.

CDM Smith, 2012, Adani Abbot Point Coal Terminal 0 Environmental Impact Study

The Adani project is proposed to be located adjacent to and east of the existing terminal (T1).

The contaminated land assessment included in the EIS (CDM Smith 2012) was limited to a desktop assessment only which included a review of aerial photographs, EMR/CLR searches, unexploded ordinance (UXO) information, local council record searches and searches for publically available reports. Some of the property lots assessed were within the footprint of the DMCPs. It should be noted that property descriptions have changed for some property lots assessed.

EMR/CLR search results indicted 11 of the 42 property lots within the Adani project area are listed on the EMR and no property lots listed on the CLR. Of the 11 property lots listed on the ERM, six fall within the Project study area (refer Section 3.2), while the remaining seven border the Project Investigation area to the north and east. The notifiable activities related to the bordering property lots include petroleum product or oil storage and railway yards.

Results of the aerial photography review did not indicate any additional APECs. Relevant local council searches showed that Lot 48 SP243724 (within the Project area) has previously held a flammable and combustible liquids licence for the storage of unleaded and diesel petroleum products and a package store of combustible liquids. No property lots within the Adani project area posed a risk of UXOs based on a search of the Department of Defence database.



WorleyParsons, 2014, Abbot Point Port and Wetland Project – Phase 1 Preliminary Site Investigation

The Abbot Point Port and Wetland Project PSI (WorleyParsons 2014) study area comprised 17 property lots, of which six property lots fall within the Project study area. It should be noted that property descriptions have changed for some property lots assessed. The PSI included a review of previous environmental investigations, a search of the EMR/CLR, DEHP and WRC public records search, interviews with previous landowners, a review of historical aerial photographs and soil sampling at five locations.

A search of the EMR/CLR returned 11 property lots listed on the EMR and none on the CLR. Of the property lots listed on the EMR, Lot 1 SP 243911 is located west of the Project investigation area and is listed for petroleum product or oil storage. Remaining property lots listed on the EMR have been either superseded or are located within the study area and will be discussed in Section 3.2.

The soil sampling program comprised three surface soil samples collected from quarry spoil, the existing coal terminal and a concrete rubble pile. The quarry spoil is located outside the investigation area and is different to the stockpiled material located adjacent to and west of the coal terminal (Golder Associates 2015). The concrete rubble pile is also located outside the Project investigation area. Samples were analysed for metals (8), organochlorine/organophosphorus pesticides (OC/OPP) and polychlorinated biphenyls (PCB).

Concentrations of OC/OPP and PCB were below the laboratories limit of reporting (LOR). Metal concentrations were either below the LOR or Health Investigation Levels (HILs) for residential land use (HIL 'A'). The assessment concluded that:

- There is limited potential for land contamination to have occurred within the area investigated
- Soils are suitable for use during construction
- The risk of exposure to hazardous substances to construction workers was considered negligible.

Australian Groundwater and Environmental Consultants Pty Ltd (AGE), 2014, The Port of Abbot Point Expansion Groundwater Studies

The Port of Abbot Point Expansion Groundwater Studies (AGE 2014) report comprised a review of historical groundwater data and completion of a groundwater monitoring program, which included the installation of 10 groundwater monitoring wells. The wells were installed within and west of the Project study area. Depth to groundwater ranged from 1.59 to 4.95 below top of casing (mBTC). Inferred groundwater flow direction was variable and was either towards the Pacific Ocean or the wetlands. Field collected water quality data shows the water is at a relatively neutral pH and electrical conductivity (EC) results indicate a range in salinity from brackish to hypersaline brine. Laboratory testing confirmed the pH



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and EC results. 122 samples were analysed for total metals and metalloids. Results showed elevated manganese and arsenic concentrations above ecological investigation limits (EILs) (NEPM 1999), however, it was concluded the elevated manganese and arsenic concentrations were representative of either background conditions or natural variation in sampling.

Golder Associates, 2015, Abbot Point Growth Gateway Project – Dredged Material Containment Ponds Design Report (Draft)

The Dredged Material Containment Ponds Design Report (Golder Associates 2015) outlines the design process of onshore containment ponds associated with the Abbot Point Growth Gateway project. Information of relevance to this PSI is contained within a section outlining a description of the existing site ground conditions. A soil stockpile of approximately 48,600 m³ is located within the Project study area adjacent to the existing coal stockpiles. This stockpile is different to the quarry spoil discussed in the Abbot Point Port and Wetland Project PSI (WorleyParsons 2014). Anecdotal evidence outlines the soil was to be used for the construction of Bund 3 (division between coal stockpiles within the existing coal terminal) and was excavated from the Bald Hill Quarry, north of (T1). A temporary (now decommissioned) waste water treatment plant was located within the Project study area (Lot 57 SP240224).

3.2 EMR/CLR search results

To assist with the management of contaminated sites, DEHP maintains databases of confirmed contaminated and potentially contaminated sites in Queensland. Potentially contaminated sites are defined as land where one or more notifiable activities have been carried out. Notifiable activities are listed in Schedule 3 of the EP Act, 1994. Land presently or formerly used for a notifiable activity or land that is confirmed as being contaminated is recorded on the Environmental Management Register (EMR). Land that is proven contaminated and has the potential to cause serious environmental harm is recorded on the Contaminated Land Register (CLR).

A search of the EMR/CLR for the lots located within the Project study area has been undertaken. A summary of the search results are provided in

Table 3-1 and copies are provided in Appendix A. The search indicated seven properties have been listed on the EMR for various notifiable activities including petroleum storage, livestock dip and spray race, landfill, abrasive blasting, metal treatment and railway yards. The searches do not provide detail of the specific location of the notifiable activities but simply their current and/or historic existence on the lot. The search also identified two lots were listed on the EMR as a result of amalgamations or subdivisions of property lots listed on the EMR. Where a lot has been listed on the EMR, any subsequent lot or amalgamation of lots will, by default, become listed on the EMR regardless of whether the activity has occurred or not. No property lots were listed on the CLR.



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Table 3-1: EMR / CLR search results

Property Lot and Plan	EMR / CLR Result
Onshore Property Lots	
L22 SP271830	Not listed
L33 SP253263	Petroleum product or oil storage
L53 SP243724	Amalgamation/subdivision of property lots L3 RP748628 and L4 RP738760, which are listed on the EMR for livestock dip or spray race, landfill, abrasive blasting, metal treatment or coating and petroleum product or oil storage
L57 SP240224	Livestock dip or spray race, landfill, abrasive blasting and metal treatment or coating
L52 SP243724 (incl. easement D SP243724)	Livestock dip or spray race, landfill, abrasive blasting and metal treatment or coating
L57 SP243726	Not listed
L33 SP124849	Not listed
L48 SP243724	Amalgamation/subdivision of property lots L47 SP117913, L3 RP748628, L4 RP738760 and L4 RP745292, which are listed on the EMR for Livestock dip or spray race, landfill, abrasive blasting, metal treatment or coating, petroleum product or oil storage and railway yards
L54 SP243724	Abrasive blasting and metal treatment or coating
L58 SP240224	Livestock dip or spray race, landfill, abrasive blasting and metal treatment or coating
Offshore Property Lots	
103 SP271829	Not listed
101 SP256311	Not listed
52 HR1732	Not listed
49 SP185904	Not listed
50 SP243721	Not listed
51 SP243721	Not listed

A description of the respective notifiable activities listed in



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Table 3-1 is provided in Table 3-2.

Table 3-2: Description of notifiable activities

Notifiable Activity	Description
Petroleum product or oil storage	Storing petroleum products or oil - (a) in underground tanks with more than 200L capacity, or (b) in above ground tanks with: (i) for petroleum products or oil in class 3 in packaging groups 1 and 2 of the dangerous goods code - more than 2,500L capacity; or (ii) for petroleum products or oil in class 3 in packaging groups 3 of the dangerous goods code - more than 5,000L capacity; or (iii) for petroleum products that are combustible liquids in class C1 or C2 in Australian Standard AS1940, 'The storage and handling of flammable and combustible liquids' published by Standards Australia - more than 25,000L capacity
Landfill	Disposing of waste (excluding inert construction and demolition waste)
Railway yards	Operating a railway yard including goods-handling yards, workshops and maintenance areas
Livestock dip or spray race	Operating a livestock dip or spray race facility. For the majority of rural properties only a small area may be affected by the chemicals used in livestock dips and spray races. The Department of Environment and Heritage Protection may hold further information relating to the location of the dip site within this property
Abrasive blasting	Carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material
Metal treatment or coating	Treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth)

3.3 Search of environmental records

WRC were contacted seeking information regarding trade waste agreements pertaining to the property lots listed in Table 2-1. A response received on 18 June 2015 from WRC states



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that no trade waste agreements are present for property lots associated with the Project study area (Mr R Smith, 2015, pers.comm., 18 June).

DEHP and the Department of Natural Resources and Mines (DNRM) were contacted to obtain information on environmentally relevant activities (ERAs) and historical titles respectively. The forthcoming information showed the Project area has been subject to a number of ERAs including storage of petroleum products, abrasive blasting, surface coating, motor vehicle workshop, dredging, chemical storage, sewage treatment and bulk materials handling (Appendix B).

A search was also made of the Commonwealth Department of Defence Unexploded Ordnance (UXO) website (<http://www.defence.gov.au/uxo/>) via map query and it was found that the Abbot Point area is clear of UXO.

3.4 Anecdotal information

Anecdotal information was gathered during a telephone interview on 19 June, 2015 with NQBP's Site Superintendent Mr. John Martin. The purpose of the interview was to gain an understanding of historical land uses within the Project study area and to locate notifiable activities identified through the EMR/CLR search. Additional anecdotal information was sourced from an interview with Allen Williams, the results of which were documented in the Abbot Point Port and Wetland Project – Phase 1 Preliminary Site Investigation (WorleyParsons 2014). Mr Williams is the son of the original land owner Lou Williams. Environmentally relevant information forthcoming from the interviews is summarised in **Table 3-3**.

Table 3-3: Summary of anecdotal information

Site attribute	Description
Property details	One property, approximately 3000 acres, known as <i>Inverdon</i> and a second occupying the north and east sides of the Caley Valley Wetland. Together these properties were known as Kaili Valley. These occupied much of the coastline from the north side of the Don River to Bald Hill (pink highlight in Figure 3-1)
Previous landowners	1870 – 1947 – James Hall-Scott (original landowner of Kaili Valley) 1947 ~ 1970 – Lou Williams 1970 ~ 1980 – John Honorary from Collinsville 1980 ~ 2010 – Colinta Holdings / Mt Isa Mines 2010 – now – Queensland State Government
Land use	The primary land use was grazing goats and angus style cattle. Pigs and ducks were also hunted in the area. Other than cattle grazing, no known



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Site attribute	Description
	anthropogenic activities have occurred within the Project study area
	Filling activities have occurred for the construction of the coal facility and included material imported from the 'Hard Rock' quarry on Abbot Point Road
	An area of land was quarried via blasting at Bald Hill
	Lay down, equipment storage areas and disposal of construction wastes within Lots 52 SP243724 and Lot 58 SP240224
Previous/ current infrastructure	Cattle yards and rodeo ring, constructed in ~1950 were located approximately 3km south west of the Project study area, near the existing farm shed. A cattle dip (known in this report as the Colinta Cattle Dip) was constructed here after the 1970s and is still present
	A cattle dip, referred to as the Abbot Point Cattle Dip, was constructed in ~1961 located adjacent to and south of Bald Hill within the boundary of the current Abbot Point coal terminal. Mr Allen Williams helped to construct this dip when he was 18 years old and located the dip on a map. Mr John Martin remembers that arsenic impacted soil was removed from this area in 2007 during the construction of XT21, however, does not know the location of any reports
	Several farm dams, fences, huts
	An old well, located near the existing farm shed (approximately 3km south of the Project study area) was used as a farm landfill
	A water pipeline constructed by NQBP follows the causeway through Caley wetlands in the west and around the north side
	The causeway and wetland access road
	Water treatment plant located in the south east corner of Lot 48 SP243724. The plant treated water from the settling ponds for general industrial use within the coal facility
	Previous temporary waste water treatment plant located in Lot 57 SP240224
Chemicals used	Coopers Amitik - contains Amitraz which is an amidine derivative. It is a white to greyish powder that has been in use in cattle dips since the 1950s (Mr Kieran Rowles - MSD Animal Health, 2014 pers.comm., 18 November). This product was used in the Abbot Point dip located below Bald Hill and with hand pumps at the cattle yards and rodeo ring prior to building the dip. Mr Allen Williams indicated his family would purchase the Amitik in 20L sealed cans and would transport the cans to the dip via the causeway and



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Site attribute	Description
	wetland access track passed Mt Luce and around the north side of the wetland to Abbot Point. He said there were no spillages and the new cans would be opened at the dip and remain there until used up. The empty cans would then be transported to the local Bowen refuse tip for disposal
Location of notifiable activities	Livestock dip or spray race: 1. Abbot Point Cattle Dip previously located within existing coal facility 2. Colinta Cattle Dip – located outside Project study area
	Landfill – location unconfirmed – may have been required as part of the coal terminal construction or related to the old farm landfill (old well located 3km south east)
	Petroleum product or oil storage – workshop fuel storage within existing coal facility
	Railway yards – within existing coal facility
	Abrasive blasting – Ongoing painting and maintenance within existing coal facility (2 locations)
	Metal treatment or coating – Ongoing maintenance within existing coal facility (2 locations)

With the exception of the landfill and the Abbot Point cattle dip, the anecdotal information provided identified the location of the notifiable activities identified in the EMR search. The information aids in the understanding of property lot subdivisions/amalgamations and shows there are a number of property lots listed on the EMR for notifiable activities that are associated with a different property lot. The anecdotal information provided is consistent with the results of the historical aerial photography review (Section 3.5).

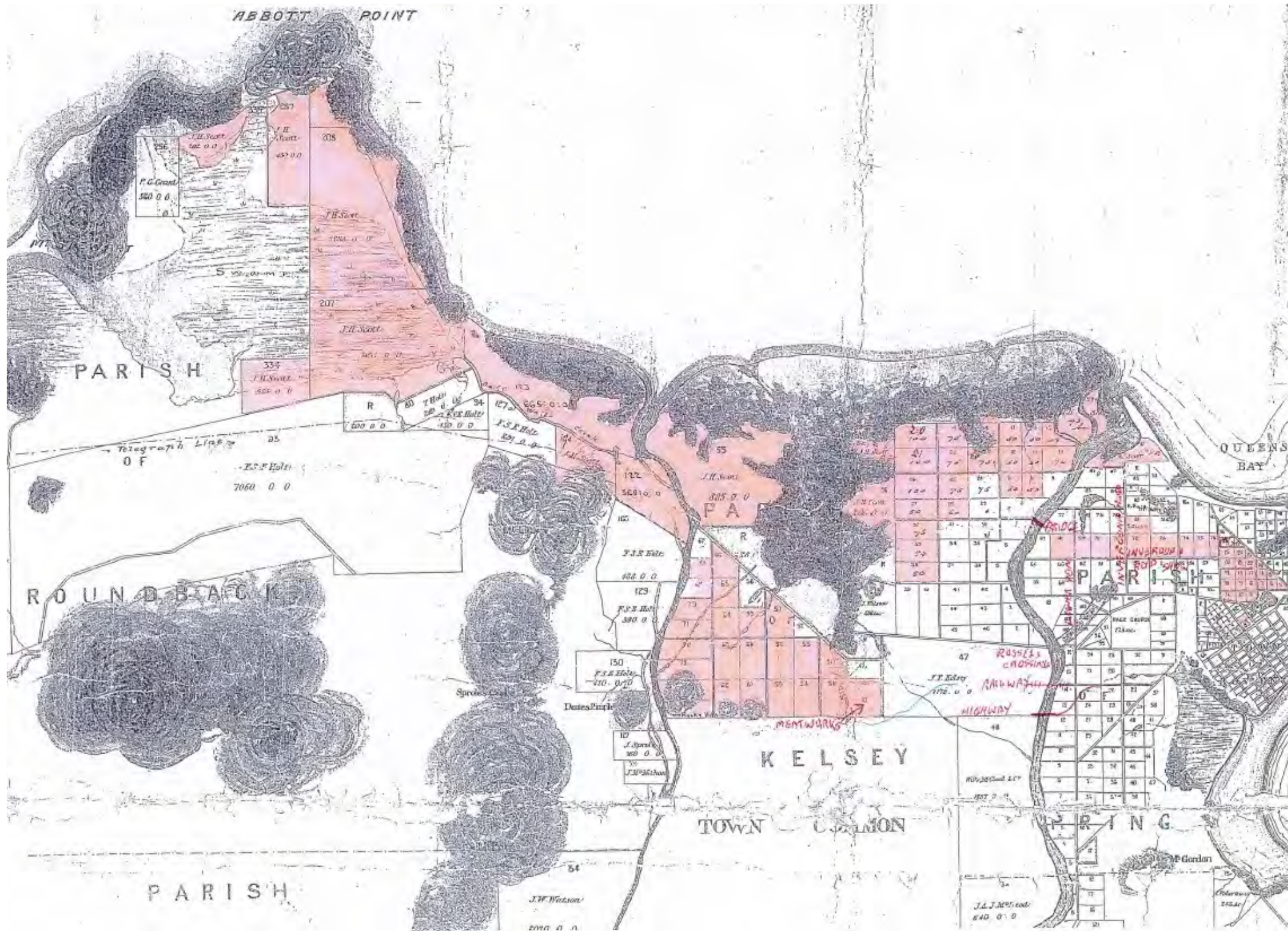


Figure 3-1: Historical lot boundaries



3.5 Aerial photography review

A review of available historical aerial photography, at approximately 10 year intervals, was undertaken to gain an understanding of previous land uses both within the Project Study area, the investigation area and on adjacent properties. The aerial photographs were sourced from DEHP and included a review of photography from 1961, 1971, 1983, 1990, 1998 and 2004. The results of the aerial photography review are described below.

1961 (1 June) – Ayr – Map 8558, run 8, photo CAB 198-5062

Figure 3-2 provides very clear definition of the Abbot Point coastline and Caley Valley Wetlands which are easily distinguishable to the south and west of Bald Hill. Regionally, the area remains uncleared with the exception of several scattered properties that can be seen on the photograph. The causeway across the mouth of the wetlands is evident, so too is the Former Colinta Homestead (Lot 1 SP248492) which can be seen south east of the Project study area. An access road (Wetlands Access Road) has also been. This access track runs north from the Colinta Homestead across the causeway and mouth of the wetlands, around the east base of Mt Luce, then around the north of the wetland past One Tree Hill and Dingo Beach, then east. There is also an established road (Colinta Holding Access Road) from the property towards the Bruce Highway. The Project area appears to be undisturbed bush land.



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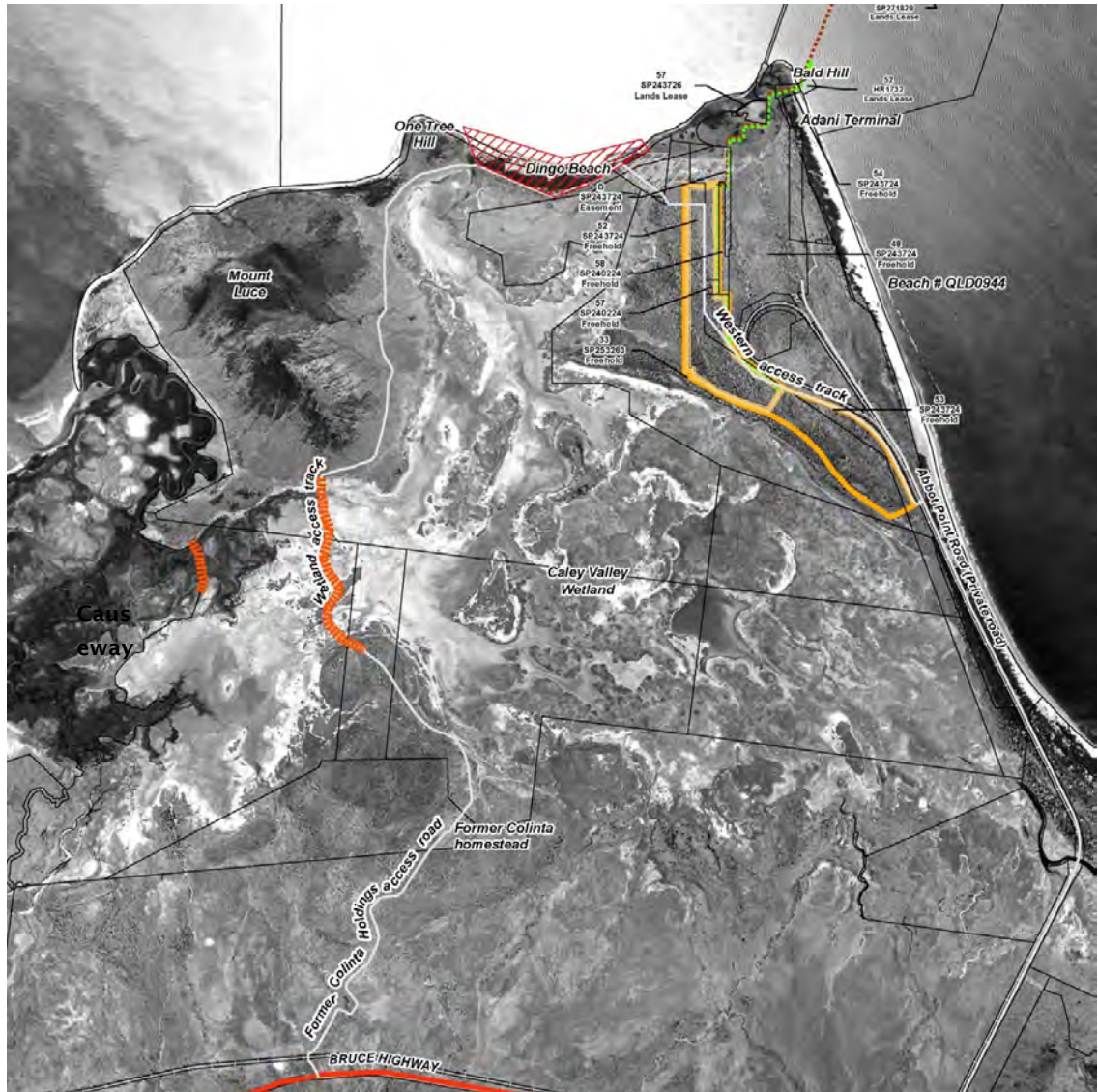


Figure 3-2: Historical aerial photograph, 1961



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1971 – Abbot Point – Map 2347, run 1 – photo 27 to 29, run 2 – photos 55 to 58

Figure 3-3 provides reasonably good definition of the Abbot Point coastline and Caley Valley Wetlands. The majority of the land within the Project study area remains uncleared, however, areas of land clearing (on Lot 33 SP253263, Lot 53 SP243724, Lot 57 SP240224, Lot 58 SP240224, Lot 58 SP112921, and Lot 33 SP124849) and infrastructure associated to farming activities is evident. Farming infrastructure identified includes a large shed or aboveground water tank south-west of Bald Hill, a large dam directly south of the water tank and potentially the Abbot Point cattle dip west of the dam. There also a farm hut or shelter located on Dingo Beach.

Land clearing has increased within the Project study area to the east (Lot 33 SP253263) and consists of cleared and fenced paddocks and appears to be associated with two new dwellings adjacent to and south of the paddock. In the west, there is a small dam south-east of Mt Luce and a small quarry on the northern bank of the wetlands near the causeway. A large dam is evident south of the causeway. There are additional structures surrounding the Former Colinta Homestead. This includes a large farm shed, a farm house, a dam to the west and the Colinta cattle dip to the north.



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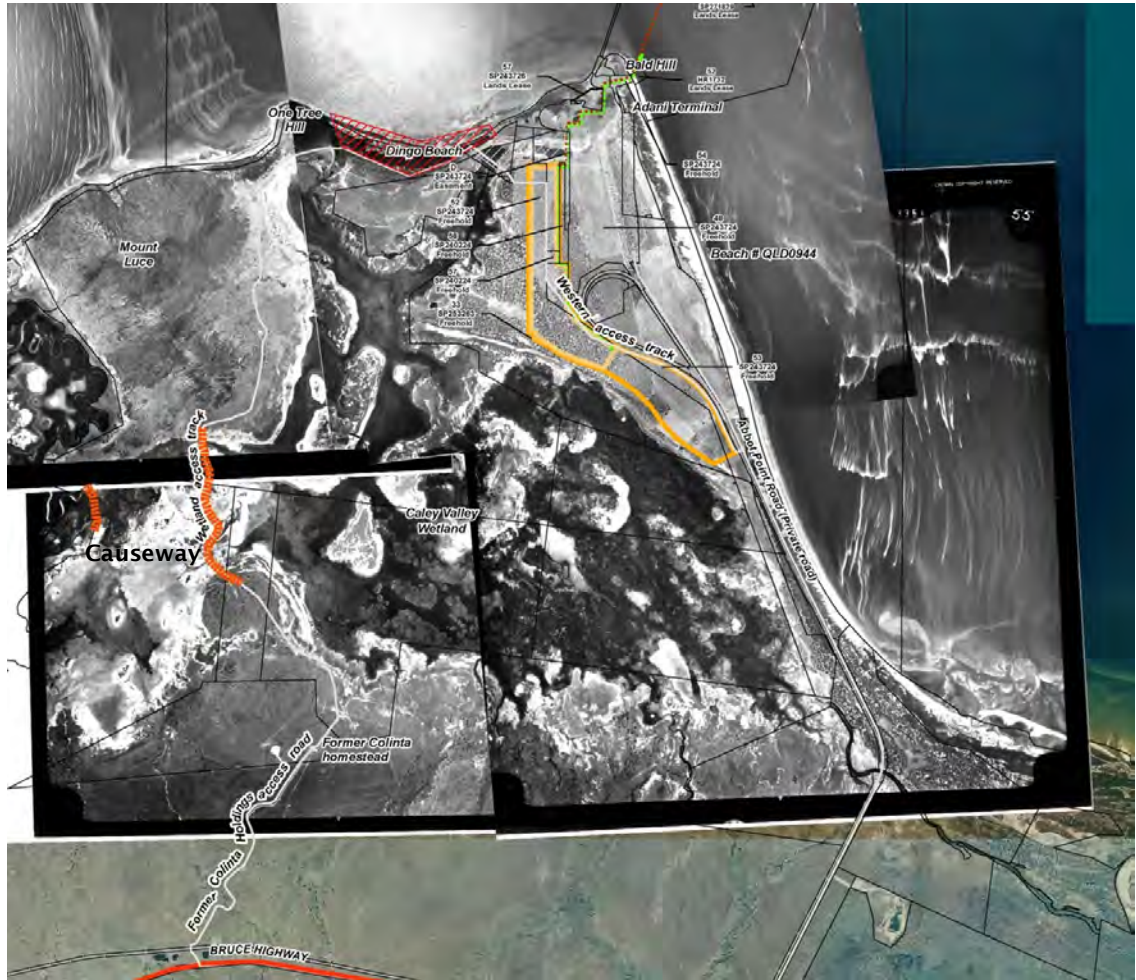


Figure 3-3: Historical aerial photograph, 1971



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1983 – Abbot Point – Map 8558, run 1 - photo 224, run 12 – photo 235

Figure 3-4 provides reasonably good definition with further land clearing evident. The coal terminal appears to be in mid construction with the construction offices and car park evident to the east and adjacent to the shoreline, along with several borrow and / or laydown areas evident: one within the railway loop and the other on Lot 33 SP253263. A dam is also associated with the latter and located within the Project study area. The Abbot Point cattle dip is no longer evident and was likely removed during construction. So far, it appears that the main jetty, large sedimentation dam, Bald Hill radar, railway line and parallel Abbot Point Private Access Road have been constructed.

The coal terminal is located to the east of the Project study area, however, the sedimentation dam, which is an expansion of the previous farm dam adjacent to the former Abbot Point cattle dip, is located within the northeast corner of the Project study area. Other construction within the Project study area includes:

- A causeway on Lot 34 SP112920 built across the north corner of the wetlands adjacent to Dingo Beach
- A borrow pit / laydown area and dam on Lot 33 SP253263
- The water pipeline which follows the wetland access track from Former Colinta Homestead to Abbot Point
- The Western Access Road between the Abbot Point Private Access Road and Dingo Beach has been established
- A fence following the east boundary of Lot 33 SP253263 and around the entire terminal is evident
- A new access track runs NE-SW from the centre of the railway loop to the wetland
- A tracks running NE-SW through the middle of the wetland is evident.



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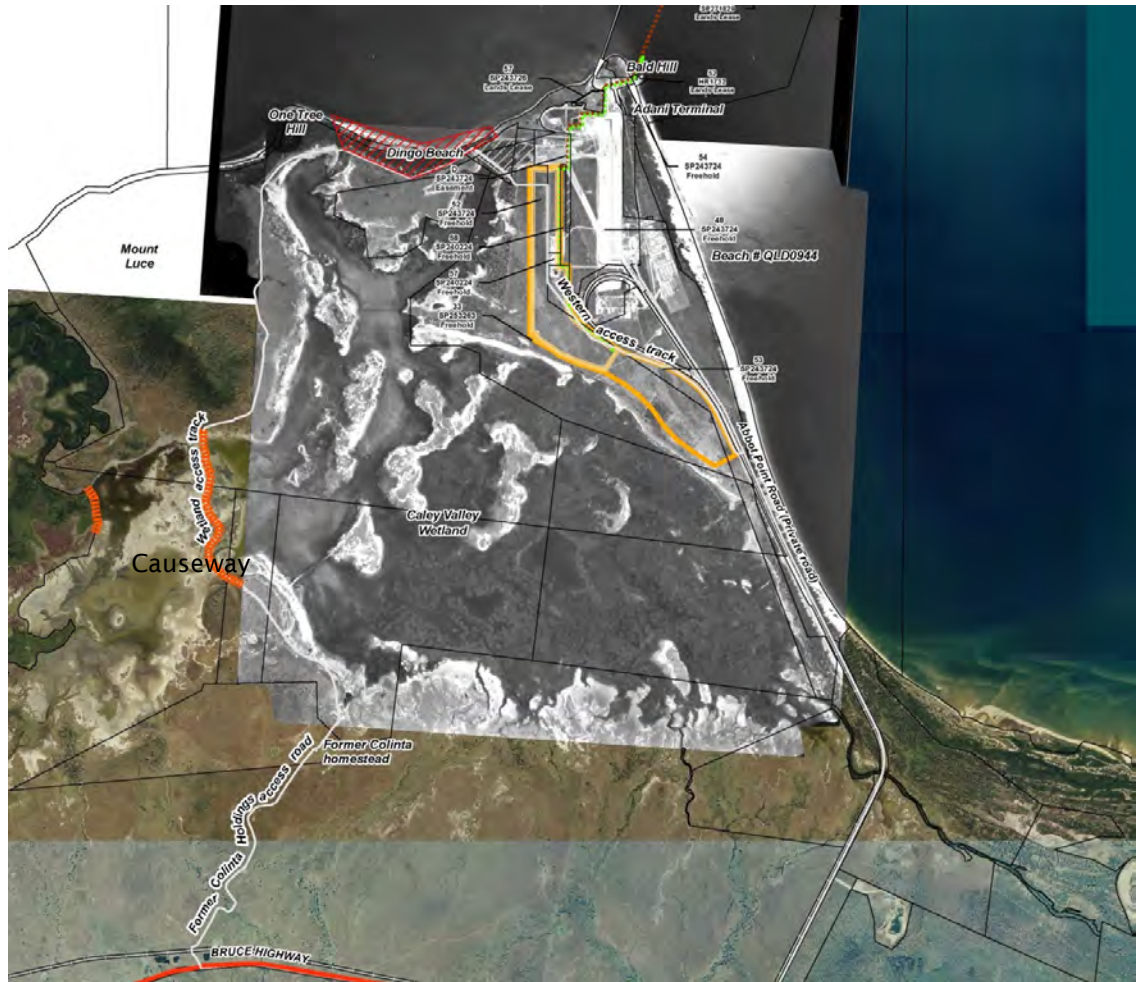


Figure 3-4: Historical aerial photograph, 1983



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1990 – Abbot Point – Map 8558, run 1 – photo 237, run 12 – photo 231

Figure 3-5 provides reasonably good definition. The Project study area remains relatively unchanged, with the exception of additional access tracks through Lot 33 SP253263. In addition, the borrow pit/laydown area and dam appear to be partially rehabilitated with the dam filled and the borrow pit/laydown area footprint reduced in size. Regionally the area also appears unchanged, however, previous construction areas (i.e. laydowns and offices) appear to be partially rehabilitated with vegetation regrowth.



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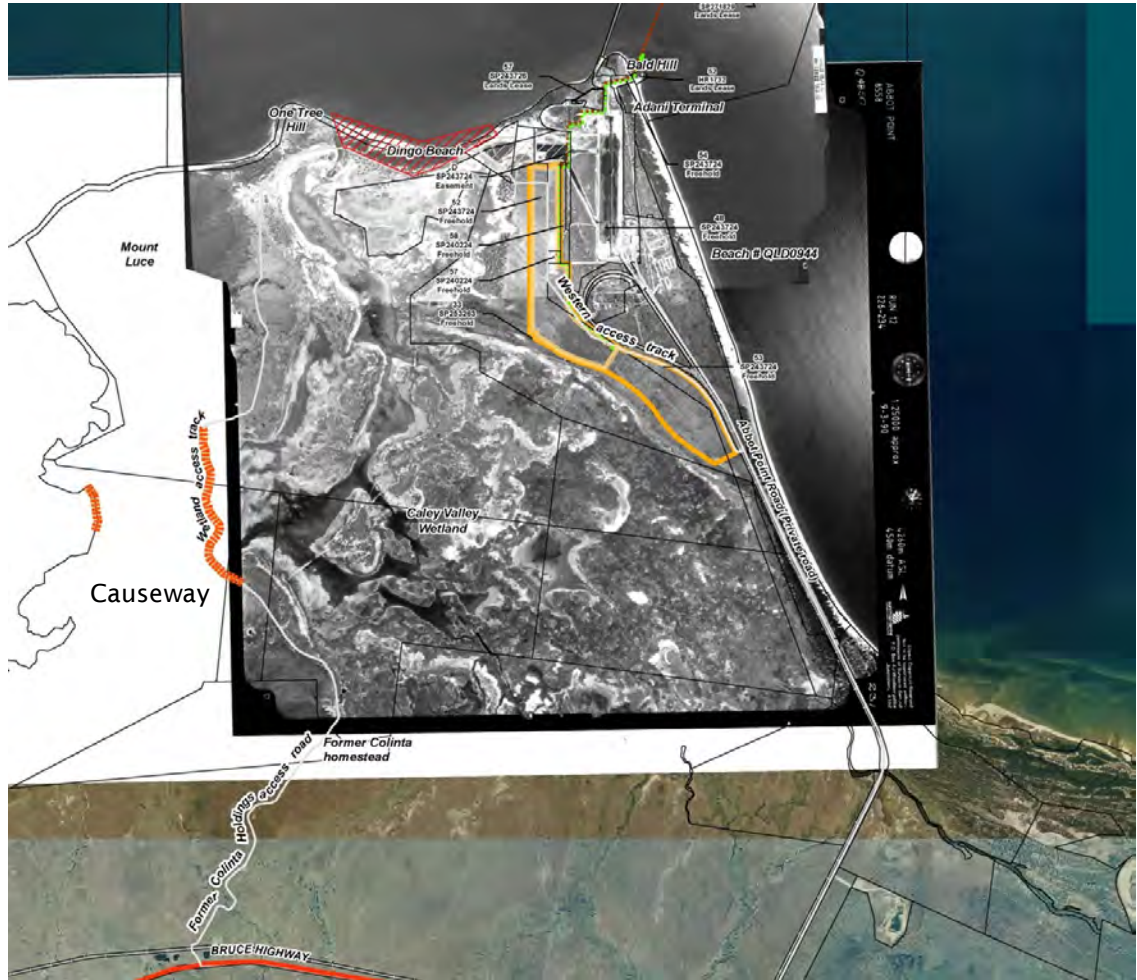


Figure 3-5 Historical aerial photograph, 1990



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1998 - Bowen - Map 8557, run 2 - photo 12

Figure 3-6 is colour and provides good definition. The Project study area remains mostly unchanged. Regionally, the area also appears unchanged with the exception of vegetation regrowth within the old construction laydown areas including the borrow-pit and dam (Lot 33 SP253263), railway loop and eastern of the laydown and vegetation maintenance (i.e. lawn mowing) is evident in the south eastern portion of Lot 33 SP253263.



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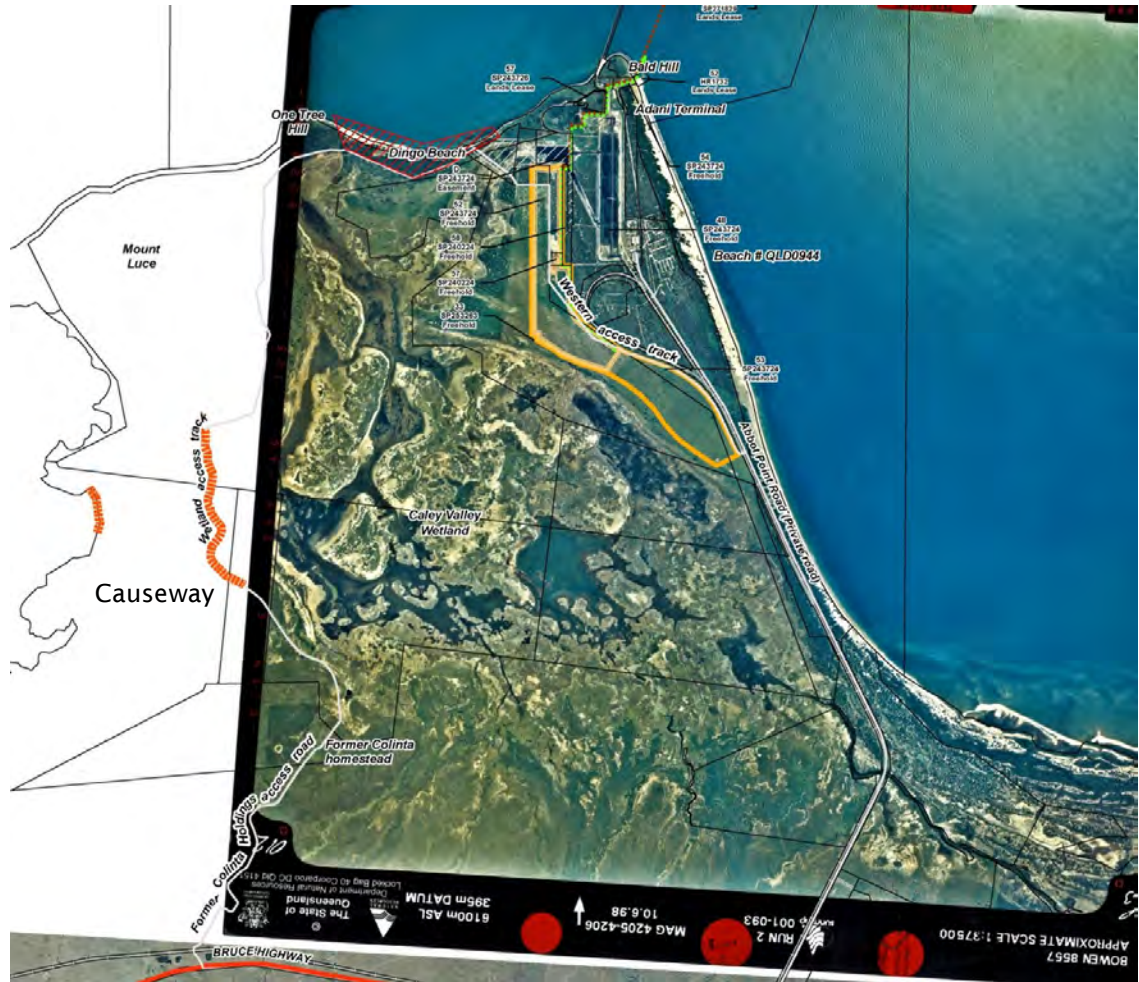


Figure 3-6 Historical aerial photograph, 1998



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2004 - St Lawrence to Townsville - Map 159-173, run 14 - photo 161

Although in colour, Figure 3-7 is dark and definition is poor. The east side of the Project study area and coal terminal can be easily seen. Much of the land within the coal terminal has now recovered from construction is mostly vegetated. The Project study area in this photograph appears to remain unchanged.



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Figure 3-7 Historical aerial photograph, 2004



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2009 Central Queensland - North, Ortho-rectified image mosaic

Figure 3-8 provides very clear definition. New development within the coal terminal is evident with the previously rehabilitation construction office area now cleared and used as a laydown. Vegetation within the coal terminal has been cleared from Lot 33 SP124849, Lot 52 SP243724, Lot 53 SP243724, Lot 58 SP240224 and Lot 57 SP240224. These lots are within the Project study area. Several structures are visible on lots 57 and 58 and they appear to be used as laydown areas. Two new dams are also evident on lot 52. One is located in the northeast corner the other in the southeast.



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Figure 3-8 Historical aerial photograph, 2009



4 ENVIRONMENTAL SETTING

4.1 Topography

The Project study area is gently undulating with a slight overall gradient to the north east. The topography has been changed through filling activities during the construction of the coal facility. The approximate elevation of the site ranges from approximately 1 m Australian Height Datum (m AHD) to 5 m AHD. The regional topography comprises undulating hills, tidal flats and flood plains.

4.2 Geology

The 1:250,000 geological mapping (**Figure 4-1**) indicated that there are five mapping units within the Project study area. These include:

- Qr low linear dunes composed of sand, some interbedded silt
- Qm littoral flats and pans composed of mud, silt and minor salt
- Qu outwash and talus
- C-Pd Upper Carboniferous to Lower Permian diorite, quartz diorite, tonalite, gabbro, norite, minor granodiorite, adamellite, granite
- C-Pg Upper Carboniferous to Lower Permian adamellite, granite, granodiorite.

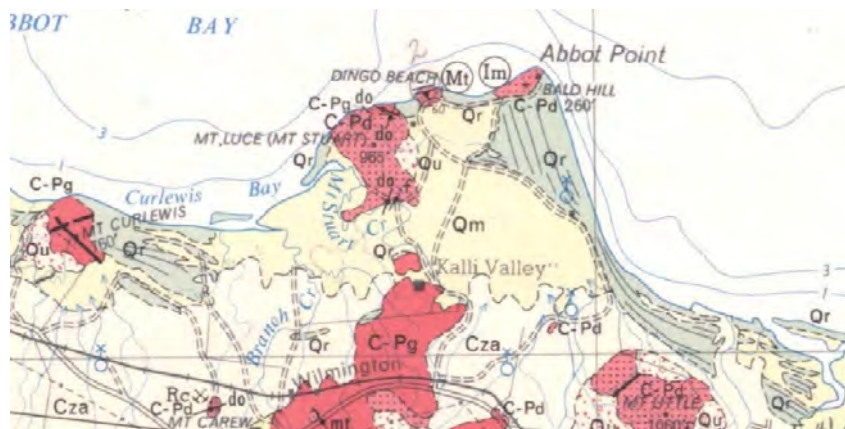


Figure 4-1: Regional geology (1:250,000 Ayr Sheet SE55-15)



4.3 Soils

Regional soils information is supplied in the Survey of the Townsville-Bowen Region, North Queensland 1950, CSIRO Land Research Series No. 2 (Christian *et al.*, 1953), Atlas of Australian Soils (Northcote *et al.* 1960-68) and CSIRO's Australian Soil Resource Information System (ASRIS). The soils information presented in these government studies are insufficiently detailed to adequately describe the Project study area.

The Abbot Point Growth Gateway Project – Soil Assessment and Management Plan (WorleyParsons 2015) outlines the DMCPs are located on coastal sands that form a sand plain at around 3-5m AHD. Two soils have been identified in the sand plain and adjacent to the DMCPs (Qr1 and Qr2).

4.4 Regional hydrology

A search of the DNRM registered groundwater bores data base shows nine registered bores are located within a 1 km site radius. Three of the nine bores are located within the DMCPs and depth to groundwater (where available) was recorded at approximately 4 mbgs. The nine bores were constructed between 2005 and 2013, which suggests they are likely used for industrial purposes.

Additional hydrogeological information pertaining to the Project study area will be presented in the forthcoming Abbot Point Growth Gateway Project – Groundwater Study currently being compiled by AGE.



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5 AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)

Based on the results of the site history review, a number of APECs have been identified within property lots associated with the Protect Study area. These APECs and the associated CoC are summarized in **Table 5-1** below. The location of APECs are presented on Figure 5-1.

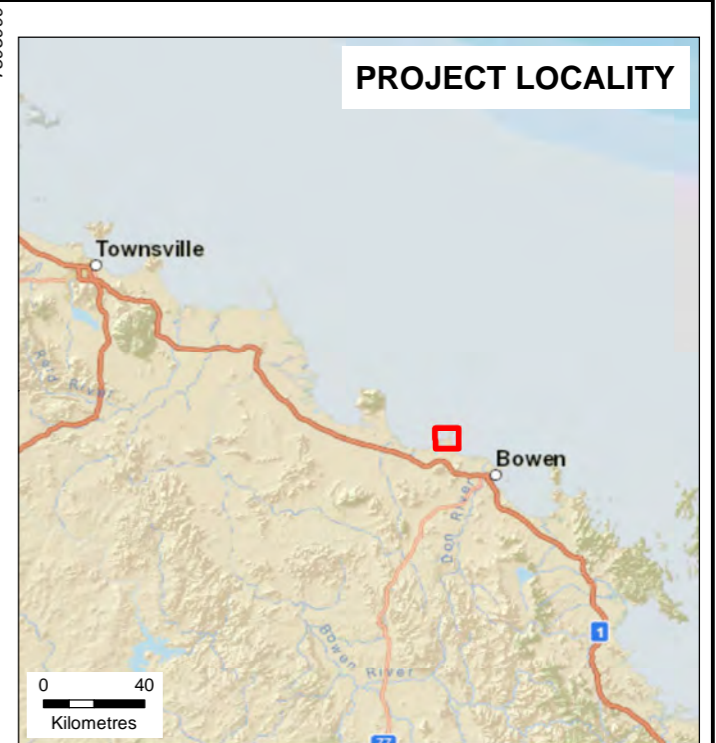
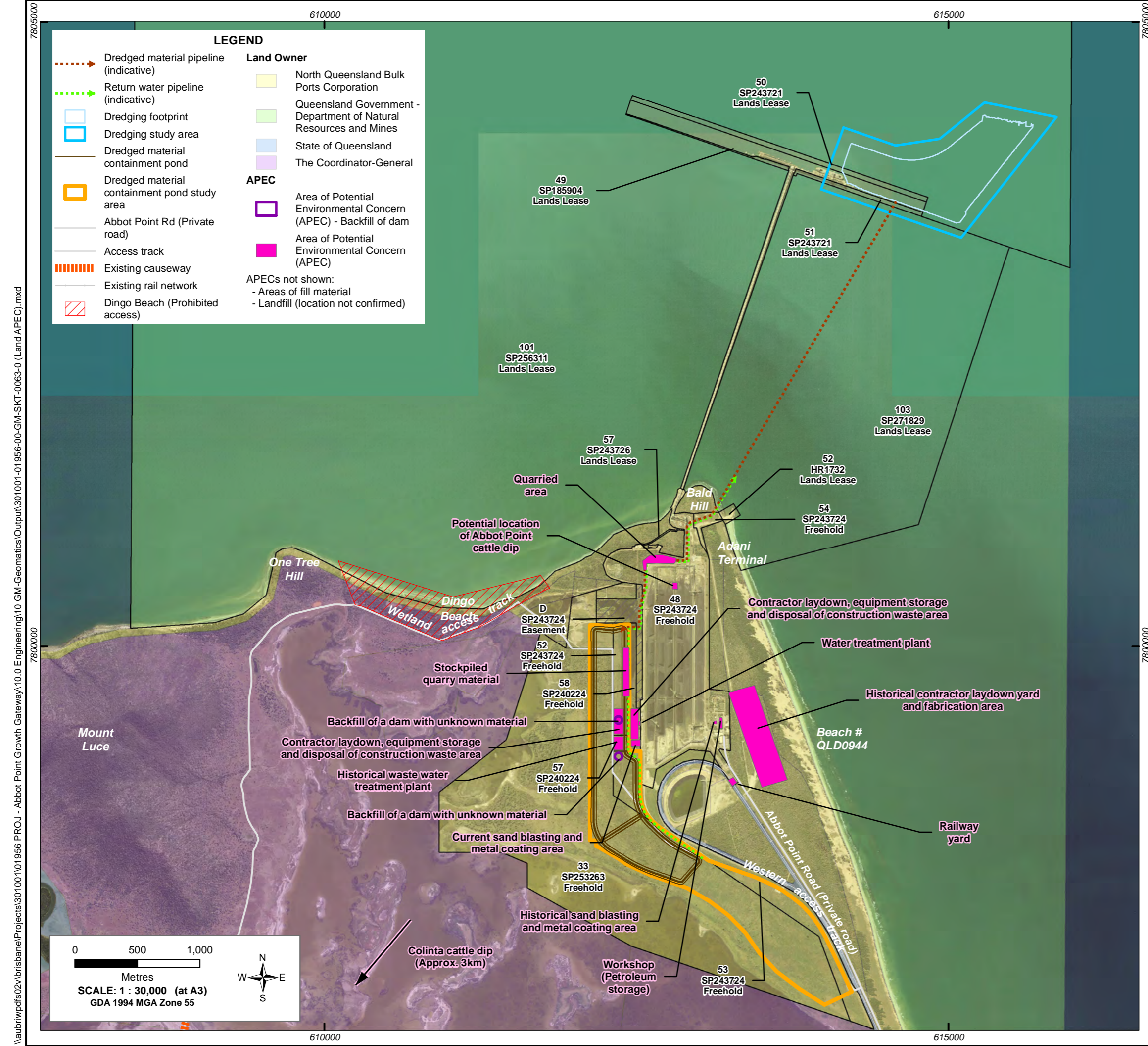
Table 5-1: Summary of APECs and associated CoC

APECs	Property lot/s	CoC	Located within Project study area
Laydown, equipment storage and disposal of construction waste areas	L52 SP243724 and L58 SP240224	Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), heavy metals	Yes (L52 SP243724) No (L58 SP240224)
Stockpile of quarried material (located adjacent to and west of the existing coal terminal).	L52 SP243724	ASS, metals	Yes
Waste water treatment plant	L57 SP240224	TRH, BTEX, PAH, heavy metals	Yes
Filling of two historical dams associated with the coal facility with an unknown material.	L53 SP243724	TRH, BTEX, PAH, heavy metals, volatile organic hydrocarbons (VOCs), OC/OPP	Yes
Landfill (location unconfirmed)	L53 SP243724, L57 SP240224, L52 SP243724 (incl. easement D SP243724), L48 SP243724, L58 SP240224	TRH, BTEX, PAH, heavy metals, OC/OPP	Unlikely



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APECs	Property lot/s	CoC	Located within Project study area
Abbot Point cattle dip located within the north west quadrant of the coal facility	Lot 52 SP243724 (incl. easement D) Lot 48 SP243724 and Lot 58 SP240224	OC/OPP, heavy metals	No
Bald Hill Quarry	Lot 48 SP243724 and Lot 58 SP240224	TRH, BTEX, PAH, heavy metals	No
Workshop (chemical storage including petroleum products)	Lot 48 SP243724	TRH, BTEX, PAH, phenols, heavy metals	No
Sand blasting and metal coating at two locations within the coal facility	Lot 48 SP243724 and Lot 58 SP240224	TRH, BTEX, heavy metals, VOCs, radioactive materials	No
Contractor laydown and fabrication area located east of the coal facility	Lot 51 SP243724 (property lot not associated with the study area)	TRH, BTEX, PAH, phenols, heavy metals	No
Water treatment plant	L58 SP240224	TRH, BTEX, PAH, heavy metals	No
Use of unverified fill material during construction of the coal facility	L22 SP271830, L33 SP253263, L53 SP243724, L57 SP240224, L52 SP243724 (incl. easement D SP243724), L57 SP243726, L33 SP124849, L48 SP243724, L54 SP243724, L58 SP240224	TRH, BTEX, OC/OPP, heavy metals	No



Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

Source information:
 Dredging study area
 Setout points derived from coordinates on NOBP/Aurecon figure 242770-0000-DRG-SK-0021-A supplied by NOBP
 Dredged material and return water pipelines
 Digitised from BMT JFA Drg. No. BMT JFA 275.02-50-03 A, dated 17/12/2014 and Golder Associates Drg. No. 1525905-027-002A, dated 12/06/2015, with some minor adjustments to avoid clashes with existing infrastructure visible in the 2013 aerial imagery and to avoid any potential clashes with the proposed MOF expansion
 Dredged material containment pond
 Supplied by Golder Associates 23/06/2015
 Dredged material containment pond study area
 Department of State Development, Infrastructure and Planning. (DSDIP)
 Existing transport network
 Physical Road Network - Queensland, Physical Rail Network - Queensland
 Queensland Government - Department of Environment and Resource Management
 2013 Imagery
 Queensland Government - Department of State Development, Infrastructure and Planning 2015
 Cadastral Boundaries
 Downloaded 08/06/2015 -
[http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid=\(4091CAF1-50E6-4BC3-B3D4-229AA318231A\)](http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid=(4091CAF1-50E6-4BC3-B3D4-229AA318231A))
 Queensland Government - Department of Natural Resources and Mines
 Land Ownership
 Digitised from NOBP map "Port of Abbot Point with Land Owners", dated 17/12/2013. Map No. NOBP2013-033d.
 Updated with information supplied by client.
 Contaminated Land Sampling Locations
 Site survey undertaken by WorleyParsons Nov 2014

0	13/07/2015	Issued for information	KM	RJ			
REV	DATE	REVISION DESCRIPTION	DRN	CHK	ENG	CHK ENG	APPD


Queensland Government
 QUEENSLAND GOVERNMENT
ABBOT POINT GROWTH GATEWAY PROJECT
 Figure 5-1
Areas of Potential Environmental Concern (APEC)
 Figure: 301001-01956-00-GM-SKT-0063 Rev: 0

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6 POTENTIAL IMPACTS

The Abbot Point Growth Gateway Project will include disturbance of soil and sediment from, but not limited to, clearing of vegetation, stripping topsoils, grading slopes, construction of earth embankment walls, excavation of soil material from borrow areas, stockpiling of soils and vegetation, placement of dredged material and trenching. This section considers the potential impacts if construction activities disturb potential contaminated land, as well as the potential for land contamination to occur as a result of construction activities.

6.1 Existing land contamination

Impacts to soil and/or groundwater within the Project study area may exist as a result of the following APECs:

- Waste water treatment plant
- Lay down, equipment storage and disposal of construction waste area
- Stockpile of quarry material (located adjacent to and west of the existing coal terminal)
- Backfilling of two dams with an unknown material.

Although the waste water treatment plant has been decommissioned, an investigation has not been completed to assess if soil and/or groundwater impacts exist as a result of its operation. Soil and/or groundwater impacts may be present as a result of product releases, maintenance and chemical storage.

The lay down, equipment storage and disposal of construction waste area were not regulated and therefore specific activities in this area unknown. Soil and/or groundwater impacts may be present as a result of vehicle/machinery maintenance, uncontrolled dumping and chemical storage.

The stockpile of quarried material poses a risk for site impacts as a result of the oxidation of potential sulphur-bearing minerals within the rock. Oxidation of these potential sulphur-bearing minerals releases acid which lowers to pH and in turn mobilises metals.

The filling of historical dams poses a risk to soil and groundwater quality as the backfilling filling processes, specifically the backfill material, is unknown. Based on the time of construction, the dams may be associated with the construction of the coal facility or associated with the historical waste water treatment plant.

Although the location of the landfill has not been identified, the landfill is considered to pose a low risk of existing soil and groundwater impacts within the Project study area. This is based on the lack of anecdotal evidence of the landfill being located within the Project study area, which is further supported by the historical aerial photograph review.



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The remaining APECs listed in **Table 5-1** are considered to pose a low risk of impacts to the Abbot Point Growth Gateway Project based on their distance from the planned areas of disturbance and/or the general nature of the associated CoC.

6.2 General construction activities

Earthmoving equipment which is utilised during construction of the DMCPs and associated pipelines may provide a source of contamination from hydrocarbons such as diesel, petroleum fuel, lubricating oils and hydraulic fluids. The appropriate storage, transfer and use of fuels, lubricants and oils will limit the quantity of material that may potentially be released to the receiving environment. The storage facilities should have primary and secondary containment along with product handling procedures for transfer and use in accordance with applicable legislation. Routine maintenance and inspections of the equipment will further limit the potential for impacts.

6.3 Cumulative impacts

The risk of cumulative impacts to soil and groundwater from the occurrence of contaminated land during operational activities will be associated mostly with the use, transport and storage of chemicals (including petroleum products). However, assuming the approved management plans are adhered to, the risk of cumulative impacts to soil and groundwater is considered low.



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7 CONCEPTUAL SITE MODEL (CSM)

A basic Conceptual Site Model (CSM) has been tabulated (Table 7-1) to identify the potential sources, pathways and receptors associated with APECs identified within the Project Study Area. The CSM should be updated when relative new information becomes available.

Table 7-1: Initial Conceptual Site Model flow diagram

Primary contaminant sources	Secondary sources	Transport mechanisms	Pathway	Exposure route	Potential Receptors
Waste water treatment plant Lay down, equipment storage and disposal of construction wastes area Stockpile of quarry material (located adjacent to and west of the existing coal terminal)	Impacted soil, groundwater and air	Overland flow, infiltration/percolation, groundwater flow and volatilization	Soil, groundwater and air	Direct contact (ingestion / absorption), inhalation	Construction/ operations worker, terrestrial and aquatic flora and fauna



8 RECOMMENDATIONS/MITIGATION MEASURES

The results of the PSI indicate there is a potential for contaminated land to be present within the footprint of the DMCPs relating to the following APECs:

- Historical waste water treatment plant
- Laydown, equipment storage and disposal of construction waste area
- Stockpile of quarry material (located adjacent to and west of the existing coal terminal)
- Backfilling of two dams with an unknown material.

A Detailed Site Investigation (DSI) should be completed prior to ground disturbance works in APECs to protect construction staff and the environment from risks associated with the potential presence of contaminants in these areas. If contamination is identified in the DSI, then remediation may be required. The DSI could also be used to assist in having the relevant property lots removed from the EMR.

The construction of the DMCPs and associated pipelines will result in the use of construction plant that will require fuels, oils and lubricants for operation and maintenance. Other chemicals may also be used for construction including paint, concrete additives and sealants. A significant volume of construction waste may also be generated. Standard good construction practice should be implemented as set out in a Construction Environmental Management Plan (CEMP) to protect against land contamination due to construction activities, and to record and remediate the affected areas if it occurs. Such measures may include but not be limited to:

- Using suitably maintained plant and equipment
- Establishing fuel and chemical stores
- Ensuring permanent fuel and chemical stores, and maintenance and refuelling areas are provided with appropriately sized secondary containment
- Installing interceptor pits or similar to collect runoff and treat where required
- Installing tanks above ground with impermeable liners in and around tanks
- Completing land assessments of decommissioned chemical and fuel store areas and after fires, in accordance with DEHP guidelines
- Keeping maintenance records and implementing an inspection program, of all plant and stores
- Installing and maintaining readily accessible spill kits and training staff in their use.



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Although the risk of unidentified soil or groundwater impacts is considered low, if excavation works uncover unexpected significant contamination (i.e. waste from landfilling), all work in proximity of the contamination should cease, and an inspection and assessment of contamination levels will be carried out. Remediation measures should then be recommended and implemented before construction continues.



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- Whitsunday Regional Council (2006). Bowen Shire Planning Scheme zoning map 1. <http://www.whitsunday.qld.gov.au/bowen-town-planning>



DEPARTMENT OF STATE DEVELOPMENT
PRELIMINARY SITE INVESTIGATION
ABBOT POINT GROWTH GATEWAY PROJECT

Whitsunday Regional Council (2006). Bowen Shire Planning Scheme overlay map 7 natural features and resources, special management areas, wetlands and waterways.

<http://www.whitsunday.qld.gov.au/bowen-town-planning>

WorleyParsons (2014). Abbot Point Port and Wetland Project – Phase 1 Preliminary Site Investigation.

WorleyParsons (2015). Soil Assessment and Management Plan Abbot Point Growth Gateway Project.



Appendix 1 EMR/CLR Search Results



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183093 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:
Lot: 22 Plan: SP271830

BOWEN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183092 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:
Lot: 57 Plan: SP243726
ABBOT POINT Road
BOWEN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183089 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:

Lot: 101 Plan: SP256311
ABBOT POINT Road
CORAL SEA

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183087 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:
Lot: 50 Plan: SP243721
ABBOT POINT Road
BOWEN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183086 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:
Lot: 51 Plan: SP243721
ABBOT POINT Road
BOWEN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056116 EMR Site Id: 14 October 2014
This response relates to a search request received for the site:
Lot: 33 Plan: SP124849

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056096 EMR Site Id: 100630 14 October
2014

This response relates to a search request received for the site:

Lot: 33 Plan: SP253263

This response relates to a search request received for the site:

The site you have searched has been subdivided from the following site, which is included on the EMR. Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the contaminating activity.

Lot: 1 Plan: RP745292
Address: ABBOT POINT
 BOWEN 4805

The site has been subject to the following Notifiable Activity pursuant to section 374 of the *Environmental Protection Act 1994*.

PETROLEUM PRODUCT OR OIL STORAGE - storing petroleum products or oil -

(a) in underground tanks with more than 200L capacity; or

(b) in above ground tanks with -

(i) for petroleum products or oil in class 3 in packaging groups 1 and 2 of the dangerous goods code - more than 2, 500L capacity; or

(ii) for petroleum products or oil in class 3 in packaging groups 3 of the dangerous goods code - more than 5, 000L capacity; or

(iii) for petroleum products that are combustible liquids in class C1 or C2 in Australian Standard AS1940, 'The storage and handling of flammable and combustible liquids' published by Standards Australia - more than 25, 000L capacity.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056141 EMR Site Id: 94374 14 October 2014
This response relates to a search request received for the site:
Lot: 48 Plan: SP243724

SEARCH RESULT

The site you have searched is a lot resulting from the amalgamation of the following sites, which are included on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR), as indicated below. Further details for these sites are available by contacting this Agency via email: emr.clr.registry@ehp.qld.gov.au

Lot	Plan	
47	SP117913	EMR
4	RP738760	EMR
3	RP748628	EMR
4	RP745292	EMR

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
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400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056122 EMR Site Id: 14 October 2014
This response relates to a search request received for the site:
 Lot: 52 Plan: HR1732

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056106 EMR Site Id: 94375 14 October 2014
This response relates to a search request received for the site:
Lot: 52 Plan: SP243724

This response relates to a search request received for the site:
The site you have searched has been subdivided from the following site, which is included on the EMR.
Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the
contaminating activity.

Lot: 4 Plan: RP738760
Address: ABBOT POINT
 BOWEN 4805

The site has been subject to the following Notifiable Activity pursuant to section 374 of the
Environmental Protection Act 1994.

LIVESTOCK DIP OR SPRAY RACE - operating a livestock dip or spray race facility.

For the majority of rural properties only a small area may be affected by the chemicals used in livestock
dips and spray races. The Department of Environment and Heritage Protection may hold further
information relating to the location of the dip site within this property.

LANDFILL - disposing of waste (excluding inert construction and demolition waste).

ABRASIVE BLASTING - carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths)
or disposing of abrasive blasting material.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising,
pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week
(other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

**Registrar
Administering Authority**



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056097 EMR Site Id: 94376 14 October 2014
This response relates to a search request received for the site:
 Lot: 53 Plan: SP243724

SEARCH RESULT

The site you have searched is a lot resulting from the amalgamation of the following sites, which are included on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR), as indicated below. Further details for these sites are available by contacting this Agency via email: emr.clr.registry@ehp.qld.gov.au

Lot	Plan	
4	RP738760	EMR
3	RP748628	EMR

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056104 EMR Site Id: 94559 14 October 2014
This response relates to a search request received for the site:
Lot: 57 Plan: SP240224

This response relates to a search request received for the site:
The site you have searched has been subdivided from the following site, which is included on the EMR.
Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the
contaminating activity.

Lot: 4 Plan: RP738760
Address: ABBOT POINT
 BOWEN 4805

The site has been subject to the following Notifiable Activity pursuant to section 374 of the
Environmental Protection Act 1994.

LIVESTOCK DIP OR SPRAY RACE - operating a livestock dip or spray race facility.

For the majority of rural properties only a small area may be affected by the chemicals used in livestock
dips and spray races. The Department of Environment and Heritage Protection may hold further
information relating to the location of the dip site within this property.

LANDFILL - disposing of waste (excluding inert construction and demolition waste).

ABRASIVE BLASTING - carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths)
or disposing of abrasive blasting material.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising,
pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week
(other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

**Registrar
Administering Authority**



Department of Environment and Heritage Protection (EHP)
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www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50056145 EMR Site Id: 94560 14 October 2014
This response relates to a search request received for the site:
 Lot: 58 Plan: SP240224

This response relates to a search request received for the site:
The site you have searched has been subdivided from the following site, which is included on the EMR.
Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the
contaminating activity.

 Lot: 4 Plan: RP738760
 Address: ABBOT POINT
 BOWEN 4805

The site has been subject to the following Notifiable Activity pursuant to section 374 of the
Environmental Protection Act 1994.

LIVESTOCK DIP OR SPRAY RACE - operating a livestock dip or spray race facility.

For the majority of rural properties only a small area may be affected by the chemicals used in livestock
dips and spray races. The Department of Environment and Heritage Protection may hold further
information relating to the location of the dip site within this property.

LANDFILL - disposing of waste (excluding inert construction and demolition waste).

ABRASIVE BLASTING - carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths)
or disposing of abrasive blasting material.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising,
pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week
(other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

**Registrar
Administering Authority**



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
Email: emr.clr.registry@ehp.qld.gov.au

REPRINT - 17/06/2015

SEARCH RESPONSE

**ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)**

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183090 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:
Lot: 103 Plan: SP271829

CORAL SEA

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

**Registrar
Administering Authority**



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
Email: emr.clr.registry@ehp.qld.gov.au

REPRINT - 17/06/2015

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183088 EMR Site Id: 10 June 2015
Cheque Number:
Client Reference:

This response relates to a search request received for the site:

Lot: 49 Plan: SP185904
ABBOT POINT Road
BOWEN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
Email: emr.clr.registry@ehp.qld.gov.au

REPRINT - 17/06/2015
SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Robert Johns
1 Merion Close Oxley
Oxley QLD 4075

Transaction ID: 50183091 EMR Site Id: 94462 10 June 2015
Client Reference:
Cheque Number:

This response relates to a search request received for the site:
Lot: 54 Plan: SP243724

This response relates to a search request received for the site:
The site you have searched has been subdivided from the following site, which is included on the EMR.
Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the
contaminating activity.

Lot: 47 Plan: SP117913
Address: ABBOT POINT ROAD
 COASTAL GRAZING 4805

The site has been subject to the following Notifiable Activity pursuant to section 374 of the *Environmental Protection Act 1994*.

ABRASIVE BLASTING - carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority



**WorleyParsons
Consulting**



**Queensland
Government**

DEPARTMENT OF STATE DEVELOPMENT
PRELIMINARY SITE INVESTIGATION
ABBOT POINT GROWTH GATEWAY PROJECT

Appendix 2 Environmentally Relevant Activities

Registration certificate

Environmental Protection Act 1994

Registration certificate

No: ENRE00543206

This registration certificate is issued by the administering authority and is a replacement document for the original approval issued on: 18 March 2011.

The anniversary day for the purposes of the Annual Return remains: 29 August.

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activities listed below at the following place subject to the conditions set out in a development approvals attached to the premises, or the relevant code of environmental compliance.

Registered Operator:-

Abbot Point Bulk Coal Pty Ltd
Level 1 MIM Plaza
410 Ann Street, BRISBANE QLD 4000

Development Permits

IPCE00319905C11 (DA05/076)
IPDE00856508

Place:-

Lot 3 Plan RP748628, Lot 47 Plan SP117913
Located at:-
Abbot Point Coal Terminal, BOWEN QLD 4805

Registered Activity/ies: -

ERA 8 Chemical storage Threshold 3(a) - storing 10m³ to 500m³ of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3

Place:-

Lot 46 Plan SP156160
Located at:-
Abbot Point Coal Terminal, BOWEN QLD 4805

RC 24/6/11

Registered Activity/ies: -

ERA 63 Sewage treatment Threshold 2(b) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 to 1500EP (i) if treated effluent is discharged to an infiltration trench or through an irrigation scheme

Place:-

Lot 1 Plan RP738760, Lot 1 Plan RP748628, Lot 2 Plan RP738760, Lot 2 Plan RP748628, Lot 3 Plan RP748628, Lot 33 Plan SP124849, Lot 34 Plan SP112920, Lot 4 Plan RP738760, Lot 46 Plan SP156160, Lot 47 Plan SP117913, Lot 49 Plan HR1647, Lot 52 HR1732, Lot 57 Plan SP112921, Lot 58 Plan SP112921

Registered Activity/ies: -

ERA 50 Bulk material handling Threshold 1(a) - loading or unloading 100t or more of minerals in a day or stockpiling 50000t or more of minerals within 5km of the highest astronomical tide or 1km of a watercourse

Place:-

Lot 3 Plan RP748628

Registered Activity/ies: -

ERA 21 Motor vehicle workshop operation - operating a workshop on a commercial basis or in the course of carrying on a commercial enterprise involving maintaining mechanical components, engine cooling radiators or body panels; spray-painting body panels; and detailing or washing relating to motor vehicles



Delegate

Department of Environment and Resource Management
Environmental Protection Act 1994

24-JUN-2011

Registration certificate

Environmental Protection Act 1994

Registration certificate

No: ENRE00549306

This amended registration certificate is issued by the administering authority and takes effect from: 20-APR-2011.

The anniversary day for the purposes of the Annual Return remains: 18th SEPTEMBER.

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activities listed below at the following places subject to the conditions set out in a development approval attached to the premises.

Registered Operator:-

Diamond Protective Coating Services Pty Ltd
Shepherd & Dudley Pty Ltd
11 Sydney Street, MACKAY QLD 4740

Development Approval No:-

DERM PERMIT No: IPCE00319905c11, IPDE00856508

Place:-

Lot 1 Plan RP738760, Lot 1 Plan RP748628, Lot 2 Plan RP738760, Lot 2 Plan RP748628,
Lot 3 Plan RP748628, Lot 33 Plan SP124849, Lot 34 Plan SP112920, Lot 4 Plan RP738760,
Lot 46 Plan SP156160, Lot 47 Plan SP117913, Lot 49 Plan HR1647, Lot 49 Plan SP185904,
Lot 52 Plan HR1732, Lot 57 Plan SP12921, Lot 58 Plan SP12921.

Located at:-

Abbot Point Coal Terminal, BOWEN QLD 4805

Registered Activity/ies: -

ERA 17 Abrasive blasting - cleaning equipment or structures on a commercial basis using a stream of abrasives in either a wet or dry pressure stream

ERA 38 Surface coating Threshold 1(d) - anodising, electroplating, enamelling or galvanizing, using, in a year, more than 10000t of surface coating materials

ERA 38 Surface coating Threshold 2(b) - coating, painting or powder coating, using, in a year, more than 100t of surface coating materials



Delegate

Marie Hayes

Department of Environment and Resource Management
Environmental Protection Act 1994

20-APR-2011

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPPR01746113

Environmental authority takes effect on 01-DEC-2013.

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee which is currently \$10,054.00 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
North Queensland Bulk Ports Corporation	Level 1, Wellington House 181 Victoria Street MACKAY QLD 4740

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
16-(1c) Dredging >100000t but <1000000t yr	Port of Abbot Point, Operational Area - Lot 49 Plan SP185904 and Lot 52 Plan SP243721

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

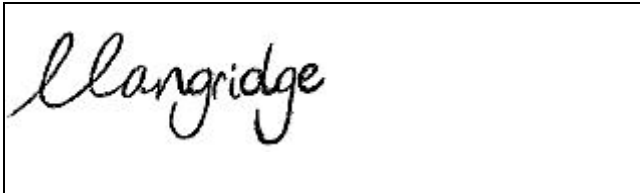
An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

03/12/2013

Date

Linda Langridge
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Margaret Jones
Permit and Licence Management
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

AGENCY INTEREST: GENERAL

(G1) The administering authority must be advised in writing of the date of commencement of a dredge campaign at least ten days prior to that date.

Limit of Dredging Approved

(G2) Dredging activities which constitutes the environmentally relevant activity (ERA 16.1(c)) hereby approved, is limited to:

(a) The removal of maintenance dredge material dredged from the berth pockets, approach areas and load-out marine facility at Abbott Point at locations shown in Drawing HP.091026.093 – Port of Abbot Point Maintenance Dredging Areas, attached herein as Attachment 1.

(b) Placement of dredge spoil at Material Relocation area, defined by the following coordinates (WGS84, Zone 55):

Northing	Easting
NW 608422.18	7807364.52
NE 610274.18	7807364.52
SE 610274.18	7806438.52
SW 608422.18	7806438.52

(G3) Any dredging must be conducted using equipment that is in survey and registered and, in relation to environmental performance, is equal to or better than the following equipment:

(a) Trailing Suction Hopper Dredge that is equipped, as a minimum, with:

- (i) below keel discharge of tail waters via an anti-turbidity control valve;
- (ii) on-board systems for determining solids to water ratio or density of dredged material;
- (iii) electronic positioning and depth control system for defining the location and depth of dredging activities;
- (iv) dredge heads and depth control capable of, and where appropriate, fitted with fauna exclusion devices (e.g. turtle deflectors).

(b) Cutter Suction Dredge that is equipped, as a minimum, with:

- (i) electronic positioning and depth control system for defining the location and depth of dredging activities;
- (ii) continuous delivery connection (e.g. floating or submerged pipeline) to an approved placement site;
- (iii) a system or process to ensure the delivery system integrity is maintained at all times;
- (iv) systems for determining solids to water ratio or density of dredged material during operations.

External Audit

- (G4) You must engage an appropriately qualified Third Party Environmental Auditor, nominated by the approval holder independent of contractual arrangements for the design and construction of the project, for each dredge campaign covered by this development approval.
- (G5) The Environmental Auditor must audit key stages of the works subject to this approval against the:
- Conditions of this Development Approval;
 - Integrated Environmental Management System (IEMS) as required by condition (G10);
 - General Environmental Duty (GED).
- (G6) At the completion of the project, the Environmental Auditor must finalise the audits and prepare a summary of the results in a form acceptable to the administering authority.
- (G7) A copy of each Audit Report must be provided to the administering authority within ten (10) business days of a written request being made or twenty-eight (28) business days of completion of a dredge campaign.
- (G8) The registered operator must ensure that a person or body possessing appropriate experience and qualifications determines the cross sections of the dredged area to confirm the works have been carried out in accordance with the plans referred to in condition (G2) and report the results of the survey determinations to the administering authority within six (6) weeks of the completion of the project.
- (G9) A copy of the conditions of this development permit must be kept in a location readily accessible to personnel carrying out the activity.

Integrated Environmental Management System

NOTE: For the purposes of this development approval, an approved Dredge Management Plan, satisfies the requirements of an Integrated Environmental Management System, provide the following requirements are satisfied.

- (G10) From commencement of this development approval, an Integrated Environmental Management System (IEMS) must be implemented. The IEMS must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The IEMS must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.
- (G11) The approved IEMS must provide for at least the following functions:
- a) Training of staff, contractors and visitors in the awareness of environmental issues related to carrying out the activities, which must include at least:
 - The environmental policy, so that all persons that carry out the activities are aware of all relevant commitments to environmental management;
 - Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these;
 - Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused;
 - Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary stabilisation and site rehabilitation);
 - Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively;
 - Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; and
 - Obligations in respect of monitoring, notification and record keeping under the DMP and relevant development permits.
 - b) Monitoring of the release of contaminants, methods, record keeping and notification of results;
 - c) Conducting assessment of the environmental impact of any release of contaminants;
 - d) Waste prevention, treatment and disposal; and
 - e) A program for continuous improvement.
- (G12) The IEMS must not be implemented or amended in a way that contravenes or is inconsistent with any condition of this approval.
- (G13) The permit holder must provide any amendments to the IEMS to the administering authority at least 28 days prior to the implementation of the proposed amendments, except where amendments must be implemented to prevent environmental harm or to ensure compliance with this development approval.
- (G14) The IEMS must be reviewed every 5 years from commencement of the ERA and supplied to the administering authority for review.

Prevent and/or Minimise Likelihood of Environmental Harm

(G15) In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and/or to minimise the likelihood of environmental harm being caused.

[Note: This development approval authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this approval explicitly authorises that harm. Where there is no condition or the development approval is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.]

Maintenance of Measures, Plant and Equipment

(G16) The registered operator of an ERA to which this approval relates must:

- install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- maintain such measures, plant and equipment in a proper and efficient condition; and
- operate such measures, plant and equipment in a proper and efficient manner.

Alterations

(G17) No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided for by this approval.

Display of Environmental Authority

(G18) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity

Records

(G19) Record, compile and keep all monitoring results required by this development approval and present this information to the administering authority upon request.

(G20) All records required by the development approval must be kept for at least five (5) years, except where stated otherwise in a condition of this approval.

Cease Activities in Event of Material or Serious Environmental Harm Occurring

(G21) If the registered operator of an ERA to which this approval relates becomes aware of material environmental harm or serious environmental harm as a result of carrying out the environmentally relevant activity (ERA) then the said activities must cease immediately.

Notification

(G22) Telephone the DERM's Pollution Hotline (1300 130 372) as soon as becoming aware of any release of contaminants not in accordance with the conditions of this development approval or any event where environmental harm has been caused or may be threatened.

Information to Follow Notification

- (G23) Written advice detailing the following information must be provided to the administering authority within fourteen (14) days following any notification in accordance with condition (G22):
- (a) the name of the registered operator, including the development approval number;
 - (b) the name and telephone number of a designated contact person;
 - (c) the location of the release / event;
 - (d) the time of the release / event;
 - (e) the time you became aware of the release / event;
 - (f) the suspected cause of the release / event;
 - (g) a description of the resulting effects of the release / event;
 - (h) the results of any sampling performed in relation to the release / event;
 - (i) actions taken to mitigate any environmental harm and or environmental nuisance caused by the release / event; and
 - (j) proposed actions to prevent a recurrence of the release / event.

Incident Recording

(G24) A record must be maintained of at least the following events:

- the time, date and duration of equipment malfunctions where the failure of the equipment resulted in the release of contaminants to the environment; and
- the time, date, description, volume and duration of any uncontrolled release of contaminants to the environment.
- the corrective actions implemented following an event (including photographic records).

Spill Kit(s)

(G25) Appropriate spill kit(s) and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.

(G26) All relevant personnel operating under this approval must be trained in the use of the spill kit(s).

Equipment Calibration

(G27) All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this development approval must be calibrated and appropriately operated and maintained.

Trained/Experienced Operator(s)

- (G28) All persons engaged in the conduct of the activity, including but not limited to employees and contract staff, must be:
- (i) trained in the procedures and practices necessary to:
 - (a) comply with the conditions of this development approval, and
 - (b) prevent environmental harm during normal operation and emergencies; or
 - (ii) under the close supervision of such a trained person.

Sample Analysis

- (G29) All analyses and tests required to be conducted under this development approval must be carried out by a laboratory that has NATA certification for such analyses and tests, except as otherwise authorised by the administering authority.

Monitoring

- (G30) An experienced and suitably qualified person(s) must conduct any monitoring required by this approval.

Quarterly Monitoring Report

- (G31) A monitoring report must be prepared every three (3) months and upon completion of dredging. This report shall include but not be limited to:
- (a) a summary of the previous three (3) months monitoring results obtained under the monitoring programs required under this approval and, in graphical form showing relevant limits, a comparison of the previous three (3) months monitoring results to both this approvals limits and to relevant prior results; and
 - (b) an evaluation and interpretation of the data from any monitoring programs;
 - (c) a summary of any record of quantities of releases required to be kept under this approval;
 - (d) a summary of the record of equipment failures or events recorded for any site under this approval;
 - (e) actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and
- (G32) The monitoring report required by condition (G31) must be submitted to the administering authority upon request or at the completion of each dredge campaign.

AGENCY INTEREST: AIR

Dust Nuisance

Nil

AGENCY INTEREST: NOISE

- (N1) Noise from the dredging activities must not cause environmental nuisance at a nuisance sensitive place.
- (N2) When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
- LA 10, adj, 10 mins
 - LA 1, adj, 10 mins
 - the level and frequency of occurrence of impulsive or tonal noise;
 - atmospheric conditions including wind speed and direction;
 - effects due to extraneous factors such as traffic noise; and
 - location, date and time of recording
- (N3) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

AGENCY INTEREST: LAND

Preventing Contaminant Release to Land

- (L1) Contaminants must not be released to land, except where otherwise stated in a condition of this approval.
- (L2) All chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

(Note: All flammable and combustible liquids including petroleum products/fuels must be stored in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids. Storage for flammable and combustible liquids must be constructed and maintained in accordance with AS 1940.)

AGENCY INTEREST: WATER

- (W1) No dredging is permitted for the period between November and March inclusive, in order to minimise impacts on seagrass and coral communities. The period when dredging is permitted may be extended with the written agreement of the administering authority.
- (W2) A Water Quality Monitoring Plan (WQMP) must be developed and approved by the administering authority prior to the initial dredge campaign.
- (W3) A Water Quality Monitoring Plan must include at least:
- an assessment of the environmental values of the area;
 - water quality objectives, including performance indicators and trigger values;
 - monitoring locations and methodology;
 - reporting criteria; and
 - management responses or corrective actions.
- (W4) Dredging activities shall not cause the dredge plume from the dredge head and the deposition site to elevate turbidity in outside the nominated turbidity trigger value identified in the approved WQMP.
- (W6) If the nominated turbidity trigger value identified in the approved WQMP is exceeded, the administering authority must be advised, within 24 hours of the event, of the corrective action that has been or will be implemented.
- (W8) Where trailer suction dredging is carried out, an effective turtle deflector device must be fitted to the dredge head. Evidence that this device has been installed and used on the dredge for the entire period of the dredging activity must be provided to the administering authority.
- (W9) Operating procedures that minimise the risk of turtle capture by the dredge head, and the risk from all activities of injury to marine species of conservation significance, must be developed prior to the commencement of dredging activities.
- (W10) Mobile dredging operations and spoil disposal activities must cease, or relocate to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 150 metres of the activities being undertaken.
- (W11) Stationary dredging operations and spoil disposal activities must cease, or relocate to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 75 metres of the activities being undertaken.
- (W12) The administering authority is to be immediately notified of any turtle captures by the dredge, or of injury to any marine species of conservation significance.

Reporting

(W13) A monthly monitoring report must be prepared and submitted to the administering authority throughout the period that the dredging and spoil disposal works are being undertaken. This report shall include, but not be limited to:

- results of the monitoring required by this development approval and the WQMP;
- a daily summary of dredge movements and disposal activity (map based);
- an evaluation or explanation of the data from these monitoring programs;
- details of any turtle captures by the dredge and the species involved;
- details of any complaints received including investigations undertaken, conclusions formed, and action taken;
- a summary of significant equipment failures or events that have potential environmental management consequences;
- an outline of corrective actions that will or have been taken to minimise or reduce environmental harm; and
- the quantity (volume in cubic metres) and location of dredging material removed and disposed of.

AGENCY INTEREST: WASTE

Waste Management

(WA1) Waste generated in the carrying out of the activities must be stored, handled and transferred in a proper and efficient manner.

(WA2) All regulated waste removed from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994*.

(WA3) Where regulated waste is removed from the site (other than by a release as permitted under another condition of this development approval), the registered operator must monitor and keep records of the following:

- (a) the date, quantity and type of waste removed;
- (b) the name of the waste transporter and/or disposal operator that removed the waste; and
- (c) the intended treatment/disposal/destination of the waste.

(Note: Records of documents maintained in compliance with a waste tracking system established under the *Environmental Protection Act 1994* or any other law for regulated waste will be deemed to satisfy this condition.

Notification of Improper Disposal of Regulated Waste

(WA4) If a person removes regulated waste associated with activities at the site and disposes of such waste in a manner which is not authorised or is improper or unlawful, the registered operator must notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal as soon as practicable.

AGENCY INTEREST: SOCIAL

Complaint Response

- (S1) The registered operator of an ERA to which this approval relates must record the following details for all complaints received and provide this information to the administering authority on request:
- (a) Time, date, name and contact details of the complainant;
 - (b) reasons for the complaint;
 - (c) any investigations undertaken;
 - (d) conclusions formed; and
 - (e) any actions taken.

Definitions

Some of the words and phrases used throughout this development approval are defined below:

“administering authority” means the Department of Environment and Resource Management (DERM) or its successor.

“commercial place” means a place used as an office or for business or commercial purposes.

“decant waters” – means settled dredge spoil waters released from release point, W1 following settlement or other management requirements.

“dwelling” means any of the following structures or vehicles that is principally used as a residence-

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

“general environmental duty” means general environmental duty as defined in section 319 of the *Environmental Protection Act 1994*

“intrusive” noise - means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration;

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual. *F*

Note: In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 - 1997 *Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations*.

“land” in the “land schedule” of this document means land excluding waters and the atmosphere.

“material environmental harm” means material environmental harm as defined in section 16 of the *Environmental Protection Act 1994*.

“mg/L” means milligrams per litre.

“noise affected premises” means a “noise sensitive place” or a “commercial place”

“noxious” means harmful or injurious to health or physical well being.

“nuisance sensitive place” means –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

“protected area” means –

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

“regulated waste” means non-domestic waste in Schedule 7 of the *Environmental Protection Regulation 1998* and includes:

- for an element - any chemical compound containing the element; and
- anything that has contained a regulated waste; and
- regulated waste that has been treated or immobilised.

“serious environmental harm” means serious environmental harm as defined in section 17 of the *Environmental Protection Act 1994*.

“waters” includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and any under groundwater, any part-thereof.

80th percentile means not more than two (2) of the measured values of the quality characteristic is to exceed the stated release limit for any ten (10) consecutive samples for a sampling point at any time during the licensed works.

END OF PERMIT

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPPR02911215

Environmental authority takes effect on 06-FEB-2015.

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date.

An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
North Queensland Bulk Ports Corporation T/A North Queensland Bulk Ports Corporation	Level 1 324 Queen Street BRISBANE QLD 4001

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
16-(1d) Dredging >1000000t yr	Port of Abbot Point, Operational Area - Lot B Plan AP20323 Lot 50 Plan SP243721, Lot 49 Plan SP185904, Lot 51 Plan SP243721 and Lot 52 Plan SP243721

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.


An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

06/02/2015

Date

Anthony Schmid
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Permit and Licence Management
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Agency interest: Coastal

PC1

The operator must develop and implement a Dredge Environmental Management Plan (DEMP) from the commencement of Dredging Activities. The DEMP must identify all causes of Environmental Harm, including the actual and potential release of contaminants, the nature of the Environmental Harm and the actions that will be taken to prevent Environmental Harm being caused. The DEMP must be made available to the Administering Authority when requested. The DEMP must achieve the following outcomes:

- (a) material to be dredged under this Environmental Authority is tested and analysed in accordance with the latest version of the National Assessment Guidelines from Dredging 2009;
- (b) significant and sensitive receptors (e.g. wetland and ecosystem features) in the port area are identified and mapped;
- (c) environmental aspects and potential impacts are identified;

- (d) control measures that minimise the potential for Environmental Harm are in place;
- (e) contingency plans and emergency procedures are in place;
- (f) organisational structures, accountability and responsibility is recorded;
- (g) arrangements for effective communication are documented and undertaken;
- (i) staff are trained and aware of the requirements of this Environmental Authority;
- (j) appropriate records are kept; and
- (k) reviews of environmental performance and continual improvement are undertaken periodically.

- PC2 Tidal Works hereby approved are limited to:
(a) the removal of up to 3.0 million cubic metres of dredged material as a result of capital dredging works of berth pockets, apron areas and associated batters for the development of Terminal 0, 2 and 3 including apron areas at the Port of Abbot Point at locations shown in Drawings BRM202-DW-MN-GEN-0001, BRM202-DW-MN-GEN-0002, BRM202-DW-MN-GEN-0003, BRM202-DW-MN-GEN-0004, 41-23742-K001, 41-23742-K002 in Attachment 1.
(b) Material dredged under this Environmental Authority must be placed at sea at a place authorised under an authority, licence or other permit issued by either or both the Commonwealth or Queensland Governments to receive the Dredged Material.
- PC3 A report from a Registered Professional Engineer of Queensland must be submitted to the administering authority within three (3) months of the date of completion of the works.
- PC4 All temporary works associated with the approved dredging program are to be removed from the site at the completion of the works and all wastes shall be collected from the site by the permittee and disposed of at a licensed waste facility.

Reason(s) for inclusion of conditions

In accordance with Section 289 of the *Sustainable Planning Act 2009* and Section 27B of the *Acts Interpretation Act 1954*, the reasons for the inclusion of development conditions are:

1. The Department of Environment and Heritage Protection is a concurrence agency under the *Sustainable Planning Regulation 2009* for the purposes of the *Environmental Protection Act 1994*.
2. Any development conditions placed on this Environmental Authority¹ for an environmentally relevant activity are in accordance with section 73B of the *Environmental Protection Act 1994*.

Interest: General

Limit of Dredging Approved

- (G1) Dredging activities which constitute the environmentally relevant activity (ERA 16.1(d)) hereby approved are limited to:
- (a) the removal of up to 3.0 million cubic metres of dredged material as a result of capital dredging works of berth pockets, apron areas and associated batters for the development of Terminal 0, 2 and 3 including apron areas at the Port of Abbot Point at locations shown in Drawings BRM202-DW-MN-GEN-0001, BRM202-DW-MN-GEN-0002, BRM202-DW-MN-GEN-0003, BRM202-DW-MN-GEN-0004, 41-23742-K001, 41-23742-K002 in Attachment 1.
 - (b) Material dredged under this Environmental Authority must be placed at sea at a place authorised under an authority, licence or other permit issued by either or both the Commonwealth or Queensland Governments to receive the Dredged Material.
- (G2) The final dredge spoil disposal location is to be provided to the Administering Authority within 28 days of its approval.
- (G3) Any dredging must be conducted using equipment that is in survey and registered and, in relation to environmental performance, is equal to or better than the following equipment:
- (a) Trailing Suction Hopper Dredge that is equipped with:
 - i. below water surface discharge of tail waters via an anti-turbidity control valve;
 - ii. on-board systems for determining solids to water ratio or density of Dredged Material
 - iii. electronic positioning and depth control system for defining the location and depth of Dredging Activities;
 - iv. turtle exclusion device acceptable to the Administering Authority must be fitted to the TSHD; and
 - v. dredge is operated to ensure suction is off, where practicable when dredge head lifts off the bottom;
 - vi. any capture of turtles must be reported to the Administering Authority.
 - (b) Cutter Suction Dredge that is equipped, as a minimum, with:
 - i. electronic positioning and depth control system for defining the location and depth of Dredging Activities
 - ii. systems for determining solids to water ratio or density of Dredged Material during operations.

- (G4) Dredged Material must not be re-handled in waters.
- (G5) For each dredging campaign, notify the Administering Authority in writing at least 7 days before commencing.
- (G6) All information and records that are required by the conditions of this Environmental Authority must be kept for a period of at least 5 years from their date of creation.

Complaints

- (G7) The operator of the ERA must record at least the following details for all complaints received and provide this information to the Administering Authority on request:
 - (a) time, date and the name and contact details of the complainant;
 - (b) reasons for the complaint;
 - (c) any investigations undertaken;
 - (d) any conclusions formed; and
 - (e) any actions undertaken or proposed to be undertaken in response to the complaint.

Notification of breaches, emergencies and incidents

- (G8) Any breach of a condition of this Environmental Authority, emergency or incident must be reported to the Administering Authority within 24 hours of becoming aware of the breach and the full details of the breach and any subsequent actions must be recorded.
- (G9) Within 14 business days following the initial notification of an emergency or incident, or receipt of monitoring results, whichever occurs last, further written advice must be provided to the administering authority, including the following:
 - (a) results and interpretation of any samples taken and analysed;
 - (b) outcomes of actions taken at the time to prevent or minimise unlawful Environmental Harm; and
 - (c) proposed actions to prevent a recurrence of the emergency or incident;.

Dredge Environmental Management Plan (DEMP)

- (G10) The operator must develop and implement a Dredge Environmental Management Plan (DEMP) from the commencement of Dredging Activities. The DEMP must identify all causes of Environmental Harm, including the actual and potential release of contaminants, the nature of the Environmental Harm and the actions that will be taken to prevent Environmental Harm being caused. The DEMP must be made available to the Administering Authority when requested.
The DEMP must achieve the following outcomes:

- (a) material to be dredged under this Environmental Authority is tested and analysed in accordance with the latest version of the National Assessment Guidelines from Dredging 2009;
- (b) significant and sensitive receptors (e.g. wetland and ecosystem features) in the port area are identified and mapped;
- (c) environmental aspects and potential impacts are identified;
- (d) control measures that minimise the potential for Environmental Harm are in place;
- (e) contingency plans and emergency procedures are in place;
- (f) organisational structures, accountability and responsibility is recorded;
- (g) arrangements for effective communication are documented and undertaken;
- (h) staff are trained and aware of the requirements of this Environmental Authority;
- (i) appropriate records are kept; and
- (k) reviews of environmental performance and continual improvement are undertaken periodically.

(G11) The DEMP must not be implemented or amended in a way that contravenes any condition of this Environmental Authority.

Monitoring Report

- (G12) A monitoring report must be prepared and submitted to the Administering Authority within 3 months of the completion of each dredge campaign. This report must include:
- (a) Results of the monitoring required under this Environmental Authority and the Water Quality Monitoring Program;
 - (b) A daily summary of dredge movements and disposal activity (map based);
 - (c) An evaluation or explanation of the data from these monitoring programs;
 - (d) Details of any turtle captures by the dredge and the species involved;
 - (e) Details of any complaints received during Dredging Activities, including the details of any investigations required under condition G7;
 - (f) A summary of any remedial actions required to ensure compliance with this Environmental Authority;
 - (g) A summary of the record of any equipment failures or incidents recorded for any site under this Environmental Authority;
 - (h) Actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and
 - (i) The quantity (volume in cubic meters) and location of Dredged Material removed and disposed of.
- (G13) The operator must implement a monitoring report that achieves the following outcomes
- (a) Long term ecological impacts associated with Dredging Activities, as defined in the DEMP are monitored;
 - (b) Compliance with the conditions of this Environmental Authority is monitored; and
 - (c) Dredging Activities are adjusted in response to monitoring results to ensure compliance with this Environmental Authority.

(G14) Monitoring must be carried out by a Qualified person in accordance with the methods set out in the latest version of the Administering Authority's water quality sampling manual

Interest: Noise

(N1) Noise from the Dredging Activities must not cause Environmental Nuisance at a Sensitive Place or Commercial Place.

Interest: Water

(W1) A Water Quality Monitoring Program must be developed and submitted to the Administering Authority prior to commencement of Dredging Activities. This program must include:

- (a) an assessment of the Environmental Values of the area;
- (b) water quality objectives, including performance indicators for potential effects on coral and seagrass communities;
- (c) monitoring locations and methodology;
- (d) reporting criteria; and
- (e) management responses or corrective actions.

Interest: Waste

Waste Management

(WA1) Waste must not be stored, transferred or disposed of contrary to any condition of this Environmental Authority.

Definitions

Where a word or expression is defined in this Environmental Authority, other parts of speech and grammatical forms of that word or expression have corresponding meanings.

Administering Authority means the Department of Environment and Heritage Protection or its successor or predecessors.

Commercial Place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Contaminant means a contaminant listed in Schedule 9 of the *Environmental Protection Regulation 2008*.

Dredging Activities means the Activities approved under this environmental authority. These activities may be carried out in one or more dredging campaigns.

DEMP means Dredge Environmental Management Plan.

Dredged Material means material removed from the Port of Abbot Point as a result of the Dredging Activities.

Environmental Authority has the same meaning as in the EP Act.

Environmental Harm has the same meaning as in the EP Act.

Environmental Nuisance has the same meaning as in the EP Act.

EP Act means the *Environmental Protection Act 1994*.

Environmental Value has the same meaning as in the EP Act.

Incident means an event or occurrence that would require reporting to DEHP in accordance with General Environmental Duty under the EP Act.

Measures has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

Noise has the same meaning as in the EP Act.

Noxious means harmful or injurious to health or physical well-being.

Offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

Qualified Person means a person who has qualified appropriate professional qualifications, training, skills or experience relevant to the nominated subject matter.

Re-handle means dredge material dropped from the bottom of a Trailer Suction Hopper Dredge for re-handling, for example, by a Cutter Suction Dredge. It does not refer to ocean disposal where approved.

Permit means this Environmental Authority.

Sensitive Place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- b) a motel, hotel or hostel; or
- c) a kindergarten, school, university or other educational institution; or
- d) a medical centre or hospital; or
- e) a public thoroughfare, park or gardens; or
- f) for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.

TSHD means Trailer Suction Hopper Dredge.

Waste has the same meaning as in the EP Act.

You means the holder of the Environmental Authority.

END OF CONDITIONS

END OF PERMIT

Attachment 1 – attached



NOTES:

1. MATERIALS FOR ALL STEELING TO BE IN ACCORDANCE WITH THE DESIGNER'S REQUIREMENTS. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STEELING AND THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STEELING.

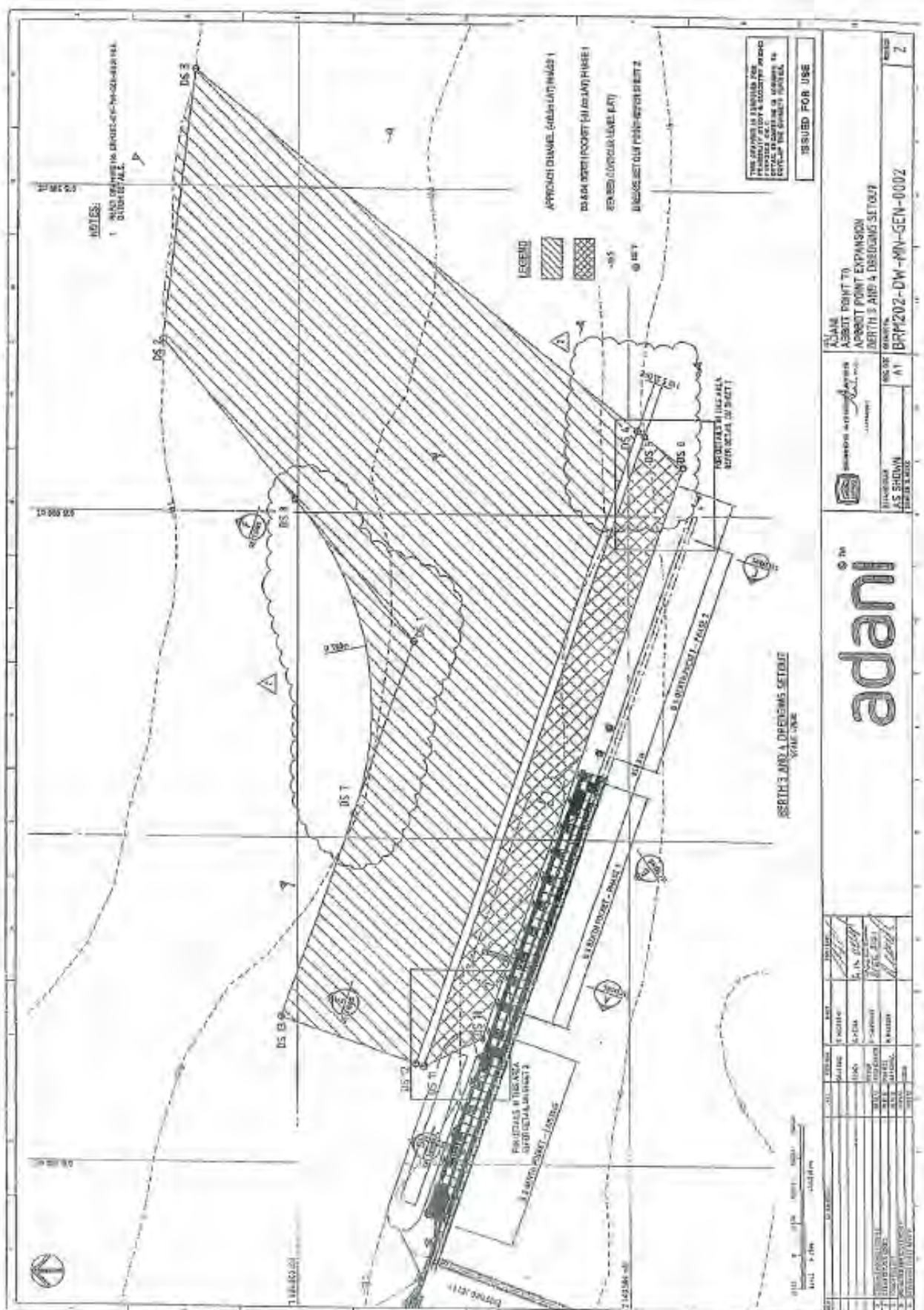
REQUIRED FOR USE
1. ALL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.
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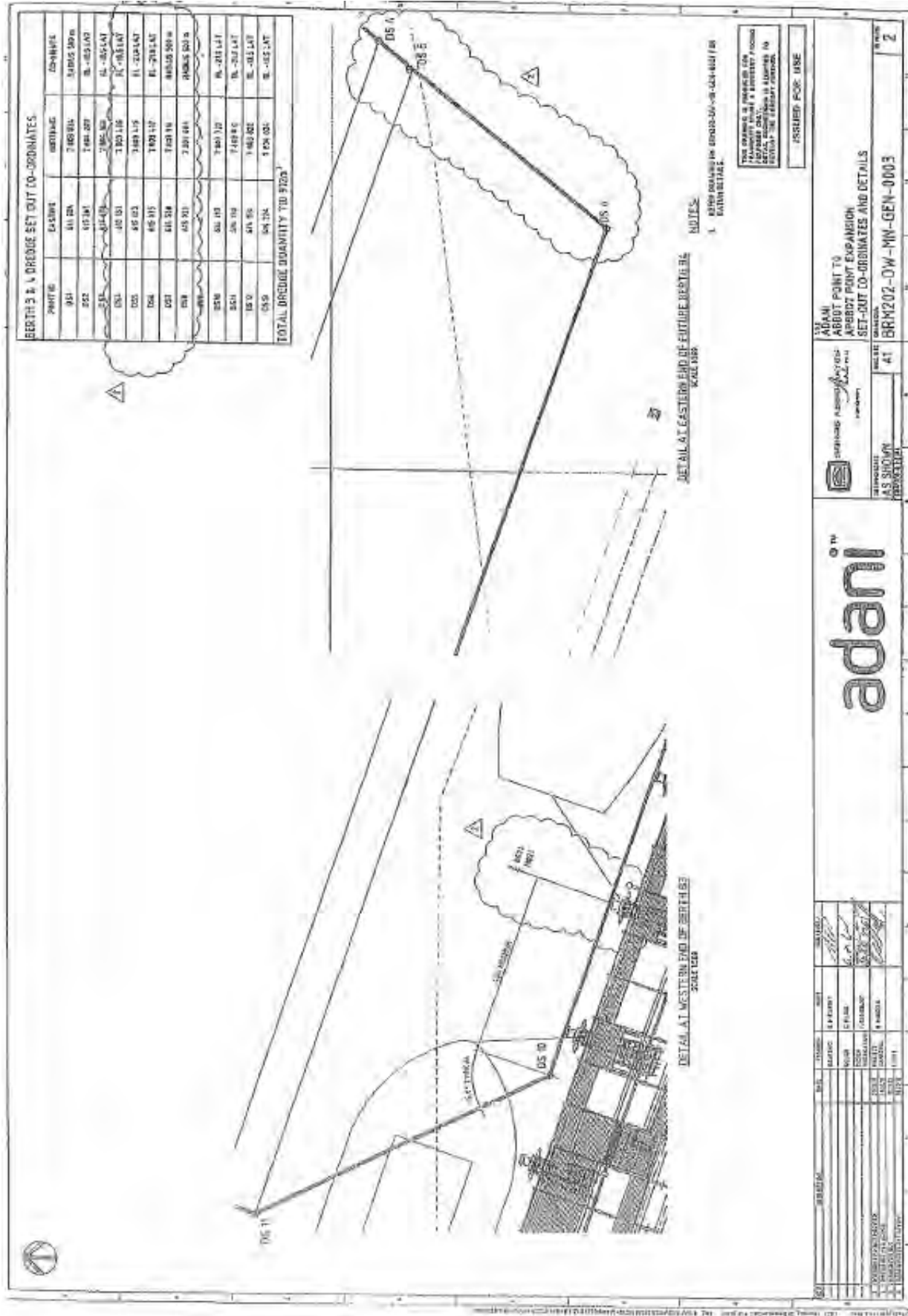
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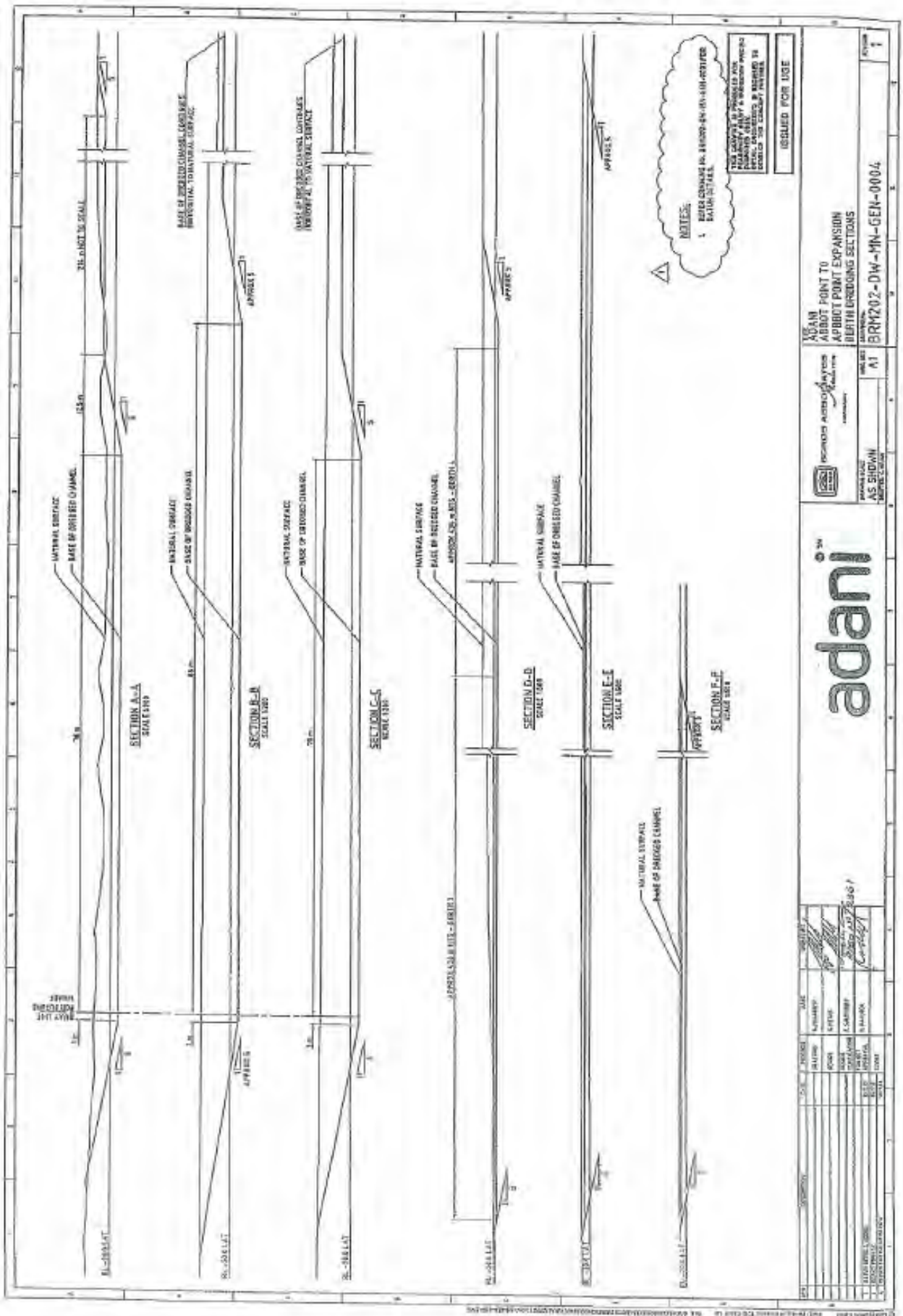
ADANI
ABBOT POINT T1
APPOINT POINT EXPANSION
SITE LAYOUT

NO.	DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR PERMIT	10/10/2011	J. J. [Signature]	[Signature]
2	ISSUED FOR CONSTRUCTION	10/10/2011	J. J. [Signature]	[Signature]

SCALE: 1/8" = 1'-0"







NOTES:
1. REFER CHANNEL NO. 44200-44-05-010-001 FOR EXISTING CHANNEL DATA.
2. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION OR ANY OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF THE ISSUING OFFICE.

ISSUED FOR USE

PROJECT NO. 44200-44-05-010-001

DATE: 11/11/2023

SCALE: 1:1

PROJECT: ADAM ABBOTT POINT TO ABBOTT POINT EXPANSION BERTH BRIDGING SECTIONS

PROJECT NO.: BRM202-DW-MN-GEN-0004

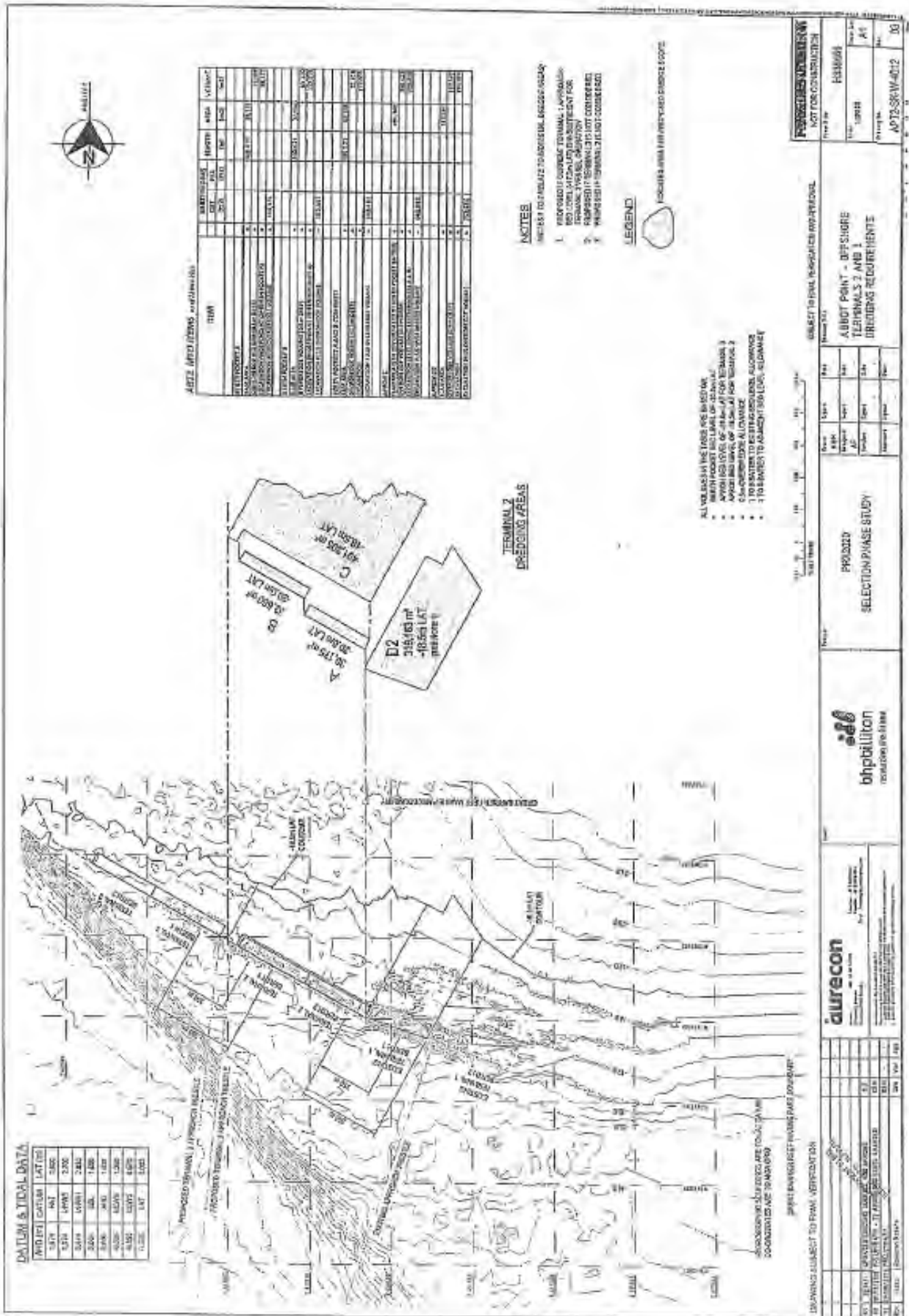
SCALE: M1

PROJECT: AS SHOWN

SCALE: METRIC COLOR



NO.	REVISION	DATE	BY	CHECKED
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2	REVISED	11/11/2023	[Signature]	[Signature]
3	REVISED	11/11/2023	[Signature]	[Signature]
4	REVISED	11/11/2023	[Signature]	[Signature]
5	REVISED	11/11/2023	[Signature]	[Signature]
6	REVISED	11/11/2023	[Signature]	[Signature]
7	REVISED	11/11/2023	[Signature]	[Signature]
8	REVISED	11/11/2023	[Signature]	[Signature]
9	REVISED	11/11/2023	[Signature]	[Signature]
10	REVISED	11/11/2023	[Signature]	[Signature]



DATUM & TIDAL DATA

WATER LEVEL	DATUM	LATITUDE
SLR	MSL	5000
SLR	APWS	5000
SLR	MSL	2480
SLR	SL	1480
SLR	MSL	1480
SLR	MSL	1280
SLR	MSL	480
SLR	MSL	100

ABRZ MEASUREMENTS

ITEM	WATER LEVEL		DATE	TIME	METER	NO.	CORRECTION	REMARKS
	HT	LT						
1. WIND SPEED								
2. WIND DIRECTION								
3. WIND FORCE								
4. WIND STATE								
5. WIND DIRECTION								
6. WIND FORCE								
7. WIND STATE								
8. WIND DIRECTION								
9. WIND FORCE								
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16. WIND STATE								
17. WIND DIRECTION								
18. WIND FORCE								
19. WIND STATE								
20. WIND DIRECTION								
21. WIND FORCE								
22. WIND STATE								

NOTES

1. PREPARED FOR THE PROJECT OWNER BY THE CONSULTANT.
2. THIS DRAWING IS THE PROPERTY OF THE CONSULTANT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE CONSULTANT.
3. THE CONSULTANT'S LIABILITY IS LIMITED TO THE SCOPE OF THE SERVICES PROVIDED UNDER THIS AGREEMENT.

LEGEND

- HATCHING AREA FOR DREDGING SCOPE

- ALL VALUES IN THIS DRAWING ARE IN METERS.
- DIMENSIONS ARE GIVEN IN METERS.
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PROJEC

Project No.	H000000
Date	10/10/10
Scale	1:500
Sheet No.	101
Total Sheets	101

PROJECT TO FINAL REVISIONS AND APPROVAL

ABOBY POINT - OFFSHORE TERMINALS 2 AND 1 DREDGING REQUIREMENTS

Rev.	Date	By	Description
01	10/10/10

PROJECT TO FINAL REVISIONS AND APPROVAL

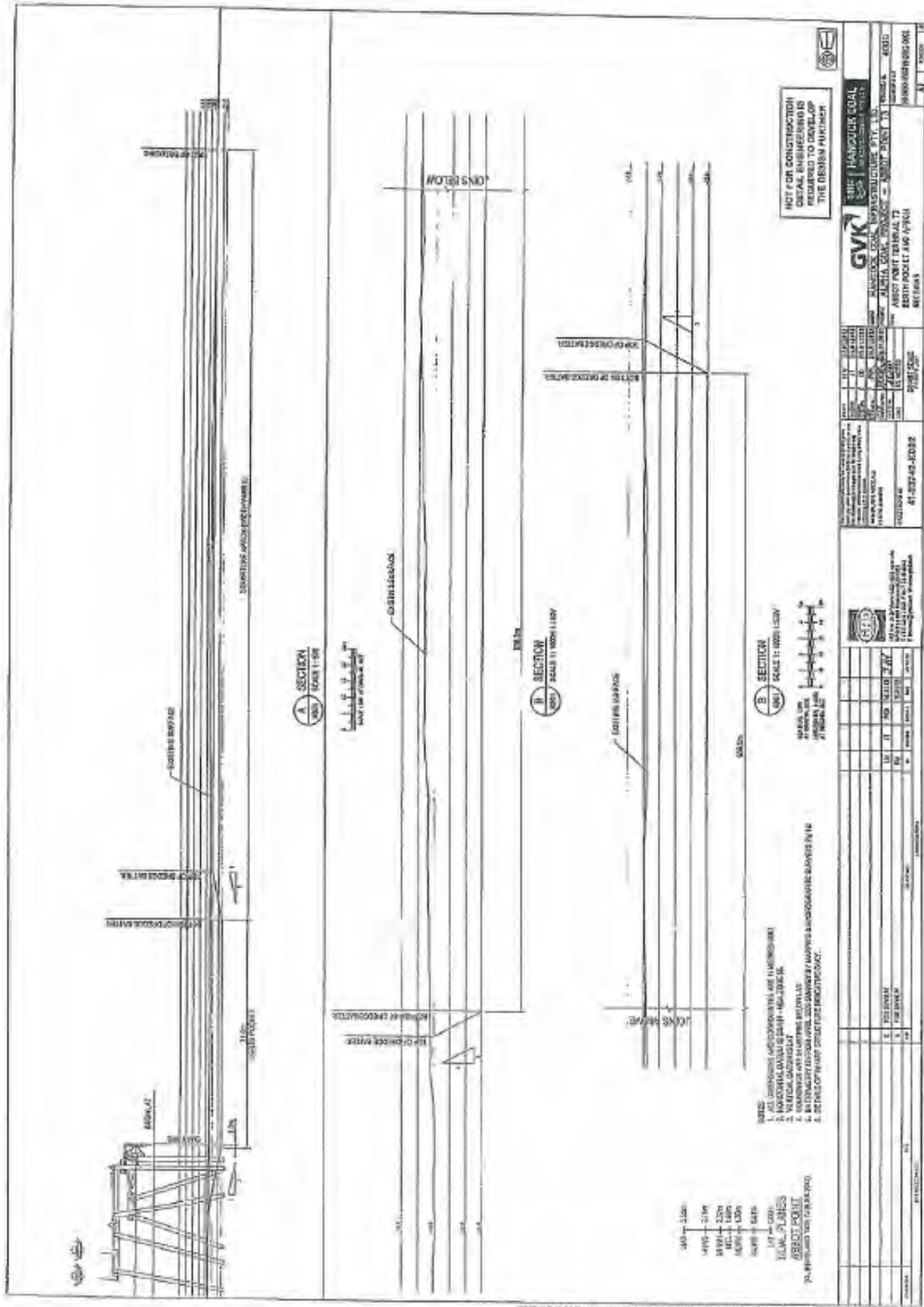
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PROJECT TO FINAL REVISIONS AND APPROVAL



PROJECT NO: 41-237-45-10332	
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CAD: G. GAY	APPROVED: J. GAY
DATE: 20/11/2013	SCALE: 1:100
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DATE: 20/11/2013	SCALE: 1:100
DRAWN: G. GAY	CHECKED: J. GAY
CAD: G. GAY	APPROVED: J. GAY

- Environmental Management Plans – Abbot Point Bulkcoal Pty Ltd Integrated Environmental Management System – February 2005.
- Abbot Point and Caley Valley Wetlands – Dry Season Flora and Fauna Surveys prepared by Eco Sers Ecological Consultants final submission (Report 02).
- Preliminary Acid Sulfate Soil Investigation – Abbot Point Expansion prepared for Ports Corporation of Queensland by WBM Oceanics Australia 16 February 2005.
- Coal in Marine Sediments at Abbot Point prepared for Ports Corporation of Queensland by WBM Oceanics Australia 31 August 2005; and

Compliance with the following Concurrence Agency conditions:

Concurrence Agency Conditions – Environmental Protection Agency

CONDITIONS OF APPROVAL

1PCE00319905C11

PART A : ERA 11 (a)

Activity: ERA 11 (a) Crude oil storing or petroleum product storing - crude oil or petroleum product in tanks or containers having a combined total storage capacity of 10 000 L or more but less than 500 000 L.

Agency Interest: General

General 1: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 2: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and

(b) maintain such measures, plant and equipment in a proper and efficient condition; and

(c) operate such measures, plant and equipment in a proper and efficient manner.

General 3: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

-
- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
 - (b) Identification of environmental issues and potential impacts.
 - (c) Control measures for routine operations to minimise likelihood of environmental harm.
 - (d) Contingency plans and emergency procedures for non-routine situations.
 - (e) Organisational structure and responsibility.
 - (f) Effective communication.
 - (g) Monitoring of contaminant releases.
 - (h) Conducting environmental impact assessments.
 - (i) Staff training.
 - (j) Record keeping.
 - (k) Periodic review of environmental performance and continual improvement.

General 4: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 5: All records required by this approval must be kept for 5 years.

General 6: Waste Records.

A record of all waste must be kept detailing the following information:

- (a) date of pickup of waste;
- (b) description of waste;
- (c) quantity of waste;
- (d) origin of the waste; and
- (e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

General 7: Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 8: Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 7]:

- a) the name of the operator, including their approval 1 registration number;
- b) the name and telephone number of a designated contact person;

-
- c) quantity and substance released;
 - d) vehicle and registration details;
 - e) personas involved (driver and any others); f) the location and time of the release; g) the suspected cause of the release; h) a description of the effects of the release;
 - i) the results of any sampling performed in relation to the release, j) actions taken to mitigate any environmental harm caused by the release; and
 - k) proposed actions to prevent a recurrence of the release.

General 9: Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

General 10: Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest: Air

Air 1: Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

Land 1: Preventing Contaminant Release To Land.

Contaminants must not be released to land.

Land 2: Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Agency Interest: Noise

Noise 1: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Social

Social 1: Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date; name and contact details of the complainant;
- b) Reasons for the complaint;
- c) Any investigations undertaken; d) conclusions formed; and
- e) Any actions taken.

Agency Interest: Water

Water 1: Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

End Part A

CONDITIONS OF APPROVAL

PART B : ERA 15 (a)

Activity: ERA 15(a) Sewage treatment - operating - a standard sewage treatment works having a peak design capacity to treat sewage of 21 or more equivalent persons but less than 100 equivalent persons.

Agency Interest: General

General 11: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 12: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

-
- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
 - (b) Identification of environmental issues and potential impacts.
 - (c) Control measures for routine operations to minimise likelihood of environmental harm.
 - (d) Contingency plans and emergency procedures for non-routine situations.
 - (e) Organisational structure and responsibility.
 - (f) Effective communication.
 - (g) Monitoring of contaminant releases.
 - (h) Conducting environmental impact assessments.
 - (i) Staff training.
 - (j) Record keeping.
 - (k) Periodic review of environmental performance and continual improvement.

General 13: Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

General 54: All records required by this approval must be kept for 5 years.

General 55: Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

General 56: Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 61: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 62: Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 56]:

- a) the name of the operator; including their approval or registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released; d) vehicle and registration details;
- e) persons involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;

- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

General 63: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures; plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

General 64: Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

General 59: Waste Records.

A record of all waste must be kept detailing the following information:-----

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

Agency Interest: Air

Air 2: Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

Land 3: The daily volume of contaminants released to land must be determined or estimated by an appropriate method; for example a flow meter, and records kept of such determinations and estimates.

Land 4: Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Land 10: Wastewater must only be released to land in compliance with the release limits listed in Table 2. Contaminant release limits to land, from the following discharge location;

- W5- outflow from the final holding tank of the Sewage Treatment Plant.

Land 11: Monitoring.

Monitoring must be undertaken and records kept of contaminant releases to land from the discharge location for the quality characteristics and not less frequently than specified in Table 2 - Contaminant release limits to land.

All determinations of the quality of contaminants released must be:

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Land 12: Waste water released from the sewage treatment plant in compliance with the limits set in table 2- contaminant releases to land, must only be used for the purpose of dust suppression and to assist with soil compaction during construction activities.

Land 13: When the capacity of the Sewage Treatment Plant's holding tank is exceeded, effluent may be discharged to the primary settlement pond.

Land 14: Notices must be prominently displayed at all areas where treated effluent is used for dust suppression and soil compaction to provide warning that treated effluent is being used and not to drink or otherwise use the effluent. These notices must be maintained in a visible and legible condition

Agency Interest: Noise

Noise 2: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Social

Social 2: Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;

- c) any investigations undertaken; d) conclusions formed; and
- e) any actions taken.

Agency Interest: Waste

Waste 4: All waste generated from the activity shall be disposed of at a facility lawfully able to accept such waste.

Agency Interest: Water

Water 2: Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

End Part B

CONDITIONS OF APPROVAL

PART C : ERA 23 (a)

Activity: ERA 23(a) Abrasive blasting - commercially cleaning equipment or structures using a stream of abrasives - if the activity is carried out at a permanent location.

Agency Interest: General

General 14: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 15: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures; plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

General 16: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of

environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility. (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments. (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

General 17: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 18: All records required by this approval must be kept for 5 years.

General 19: Waste Records.

A record of all waste must be kept detailing the following information:

- (a) date of pickup of waste;
- (b) description of waste;
- (c) quantity of waste;
- (d) origin of the waste; and
- (e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

General 20: Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 21: Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 20]:

- a) the name of the operator; including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released; d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release;
and
- k) proposed actions to prevent a recurrence of the release.

General 22: Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

General 23: Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest: Air

Air 3: Dust Nuisance.

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

Land 5: Preventing Contaminant Release To Land.

Contaminants must not be released to land.

Land 6: Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Agency Interest: Noise

Noise 3: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

Social 3: Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest: Waste

Waste 1 As far as is reasonable and practicable, all waste generated by Abrasive Blasting activities at the dedicated abrasive blasting area must be captured within an onsite containment system and controlled in a manner that prevents environmental harm.

Waste 2: All waste generated from the activity must be disposed of at a facility lawfully able to accept such waste.

Agency Interest: Water

Water 3: Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

End Part C

CONDITIONS OF APPROVAL

PART D : ERA 25 (d)

Activity: ERA 25(d) Metal surface coating - commercial spray painting (other than spray painting motor vehicles), powder coating, enamelling, electroplating, anodising, or galvanising in works having an annual throughput of metal products of 30 000 t or more.

Agency Interest: General

General 24: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 25: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures: plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

General 26: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- b) Identification of environmental issues and potential impacts. (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments,
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

General 27: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 28: All records required by this approval must be kept for 5 years.

General 29: Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

General 30: Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 31: Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 30]:

- a) the name of the operator; including their approval of registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) persons involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release;
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

General 32: Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

General 33: Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest: Air

Air 4: Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

Land 7: Preventing Contaminant Release To Land.

Contaminants must not be released to land.

Land 8: Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Agency Interest: Noise

Noise 4: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Social

Social 4: Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest: Waste

Waste 3: All waste generated from the activity shall be disposed of at a facility lawfully able to accept such waste.

Agency Interest: Water

Water 4: Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

End Part D

CONDITIONS OF APPROVAL

PART E : ERA 28

Activity: ERA 28 Motor vehicle workshop - operating a workshop or mobile workshop in the course of which motor vehicle mechanical or panel repairs are carried out in the course of a commercial or municipal enterprise (other than on a farm or under a mining tenement) or on a commercial basis.

Agency Interest: General

General 34: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 35: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures; plant and equipment in a proper and efficient condition: and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

General 36: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility. (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.

(k) Periodic review of environmental performance and continual improvement.

General 37: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 38: All records required by this approval must be kept for 5 years.

General 39: Waste Records.

A record of all waste (from abrasive blasting activities) must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

General 40: Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 41: Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 40]:

- a) the name of the operator; including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

General 65: Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

General 66: Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

Agency Interest: Air

Air 5: Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

Land 16: Discharges to land must only be released in compliance with the release limits listed in Table 2. Contaminant release limits to land, from the following discharge locations:

- Discharge W6- outflow from ^{oil/water} separator of the motor vehicle workshop.

Land 18: Monitoring must be undertaken and records kept of contaminant releases to land from the discharge location for the quality characteristics and not less frequently than specified in Table 2- Contaminant release limits to land.

All determinations of the quality of contaminants released must be:

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Agency Interest: Noise

Noise 5: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Waste

Waste 5: All waste generated from the activity shall be disposed of at a place lawfully able to accept such waste.

Agency Interest: Water

Water 5: Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

End Part E

CONDITIONS OF APPROVAL

PART F : ERA 74

Activity: ERA 74 Stockpiling, loading or unloading goods in bulk - commercially loading, unloading or stockpiling materials or goods in association with an activity mentioned in item 71, using a crane, conveyor or pump or other similar way at a rate of more than 100 t a day.

Agency Interest: General

General 42: This development permit authorises a maximum annualised throughput of 25 million tonne of coal per year.

General 43: Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

General 44: Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and (b) maintain such measures; plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

General 45: Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals,
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.

- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

General 46: The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

General 47: Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

General 48: All records required by this approval must be kept for 5 years.

General 49: Waste Records.

A record of all waste [] must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

General 50: Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

General 51: Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

General 52: Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

General 53: Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

General 57: Notification,

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

General 58: Information About Spills,

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition [General 57]:

- a) the name of the operator; including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) persona involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Agency Interest: Air

Air 6: Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Air 7: Dust Nuisance.

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

Air 8: The dust monitoring program described in the Abbot Point Bulkcoal Pty Ltd's Integrated Environmental Management System (Feb 2005), or subsequent revisions, must be implemented.

Agency Interest: Land

Land 9: Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Land 15: Discharges to land must only be released in compliance with the release limits and from the discharge locations listed in Table 2. Contaminant release limits to land; from the following discharge locations:

- Discharge W3 - land adjacent to the surge bin sediment sump at Abbot Point as depicted in map 1.
- Discharge W4 - land adjacent to the main sub station sediment sump onto land at Abbot Point as depicted in map 1.

Land 17: A discharge may only occur from discharge locations W3 and W4 if a 1 in 2 year, 24 hour rainfall event is exceeded.

Agency Interest: Noise

Noise 6: Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Social

Social 5: Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest: Waste

Waste 6: All waste generated from the activity shall be disposed of to a facility lawfully able to accept such waste.

Agency Interest: Water

Water 6 Contaminants other than settled/treated stormwater runoff waters must not be released from the site to surface waters or the beds or banks of surface waters, other than as authorised in this approval.

condition changed refer to notice to change existing approval
✓
HP

Water 7: A discharge may only occur from discharge location W1 if a 1 in 10 year 24 hour rainfall event is exceeded.

Water 8: Stormwater from all stockpiles must be directed to stormwater settlement ponds, which must be capable of containing runoff from a one in ten year, 24 hour rainfall event as measured at the nearest official Bureau of Meteorology rainfall station.

Water 9: Stormwater runoff must only be released in compliance with the release limits listed in Table 1. Contaminant release limits to water, from the following discharge locations:

- Discharge Location W1 - the discharge point adjacent to the secondary settlement pond into the waters known as the Caley Valley Wetland depicted in Map 1.
- Discharge Location W2 - the sample station wash water drain into the ocean at Abbot Point as depicted in Map 1.

Water 10: Monitoring.
Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the quality characteristics and not less frequently than specified in Table 1- Contaminant release limits to water. All determinations of the quality of contaminants released must be as follows:

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Water 11: Pond Conditions.
All ponds used for the storage or treatment of contaminants, sewage or wastes at or the authorised place must be constructed, installed and maintained:

- a) so as to minimise the likelihood of any release of contaminants through the bed or banks of the pond to any waters (including ground water); and
- b) so as to ensure the stability of the ponds' construction

Water 12: A discharge may only occur from discharge location W2 if a 1 in 2 years, 24 hour rainfall event is exceeded.

Table 1 Contaminant release limits to water

Monitoring point	Discharge location	Quality characteristics	Release limit			Monitoring frequency	
			Minimum	50th Percentile	80th Percentile		Maximum
W1	Discharge point from the secondary settlement pond	Ph	6			8	Each time a release occurs
		Suspended solids				30mg/l	
W2	Sample station wash water drain	Ph	6			8	Each time a release occurs
		Suspended solids				30 mg/l	
W3	Land adjacent to the surge bin sediment sump	Ph	6			8	Each time a release occurs
		Suspended solids				30 mg/l	

Monitoring point	Discharge location	Quality characteristics	Release limit			Monitoring frequency	
			Minimum	50th Percentile	80th Percentile		Maximum
W4	Land adjacent to the main substation sediment sump	Ph	6			8	
		Suspended solids				30 mg/l	
W5	Outflow from the final holding tank of the sewage treatment plant	Faecal coliforms				10cfu per 100ml	Monthly
		Ph	6			8	Daily
		Suspended solids				30mg/l	Monthly
		BOD				20 mg/l	Monthly
		Dissolved oxygen	2 mg/l				Daily
		Residual chlorine following a min contact time of 30 min	1 mg/l				Daily
W6	Outflow from the oil/water separator from the motor vehicle workshop	Grease/oil				20 mg/l	When a release occurs

Concurrence Agency Conditions – Main Roads Department

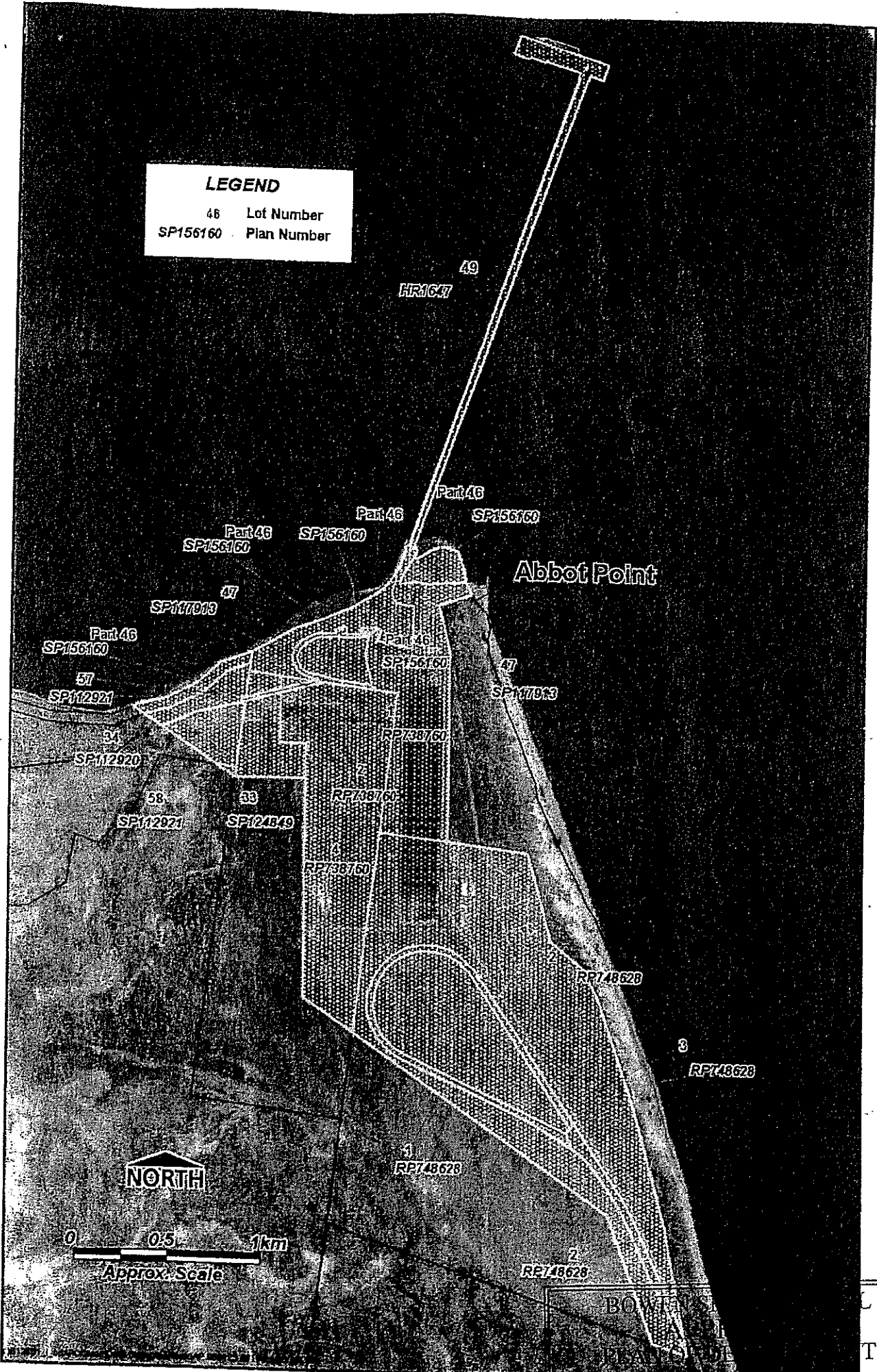
Reasons	Conditions of Development	Condition Basis
<p>1. The development will generate significant volumes of heavy vehicle traffic with potentially adverse effects on the safety and efficiency of the existing state-controlled road network.</p>	<p>Intersection Works</p> <p>1. Prior to Bowen Shire Council issuing a permit for Operational Works on the Subject Land, the developer must construct or cause to be constructed at its sole cost and to Main Roads satisfaction, modifications to the Abbott Point – Bruce Highway intersection. Said intersection must:--</p> <ul style="list-style-type: none"> a. provide a channelised intersection with a: <ul style="list-style-type: none"> i. 120 metre long protected right-turn bay (including 50 metre taper), ii. 120 metre long left-turn deceleration lane (including 50 metre taper), and b. be designed in accordance with Main Roads' "Road Planning and Design Manual". 	<p>1. s.62 Transport Infrastructure Act 1994 (Q/d)</p>
<p>2. Access points to the state-controlled road network must provide sufficient capacity and safety margins for the design traffic and be built to approved standards.</p>	<p>Intersection Works (continued)</p> <p>2. Pursuant to condition 1, the developer must: -</p> <ul style="list-style-type: none"> a. Submit to Main Roads, for Main Roads written approval, concept plans for the proposed configuration of the intersection required pursuant to these conditions. b. Subject to the approval of concept plans by Main Roads the developer, submit detailed engineering plans to Main Roads for approval, at Main Roads discretion. c. Submit for the written approval of Main Roads, a bill of works for the whole of 	<p>2. s.62 Transport Infrastructure Act 1994 (Q/d)</p>

Reasons	Conditions of Development	Condition Basis
<p>3. Main Roads must manage all activities on state-controlled roads taking into account national and international benchmarks and best practices.</p>	<p>the cost of construction of the intersection, including surveillance, and pay to Main Roads, in clear funds, the sum of the works for the purposes of Main Roads carrying out works on behalf of the developer; or</p> <p>d. Submit for the written approval of Main Roads, a bill of works for the whole of the cost of construction of the intersection, including surveillance, and provide to Main Roads, in clear funds, a bond totaling 121% of the sum of the works for the purposes of securing the developer to carry out the whole the works.</p> <p>i. The bond may take the form of either clear funds or a bank guarantee.</p> <p>ii. The bond shall consist of separable portions, 110% to be returned when the works are accepted on maintenance (Practical Completion) and 11% following the satisfactory completion of a 12 month (from the date of Practical Completion) maintenance period.</p> <p>Design And Construction Of Works Generally</p> <p>3. Prior to the developer commencing any works within the state-controlled road reserve the developer must apply for a Main Roads Ancillary Works & Encroachment permit in accordance with the <i>Transport Infrastructure Act 1994 (Qld)</i>. The permit may include additional conditions at the sole discretion of Main Roads.</p> <p>4. The developer must submit to Main Roads for Main Roads consideration in accordance with the <i>Transport Infrastructure Act 1994 (Qld)</i> an Ancillary Works and Encroachment permit application together with certified detailed: -</p> <p>a. Engineering plans of the proposed works</p>	<p>3. s.50 <i>Transport Infrastructure Act 1994 (Qld)</i></p> <p>4. s.9 <i>Transport Infrastructure Act 1994 (Qld)</i></p>

Reasons	Conditions of Development	Condition Basis
	<p>b. Design and tender documentation</p> <p>c. Traffic Management Plan</p> <p>d. Sediment and Erosion Control Plan.</p> <p>5. The documentation referred to in condition 4 hereof must be submitted by the developer and approved by Main Roads, at Main Roads discretion, prior to the letting of any contract for the works.</p> <p>6. All plans, designs and documentation required to be submitted by the developer as a consequence of Main Roads conditions must be prepared in accordance with Main Roads' "Standard Specifications", "Standard Drawings" and "Road Planning and Design Manual". Where no Main Road standard is available the Australian Standards or similar shall be used at the discretion of Main Roads.</p> <p>Design And Construction Of Works Generally (continued)</p> <p>7. All plans, designs and documentation submitted by the developer as a consequence of Main Roads conditions must be certified by a suitably qualified person being a Registered Professional Engineer, Queensland ("RPEQ").</p> <p>8. All contractors engaged for design or construction works shall be</p> <p>a. Pre-qualified under the Main Roads prequalification system; or</p> <p>b. Able to demonstrate, to Main Roads' satisfaction, experience in civil design and/or construction works of a similar nature to those required as a result of these conditions</p>	<p>5. s.9 Transport Infrastructure Act 1994 (Qld)</p> <p>6. Main Roads' "Road Planning and Design Manual"</p> <p>7. s.9 Transport Infrastructure Act 1994 (Qld)</p> <p>8. s.9 Transport Infrastructure Act 1994 (Qld)</p>

Reasons	Conditions of Development	Condition Basis
<p>9. Advertising signs either within or adjacent to a state-controlled road may obscure signage or distract drivers.</p>	<p>Roadside Advertising</p> <p>9. The developer shall not install any permanent or temporary advertising signage within the boundaries of state-controlled roads.</p>	<p>9. s. 50 <i>Transport Infrastructure Act 1994 (Qld)</i></p>
	<p>10. Where the developer seeks to install signage visible from a state-controlled road then the developer shall provide to Main Roads full details of proposed signage including colour layouts and wording for Main Roads consideration and approval at Main Roads discretion.</p>	<p>10. s.62AA <i>Transport Operations (Road Use Management) Regulation 1995 (Qld)</i></p>

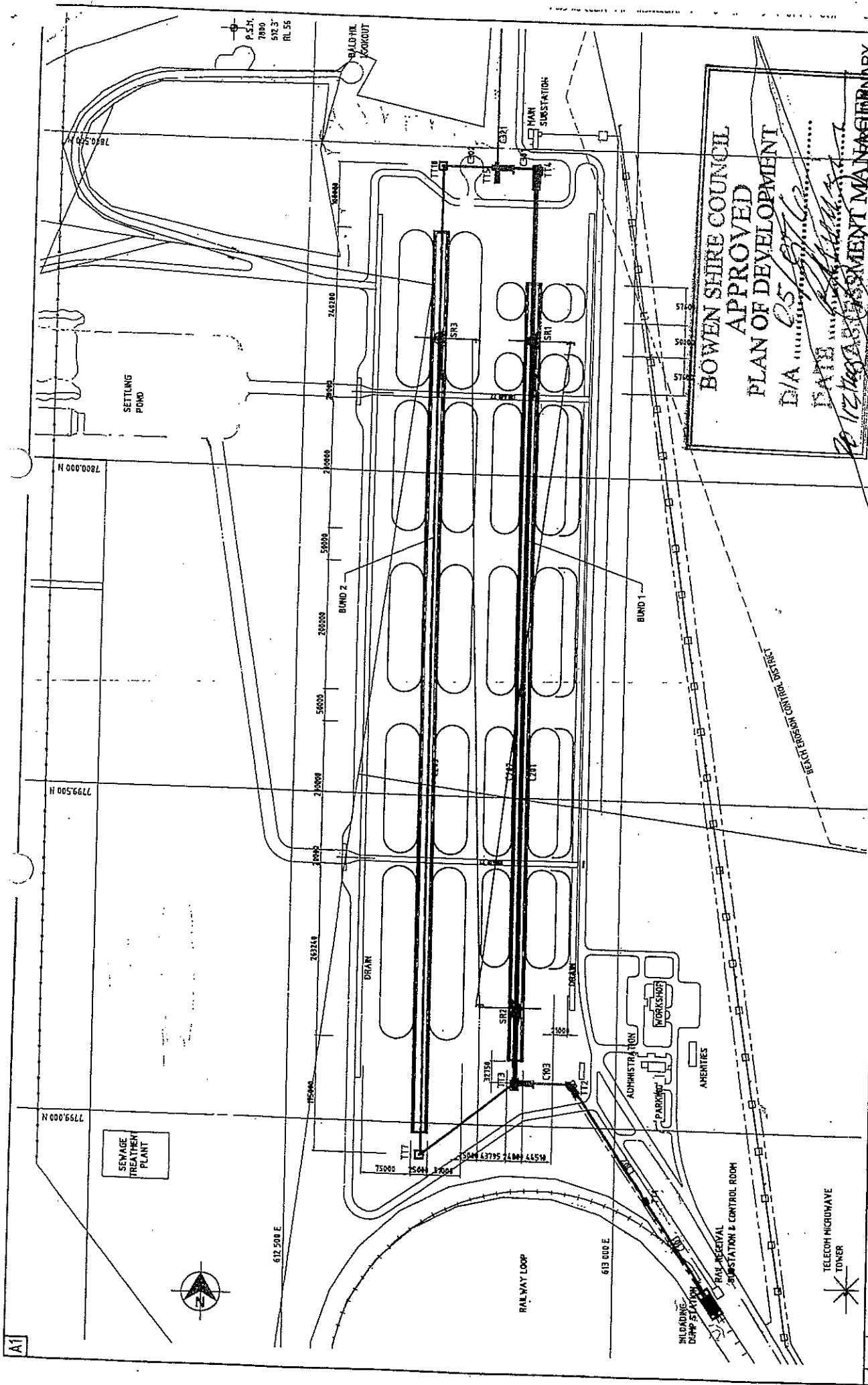
LEGEND
 46 Lot Number
 SP156160 Plan Number



**Port of Abbot Point
 Area for Development Application for Terminal Operations**

Proposal Report – Stage 2 Expansion of Abbot Point Coal Terminal

D/A
 D/A
 ASSESSMENT MANAGER



BOWEN SHIRE COUNCIL
APPROVED
PLAN OF DEVELOPMENT
 D/A 05/07/02
 DATE 12/12/03
 PROJECT NO. HD7301CM
 SHEET NO. 1/2500
 DRAWING NO. HD73-SK-C12 1

PORTS CORPORATION QUEENSLAND		ABBOT POINT COAL TERMINAL MASTERPLAN		ONSHORE SITE PLAN EXPANSION STAGE 2	
Project No. HD7301CM Sheet No. 1/2500 Drawing No. HD73-SK-C12 1	Date: FEB 05 By: [Signature] App: [Signature]	Date: FEB 05 By: [Signature] App: [Signature]	Date: FEB 05 By: [Signature] App: [Signature]	Date: FEB 05 By: [Signature] App: [Signature]	Date: FEB 05 By: [Signature] App: [Signature]
Revision History:	No. 1 Date: [Blank] Description: [Blank]	No. 2 Date: [Blank] Description: [Blank]	No. 3 Date: [Blank] Description: [Blank]	No. 4 Date: [Blank] Description: [Blank]	No. 5 Date: [Blank] Description: [Blank]

Section 3.5.15 Integrated Planning Act 1997

EPA Permit¹ number: IPDE00856508

EPA Permit ¹ number:	IPDE00856508
Assessment Manager reference:	as above
Date application received by EPA:	01-FEB-2008
Permit ¹ Type:	Development Approval for a MCU involving an ERA
Date of Decision:	29-FEB-2008
Decision:	Approved with conditions
Relevant Laws and Policies:	<i>Environmental Protection Act 1994</i> and any subordinate legislation

Development Description

Property	Lot/Plan	Aspect of Development
Abbot Point	Lot 49 Plan SP185904	<p>ERA 15(b) Sewage treatment - operating a standard sewage treatment works having a peak design capacity to treat sewage of 100 or more equivalent persons but less than 1 500 equivalent persons.</p> <p>ERA 23(a) Abrasive blasting - commercially cleaning equipment or structures using a stream of abrasives - if the activity is carried out at a permanent location.</p> <p>ERA 25(d) Metal surface coating - commercial spray painting (other than spray painting motor vehicles), powder coating, enamelling, electroplating, anodising, or galvanising in works having an annual throughput of</p>

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Environmental Protection Agency and the Queensland Parks and Wildlife Service

		<p>metal products of 30 000 t or more.</p> <p>ERA 62 Concrete batching - producing concrete or a concrete product by mixing cement, sand, rock, aggregate or other similar materials in works (including mobile works) having a design production capacity of more than 100 t a year.</p> <p>ERA 71 Port - operating a port (other than an airport) under the Transport Infrastructure Act 1994)</p> <p>ERA 74 Stockpiling, loading or unloading goods in bulk - commercially loading, unloading or stockpiling materials or goods in association with an activity mentioned in item 71, using a crane, conveyor or pump or other similar way at a rate of more than 100 t a day.</p>
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Additional comments or advice about the application

There are conditions that are applicable to the construction phase and post construction phase of the project. The relevant conditions (construction phase/post construction phase) are indicated and if there is any doubt reference should be made to the Agency responsible indicated within this development approval.

Additional information for applicants

The standard currency periods stated in section 3.5.21 of the Integrated Planning Act 1997 or the nominated currency period, apply to each aspect of development in this permit¹. For information on when this permit¹ takes effect and the relevant currency periods, please see point 3 in the Notice of Decision.

Contaminated Land


It is a requirement of the *Environmental Protection Act 1994* that if an owner or occupier of land becomes aware a Notifiable Activity (as defined by Schedule 2 of the *Environmental Protection Act 1994*) is being carried out on the land or that the land has been affected by a hazardous contaminant, they must, within 30 days after becoming so aware, give notice to the Environmental Protection Agency.

Environmentally Relevant Activities

The aforementioned description of any environmentally relevant activity (ERA) for which this permit is issued is simply a restatement of the ERA as prescribed in the legislation at the time of issuing this permit. Where there is any conflict between the abovementioned description of the ERA for which this permit is issued and the conditions specified herein as to the scale, intensity or manner of carrying out of the ERA, then such conditions prevail to the extent of the inconsistency.

This permit authorises the ERA. It does not authorise environmental harm unless a condition within this permit explicitly authorises that harm. Where there is no such condition, or the permit is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

In addition to this permit, the person to carry out the ERA must be a registered operator under the Environmental Protection Act 1994. For the person to become a registered operator, they must apply for a registration certificate under section 73F of the Environmental Protection Act 1994.



Tania Laurentcont
Delegate
Environmental Protection Agency
29-FEB-2008

CONDITIONS OF APPROVAL

General Permit Condition

Agency Interest: Water

PG1 Stormwater Management

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

Condition for: ERA 62 Concrete batching - producing concrete or a concrete product by mixing cement, sand, rock, aggregate or other similar materials in works (including mobile works) having a design production capacity of more than 100 t a year.

Agency Interest: General

A1G1 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

A1G2 Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures, plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

A1G3 Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.

- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

A1G4 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

A1G5 Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants including acid sulfate soils or wastes.

A1G6 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

A1G7 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition A1G6:

- (a) the name of the operator, including their approval / registration number;
- (b) the name and telephone number of a designated contact person;
- (c) quantity and substance released;
- (d) vehicle and registration details;
- (e) person/s involved (driver and any others);
- (f) the location and time of the release;
- (g) the suspected cause of the release;
- (h) a description of the effects of the release;
- (i) the results of any sampling performed in relation to the release,
- (j) actions taken to mitigate any environmental harm caused by the release; and
- (k) proposed actions to prevent a recurrence of the release.

A1G8 Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

A1G9 Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest: Air

A1A1 Dust Nuisance.

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

A1A2 When requested by the administering authority, monitoring must be undertaken to investigate any complaint of environmental nuisance caused by a release to the atmosphere from a release point at the site, and the results thereof notified to the administering authority within 14 days following completion of monitoring.

Agency Interest: Land

A1L1 Preventing Contaminant Release To Land.

Contaminants must not be released to land.

A1L2 Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Agency Interest: Noise

A1N1 Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest: Social

A1S1 Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- (a) Time, date, name and contact details of the complainant;
- (b) reasons for the complaint;
- (c) any investigations undertaken;
- (d) conclusions formed; and
- (e) any actions taken.

The Environmental Protection Agency is responsible for these conditions

DEFINITIONS

Words and phrases used throughout this permit¹ are defined below. Where a definition for a term used in this permit¹ is sought and the term is not defined within this permit¹ the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"authorised place" means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

"commercial place" means a place used as an office or for business or commercial purposes.

"dwelling" means any of the following structures or vehicles that is principally used as a residence –

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"Environmental Protection Agency" means the department or agency (whatever called) administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994*.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"nuisance sensitive place" includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

"site" means land or tidal waters on or in which it is proposed to carry out the development approved under this development approval.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

"you" means the holder of this development approval or owner / occupier of the land which is the subject of this development approval.

END OF CONDITIONS



10 December 2007

Maritime Safety
Queensland

District Manager – Townsville
Northern Region
Environmental Protection Agency
PO Box 5391
Townsville QLD 4810
Attention: Michelle Ramsay

Queensland Transport

Dear Michelle

Abbott Point Coal Terminal Stage 3 Expansion

I refer to your letter dated 29 November 2007 regarding the above development application.

Maritime Safety Queensland is identified under the *Integrated Planning Act 1997* as the concurrence agency with the jurisdiction for navigation and maritime safety issues relating to this application.

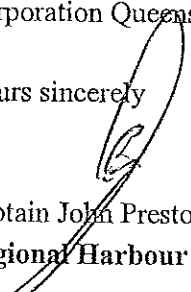
Based on information provided with your application, I advise that Maritime Safety Queensland, through the Regional Harbour Master (Townsville), has no objection to the proposed Abbott Point Coal Terminal Stage 3 Expansion provided the following navigation and Marine Safety requirements are addressed:-

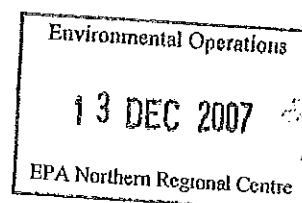
LIST CONDITIONS – SEE ATTACHED PROFORMA OF CONDITIONS

Maritime Safety Queensland does not need to be further consulted if all of the above requirements are met.

A copy of this letter has been forwarded to Bob Brunner General Manager Environment & Risk, Ports Corporation Queensland for their records.

Yours sincerely


Captain John Preston
Regional Harbour Master (Townsville)



Maritime Safety Queensland
Townsville
60 Ross Street South Townsville QLD 4810
PO Box 1921 Townsville QLD 4810

Our ref
Your ref
Enquires John Preston
Telephone +61 7 47263400
Facsimile +61 7 47212028
Website www.msq.qld.gov.au
Email john.a.preston@msq.qld.gov.au

IDAS APPLICATIONS
STANDARD CONDITIONS

- Operational works are to be carried out in a manner so as to ensure that a navigable channel is open to vessel traffic at all times.
- Any operational works that may affect the safe navigation of vessels in the waterway must be appropriately lit during the hours of darkness.
- Any vessels and/or floating plant utilised by the permit holder for the purposes of this permit shall conform to the *Transport Operations (Marine Safety) Act 1994*, the *Transport Operations (Marine Safety) Regulation 2004* and the *Transport Operations (Marine Pollution) Act 1995*.
- The owner/master of all vessels utilised by the permit holder for the purposes of this permit shall comply with their general safety obligation in accordance with the *Transport Operations (Marine Safety) Act 1994*, in particular licensing and safety equipment provisions. All vessels are to be appropriately equipped and crewed in accordance the *Transport Operations (Marine Safety) Act 1994* and the *Transport Operations (Marine Safety) Regulation 2004*.
- Any vessel berthed or moored as part of the construction phase must not impede the safe navigation or other shipping that utilises the waterway.
- If any debris or obstructions are encountered during operations, the permit holder shall at his cost and expense remove and dispose of them as directed by the Regional Harbour Master.
- If any damage is done to a navigational aid due to the operation, the permit holder shall repair or replace the navigational aid to the satisfaction of the Regional Harbour Master.
- The permit holder must give the Regional Harbour Master fourteen (14) days notice before commencing operations. Notification of completion of operations must be provided to the Regional Harbour Master within seven (7) days of completion. This information is required for the issuing of a Notice to Mariners.
- On completion of the operations, the permit holder shall ensure that all plant and equipment (including pipes, floats and other equipment used in or in connection with the operations) is removed from the site.
- The contractor must comply with all written instructions issued by the Regional Harbour Master. This permit may be suspended or cancelled at the discretion of the Regional Harbour Master.

ADDITIONAL DREDGING CONDITIONS:-

- Dredging operations shall be carried out by the dredger so that at all times a navigable channel is open to traffic to the satisfaction of the Regional Harbour Master.
- If any snags or obstructions are encountered during dredging operations, the dredger shall at his cost and expense remove and dispose of them as directed by the Regional Harbour Master.
- The dredger must comply with all written instructions issued by the Regional Harbour Master and this permit may be suspended or cancelled if the Regional Harbour Master recommends such action.

APPENDIX 1

List of Coordinator-General's Conditions relating to Abbot Point Stage 3 Project

Requirements that the Assessment Manager must attach to a Development Approval under the *Integrated Planning Act 1997*

Aspect of Development: Material Change of Use on strategic and non-strategic port land.

Condition 1

- a. PCQ shall finalise the Environmental Management Plan (Construction) to the satisfaction of EPA prior to commencement of construction of the Stage 3 Expansion.
- b. PCQ shall ensure the current Site Based Management Plan for the Abbot Point Coal Terminal is modified by the terminal operator to account for additional environmental management matters associated with the operation of the Stage 3 expansion, prior to commencement of operation of the coal terminal Stage 3 expansion.
- c. PCQ shall implement the Management Commitments contained in the EIS for the Abbot Point Coal Terminal Stage 3 Expansion dated March 2006, and further identified in the EMPs (Construction and Operations).

EPA is the responsible agency for this condition.

Condition 2

- a. If the unaccompanied construction workforce for any phase of the Project is projected to rise above 140 personnel, then:
 - (i) PCQ shall make application to the Bowen Shire Council for development approval under the *Integrated Planning Act 1997* for a construction camp to accommodate the forecast number of unaccompanied construction workers, with the Bowen Showgrounds site being the strongly preferred location;
 - (ii) The application will oblige PCQ to consult with the Bowen Shire Council, and the Bowen Show Society if the showgrounds site is proposed, regarding appropriate infrastructure that will remain at the showground site after the construction camp is dismantled;
 - (iii) PCQ shall ensure that a program is offered to make accommodation available outside of the construction camp for the required number of

accompanied construction workers and their dependants in the Bowen region during the construction period;

- b. Commencing not more than three months after a construction contractor is appointed, PCQ shall consult with Bowen Shire Council, Department of Housing, and Department of Primary Industry and Fisheries on a quarterly basis, during the construction period, to discuss project employment projections and accommodation trends in the Bowen region, with the objective of developing responses within each party's capability to address actions on accommodation issues.

The Bowen Shire Council is the agency responsible for this condition.

Condition 3

- a. A Road Impact Assessment (RIA) Report and Road Management Plan (RMP) for state-controlled roads shall be prepared by PCQ in consultation with Main Roads (DMR) Northern (Townsville) District Office for transport tasks associated with each progressive and committed stage of the Project, in accordance with the current DMR Guidelines for Assessment of Road Impacts of Development at the time. The reports shall address at least the following issues:
 - (i) Details of anticipated haulage routes, including intersection analysis, where those routes cross state-controlled roads;
 - (ii) Configuration of proposed haulage vehicles including axle type;
 - (iii) Operational matters, including safety of project traffic and other users of the state-controlled road network;
 - (iv) Evaluation of any significant accelerated reduction in pavement life;
 - (v) Evaluation of any increased maintenance requirements; and
 - (vi) Assessment of the intersection and lighting requirements at the Bruce Highway – Abbot Point access road intersections to ensure designs manage safety (including proposed Stage 3 level use) of the intersection
- b. PCQ shall submit the RIA Report and RMP for approval to the Director General of DMR within three months of the appointment of the principal construction contractor, and before commencement of major Stage 3 construction activities on site.

The Department of Main Roads is the agency responsible for this condition.

Condition 4

- a. PCQ shall enter into a Transport and Traffic Pre-Construction Agreement with DMR to address issues relating to road use, maintenance, traffic management and contributions for infrastructure upgrading works, within two months of the production of the (RIA) Report and RMP, and before commencement of major Stage 3 construction activities on site.

- b. If agreement is not reached within two months of production of the RMP, then PCQ will provide a letter of undertaking to DMR to address any outstanding matters defined in the RMP and RIA Report that have not been agreed with DMR.

DMR is the agency responsible for this condition.

Condition 5

In conjunction with Queensland Rail, PCQ shall carry out an assessment of the long term interaction of the rail crossings on the Abbot Point access road, with the adjacent Bruce Highway intersection, and submit the assessment to DMR for approval, before commencement of operations of the Stage 3 expansion.

DMR is the agency responsible for this condition.

Condition 6

- a. PCQ shall lodge an application for a development permit accompanied by a proposal for vegetation offset under the *Vegetation Management Act* and the *Integrated Planning Act* for the clearing of vegetation on the proposed area of Strategic Port Land.
- b. If the proposed vegetation offset is not acceptable to NRW, PCQ must conclude an agreement for supplying this offset arrangement within twelve months of the granting of the development permit for the Project;
- c. In the event that a clearing permit is not granted, PCQ must propose an alternative option for environmental management of the affected vegetation area on the project site, which may include, but not limited to, an alternative offset area being offered, or other environmental management arrangements;

The Department of Natural Resources and Water is the agency responsible for this condition.

Condition 7

- a. PCQ shall ensure a monitoring program of groundwater quality and hydrology is conducted based on at least the current investigation bores around the stockpile site and settling ponds, with monitoring parameters including pH, salinity, conductivity, and a suite of heavy metals. This program is to be approved by NRW and EPA.

- b. This groundwater monitoring must begin before Stage 3 operations commence and be conducted over the first three years of operations of Stage 3. The results of monitoring must be submitted to DNRW and EPA after each period.

The Department of Natural Resources and Water is the agency responsible for this condition.

Condition 8

- a. PCQ shall ensure that an inspection and maintenance program is commenced for the Splitters Creek borefield within three months of commencement of Stage 3 construction.
- b. PCQ shall ensure that a groundwater salinity and flow monitoring program on this borefield is commenced within three months of commencement of Stage 3 construction, and the results submitted to NRW every two years, and at the time an application is made for increased allocation from the borefield.
- c. If an application for increased allocation from this borefield is made, PCQ shall also submit a "water supply and demand options analysis" stating factors affecting the water supply and demand alternatives for the coal terminal.

The Department of Natural Resources and Water is the agency responsible for this condition.

END OF APPENDIX 1

APPENDIX 2

List of Other Conditions and Recommendations relating to Abbot Point Stage 3 Project

Part A

Conditions specified by the EPA as a concurrence agency that the Assessment Manager must attach to a development approval pursuant to the *Integrated Planning Act 1997*.

Aspect of Development:

ERA 71 Port – Operating a port (other than an airport) under the *Transport Infrastructure Act 1994*.

On land described as:

Lot 1 on RP748628
Lot 2 on RP748628
Lot 3 on RP748628
Lot 4 on RP738760
Lot 47 on SP117913
Lot 49 on HR1647
Lot 52 on HR1732
Lot 46 on SP156160

Gen 1 Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.

- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 2 Dredging may only be carried out within port limits as designated by the *Transport Infrastructure Act 1994*.

Gen 3 Dredge spoil must not be disposed of into Queensland waters that are within the limits of the State, or are coastal waters of the State.

Gen 4 A turtle excluding device must be used on the draghead suction of any dredge used.

Gen 5 No dredging is permitted between November to March inclusive in order to minimise the impact on the marine environment.

Aspect of Development:

ERA 74 Stockpiling, loading or unloading goods in bulk- commercially loading, unloading or stockpiling materials or goods in association with an activity mentioned in item 71, using a crane, conveyor or pump or other similar way at a rate of more than 100t a day.

On Lot 1 rp748628

Lot 2 on rp748628

Lot 3 on rp748628

Lot 4 on rp738760

Lot 47 on sp117913

Lot 49 on HR1647

Lot 46 on SP156160

Lot 52 on HR1732

Agency Interest General

Gen 1. This development permit authorises a maximum annualised throughput of 50 million tonne of coal per year.

Gen 2. Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

Gen 3. Maintenance of Measures, Plant and Equipment.

The operator of an Environmentally Relevant Activity (ERA) to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures, plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

Gen 4. Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all

sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 5. The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

Gen 6. Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

Gen 7. All records required by this approval must be kept for 5 years.

Gen.8. Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

Gen 9. Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

Gen 10. Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

Gen 11. Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

Gen 12. Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

Gen 13. Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

Gen 14. Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition Gen13:

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Agency Interest Air

Air 1. Nuisance

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Air 2. Dust Nuisance

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

Air 3. Air Monitoring

The release of dust contaminants to the atmosphere shall have management objectives measured at a nuisance sensitive place as set out below:

(a) Dust deposition

60 milligrams per square metre per day above background (i.e. at the most upwind sampling station) expressed as a monthly average.

(b) Particulate matter

A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre at any time, over a 24 hour averaging period, when monitored in accordance with:

- 1) Australian Standard AS 3580.9.6 "Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method"; or
- 2) An alternative method of monitoring PM10 may be permitted in writing by the administering authority or by the "Air Quality Sampling Manual" as published from time to time by the administering authority;

Air 4 All reasonable and practicable measures must be undertaken to minimise emissions of dust and particulate matter to the atmosphere. Reasonable and practicable measures may include but not be limited to:

- (a) use of water sprays on unsealed trafficable areas;
- (b) handling materials in a moist state;
- (c) install belt cleaners at transfer points on all new conveyors

- (d) design chutes in new transfer towers for minimal dust generation.
- (e) Provide water sprays on the new stacker reclaimers

Air 5. The dust monitoring program described in the Abbot Point Bulkcoal Pty Ltd's Integrated Environmental Management System (Feb 2005 or later versions) must be implemented. The dust monitoring and management program must be reviewed on an annual basis.

Agency Interest- Land

Land 1. Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Land 2. Discharges to land must only be released from discharge locations W3 and W4 if a 1 in 2 year, 24 hour rainfall event is exceeded.

-Discharge W3 - land adjacent to the surge bin sediment sump at Abbot Point as depicted in map 1.

-Discharge W4 - land adjacent to the main sub station sediment sump onto land at Abbot Point as depicted in map 1.

Agency Interest- Noise

Noise 1. Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest- Social

Soc 1. Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;

- d) conclusions formed; and
- e) any actions taken.

Agency Interest- Waste

Waste 1 The operator of the activity must not:

- (a) burn waste on the site
- (b) allow waste to be burned on the site; or
- (c) remove waste from the site for burning elsewhere.

Waste 2. All waste generated from the activity shall be disposed of to a facility lawfully able to accept such waste.

Agency Interest- Water

Water 1. Contaminants other than settled/treated stormwater runoff waters must not be released from the site to surface waters or the bed or bank of surface waters unless otherwise authorised by this approval.

Water 2 A discharge may only occur from discharge location W1 if:

- (a) a 1 in 10 year , 24 hour rainfall event is exceeded, or
- (b) A controlled release of water after a rainfall event is required to maintain freeboard in the Secondary Settlement pond to handle continuing rainfall events. This controlled release is not to exceed 50% of the capacity of the Secondary Settlement pond on each occasion it is required and is only authorised when it meets the quality criteria in Table 1.

Water 3. A discharge may only occur from discharge location W2 if a 1 in 2 years, 24 hour rainfall event is exceeded.

Water 4. Stormwater from all stockpiles must be directed to stormwater settlement ponds, which must be capable of containing runoff from a one in ten year, 24 hour rainfall event as measured at the nearest official Bureau of Meteorology rainfall station.

Water 5. Stormwater runoff must only be released in compliance with the release limits listed in Table 1. Contaminant release limits to water, from the following discharge locations:

- Discharge Location W1 - the discharge point adjacent to the secondary settlement pond into the waters known as the Caley Valley Wetland depicted in Map 1.
- Discharge Location W2 - the sample station wash water drain into the ocean at Abbot Point as depicted in Map 1.

Water 6 Monitoring.

Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the quality characteristics and not less frequently than specified in Table 1- Contaminant release limits to water. All determinations of the quality of contaminants released must be:

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Water 7. Pond Conditions.

All ponds used for the storage or treatment of contaminants, sewage or wastes at or on the authorised place must be constructed, installed and maintained:

- a) so as to minimise the likelihood of any release of contaminants through the bed or banks of the pond to any waters (including ground water),
- b) so as to ensure the stability of the ponds' construction, and
- c) so as to maintain adequate freeboard in order to minimise uncontrolled releases.

Aspect of Development:

ERA 15 (b) Standard Sewage treatment works- having a peak design capacity to treat sewage of 100 or more equivalent persons but less than 1500 equivalent persons

On Lot 40 on SP117913

Agency Interest- General

Gen 1 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

Gen 2 Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 3 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

Gen 4 Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

Gen 5 All records required by this approval must be kept for five years.

Gen 6 Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

Gen 7 Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

Gen 8 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

Gen 9 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition Gen 8

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);

- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Gen 10 Maintenance of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures, plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

Gen 11 Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

Agency Interest- Air

Air 1 Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest- Land

Land 1 The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations and estimates.

Land 2 Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

Land 3 Waste water must only be released to land in compliance with the release limits listed in Table 2. Contaminant release limits to land, from the following discharge location;

W7- outflow from the final holding tank of the Sewage Treatment Plant.

Land 4 Monitoring.

Monitoring must be undertaken and records kept of contaminant releases to land from the discharge location for the quality characteristics and not less frequently than specified in Table 2 - Contaminant release limits to land.

All determinations of the quality of contaminants released must be:

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Land 5 Waste water released from the sewage treatment plant in compliance with the limits set in Table 2- Contaminant Releases to Land, must only be reused for the purpose of dust suppression and soil compaction during construction activities, and dust suppression on coal stockpiles.

Land 6 When the capacity of the Sewage Treatment Plant's holding tank is exceeded, effluent may be discharged to the primary settlement pond.

Land 7 Notices must be prominently displayed at all areas where treated effluent is used for dust suppression and soil compaction to provide warning that treated effluent is being used and not to drink or otherwise use the effluent. These notices must be maintained in a visible and legible condition

Agency Interest- Noise

Noise 1 Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest- **Social**

Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest- **Waste**

Waste 1 All waste generated from the activity shall be disposed of at a facility lawfully able to accept such waste.

Agency Interest- **Water**

Water 1 Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

Aspect of Development

ERA 28 Motor Vehicle Workshop, -operating a workshop or mobile workshop in the course of which motor vehicle mechanical or panel repairs are carried out in the course of a commercial or municipal enterprise (other than on a farm or under a mining tenement) or on a commercial basis.

On Lot 3 on RP748628

Agency Interest- **General**

Gen 1 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and /or to minimise the likelihood of environmental harm being caused.

Gen 2 Maintenance of measures, plant and equipment.

The operator of an ERA to which this approval relates must;

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures plant and equipment in a proper and efficient condition and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

Gen 3. Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.

- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 4 All records required by this approval must be kept for five years.

Gen 5 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

Gen 6 Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation

Gen 6 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

Gen 7 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition Gen 6

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;

- i) the results of any sampling performed in relation to the release;
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Gen 8 Monitoring

A competent person(s) must conduct any monitoring required by this approval.

Gen 9 Equipment Calibration

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

Agency Interest- Air

Air 1 Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest- Land

Land 1 Discharges to land must only be released in compliance with the release limits listed in Table 2. Contaminant releases limits to land, from the following discharge locations:

Discharge W6- outflow from oil/water separator of the motor vehicle workshop.

Land 2 Monitoring must be undertaken and records kept of contaminant releases to land from the discharge location for the quality characteristics and not less frequently than specified in Table 2- Contaminant release limits to land.

All determinations of the quality of contaminants released must be;

- a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
- b) carried out on samples that are representative of the discharge.

Agency Interest- Noise

Noise 1 Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest- Waste

Waste 1 All waste generated from the activity shall be disposed of at a facility lawfully able to accept such waste.

Agency Interest- Water

Water 1 Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

Aspect of Development

ERA 23 (a) Abrasive Blasting- commercially cleaning equipment or structures using a stream of abrasives- if the activity is carried out at a permanent location.

On Lot 3 on RP748628

Lot 47 on SP117913

Lot 49 on HR1647 and

Lot 4 on RP738760

Lot 46 on SP156160

Agency Interest- **General**

Gen 1 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

Gen 2 Maintenance of measures, plant and equipment.

The operator of an ERA to which this approval relates must;

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures plant and equipment in a proper and efficient condition and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

Gen 3. Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out:

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.

- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 4 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

Gen 5 All records required by this approval must be kept for 5 years.

Gen 6 Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation

Gen 7 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

Gen 8 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition Gen 7

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release;
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Gen 9 Spill Kit

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

Gen 10 Spill Kit Training

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest- Air

Air 1 Nuisance.

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

Agency Interest- Land

Land1 Preventing Contaminant Release to land

Contaminants must not be released to land.

Land2 Spillage of all chemicals and fuels must be contained within an on site containment system and controlled in a manner that prevents environmental harm.

Note: All petroleum product storages must be designed, constructed and maintained in accordance with AS 1940- Storage and Handling of Flammable and Combustible Liquids.

Agency Interest- Noise

Noise 1 Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest- **Social**

Social 1 Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest- **Waste**

Waste 1 As far as is reasonable and practicable, all waste generated by Abrasive Blasting activities at the dedicated abrasive blasting area must be captured within an onsite containment system and controlled in a manner that prevents environmental harm.

Waste 2 All waste generated from the activity must be disposed of at a facility lawfully able to accept such waste.

Agency Interest- **Water**

Water 1 Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

Aspect of Development

ERA 25 (d) Metal Surface Coating- commercial spray painting (other than spray painting motor vehicles), powder coating, enamelling, electroplating, anodising, or galvanising in works having an annual through put of metal products of 30 000 t or more.

On Lot 3 on RP748628
Lot 46 on SP156160
Lot 47 on SP117913
Lot 49 on HR1647 and
Lot 4 on RP738760

Agency Interest- **General**

Gen 1 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

Gen 2 Maintenance of measures, plant and equipment.

The operator of an ERA to which this approval relates must;

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval;
- (b) maintain such measures plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

Gen 3. Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.

- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

Gen 4 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

Gen 5 All records required by this approval must be kept for 5 years.

Gen 6 Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation

Gen 6 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

Gen 7 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition Gen 6

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;
- i) the results of any sampling performed in relation to the release,

- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

Gen 8 Spill Kit

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA.

Gen 9 Spill Kit Training

Anyone operating under this approval must be trained in the use of the spill kit.

Agency Interest- Air

Air 1 Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest- Land

Land 1 Preventing Contaminant Release to land

Contaminants must not be released to land.

Land 2 Spillage of all chemicals and fuels must be contained within an on site containment system and controlled in a manner that prevents environmental harm.

Note: All petroleum product storages must be designed, constructed and maintained in accordance with AS 1940- Storage and Handling of Flammable and Combustible Liquids.

Agency Interest- Noise

Noise 1 Noise Nuisance.

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Agency Interest- **Social**

Social 1 Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest- **Waste**

Waste 1: all waste generated from the activity shall be disposed of at a facility lawfully able to accept such waste.

Agency Interest- **Water**

Water 1 Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

Attachment - Tables

Table 1 Contaminant release limits to water

Monitoring point	Discharge location	Quality characteristics	Release limit				Monitoring frequency
			Minimum	50th Percentile	80th Percentile	Maximum	
W1	Discharge point from the secondary settlement pond	pH	6			8	Each time a release occurs
		Suspended solids				30mg per litre	
W2	Sample station wash water drain	pH	6			8	Each time a release occurs
		Suspended solids				30mg/l	

Table 2 - Contaminant release limits to land

Monitoring point	Discharge location	Quality characteristics	Release limit				Monitoring frequency
			Minimum	50th Percentile	80th Percentile	Maximum	
W3	Land adjacent to the surge bin sediment sump	pH	6			8	Each time a release occurs
		Suspended solids				30mg/l	
W4	Land adjacent to the main substation sediment sump	pH	6			8	Each time a release occurs
		Suspended solids				30mg/l	
W6	Outflow from the oil/water separator from the motor vehicle workshop	Grease/oil				20 mg/l	When a release occurs
W7	Outflow from the final holding tank of the sewage treatment plant	Faecal coliforms				10cfu per 100ml	Monthly
		pH	6			8	Daily
		Suspended solids				30mg/l	Monthly
		BOD				20 mg/l	Monthly
		Dissolved oxygen	2 mg/l				Daily

		Residual chlorine following a min contact time of 30 min	1 mg/l				Daily
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Attachment – Definitions

Words and phrases used throughout this permit¹ are defined below. Where a definition for a term used in this approval is sought and the term is not defined within this approval the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"authorised place" means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

"commercial place" means a place used as an office or for business or commercial purposes.

"dwelling" means any of the following structures or vehicles that is principally used as a residence –

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"ignitable, corrosive, reactive or toxic materials" are materials as defined in the Queensland Government Environmental Protection Agency 'Technical guideline on landfill siting, design, operation and rehabilitation', 2003.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"noxious" means harmful or injurious to health or physical well being.

"nuisance sensitive place" includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or

and includes a place within the curtilage of such a place reasonably used by persons at that place.

"**offensive**" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

"**protected area**" means –

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"**regulated waste**" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (whether or not it has been treated or immobilised), and includes –

- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

"**statistically significant**" means when the difference between groups of data is sufficient for a statistical test to reject the *null hypothesis*. For example, a requirement for a statistical test is that you have a minimum of two hypotheses, the null hypothesis and one or more alternative hypotheses. If you have data from two groups of bores (say A = background values and B = values at locations hydraulically down gradient of the landfill unit), and you wish to test whether A is different from B, the *null hypothesis* would be that A and B are from the same population (no significant difference). After performing the statistical test, you will either accept or reject the null hypothesis.

"**site**" means the place to which this development approval relates or the premises to which this development approval relates.

"**waters**" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

"**50th percentile**" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"**80th percentile**" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

Provisions specified by the EPA as a concurrence agency that are recommended to the Assessment Manager for a preliminary approval pursuant to the *Integrated Planning Act 1997*.

Aspect of Development:

ERA 15 (a) Standard Sewage treatment works- having a peak design capacity to treat sewage of 21 or more equivalent persons but less than 100 equivalent persons

Lot 3 RP 748628

Nil conditions

END OF CONDITIONS PART A

Part B - Recommendations provided by the EPA as advice for conditions related to the construction phase.

The conditions contained in Part B establish the additional environmental requirements that apply only to the construction phase of the project. These conditions apply to the development sites.

Nuisance

- (B1) Notwithstanding any other condition of this Approval, this Development Approval does not authorise any release of contaminants which causes or is likely to cause an environmental nuisance beyond the boundaries of the place to which this Approval relates.

Erosion and sediment control

- (B2) An Erosion and Sediment Control Plan is to be developed and implemented prior to the commencement of construction activities. As a minimum requirement, it will include the features detailed in the Environmental Management Plan contained in Abbot Point Coal Terminal EIS (March 2006) and the Supplementary Report (Dec 2006).
- (B3) Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment. The size of any sedimentation dam must be sufficient to contain the run-off expected from a 24 hour storm with an average recurrence interval of 1 in 5 years.

Complaint Recording

- (B4) All complaints received relating to releases of contaminants from construction and commissioning must be recorded and kept with the following details:
- (a) time, date and nature of complaint;
 - (b) type of communication (telephone, letter, personal etc.);
 - (c) name, contact address and contact telephone number of complainant (Note: if the complaint does not wish to be identified the "Not identified" is to be recorded);
 - (d) response and investigation undertaken as a result of the complaint;
 - (e) name of person responsible for investigating complaint; and
 - (f) action taken as a result of the complaint investigation and signature of responsible person.

Acid Sulfate Soils

- (B5) Works must comply with Instructions For the Treatment and Management of Acid Sulfate Soils, 2001 Queensland Government Environmental Protection Agency,

or any updates as they become available.

(B6) Acid sulphate soils must be managed such that contaminants are not directly or indirectly released from the works to any waters unless otherwise authorised under a condition of approval.

Waste management

(B7) A Waste Management Plan incorporating waste avoidance, minimisation, reuse, and recycling strategies must be prepared and implemented. As a minimum requirement, it will include the features detailed in the Environmental Management Plan contained in the Abbot Point coal terminal EIS (March 2006) and the Supplementary Report (Dec 2006). The plan will be finalised by with regard to the comments provided by the Environmental Protection Agency.

Rehabilitation

(B8) Sites disturbed during construction not otherwise required for ongoing operations should be rehabilitated (including all disturbed areas such as slopes, borrow pits, stormwater or waste water collection pits, stockpile and screening areas) in a manner such that:

- If practical, suitable native species of vegetation are planted and established
- Potential for erosion of the site is minimised
- The quality of stormwater, water and seepage released from the site is such that releases of contaminants are not likely to cause environmental harm
- Environmental nuisance caused by release of dust is avoided

END OF CONDITIONS PART B

Part C Recommendation to the Assessment Manager

The proponent has requested that additional conditions be provided to define at what point the relevant conditions within this Appendix should take effect beyond existing operations. It is requested that the Assessment Manager (of the required *Integrated Planning Act 1997* approvals) provide the necessary condition/s on any decision notice issue to provide clarity in this regard.

END OF RECOMMENDATION PART C

END OF APPENDIX 2

APPENDIX 3

Difficulties Observed in the Application of the Vegetation Clearing Exemption Under the *Vegetation Management Act (VMA)* for the Abbot Point Coal Terminal Stage 3 Expansion Project

There are several categories of exemption from a Vegetation Management clearing permit recognised under Schedule 8 of the *Integrated Planning Act*. These include:

1. where the clearing is necessary for Routine Management (for establishing necessary infrastructure) if the total clearing area is less than 2 hectares, and where the infrastructure is also less than 2 hectares; [Table 4 Item 1A clause (h)]
2. land for Urban purposes in an Urban area; [Table 4 Item 1A clause (g)]
3. for a Specified Activity, including: [Table 4 Item 1A clause (j)]
 - a. Mining or petroleum activity
 - b. Activity under certain sections of the *Electricity Act*
 - c. State-controlled roads
 - d. Rail corridors

Taking these in turn, the first exemption sets a reasonable threshold (of two hectares) below which the legislation contemplates that the clearance permit process is not justified. However the infrastructure clearing for this Project is greater than 2 hectares in total. As the clearing for infrastructure on adjacent land is either exempt from requiring a clearing permit under VMA, or does not involve clearing, the actual area of the infrastructure as a whole might be considered immaterial. It seems to be an unnecessary outcome to treat this trivial (one hectare) area in the same way as broadscale clearing is intended to be treated by the VMA.

Exemption 2 applies for urban areas only and does not extend to Strategic Port Land (which is outside the local authority planning scheme). In this case, it might be claimed that Strategic Port Land with an industrial use category on an approved Land Use Plan has the same character as an industrial land use in a local authority planning scheme, which is categorised as an Urban purpose in an Urban area. Consequently there are fundamental discrepancies between the exemption treatment of adjacent lands serving the same purpose – port infrastructure - in the one case under the control of a local authority planning scheme, and in the other case under a corresponding land use plan for Strategic Port Land.

The project spans Strategic Port Land and non-strategic port land. These primary designations follow land parcel boundaries. Figure 4 shows the proposed clearing area (green), which spans non-strategic port land (yellow) and Strategic Port Land (pink).

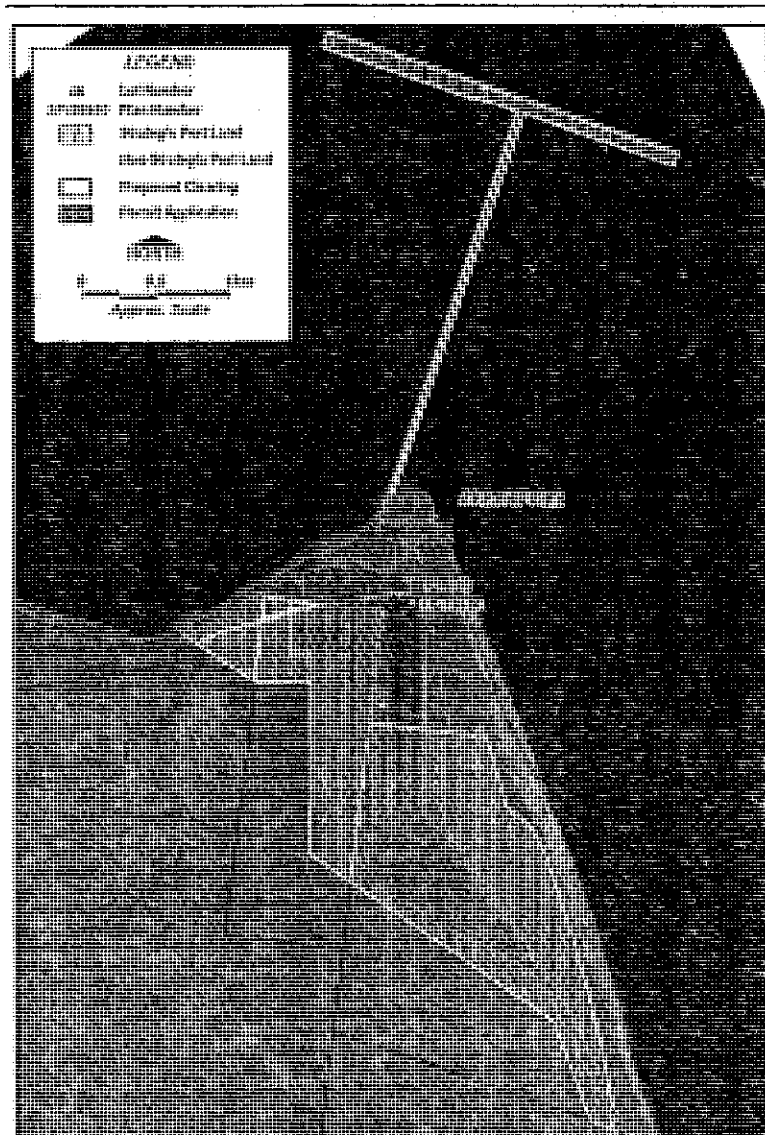


Figure 4: Strategic and non-strategic port land areas.

The exemption 3 list appears incomplete without Strategic Port Land, being an item of infrastructure publicly designated for transport purposes. Exemptions for land uses for other transport infrastructure are treated one way, and port infrastructure another.

In order to deal with the potential for improvements to vegetation management administration that have been highlighted by this case, I make the following recommendations to NRW:

1. The vegetation management assessment process followed by NRW for significant projects declared under the SDPWO Act should be reviewed to ensure that the Coordinator-General receives early advice on the potential for

vegetation management outcomes to be provided during the EIS process;

2. The IPA Schedule 8 Table 4 exemptions from vegetation clearing permits should be reviewed to consider the development of Strategic Port Land to be treated identically to urban use under local government planning schemes.

END OF APPENDIX 3