PL83 OPERATIONAL ENVIRONMENTAL PLAN SUMMARY

GAS DIVISION

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Contents

1. DEFINITIONS

Term / Acronym	Definition
AASS	Actual Acid Sulfate Soils
ALARP	As Low As Reasonably Practicable.
ATCO	ATCO Gas Australia Pty Ltd.
BCT	Business Continuity Team
Contractor	A supplier in a contractual situation.
CMT	Crisis Management Team
DBNGP	Dampier to Bunbury Natural Gas Pipeline.
DBP	Dampier Bunbury Pipeline.
DPLH	Department of Planning Lands and Heritage.
DRF	Declared Rare Flora
DWER	Department of Water and Environmental Regulation.
DEE	Department of the Environment and Energy.
DRDL	Department of Regional Development and Lands.
DMIRS	Department of Mines, Industry Regulation and Safety.
DBCA	Department of Biodiversity, Conservation and Attractions.
Emergency	Means an incident which: • Has the potential to cause major loss of people, equipment, materials process or the environment; • Has caused or threatens to cause failure of gas supply to shippers; • Is of sufficient magnitude to attract wide publicity and the responsibility and the response of the police, fire brigade or other emergency services; and • Results in an uncontrolled release of gas
EPA	Environmental Protection Authority.
EPBC Act	Environment Protection and Biodiversity Conservation Act (1999).
EPBC Regulations	Environment Protection and Biodiversity Conservation Regulations (2000).
GDA94	Geocentric Datum Of Australia 1994
GDS	Gas Distribution System.
GHG	Greenhouse Gases.
Hazard	Any unsafe act or condition that has the potential to injure people, result in harm to the environment, damage property, equipment or materials or lead to loss of process.
Hazardous Substance	A substance: • Entered in the List of Designated Hazardous Substances; or • If the substance is not entered in the List of Hazardous Substances determined in accordance with the Approved Criteria for Classifying Hazardous Substances whether the substance is a hazardous substance
HDD	Horizontal directional drilling

Term / Acronym	Definition
HSE	Health, Safety and the Environment
HP120	High Pressure Pipeline number 120 (internal ATCO numbering of the Pipeline)
Incident	An undesired event or set of circumstances that did result in an undesired outcome through injury to people, harm to the environment, damage to property, equipment or materials or loss of process.
KP	Kilometre Point when making reference to the location of a particular point of reference in relation to the MGL.
JRA	Job Risk Analysis means a method of identifying hazards with workplace tasks and the development of control measures to manage the identified hazards.
MAOP	Maximum allowable operating pressure.
Management Plan	A project or job specific management plan, which describes how QHS&E and quality activities and Potential Impacts on a project or job will be managed.
Management System	A framework that integrates quality, health, safety and environmental management activities and ensures compliance to specified requirements; contains objectives, performance standards and responsibilities, as well as specifying the methods of implementation in the context of the operations of the company.
MGL	Mandurah Gas Lateral
Near Miss	An undesired event or set of circumstances that did not result in any loss but had the potential to do so.
NGER Act	National Greenhouse and Energy Reporting Act (2007).
NGER Regulation	National Greenhouse and Energy Reporting Regulations (2008).
OEP	Operational Environmental Plan.
O&M	Operation and Maintenance
PASS	Potential Acid Sulfate Soils
Permit to Work	A completed and authorised permit to carry out work within the compound fences at any site.
PL83	Pipeline Licence 83.
PIMP	Pipeline Integrity Management Plan.
PRS015	Pressure Reduction Station 015.
QHS&E	Quality, Health, Safety and Environment.
Relevant Authorities	Either one or all of DMIRS, DWER, DBCA, or EPA as the case may be.
ROW	(Right of Way/ROW/corridor) means the area located surrounding an infrastructure installation, e.g. road, or pipeline, legally recognised for access by the relevant authority.
Risk	The exposure to the chance of harm or loss.
Risk Assessment	The process used to determine risk priorities by evaluating and comparing the level of risk against program standards, pre-determined risk levels or other criteria.
Safeguard Mechanism Rule	National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule (2015).

Term / Acronym	Definition
SDS	Safety Data Sheet.
SSV	Slam shut valve
Sub-contractor	An organisation that conducts work for a Contractor, under contract to that Contractor.
SWI	Safe Work Instructions
System Improvement	The corrective action required rectifying a situation. Corrective action encompasses three stages: • Implementation of control; • Facility for sign-off; and • Follow-up to check effectiveness of control.
Take 5	Primary method of identifying hazards with workplace tasks and the implementation of control measures to manage the identified hazards.
TEC	Threatened Ecological Community
UAFG	Unaccounted for Gas.
WNES	WestNet Energy Services

2. INTRODUCTION

ATCO Gas Australia (ATCO) owns and operates the Mid-West and South-West Gas Distribution System (MWSWGDS), which includes the Rockingham sub-network used to transport gas to the Rockingham and Mandurah areas. The Pipeline Licence 83 (PL83) also known internally in ATCO as High Pressure Pipeline number 120 (HP120), pipeline route passes through the Shire of Murray, located approximately 65km south of Perth in Western Australia's Peel Region.

The Mandurah Gas Lateral (MGL) consists of a 7.05km 200mm nominal diameter (DN200) Class 600 Steel pipeline from the Dampier to Bunbury Natural Gas Pipeline (DBNGP) to Pressure Reduction Station (PRS015) and approximately 9.65km of DN250 Class 150 Steel pipeline from PRS015 connecting to the Rockingham sub-network (pipeline). The Class 600 section of the MGL, including PRS015, is regulated under the *Petroleum Pipelines Act (1969)* (PPA) and the Class 150 section is regulated under the *Gas Standards Act (1972)*. ATCO is granted a Pipeline Licence under the PPA for this portion and is known as Pipeline Licence 83 (PL83). The primary location class as defined by the Australian Standard/New Zealand Standard 2885.6 *Pipelines – Gas and Liquid Petroleum Part 6: Pipeline safety management* (AS/NZS 2885.6) is Rural Residential (R2).

Construction and commissioning of PL83 was completed in 2010 with the facility having an operating design life of at least 40 years. PL83 is valid from September 23rd 2009 to the 23rd September 2030 inclusive.

The OEP was developed to ensure effective operation and maintenance of PL83, which is owned and operated by ATCO Gas. The OEP outlines and describes the activities conducted by ATCO Gas in the operation and maintenance of PL 83, including documents and the necessary processes to manage the potential environmental impacts of those activities.

3. SCOPE

The OEP applies to all the activities associated with PL 83 and includes, but is not limited to, the following:

- Description of the legislative framework.
- Description of the operational and maintenance activities.
- Description of the existing environment.
- Identification and assessment of potential environmental aspects and impacts associated with the activities.
- Control measures by which potential aspects and impacts will be avoided or minimised.
- Performance objectives and measurable standards by which environmental performances can be quantitatively assessed.
- Emergency and contingency planning; and
- The environmental management and implementation strategy.

The OEP will be reviewed and updated as required, to incorporate any new requirements from the conditions associated with PL 83 activities.

3.1 Location

PL 83 is located in the Mandurah region, south of Perth, Western Australia. The western extent of the pipeline is located generally within rural land with potential for future light industrial uses. The general locality of the MGL including the Pipeline Licence area is shown in Figure 1. Table 1 contains the GDA94 coordinates of the PL 83 pipeline extent.

Table 1. PL 83 MGL Extent GDA94 Coordinates

Point	Easting	Northing
Start	397,773.753	6,403,763.323
Finish	390,026.601	6,403,685.419

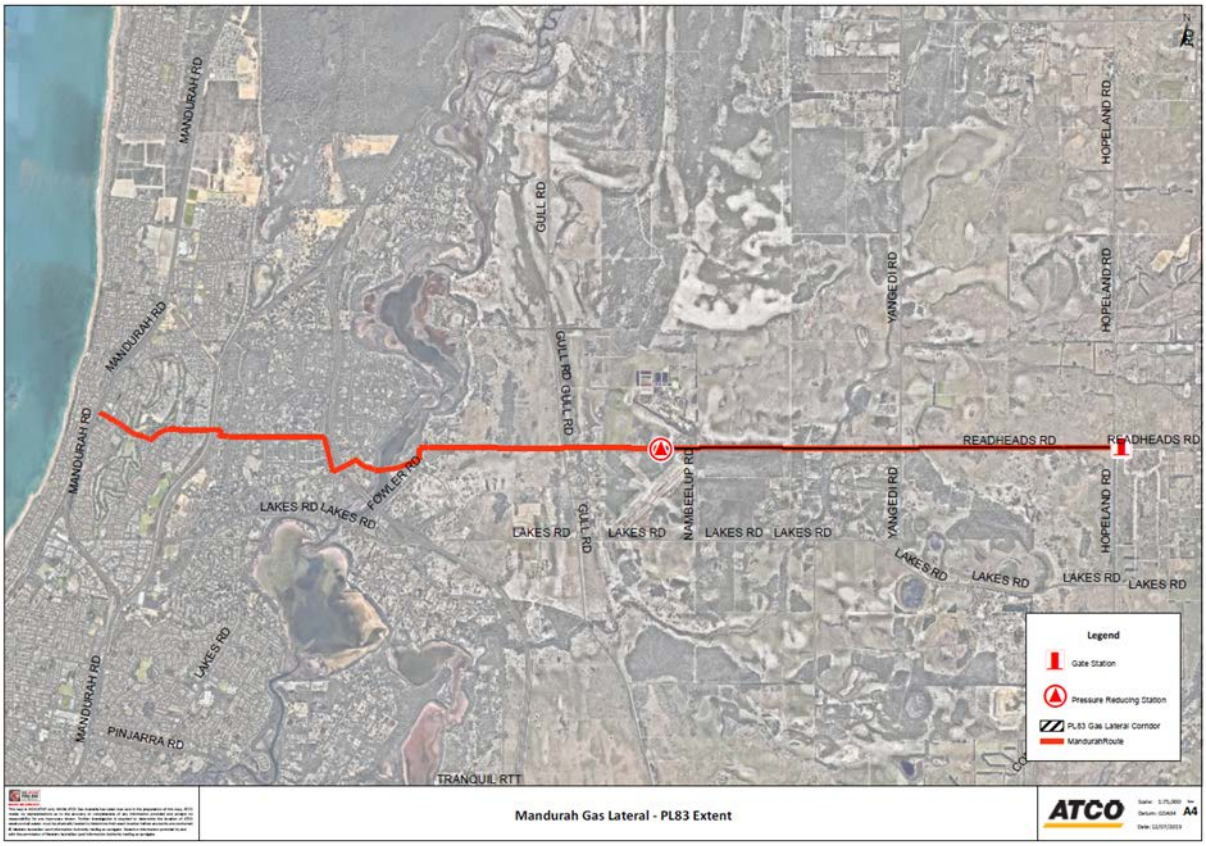

Figure 1. Mandurah Gas Lateral Pipeline Route.

3.2 Land Tenure

The PL 83 inlet and launcher facility is located adjacent to the DBNGP and within the widened DBNGP corridor managed by the DBNGP Land Access Minister. A section 34 access right was granted under the *Dampier to Bunbury Pipeline Act* (1997) for the ongoing access and use of this area (AR43, granted 2nd November 2011) and is still currently in place.

The PRS is located within an area that was originally part of the Royal Aero Club of Western Australia (RACWA) Aerodrome. The PRS and the associated buffer is located on subdivided land and the freehold was purchased by ATCO Gas on 27th April 2010. This area is now known as Lot 3 on Deposited Plan 67436 being the subject of Certificate of Title Volume 2752 Folio 968. The locations of the PRS and launcher sites are identified in figure 1.

The pipeline corridor can be accessed from Hopelands Road, Readheads Road, Gull Road, Yangedi Road, Fowler Road, Nambeelup Road and Lakes Road.

The land adjacent to PL 83 is predominantly used for agriculture. Peel Region Scheme maps identify all surrounding land as rural, however the Shire of Murray Local Planning Scheme indicates some special uses along the pipeline route. These are identified as:

- Royal Aero Club of Western Australia airbase at Murray Field,
- Bush Retreat is zoned for use as kennels, and
- Dirk Hartog Road (east of Yangedi South Road) is zoned for home business use. The pipeline is over 190m from the Dirk Hartog road reserve and there are currently no dwellings within 500m of the pipeline.

Although the land north of the RACWA air field is zoned rural, it comprises a piggery, an organic waste recycling facility and a mushroom composting business. These facilities are over 270m from the pipeline. Three dwellings for piggery staff are within 130m from the gas pipeline (one of which is approximately 60m from the pipeline).

Other dwellings within 300m of the pipeline are situated at Bush Retreat in the land zoned for kennel use. The closest home is approximately 50m from the pipeline and the site is used for greyhound training and kennels.

The only other dwelling in the vicinity is a farm residence over 200m from the pipeline just east of Yangedi South Road. The closest dwelling to the Launcher is 330m away and the closest dwelling to the PRS is 440m away.

4. HEALTH SAFETY AND ENVIRONMENTAL POLICY

ATCO Gas aspires to excellence in Health, Safety and Environmental Performance. The ATCO Health, Safety and Environment Policy (AA-WHS-POL-001) provides a framework for ATCO Gas activities. This policy is accessible to all personnel including employees, contractors and sub-contractors. It is also displayed in all depots and is available on the Intranet. Appendix A contains a copy of the ATCO Health, Safety and Environment Policy (AA-WHS-POL-001).

ATCO Gas is wholly committed to protecting the environment in which it operates, by undertaking activities with sensitivity for the environmental impacts, such that legislation and regulatory compliance is maintained, minimising environmental impacts and seeking to reduce environmental impact intensity over time.

5. SUMMARY OF APPROVALS

A summary of the approval requirements for PL 83 is provided in Table 2.

Table 2. Summary of PL 83 Approvals

Approval	Agency	Act or Regulation	WA/Cth	Comments
Pipeline Licence	DMIRS	*Petroleum Pipelines Act (1969)*	WA	PL 83 granted 23/09/2009
S18 Approval to disturb	DPLH	*Aboriginal Heritage Act (1972)*	WA	Granted – Ref: 29-09036 (DIA 3582 (Serpentine River) 31/12/2009

Approval	Agency	Act or Regulation	WA/Cth	Comments
Approval to proceed	DEE	*Environmental Protection and Biodiversity Conservation Act (1991)*	Cth	Not required
Native Vegetation Clearing Permit	DWER	*Environmental Protection (Clearing of Native Vegetation) Regulations (2004)*	WA	Granted - CPS/3491 29/01/2010
Bed and Banks Permit	DWER	*Rights in Water and Irrigation Act (1914)*	WA	Granted – PMB167877(1) 28/01/2010 Note: for construction period only 25 January 2010 – 30 June 2010
Approval to disturb wetland	EPA	*Environmental Protection Act (1986) and Environmental Protection (Swan Coastal Plain Lakes) Policy (1992)*	WA	Assessed as "Not Assessed – Public Advise Given – Managed under Part V of the EP Act (Clearing)" 4/05/2009
Section 34 access right	DRDL	*Dampier to Bunbury Pipeline Act (1997)*	WA	Granted – Access Right 43 (AR 43) 2/11/2011

6. DESCRIPTION OF ACTIVITY

The MGL was constructed in 2010, with the construction and commissioning of the MGL conducted under the Construction Environmental Management Plan (CEMP - document number ML-5.6-PA-001). The PL 83 OEP relates to the ongoing operation and management of the MGL commencing in 2010. Table 3 outlines the activity timeframes and related environmental considerations.

Table 3. Activity Timeframes and Environmental Considerations Summary

	Date	Environmental Considerations
Timeframe	23rd September 2009 – 23rd September 2030	• Impacts on fauna habitat • Impact to native vegetation • Contribution to atmospheric greenhouse gases through use of vehicles and machinery • Loss of top soil due to erosion • Contamination of water bodies due to sedimentation • Contaminations to soil and water resulting from Spills
Duration	21 years	• As above
Hours of Operation	24 hours (night and day continuous operations)	• Death to fauna due to interactions and unauthorised activity. • Noise due to venting / gas release • Fire due to ignition of flammable substances • General waste site contamination from personnel due to lack of housekeeping

	Date	Environmental Considerations
		• Spills due to lack of appropriate storage and handling of fuel and hazardous materials • Death of fauna due to interaction and disturbance through vibration • Damage to vegetation due to unauthorised clearing • Erosion due to inappropriate stockpile heights or incorrect implementation of design • Fire due to lack of appropriate fuel, machinery and emergency response management • Spread of weed / disease due to lack of adherence to vehicle / machinery hygiene requirements

The PL 83 pipeline route shown in Figure 1 commences at the DBNGP near the intersection of Hopelands Road and Readheads Road, North Dandalup and terminates at the PRS located adjacent to Readheads Road. The pipeline is approximately 7.05km in length and includes the following.

6.1 North Dandalup to Nambeelup section

The North Dandalup to Nambeelup section is approximately 7.05km of 200mm diameter, Class 600 Maximum Allowable Operating Pressure (MAOP) 6,900 kPa pressure steel pipeline. The alignment follows Readheads Road from the DBNGP near Hopelands Road to a Pressure Reduction Station (PRS) located adjacent to Readheads Road.

The pipeline installation depth varies, but maintains a minimum depth of 1.5m cover. Trenchless installations, or horizontal directional drilling (HDD) installations were utilised under nominated road and rail crossings in accordance with API RP 1102 Steel Pipelines Crossing Railroads and the Highways and the Railways of Australia Code and the Public Transport Authorities approval. HDD was used where the pipeline traversed waterways (Serpentine River, Nambeelup Brook and EPP Lake) at a depth of approximately 10m below the river beds to avoid flow interruptions related to the pipeline infrastructure. HDD was also utilised in areas of environmental significance to avoid/minimise the potential impacts. Sacrificial magnesium anode cathodic protection is utilised on the MGL at 3 sites along the PL 83 extent.

The PRS is located at Kilometre Point (KP) KP7 South of Readheads Road approximately 450m east of the North-West corner of Murray Field aerodrome. This structure is located within a fenced compound 22m x 27m. The purpose of PRS015 is to limit the pressure of the gas in the Class 150 section of the Mandurah gas pipeline to within the design pressure. Overpressure protection is provided by the utilisation of active monitor regulation. As a safety back up to the active monitor arrangement a slam shut valve (SSV) is provided on each pressure control run to close on over pressure. Filtration has been installed to remove solids from the gas stream prior to entering the pressure control sections of PRS015. PRS015 has pressure indicators located upstream of each SSV and downstream of the pressure reduction regulators.

6.2 PRS to Mandurah section

PRS to Mandurah section is 250mm diameter Class 150 MAOP 1,900 kPa pressure steel pipeline and continues from the PRS terminating at Mandurah Road, Mandurah. This section is not covered under PL 83 or the Petroleum Pipelines Act (1969).

6.3 Potential Environmental Impacts Related to Activities

The operation of PL 83 involves a range of activities generally undertaken by operations staff and specialist service contractors. Common activities include surveillance of the Pipeline Licence area, maintenance of the pipeline, Pipeline Licence area and associated facilities (such as valves, pressure reduction stations and cathodic protection equipment); filter inspection and replacements; periodic pigging (pipeline integrity gauge maintenance) of the pipeline for cleaning or inspection; and may include the use and handling of chemicals and hazardous materials. As part of these operation and maintenance activities of PL 83, there may be a requirement to conduct maintenance related excavations for pipeline inspection and / or repair or similar activities involving ground disturbance.

Line of site clearing is considered exempt under *Schedule 6 item 1* of the EP Act. Pursuant to *section 54* (1) of the EO Act, ATCO is required to ensure that vegetation which may interfere with, or obstruct the maintenance, construction or safe use of a supply system is removed. Line of sight clearing operates on the principle of minimisation, only clearing what is deemed necessary to maintain line of sight in accordance with the EO Act.

The entire extent of the MGL ROW was constructed utilising a 16m width, with a reduced ROW of between 8m to 10m used in environmentally sensitive areas.

There is no machinery or mobile equipment stored at PL 83. Any machinery or mobile equipment that may be utilised during the operations and maintenance of PL 83 will be transported from an ATCO Gas Depot or brought to site by specialist contractors.

There are no hazardous chemical storage areas on PL 83. There are 2 fire extinguishers located at the PRS and the launcher site. Should chemicals or hazardous substances be required for the maintenance and operation of PL 83, they will be transported from an ATCO Gas Depot to site by specialist contractors. During normal maintenance and operations activities, only minimal quantities of chemicals or hazardous substances are likely to be taken to, or used on site. The largest quantities expected are during major maintenance activities such as intelligent pigging where there may be a maximum of 10L to 20L approved of various required lubricating oils. Any materials removed from headers during pigging will be retained with drip trays and disposed of at an appropriate waste disposal centre.

There are no ablution facilities on the Pipeline Licence area or at pipeline facilities which generate black or grey water wastes.

Table 4 provides descriptions of the relevant activities and the potential environmental impacts which are managed within this OEP and supporting documents referenced in the PL 83 OEP.

Table 4. Summary of PL 83 Operations and Potential Environmental Impacts

Activity	Description	Potential Environmental Impact
Weed Control	Localised spraying and hand removal of weeds is undertaken along the Licence area regularly should the identification of weeds occur.	• Death to fauna due to interaction • Impact on fauna habitat due to uncontrolled spraying • Impact to native vegetation due to uncontrolled spraying • Spills due to lack of appropriate storage and handling of chemicals • General waste from containers and equipment • Spread of weeds due to lack of control
Line of Sight Clearance	Clearance of the Licence area to maintain line-of-sight is generally not required as the pipeline is located in an arid region with predominantly low open grassland or shrub-land and the majority of the Licence area is within a fire break. Any large trees or shrubs directly above the buried pipe have been removed during construction. Any vegetation identified as a risk to the operational integrity of the pipeline will be removed in accordance with AS2885.3-2012 on an as needs basis.	• Death to fauna due to interaction • Impact on fauna habitat due to uncontrolled clearing • Impact to native vegetation due to uncontrolled clearing • Spread of weeds due to lack of control
Patrolling and inspections	PL 83 is patrolled and inspected monthly, to inspect for unauthorised activity, weeds, erosion, sign damage, etc. This is conducted utilising a vehicle along the access track.	• Death to fauna due to interaction • Spread of weeds due to lack of control • Spread of phytophthora dieback • Oil and diesel spills from vehicle • Unauthorised activity
Above Ground Facility Inspections	The PL 83 above ground facilities are inspected monthly for unauthorised activity, weeds, erosion, sign damage, etc. This is conducted by driving to each site and conducting a physical inspection by walking around and within the site and then conducting the technical inspections and general maintenance as required by the Work Instructions.	• Death to fauna due to interaction • Spread of weeds due to lack of control • Spread of phytophthora dieback • Oil and diesel spills from vehicle • Unauthorised activity • General waste from containers and equipment
Emissions	Methane gas (as the major component of natural gas within the pipeline) is released to the atmosphere as a result of pipeline and facility maintenance operations (i.e. unit blow downs/venting, valve opening/testing). Small volumes are released. This occurs for the duration of the pipeline's operational life.	• Noise due to venting / gas release • Contamination of environment due to emissions

Activity	Description	Potential Environmental Impact
Pipeline Incident	The main threats to public safety from pipeline operation and maintenance are fire, explosion or radiation exposure as a result of pipeline rupture. Pipeline risk assessments have identified that these threats are associated with factors such as third party or external interference to the pipeline and pipeline corrosion. Pipeline design minimises this threat in that the pipeline has been designed to comply with Clause 4.7.2 of AS2885.1 (the 'no rupture' clause) and identified third party external interference risk locations have concrete slabs installed over the pipeline to provide additional protection. It is assessed that a full bore rupture is not feasible and the risk of penetration of the pipe wall is reduced to as low as reasonably practicable.	• Noise due to venting / gas release • Contamination of environment due to emissions • Fire due to ignition of flammable substances
Erosion Events	Following major rainfall events run-off areas on the Licence area can experience soil erosion. Repairs are conducted following detection of an erosion event and include the replacement of similar materials, re-profiling and ongoing monitoring.	• Loss of top soil due to erosion • Contamination of water bodies due to sedimentation • Spread of weeds due to water flow • Spread of phytophthora dieback due to water flow

Activity	Description	Potential Environmental Impact
Maintenance Excavations (including coating refurbishment, defect dig ups and inspections, installation of anode beds and new tie-ins) Replacement of Pipeline Section Maintenance on Pipeline (including pressure testing and pigging)	Excavations of the Licence area usually involve the following steps: A grader, excavator or bulldozer is used to clear and stockpile any surface vegetation from the site. Topsoil is removed to a depth, typically 100 to 150 mm and stockpiled separately to vegetation. Vegetation and soil stockpiles are to be a maximum height of 2 metres. Spoil is excavated and stockpiled separately to vegetation and topsoil on a pad cleared of topsoil. The pipeline maintenance is then undertaken (this may include welding, painting, sand blasting). Following the completion of the work, trench spoil is returned to the trench, with a low crown left above the trench to minimise the likelihood of subsidence of material. Topsoil is then evenly re-spread and cleared vegetation placed/re-spread over the site to assist in soil retention and provision of seed stock for re-vegetation. The Licence area was re-contoured to match the surrounding landform and erosion controls constructed as required. In some areas (e.g. areas at risk of erosion), manual spreading of seed may be carried out to enhance natural regeneration. These activities may occur to rectify defects but are expected to be very rare throughout the life of the pipeline.	• General waste from personnel due to lack of housekeeping • Fire risk due to general waste and lack of housekeeping • Spills due to lack of appropriate storage and handling of fuel and hazardous materials • Death of fauna due to interaction and disturbance through vibration • Impact on fauna habitat due to unauthorised clearing • Damage to vegetation due to unauthorised clearing • Inability to reinstate due to lack of top soil stripped and inappropriate storage • Soil compaction due to lack of appropriate reinstatement • Erosion due to inappropriate stockpile heights or incorrect implementation of design • Fire due to lack of appropriate fuel, machinery and emergency response management • Spread of weed / disease due to lack of adherence to vehicle / machinery hygiene requirements • Contribution to atmospheric greenhouse gases through use of vehicles and machinery

6.4 Rehabilitation

6.4.1 Current Status

The majority of the pipeline ROW was reinstated at the conclusion of construction by backfilling the trench, respreading top soil, contouring to reflect the pre-construction contours and fencing rectification or replacement where required. Where a road or access track was intersected, the ROW was reinstated to the original access track condition. The section of the pipeline extending to the east of Nambeelup Rd for approximately 1,250m was revegetated at the conclusion of the installation works. Remediation and revegetation works consisted of levelling the site, spreading topsoil, mulching cleared vegetation, direct seeding and erection of new fencing.

A flora and vegetation rehabilitation program has been undertaken following the construction of PL 83 to assess the progress of the rehabilitation along the ROW and to determine compliance with the Native Vegetation Clearing Permit CPS/3491 valid from 21st February 2010 to 21st February 2015 inclusive.

A weed species assessment was undertaken on the 21st July 2011 to determine the diversity of weed species, locations of weed species and areas to be prioritised for control within areas cleared during the construction of PL83 under CPS/3491. The areas cleared along PL83 were located from an off-take point on the DBNGP on Readheads Road to the east of Hopelands Road, traversing approximately 16 km west to Meadow Springs. It was found that the diversity of weeds recorded was lower than the records made during the surveys conducted over the alignment during 2009.

6.4.2 Closure

Following cessation of operations, the Activity area will be returned to a condition suitable for the relevant surrounding land use (i.e. rural/ agricultural). To achieve this, the pipeline will be decommissioned. All infrastructure above ground will be removed and the remaining in-ground pipeline will be cut and capped at the ends. All remaining excavations will be filled with clean fill, all sources of contamination removed and the area reseeded with locally native species.

Decommissioning of the pipeline will commence within one year of the pipeline no longer being required.

6.4.2.1 Decommissioning

To decommission the pipeline, it will first be purged of natural gas with a non-hazardous substance (e.g. nitrogen gas, water) with all received fluids appropriately contained where applicable. Topsoil will be removed from the areas where excavations area required and stockpiled.

Above ground infrastructure will be removed for offsite disposal in accordance with the ATCO waste management procedure and applicable regulatory requirements. The pipeline infrastructure will remain in-ground and be cut and capped in-situ.

Soil sampling will be undertaken on the excavated soils to determine the presence of any contamination relating to ATCO operations. If soil contamination is detected, remediation will commence immediately and groundwater sampling will be undertaken from available nearby bores to determine if groundwater contamination has occurred. Similarly, if groundwater contamination is detected, remediation will commence immediately.

Once the excavation has been cleared of any contamination, the excavation will be filled with clean fill and the stockpiled topsoil re-spread over the area. The immediate area will be contoured to match the surrounding landscape.

6.4.2.2 Rehabilitation Monitoring and Reporting

Following completion of the above described decommissioning operations, rehabilitation monitoring will commence within one year. Rehabilitation monitoring will be undertaken by an independent consultant (botanist) and record:

- Species present (native and introduced) and their coverage
- Signs of contamination
- Signs of erosion/sedimentation
- Presence of any infrastructure or waste

- Evidence of any impacts from external factors (e.g. vehicle tracks).

Rehabilitation monitoring will be undertaken at 17 representative impact and reference locations along the pipeline route, nominally at each KP of the pipeline (i.e. 0,1…16). The exact location of the rehabilitation monitoring locations will be refined by the rehabilitation consultant prior to the first survey to ensure representative coverage of surrounding environments. Rehabilitation monitoring continue annually until the below rehabilitation objectives and completion criteria have been met.

Results of annual rehabilitation monitoring will be provided to DMIRS on an annual basis, submitted with the annual compliance monitoring.

7. DESCRIPTION OF ENVIRONMENT

Prior to the construction of PL 83, there were a number of environmental studies conducted. These studies are detailed in the Construction Environmental Management Plan (CEMP - document number ML 5.6 PA 001), and the environmental approvals supporting documentation.The CEMP was submitted as part of the pipeline approval process and should be referenced when considering the environmental impact of any new or existing pipeline activities. There have been no further environmental studies other than those mentioned in this EP since the completion of the CEMP environmental studies.

Post construction, there have been no recorded impacts to fauna, however, periodic line of sight maintenance clearing will occur along the pipeline route for the life of the asset. Line of site clearing is considered exempt under Schedule 6 item 1 of the *Environmental Protection Act* (1986) (WA). Pursuant to section 54 (1) of the *Energy Operators (Powers) Act* (1979) (WA) ATCO is required to ensure that vegetation which may interfere with, or obstruct the maintenance, construction or safe use of a supply system is removed.

No evidence of dieback incursion has been observed in vegetation adjacent to the pipeline. Weed and pathogen management is ongoing and conducted in accordance with the Weed and Pathogen Management and Vehicle Hygiene procedure (HSE PL0001 GL0001). Periodic surveys and eradication programs will be conducted to ensure no new weed infestations occur.

No new heritage areas have been discovered and are not expected to be discovered in the pipeline area.

The environmental aspects detailed in the CEMP include;

- Vegetation, flora and fauna survey; including disease and weed identification and mapping
- Soils
- Hydrology
- Environmentally sensitive areas; and
- Heritage sites

7.1 Vegetation, Flora and Fauna

Prior to construction, the pipeline alignment was subject to flora and vegetation surveys completed between September 2009 and December 2009. The flora and vegetation surveys consisted of a combination of Level 1 and Level 2 surveys as defined and required by the EPA and

targeted searches for Threatened Flora, Declared Rare Flora (extant) and Priority Flora. The survey was conducted over the entire length of the MGL alignment, being approximately 16km, located between the corner of Readheads Road and Hopelands Road, North Dandalup west to the intersection of Meadow Springs Road and Mandurah Road, Meadow Springs.

A search of the Commonwealth Environment Protection and Biodiversity Conservation Act (1999) (EPBC Act) Protected Matters database was undertaken for the area within which the lateral line is located. There were several items listed in the database search that were considered relevant to the area.

7.1.1 EPBC Listed Fauna

During a fauna survey of the pipeline route between Hopelands Road and the Serpentine River (Ecoscape 2008a), a total of 20 native fauna species were recorded in the area, including two threatened species, the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) and either Carnaby's (*Calyptorhynchus latirostris*) or Baudin's Cockatoo (*Calyptorhynchus baudinii*).

The priority conservation species Rainbow Bee-eater (*Merops ornatus*), a transient species, was also identified by call while surveying in Marri woodlands in the eastern parts of the survey route. This species is also listed as a migratory species and a marine species under the EPBC Act (1999). These species are all listed as matters of National Environmental; Significance under the EPBC Act (1999).

Habitat searches were conducted for the EPBC listed Endangered *Calyptorhynchus latirostris* (Carnaby's Black Cockatoo), the Vulnerable *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo) and the Vulnerable *Calyptorhynchus baudinii* (Baudin's Black Cockatoo). Based on this work, there were a total of 20 habitat trees along the alignment. The alignment was modified to avoid habitat trees with none removed through the construction phase or the operations phase. The loss of feeding habitat for this species has been avoided.

7.1.2 EPBC and DBCA Listed Flora

During the survey, one (1) Declared Rare Flora and two (2) Priority Flora were recorded (see Table 5). These were new records for each of the species.

Table 5: Declared Rare Flora and Priority Flora

Category	Species	Information
Declared Rare Flora	*Diuris drummondii*	Collected from one location along the pipeline alignment, with a total of three (3) plants recorded at that location. 500 – 1,000 located in surrounding area undisturbed by pipeline activity.
Priority Flora	*Acacia benthamii*	Recorded at a single location. No additional collections were made of this species during surrounding location searches.
Priority Flora	*Boronia capitata ssp. gracilis*	Recorded at two location along the proposed pipeline alignment. First population of three (3) plants and second population of two (2) plants. Populations avoided during clearing.

The area is potentially habitat for the Critically Endangered *Darwinia sp. Muchea* (B.J. Keighery 2458), the Endangered *Caladenia huegelii, Drakaea elastica* and *Lepidosperma rostratum* and the Vulnerable *Drakaea micrantha* (Hopper & A.P. Brown). It was noted that of these species, only *Caladenia huegelii* and *Drakaea elastica* have been collected from within 10km of the area of disturbance. Targeted searches for *Drakaea elastica* and *Caladenia huegelii* were completed as a component of the surveys. No specimens of either were found. The *Kunzea spp*. vegetation within the alignment was considered to potentially host *Drakaea elastica* and impacts to these units were minimised.

According to DPaW database results there were a total of six (6) Declared Rare Flora (DRF), as defined under the Western Australian Wildlife Conservation Act (1950), recorded within a 10km radius of the pipeline alignment (see Table 6).

Table 6. Declared Rare Flora recorded as being within 10km

Category	Species
Declared Rare Flora	*Caladenia huegelii (Orchidaceae)*
Declared Rare Flora	*Diuris drummondii (Orchidaceae)*
Declared Rare Flora	*Drakaea elastica (Orchidaceae)*
Declared Rare Flora	*Synaphea sp. Fairbridge Farm (Proteaceae)*
Declared Rare Flora	*Synaphea sp. Pinjarra (Proteaceae)*
Declared Rare Flora	*Synaphea stenoloba (Proteaceae)*

In addition to the DRF, there were a total of 18 Priority Flora listed that have been collected from within a 10km radius of the area of disturbance. Of the DRF and Priority Flora, Table 7 contains those species were noted as occurring within or in close proximity to the areas of disturbance.

Table 7. Declared Rare Flora and Priority Flora within or in close proximity.

Category	Species
Priority 2	*Acacia benthamii (Mimosaceae)*
Priority 4	*Parsonsia diaphanophleba (Apocynaceae)*
Declared Rare Flora	*Drakaea elastica (Orchidaceae)*
Priority 2	*Johnsonia pubescens ssp cygnorum (Hemerocallidaceae)*

7.1.3 Peel-Harvey Catchment Area

The area cleared is located within the Peel-Harvey Catchment – the clearing was not considered to significantly impact on the catchment.

7.1.4 Conservation Reserve

The pipeline alignment runs through Reserve 44986 (KP11.34-KP11.8), which is listed as a conservation area under the Act. The activities within the reserve are limited to existing firebreaks and cleared areas. There are no provisions to clear within this reserve.

7.1.5 Threatened and Priority Ecological Communities

There were no Threatened Ecological Communities (TECs) identified as occurring within the DPaW database search for the project area and surrounds; however, two TECs were identified as having

been recorded within 7km of the database search area. Table 8 contains details of the identified TECs.

Table 8. Threatened Ecological Communities identified in close proximity

ID	Name	Status
SCP3b	Corymbia calophylla - Eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain	Vulnerable
SCP15	Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain	Vulnerable

During the first site visit, the inferred TEC claypan vegetation unit, described in previous surveys as being located between KP1.7 and KP1.9, was visited. Based on guidance from the DPaW, Horizontal Directional Drilling (HDD) was utilised at this site to avoid potential impacts to this vegetation. The DPaW also provided guidance in relation to an area of vegetation that was considered to contain the TEC SCP3b. Based on the guidance from the DPAW, this section of vegetation was considered as requiring a quadrat-based assessment, as this allowed for the use of statistical analysis to determine whether it could be inferred as a TEC.

During the surveys of the pipeline alignment, a total of 11 broad associations were described, within which a total of 33 vegetation units were defined. The 11 broad associations are:

- *Melaleuca* species Woodlands in seasonally wet areas.
- *Corymbia calophylla* Woodlands in low-lying areas.
- *Eucalyptus marginata ssp marginata* Woodlands on grey sands.
- *Kunzea glabrescens* Low Forests in seasonally wet areas.
- *Jacksonia - Adenanthos* Open Shrubland on grey sands.
- Acacia Scrub on grey sands
- *Juncus pallidus* Sedegland on seasonally inundated grey sands
- *Hakea varia* Shrubland
- Banksia Low Open Forests on grey sands
- *Eucalyptus rudis* Low Woodland on low-lying areas.
- *Dasypogon bromeliifolius* Heath on grey sands

The vegetation within which the DRF orchid *Diuris drummondii* was recorded was considered to have conservation significance. The vegetation in this area is habitat for this orchid, and contains vegetation that would potentially be habitat for the EPBC Act (1999) listed critically endangered DRF orchid *Drakaea elastica*. The vegetation in this area and the implications of impacts were discussed with the Species and Communities Branch of the DPaW. In this discussion, the need to avoid impacts to habitat as well as individual plants was raised. Based on this information, the pipeline was constructed through HDD in this section of the pipeline alignment, thereby eliminating any impacts and maintaining the habitat. This relates to vegetation between KP7.4 and KP7.5.

Based on analysis of the quadrat-based data, a number of the vegetation units described in the report were found to have a high level of affinity with 'Low Lying Banksia attenuata woodlands or shrublands (SCP 21c)', which is a P3 Priority Ecological Community. The remaining vegetation bore no clear relationship to the SCP units included in the statistical analysis, which may mean that the

dataset needs to be expanded to include more units. The vegetation previously identified by the DPaW as potentially being a TEC SCP 3b was included in the analysis. Based on the findings of this analysis, this section of vegetation was not inferred as a TEC. During the assessment of the clearing permit application by the DPAW, a determination from the Species and Communities Branch was noted, in which this vegetation was considered to be the TEC SCP 3b. This relates to vegetation located at KP 2.64 – 2.81.

7.1.6 Native Vegetation

During the surveys, a total of 480 specimens were collected during the survey, from which a total of 298 taxa (including subspecies and variants) were identified. The native flora collected during this survey numbered 222 different species, subspecies and variants from 125 genera within 55 families. The most speciose families identified are summarised in Table 9. The native vegetation extent of the MGL is shown in Figure 2.

Table 9. Flora Survey Identified Families Summary Results

Species	Number taxa Identified	Number genera Identified
Papilionaceae	19	11
Cyperaceae	19	8
Myrtaceae	18	11
Proteaceae	18	9
Orchidaceae	15	7

The census of the native flora within the alignment and immediate surrounds was conducted over a number of site visits, timed to coincide as far as was practicable with flowering times or the presence of annual or ephemeral taxa.

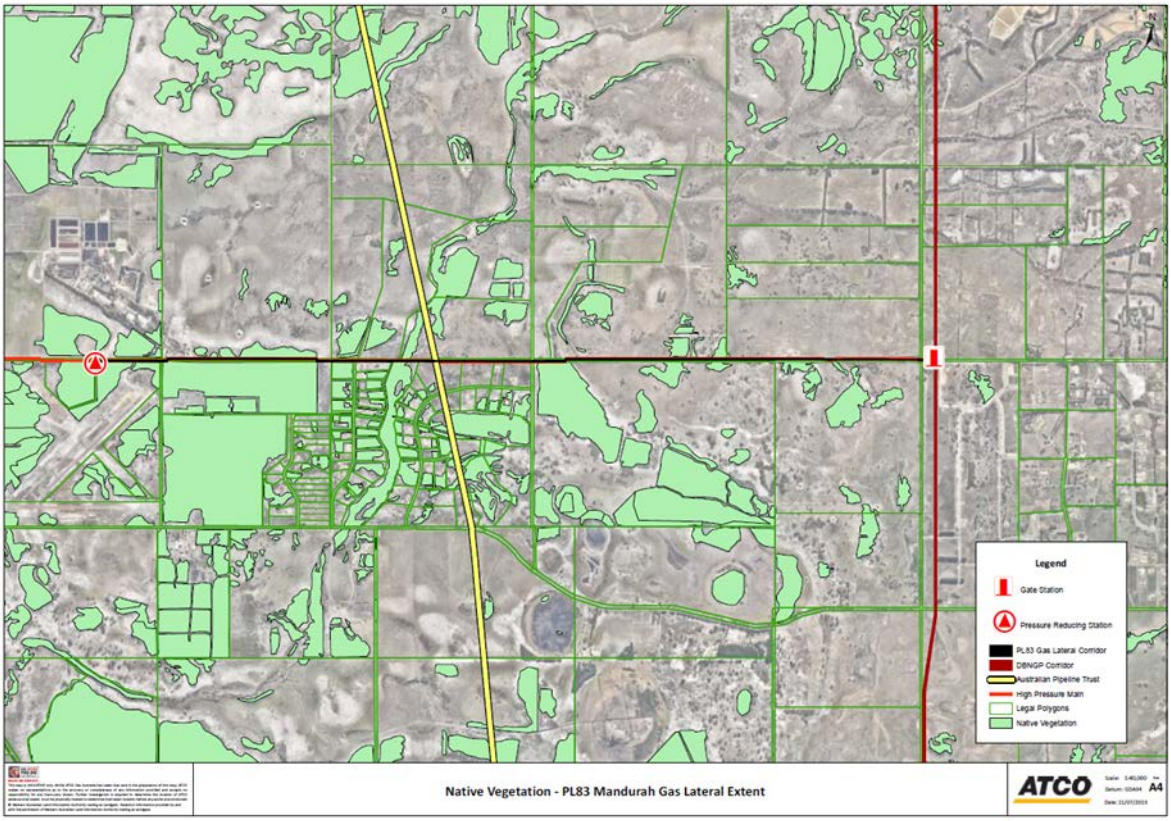

Figure 2. Native Vegetation – Mandurah Gas Lateral PL83 Extent

7.1.7 Vegetation Complexes

The survey areas are within the following Heddle vegetation complexes:

- Bassendean Complex Central and South;
- Guildford Complex;
- Herdsman Complex;
- Southern River Complex; and
- Yoongarillup Complex.

7.1.8 Offests

As some areas of native vegetation within the Project area were to be cleared during the construction phase that may have triggered environmental offset requirements, a suitable offset area (nominally a minimum of 13.85ha as approved under CPS/3491) was secured for DPaW ownership and ongoing management.

The offset area contains vegetation that is habitat to the DRF orchid *Diuris drummondii* with a population of between 500 and 1,000 plants recorded. In addition to this, areas were identified as being potential habitat for the EPBC Act (1999) listed DRF species *Drakaea elastica*. Whilst none of this species were recorded in this area, the potential for this vegetation to host this species was considered to be of conservation significance.

The vegetation within the offset area was assessed as having habitat potential for the EPBC Act (1999) listed species *Calyptorhynchus latirostris* (Carnaby's Black Cockatoo), *Calyptorhynchus naso*

(Forest Red-tailed Black Cockatoo) and *Calyptorhynchus baudinii* (Baudin's Black Cockatoo). In particular, some areas were considered to be in excellent condition, with a number of *Corymbia calophylla* in the area of a size suitable for nesting.

7.1.9 Weeds

The alien flora collected during the CEMP survey numbered 76 different species, subspecies and variants from 62 genera within 27 families. The most speciose families were: *Poaceae*, with 19 taxa from 14 genera; *Papilionaceae*, with 13 taxa from 7 genera; and *Asteraceae*, 9 taxa from 9 genera. There were three declared plants recorded during the survey identified in Table 10.

Table 10. Declared Weeds Identified in Survey Area.

Species	Status
Zantedeschia aethiopica (arum lily)	P1, P4 for whole of state.
Moraea flaccida (one leaf cape tulip)	P1 for whole of state, P4 for LGA Mandurah, Waroona, Murray, Harvey.
Echium plantagineum (Paterson's Curse)	P1 for whole of state, P3 for LGA Mandurah, Murray.

ATCO Gas engaged a 3rd party consultant to conduct a weed mapping exercise of the PL83 area in January 2019. The survey identified a total of 28 introduced species, with one species, *Gomphocarpus fruticosus*, being listed as a declared pest under the *Biosecurity and Agriculture Management Act* (2007) (BAM Act). There were no identified species listed as weeds of national significance during the survey.

7.1.10 Dieback

A dieback assessment of the route was undertaken in November 2008 (Glevan 2008). The assessment resulted in the determination of three categories of vegetation, being Un-infested (no apparent dieback disease), Infested (disease symptoms present) and Un-mappable (unable to determine dieback disease presence).

Most of the route was un-mappable with dieback only found in a small location between KP4.74 to KP4.82 (at the end of a recently constructed road into a rural subdivision) near Nambeelup Brook and in the section between Bush Road and Nambeelup Road (between KP 5.2 and KP 6.5) (see Figure 3).

No further dieback survey work has been undertaken since the initial 2008 work.

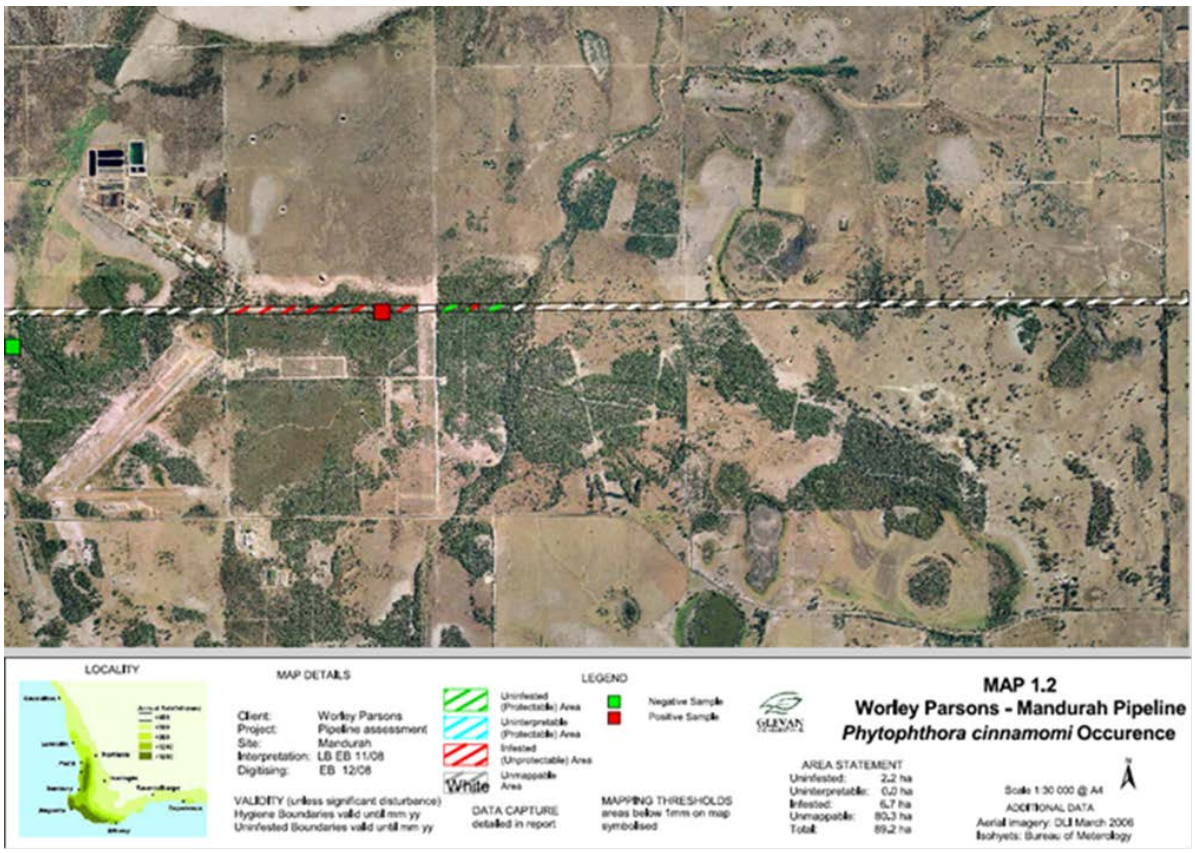

Figure 3. Glevan 2008 PL 83 Dieback assessment mapping

7.2 Soils

The soil along the pipeline route was found to be typically fine to medium grained quartz sand, with various colours and amounts of organic matter. Some areas had sandy clay horizons and iron-rich mottling. The pipeline route is known to have at least moderate potential to encounter actual and potential acid sulfate soils (AASS and PASS) (see Figure 4). As the groundwater level is relatively high and there are organic-rich and / or potentially sulphurous soils present along the pipeline route, all areas apart from the Tamala Limestone are considered to present a high to moderate risk of encountering acid sulfate soils (ASS), especially areas underlain by swamp, estuaries and the soils of the Guildford Formation.

An investigation for acid sulfate soils was undertaken along the pipeline route between Hopelands Road and the Serpentine River in May, November and December 2008 in accordance with the *Draft Identification and investigation of Acid Sulfate Soils* (Department of Environment 2006) by digging 53 test pits and 13 boreholes. Soil pH did not indicate the presence of AASS in this section of the pipeline.

No further ASS assessment work has been undertaken since the initial investigations in late 2008.

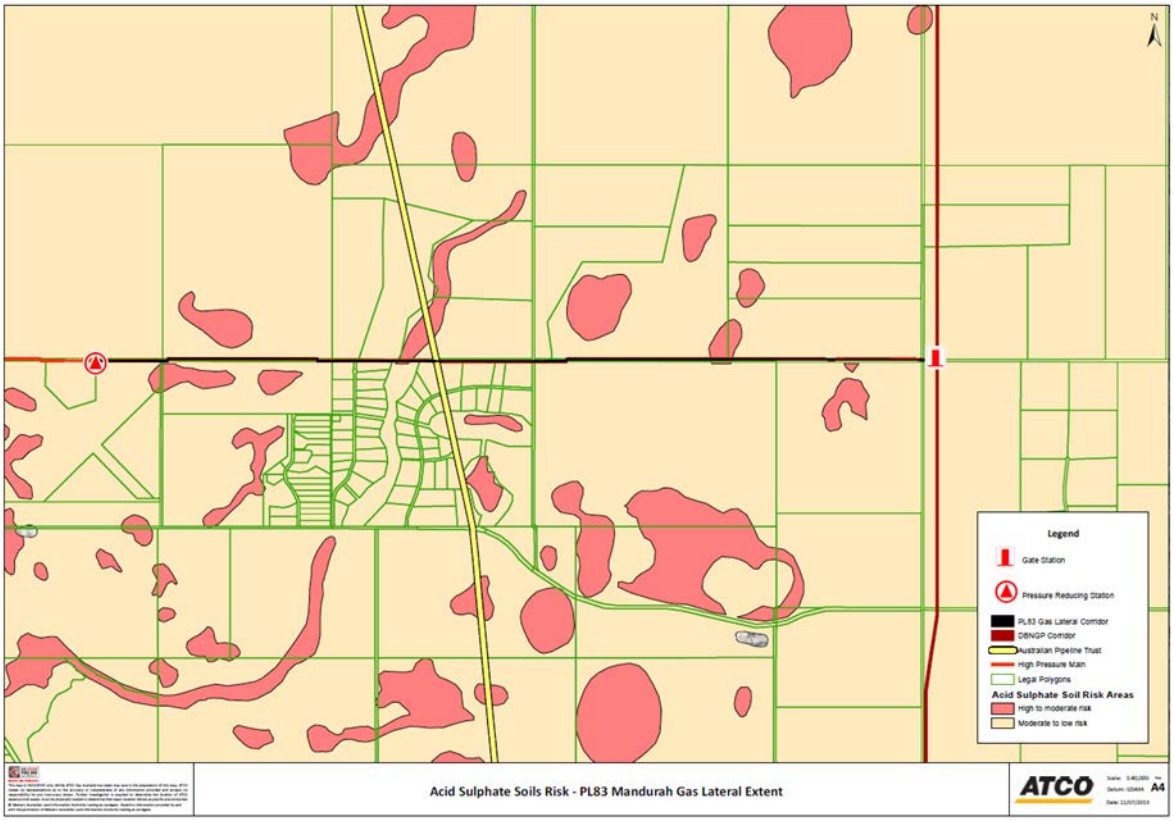

Figure 4. Acid Sulphate Soil Risks – Mandurah Gas Lateral PL83 Extent

7.3 Hydrology

The water table along the eastern portion of the pipeline route, between Hopelands Road and the Serpentine River, is relatively shallow, lying between 0m and 5m below the ground's surface. Much of the area inundated in winter and is classified as Multiple Use category wetlands (see Figure 5).

Existing man-made drains are common in the area. They were predominantly designed and installed during a time of high rainfall (particularly in the 1940s) and are now resulting in lowering of the groundwater table.

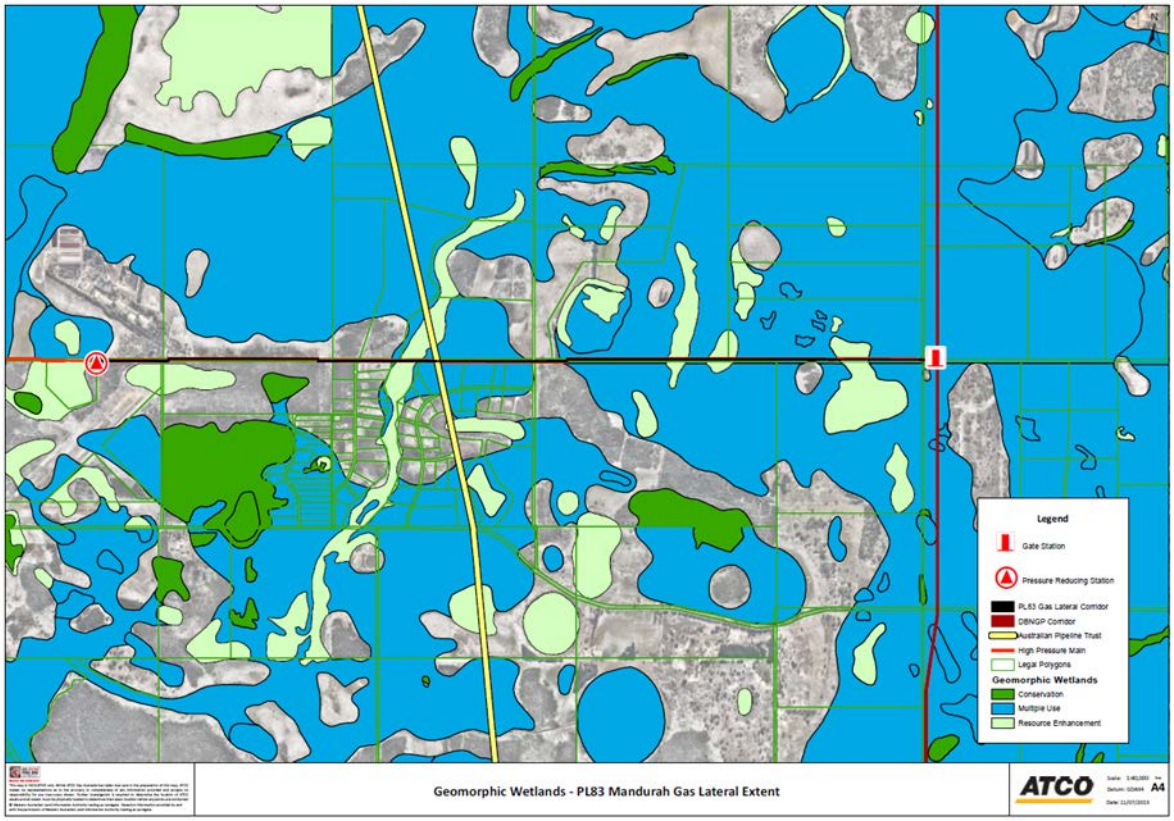

Figure 5. Geomorphic Wetlands – Mandurah Gas Lateral PL83 Extent

7.4 Environmentally Sensitive Areas

Several Environmentally Sensitive Areas (ESAs) occur in the vicinity of the pipeline corridor (see Figure 6). The identified ESAs are as follows:

- Conservation Category wetland to the south of the proposed route along Readheads Road at KP5.2 to KP5.7. The ROW avoids the wetland as well as the 50m buffer.
- *Environmental Protection (Swan Coastal Plain Lakes) Policy* 1992 Lake (EPP Lake) to the south of the proposed route along Readheads Road at KP6.35 to KP6.5. The northern boundary of the EPP Lake, a Resource Enhancement Category wetland, is south of the Readheads Road reserve. The ROW is wholly contained within the Readheads Road reserve.
- EPP Lake to the south of the proposed route along Readheads Road at KP6.57 to KP6.75. The northern boundary of the EPP Lake, a Resource Enhancement Category wetland, is 40m south of the ROW

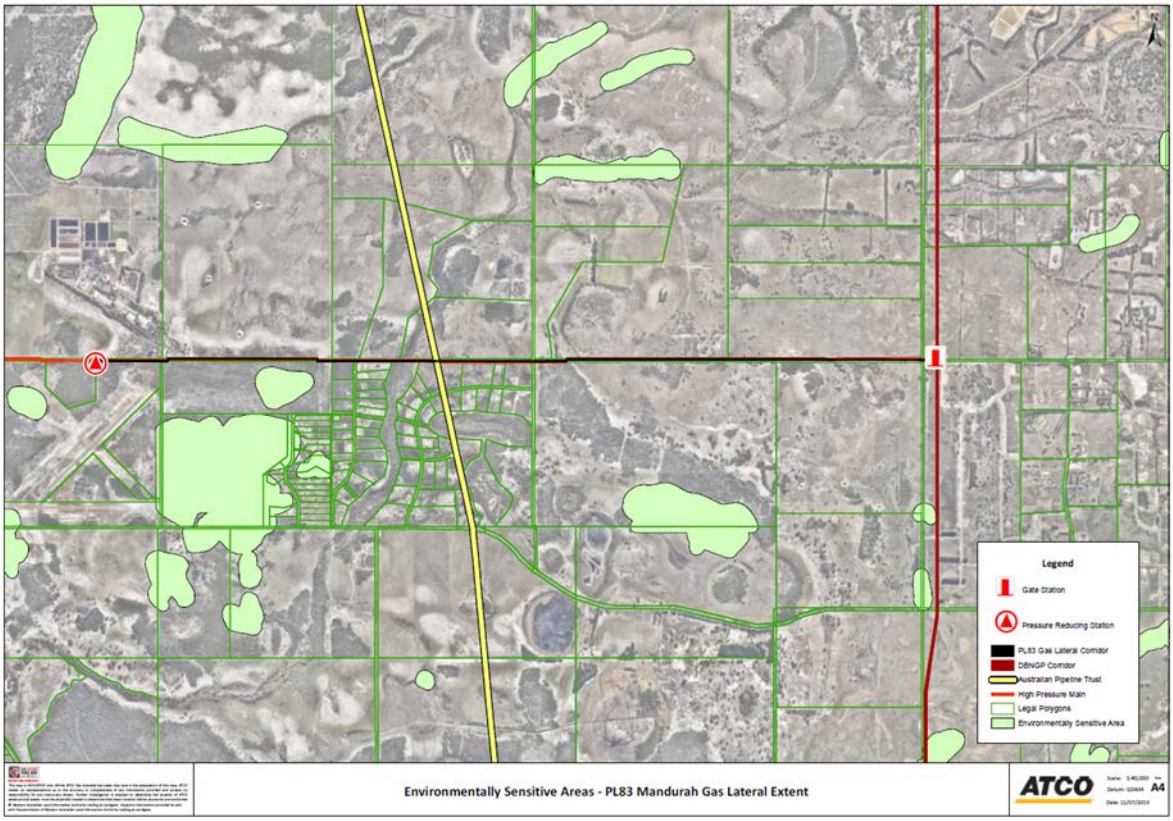

Figure 6. Environmentally Sensitive Areas – Mandurah Gas Lateral PL83 Extent.

The route also crosses Nambeelup Brook between KP4.32 to KP4.55, which while not classified as an ESA, is classified as a Resource Enhancement wetland. Nambeelup Brook produces intermittent, and sometimes very high, flows. As a consequence, the banks are notably eroded where the brook crosses Readheads Road and Lakes Road, and the floodplain is quite wide. Near Readheads Road, the median flow in the period February - April is 0.01 ML/month (MBS Environmental, 2006). Ponding of water in Nambeelup Brook is common although there was no visible water in the main channel at the Readheads Road crossing in February 2008.

The general direction of groundwater flow across the Pipeline Licence area is from east to west and locally the direction of groundwater movement is towards drainage paths and major water bodies such as the Serpentine River and Nambeelup Brook.

7.5 Aboriginal Heritage

The Aboriginal people of the Bibbulmun Nation are the first people known to have inhabited south-west Western Australia, including the Mandurah region. The people of the Bibbulmun Nation lived off the land, with estuaries in the area being the main source of food. The locality was then known as Mandjar, which translates to 'meeting place'. Following European settlement, the name was adapted to Mandurah.

Several Aboriginal heritage sites occur within the pipeline alignment (see Figure 7). The primary sites are associated with the Nambeelup Brook and the Serpentine River. Aboriginal heritage surveys of the pipeline route confirmed a total of seven existing Aboriginal heritage sites in the project development area, although no new sites were identified during the survey. The Aboriginal heritage site associated with the Serpentine River marks a significant water source in the area and is likely to have been of particular focus by Aboriginal people in the past. This section

was horizontally directionally drilled to minimise impacts to groundwater flows and Aboriginal heritage sites.

Should ground disturbance be required near Aboriginal heritage sites, a desktop review will be completed which may require consultation with the Department of Aboriginal Affairs (DAA) and the Traditional Owners.

The Nambeelup Brook is within the PL 83 licence area, however the Serpentine River is not.

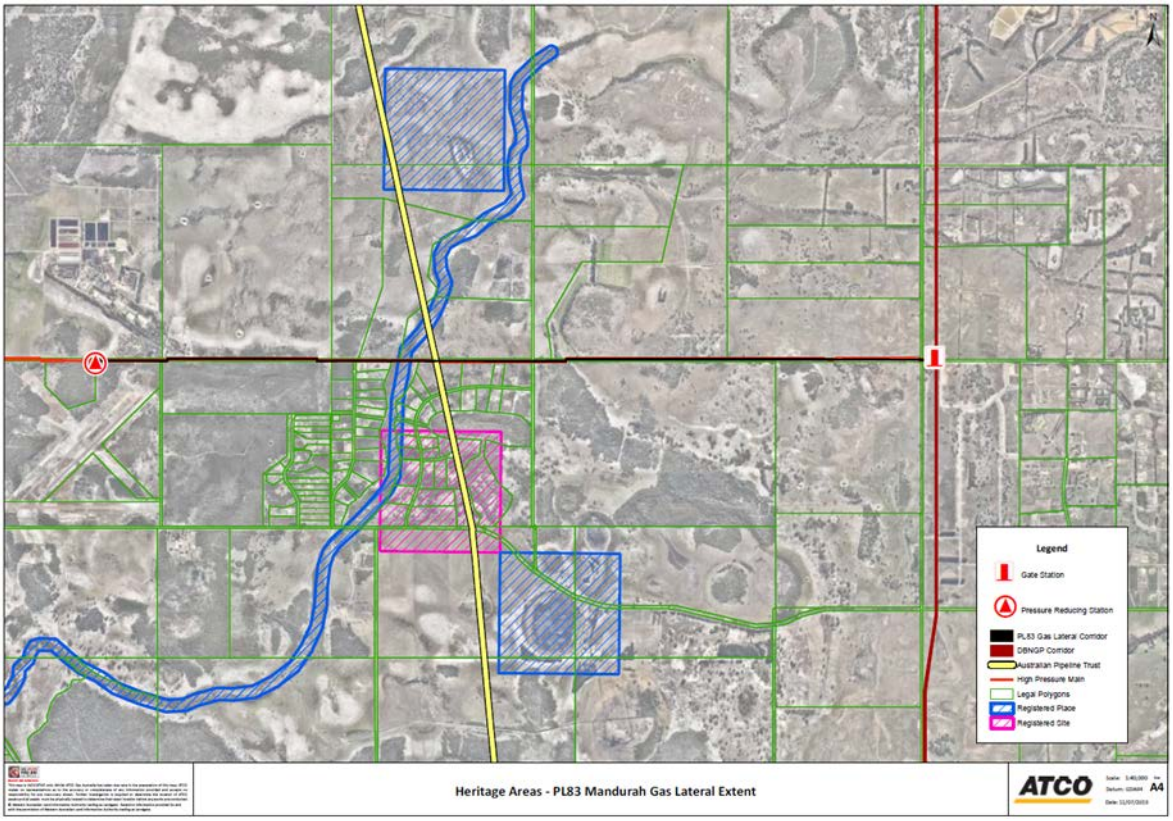

Figure 7. Aboriginal heritage sites and places – Mandurah Gas Lateral PL 83 Extent.

8. IMPLEMENTATION STRATEGY

8.1 Environmental Management

Environmental management is an integral part of the operations and maintenance of PL 83. Sound management of PL 83 will result in minimising the potential impact of the operations and maintenance activities associated with the asset. In particular, ATCO Gas operations aim to manage four key issues:

- The pipeline structure and integrity
- Pipeline operating conditions and practices
- The Pipeline Licence area; and
- Activities that could affect the above elements.

Effective environmental management in these areas and the application of the following components shown as they relate in Figure 8, help to ensure that the environmental impacts and risks are reduced and environmental management is efficiently practised.

- *Petroleum Pipelines Act (1969) & Environmental Protection Act (1986)*
- Pipeline License 83
- Health, Safety and Environment Policy (see Appendix A)
- Relevant internal referenced documents
- Emergency Response Plan
- Incident Reporting

Figure 8: Systems, Practices and Procedures Relational Hierarchy

This OEP has been developed in accordance with the *Petroleum Pipelines (Environment) Regulations (2012)* and Schedule of Onshore Petroleum Exploration and Production Requirements 1991, administered by DMIRS.

This EP is also consistent with *Australian Pipelines and Gas Association (APGA) Code of Environmental Practice – Onshore Pipelines Revision 4 (2017)* and *AS2885.3 Pipelines – Gas and Liquid Petroleum – Operation and Maintenance*.

8.2 Roles and Responsibilities

Environmental management will be undertaken by ATCO Gas employees, consultants, its contractors and sub-contractors. Environmental responsibilities for employees and contractors are contained within position descriptions, relevant operational procedures and safe work instructions. The OEP contains a full list of position titles and associated principal duties.

8.3 Training and Implementation

The training program implemented for the PL 83 OEP is provided to all ATCO Gas personnel involved in the operations and maintenance of PL 83. All personnel involved will be made aware of the relevant environmental aspects, impacts and their applicable control measures. The training program will include but not be limited to spill management containment and clean up, environmental noise, flora and fauna and weed and pathogen training.

Personnel will be informed of their obligations and the specific environmental aspects, impacts and their control measures involved with PL 83 through the ATCO Gas Site Safety and Environment (ATCO Gas SSE) programmes. Personnel will be inducted and records of personnel attendance and assessments of induction training conducted will be maintained. Personnel may also attend additional training where identified, as required by ATCO Gas.

Additional training is provided to all ATCO Gas personnel who are involved in operational and maintenance activates.

Visitors shall be provided with induction in Gas Distribution Field Observation Visits by Office Staff Visitor Safety Induction and shall be supervised and not permitted to perform any works on the Gas Distribution network. Records of visitor induction shall be maintained.

8.4 Communication

HSE notice boards have been established to inform personnel of relevant health, safety and environmental information. This includes HSE Committee minutes and environmental incident alerts. The notice boards are refreshed periodically with up-to-date information, as it becomes available. Internal communication of environmental issues requiring action is made through:

- HSE Committee meetings
- Audit report findings/ actions
- Environmental site inspections
- HSE event reports
- Monthly report process
- Audits; and
- Toolbox meetings.

9. STAKEHOLDER CONSULTATION AND ENGAGEMENT

ATCO Gas is committed to respecting the rights and desires of all individuals who may be directly affected by PL 83 and to abide by relevant legislation. Land access agreements and the relevant land tenure have been obtained or are agreed in principle to ensure long term operational access to the pipeline and the PRS.

Ongoing stakeholder consultation is implemented throughout the operation of PL 83. Landowners/occupiers adjacent to the MGL are contacted on an annual basis either by email or phone to ensure that they are aware of the location of the MGL adjacent to their property and to assess any existing or future threats to the pipeline integrity or risks to people, property and the environment. In the event that landowners/occupiers cannot be contacted on the current details

held by AGA, the Designated Landowner Liaison Contact will attempt to contact land occupiers in person at the property address.

The Shire of Murray is to be contacted on a quarterly basis by the Land Management and Project Co-ordinator either in person, via email or telephone conversation. The intent of this regular communication is to:

- Ensure the Shire of Murray is aware of the relevant AGA contact for any matters relating to the MGL; and
- To keep updated on any planned works on or around the MGL Licence Area (such as sealing the gazetted road or planned residential developments).

In the event that the Shire of Murray communicate any planned works on or around the MGL to AGA, relevant reviews to Formal Safety Assessments (including review of location class) will be undertaken to assess the change / proposed change to ensure MGL risk is controlled to acceptable level, or is ALARP. Liaison with other government or third party stakeholders will be conducted on an as-required basis (i.e. Department of Water and Environmental Regulation, Department of Planning, Lands and Heritage).

Ongoing consultation with DMIRS, DPLH, WAPC and Shire of Murray has continued through the operation period and will continue for the duration of the PL 83.

The Land Owner / Occupier Liaison Procedure provides mechanisms and processes for stakeholder consultation and resolution of any concerns or complaints for the minimisation of impact to the public from the site.

10. INTERNAL REFERENCES

Document Name	Document Number
Construction Environmental Management Plan	ML-5.6-PA-001-1
PL 83 Operational Environmental Plan	AGA-HSE-PL03
Emergency Response Management Plan	TCO-PL00001
Risk Management Framework	AA-GRC-PL05

11. EXTERNAL REFERENCES

External Reference Document
Aboriginal Heritage Act 1972
Bush Fires Act 1954
Conservation and Land Management Act 1984
Contaminated Sites Act 2003
Dangerous Goods Safety Act 2004
Dampier to Bunbury Pipeline Act 1997
Environmental Protection Act 1986
Environmental Protection Regulations 1987
Environmental Protection (Clearing Of Native Vegetation) Regulations 2004
Environmental Protection (Controlled Waste) Regulations 2004
Environmental Protection (Noise) Regulations 1997
Environmental Protection (Abrasive Blasting) Regulations 1998
Environment Protection and Biodiversity Conservation Act 1999 (Cth)
Explosives and Dangerous Goods Act 1961
Health Act 1911
Heritage of Western Australian Act 1990
Land Administration Act 1997
Local Government Main Roads Act 1930
Native Title Act 1993
Petroleum Pipelines Act 1969
Petroleum Pipelines (Environment) Regulations 2012
Rights in Water and Irrigation Act 1914
Rights in Water and Irrigation Regulations 2000
Schedule of Onshore Petroleum Exploration and Production Requirements 1991
Soil and Land Conservation Act 1945
Wildlife Conservation Act 1950

External Reference Document
APIA Code of Environmental Practice
APGA Code of Environmental Practice – Onshore Pipelines Revision 4
AS 2885.0-2018 Pipelines – Gas and Liquid Petroleum General Requirements
AS/NZS 2885.1-2018 Pipelines - Gas and Liquid Petroleum - Design and Construction
AS/NZS 2885.2-2016 Pipelines - Gas and Liquid Petroleum – Welding
AS 2885.3-2012 Pipelines - Gas and Liquid Petroleum - Operation and Maintenance
AS/NZS 2885.5-2012 Pipelines - Gas and Liquid Petroleum - Field Pressure Testing

12. DOCUMENT APPROVAL

	Title	Name	Date
Owner:	Senior Environment & Sustainability Advisor	Brad Wallace	21/10/2020
Approver:	HSE General Manager	Leonard Santana	21/10/2020

13. DOCUMENT HISTORY

Rev	Date	Amended By	Reason for Change
0	19/07/2019	Brad Wallace	Document created for DMIRS submission
1	21/01/2020	Brad Wallace	Document updated
2	20/10/2020	Brad Wallace	Document updated to include rehabilitation, decommissioning and closure provisions

APPENDIX A. HEALTH, SAFETY AND ENVIRONMENT POLICY

ATCO OUR POLICY

HEALTH, SAFETY AND ENVIRONMENT POLICY

This policy applies to all employees, contractors, and other personnel at workplaces under the management and control of ATCO Australia.

COMMITMENT

ATCO Australia is committed to providing a safe and healthy workplace for employees, visitors and contractors. We seek to protect the environment and reduce environmental impact and pollution through the implementation of sustainable practices and technologies.

OBJECTIVES

In order to fulfil this commitment ATCO Australia shall ensure:

- Compliance with all applicable health, safety and environmental legislative requirements and statutory obligations; including alignment with ISO 14001 & 4801;
- Safety and environmental sustainability are key considerations in everything we do. It is part of any decision we make and every action we take;
- Sufficient financial and physical resources are made available to ensure the provision of effective health, safety and environmental management systems;
- The provision of effective health, safety and environment induction and training;
- Every person working for ATCO Australia is aware of their responsibility to:
  - ensure their personal safety and fitness for work at all times and maintain vigilance to ensure their actions do not cause harm to others, equipment or the environment
  - promptly and transparently report all hazards, incidents, accidents and near misses to enable thorough and constructive investigation
- Effective consultative arrangements are developed and maintained, enabling all employees, contractors and stakeholders to participate in decision making;
- Workplace health, safety and environmental risks are managed through a systematic identification, analysis and control process;
- Conduct periodic reviews of health, safety and environmental practices, with a commitment to continual improvement of the management systems to enhance overall performance;
- Measurable objectives and targets are established in order to eliminate work related illness and injuries, monitor environmental performance and report outcomes as part of routine business activities;
- Promote the efficient use of energy, reduction of waste and recycling of materials in all our business activities.

Every person working for ATCO Australia is responsible for exercising leadership and commitment to the continual improvement of workplace health, safety and environmental stewardship.

Patrick Creaghan
Managing Director & Chief Operating Officer
May 2019

Warning: A printed copy of this document may not be the current version. Please refer to the BMS to verify the current version

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Page: Page 1 of 1