Infrastructure Development

PARMELIA GAS PIPELINE

PARMELIA RELOCATION FORRESTFIELD

Summary - Environmental Bridging Document

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APA Group

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1 INTRODUCTION

1.1 Background

This document provides an overview of the environmental management requirements for the relocation of the Parmelia Gas Pipeline (PGP) at the proposed Forrestfield Station site (PRF project), as part of the forward works for the Forrestfield-Airport Link (FAL). It is a summary of the document "*Environmental Plan Bridging Document – Parmelia Gas Pipeline – Parmelia Relocation Forrestfield*" (PRF-PL-HS-0001) (PRF E-BD), which bridges the environmental requirements and management measures set out in the "*Operations Environment Plan Parmelia Gas Pipeline System"* (PAR-EMP-457; Rev 1.2; 26/06/2013) (PGPS OEMP) to the PRF project.

1.2 Purpose and Scope

The purpose of this document (the PRF E-BD Summary) is to provide information to the general public regarding environmental considerations and management requirements for the PRF project. Its scope is limited to the environmental management measures applicable to the PRF project that are additional to measures applicable to normal Parmelia Gas Pipeline operations.

1.3 Objectives

The objectives of this E-BD are to:

- Describe the works to be undertaken for the PRF.
- Provide management measures to minimise environmental impacts resulting from the project;
- Mitigate all identified environmental risks to ALARP;
- Comply with all relevant legal and regulatory environmental requirements;
- Address any special requirements of the PTA CEMP, where they differ from the PGPS OEP; and
- Minimise disturbance to surrounding landholders.

2 PROJECT BACKGROUND

The Parmelia Gas Pipeline System (PGPS) comprises the Parmelia Gas Pipeline (PGP), pipeline facilities and associated laterals. The PGPS takes gas from Dongara to Pinjarra and has been operating since 1972. APT Parmelia Pty Ltd (APA) is the current owner and operator of the PGPS, and operates the PGPS according to an Operations Environment Plan (OEP) approved by the Department of Mines and Petroleum (DMP).

The Public Transport Authority of Western Australia (PTA) presently proposes to construct the Forrestfield Airport Link (FAL), incorporating a new railway spurring off the existing Midland Line immediately after Bayswater Station, running under the Perth Airport estate, and terminating at Forrestfield.

Forward works for the FAL involve relocating existing buried services to make way for the proposed Forrestfield Station, including approximately 1.4 km of the PGP. The PGP Relocation Forrestfield (PRF) works will comprise preparation, construction and installation of the relocated section of pipeline, live

line welding of “hot tap” fittings, construction of bypass piping, commissioning, tie-in, and removal of the redundant section of the PGP.

As the PRF works are being staged out of the PGPS mainline operations, environmental aspects of the project fall within the scope of the approved PGPS OEMP (PAR-EMP-457; Rev 1.2; 26/06/2013; APA 2013). An Environmental Plan Bridging Document (E-BD) is considered adequate to cover the proposed activities given that the project:

- Pertains to new activities that are within the scope of the PGPS OEP, for which the environmental risks are covered; or
- Will result in changed operational details from the scope of the PGPS OEP, but do not result in any major additional or modified environment risks.

This is consistent with advice given in the DMP *Guidelines for the Preparation and Submission of an Environment Plan* (DMP, 2012).

The Environmental Protection Authority (EPA) of Western Australia has assessed the FAL under Part IV of the *Environmental Protection Act 1986* (EP Act), through Assessment on Proponent Information (API) (PTA 2015a) submitted by the PTA in June 2015. In July 2015, the EPA recommended that that the FAL be approved, subject to a number of environmental management conditions (EPA 2015a); Ministerial approval, subject to such conditions, was granted in November 2015 (EPA 2015b).

The PTA has prepared a Construction Environment Management Plan (CEMP) (PTA15066_01; PTA 2015b) for the Forrestfield forward works, to address the conditions of approval. This E-BD considers the additional requirements of the PTA CEMP, where relevant to the PRF works.

Table 1 provides a summary of the works for the PRF project.

Table 1: Summary of PRF Scope of Work

Item	Detail
Company	APT Parmelia Pty Ltd, a member of the APA Group of companies.
Pipeline Licence	PL1.
Project name	Parmelia Relocation Forrestfield (PRF).
Location	Proposed Forrestfield Station site, off Dundas Road in Forrestfield, about 13 km west of the Perth CBD (approximate centre 404750 mE, 64624200 mS; MGA Zone 50) (Figure 1, Figure 2).
Project scope summary	▪ Prepare construction ROW. ▪ Construct 1.4 km of DN350, 2-layer FBE coated, AS2885 compliant pipeline. ▪ Install hot tap fittings (with live line welding). ▪ Construct bypass piping. ▪ Hot tap and line stop the pipeline. ▪ Tie-in to existing PGP. ▪ Dig up and remove redundant section of PGP.
Mobilisation Route	Via Dundas Road and other existing public roads.
Existing infrastructure	▪ APA gas pipeline (PGP). ▪ ATCO gas pipeline. ▪ Underground telecommunications cables. ▪ Overhead power lines
Infrastructure and equipment operated and stored in project area.	Excavators, pipe delivery trucks, bending rigs, welding rigs, service vehicles, fuel trailer, light vehicles, pipe laydown, inert, putrescible, and contaminated waste skips and bins.
Contractor/ Service Provider	To be confirmed. At time of writing this E-BD, APA are in negotiations with the preferred contractor.
Hours of work	12 hours a day, 7am – 7pm Monday to Saturday.

The site work is expected to commence in January 2016, and last up to 180 days. An indicative schedule is provided in Table 2, below.

Table 2: Indicative Project Schedule

Aspect	Date	Duration
Project mobilisation and works	January 2016	165 days
Demobilisation	June 2016	15 days

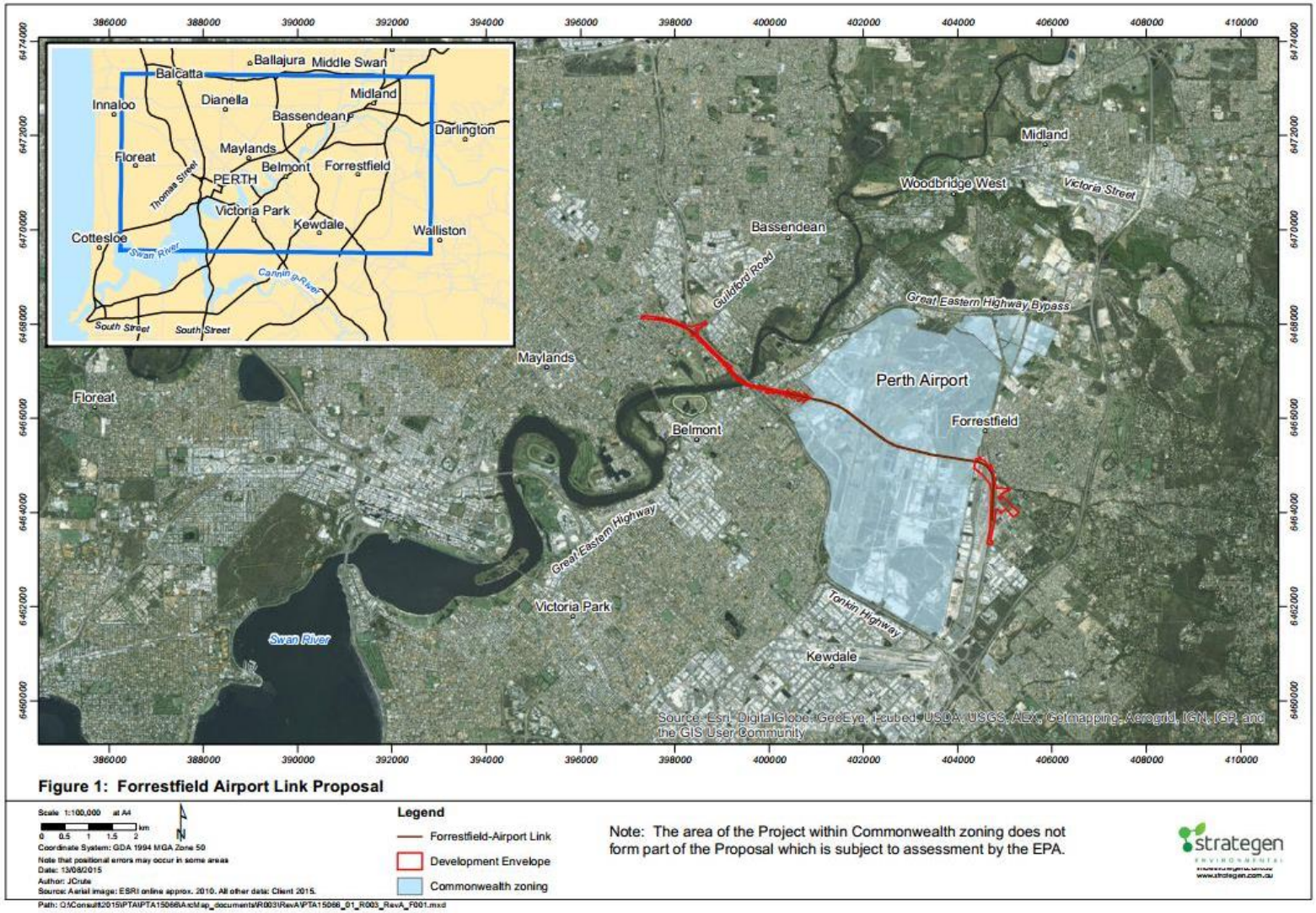

Figure 1: Forrestfield Airport Link Proposal

Figure 1: FAL Proposal Plan

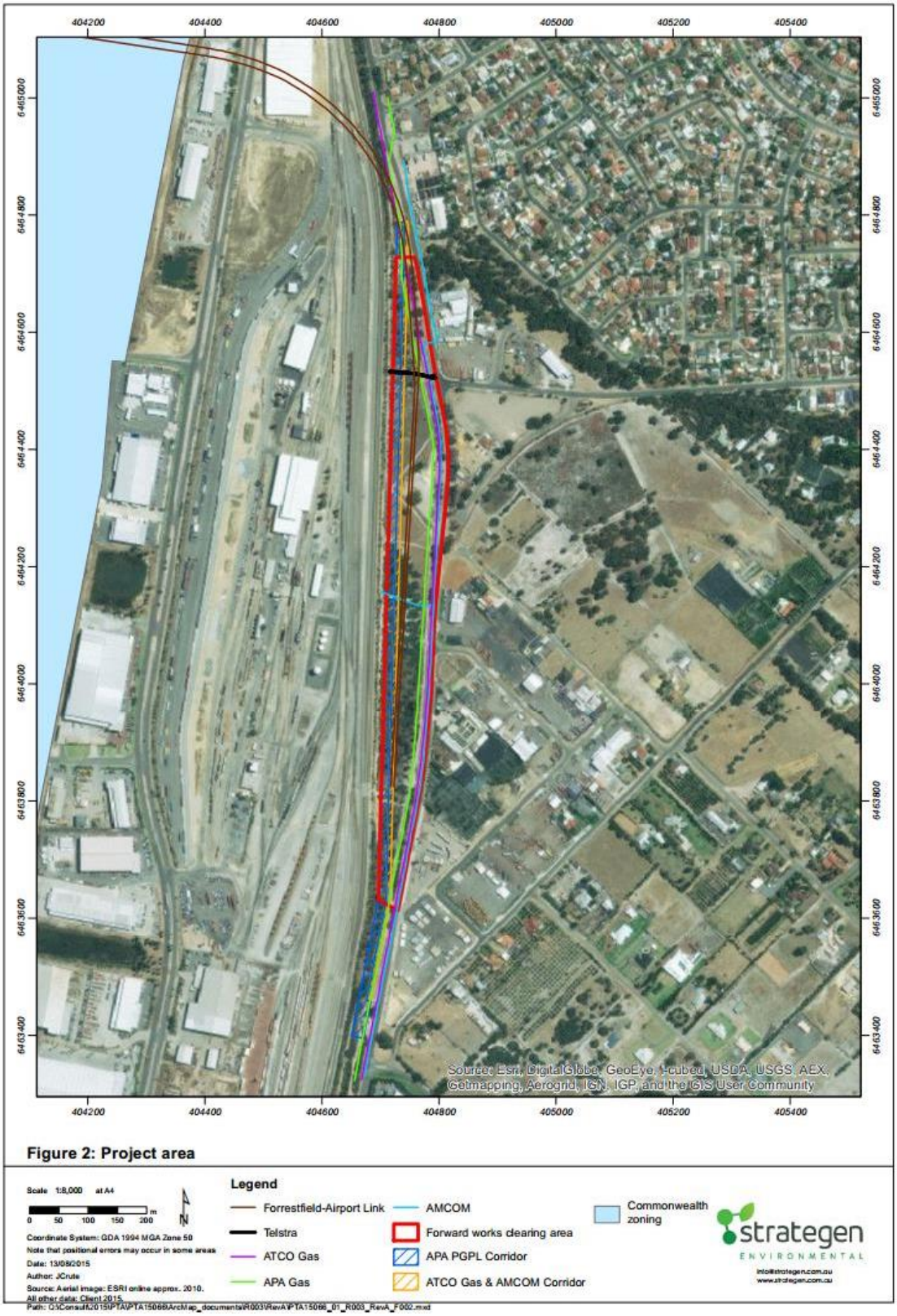

Figure 2: Project Area Plan

3 PROJECT ACTIVITIES

The main project work phases comprise:

- Clearing the construction right-of-way (ROW) of any vegetation, stripping and stockpiling topsoil, and grading to leave a level work area. The Forrestfield site will be largely cleared and graded by PTA contractors ahead of the PRF works.
- Preparation of the ROW (Figure 3), including surveying and marking out the limits of the working area and critical features, including the existing PGP and other buried services. Signs will be installed and "no-go" areas will be fenced off.
- Establishment of temporary support facilities, including site offices, toilets, waste skips and bins, parking and laydown areas.
- Excavation of a trench for the relocated pipeline, and ramped "bell-holes" for access to the existing pipeline tie-in points.
- Assembly of the new pipeline, including delivery and layout of pipe sections along the ROW, welding into one continuous length (string), joint coating and inspection.
- Lowering the new pipe string into the trench, padding and backfilling with excavated material or (where necessary) imported material.
- Hydrotesting the new pipe section by filling with water and pressurising for up to 24 hours to detect potential leaks, then draining and cleaning the pipe, and disposing of hydrotest water appropriately.
- Installing temporary bypass spools on the old pipeline using "hot-tapping" techniques and special "stops" to divert gas, and tying-in the new pipeline (Figure 4).
- Commissioning, including removing stops, purging and filling the new section of pipeline, and venting and purging the old section of pipeline in a controlled manner. Remaining bell-holes will be back filled.
- Uncovering and removing the old pipeline, and cutting into sections for removal to a recycling facility. The old pipeline trench will be backfilled with excavated spoil and (if necessary) additional imported fill.
- Cleanup and reinstatement, including reinstating ground levels to leave a stable surface, removing markers and signs, demobilising mobile plant and equipment, removing temporary support facilities, and disposing of any remaining waste materials. Cleared topsoil and revegetation will be respread except where further works for the Forrestfield site are expected (to be determined by the PTA).

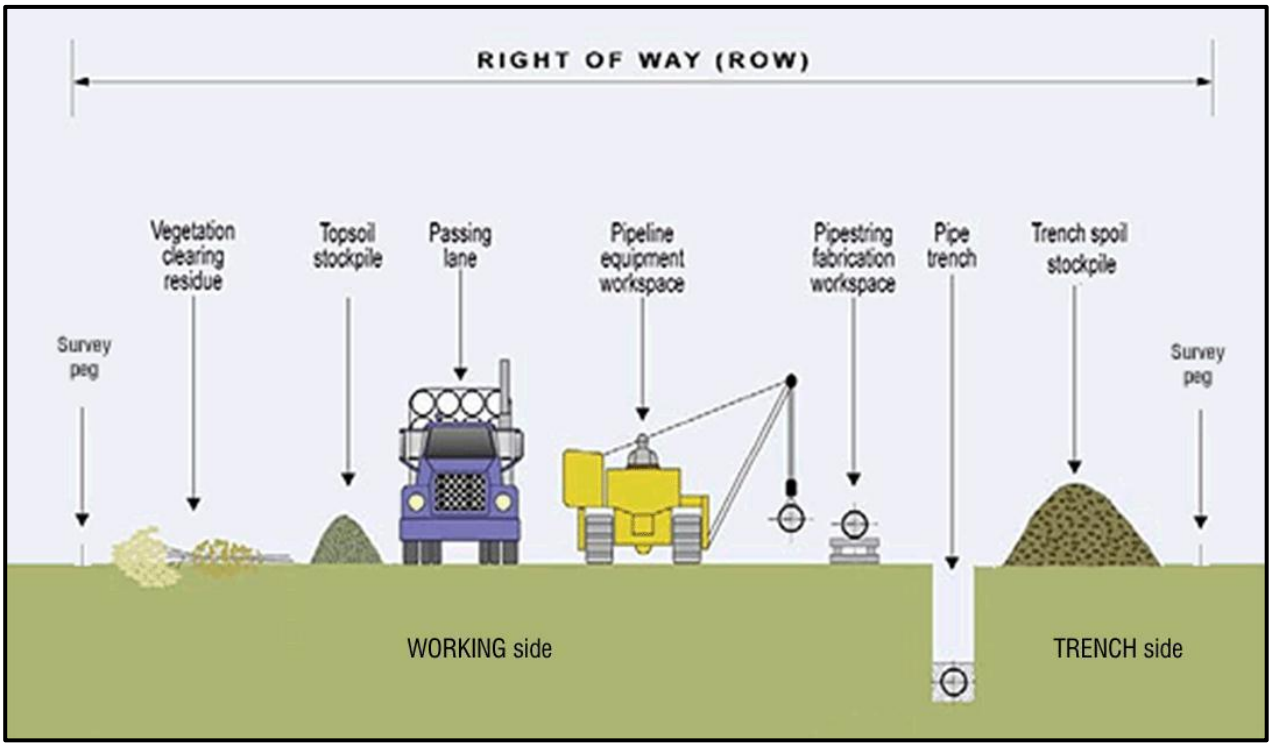

Figure 3: Typical ROW layout

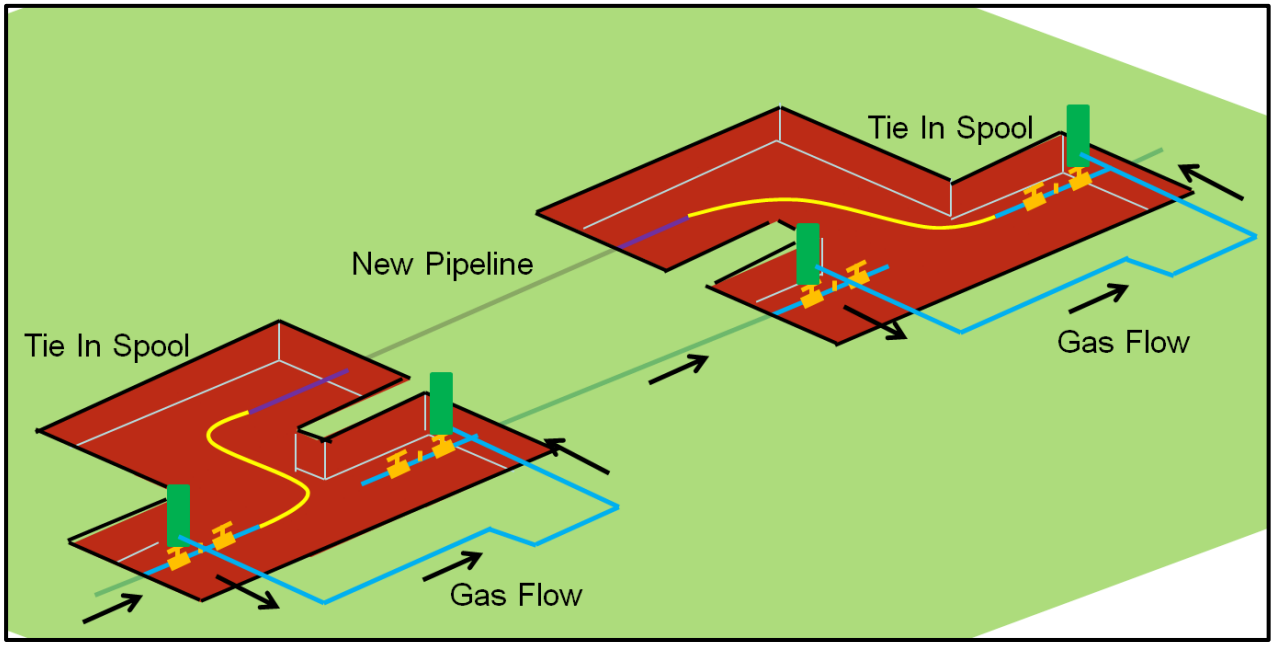

Figure 4: Tie-in of new pipeline with tie-in spools

4 DESCRIPTION OF THE ENVIRONMENT

The environmental setting of the broader PGPS, incorporating the PRF site, is described in detail in Section 4 of the PGPS OEP, including: climate, topography, geology, soils, hydrology, flora, fauna, weeds, disease and heritage.

The PRF site has been partly cleared and extensively disturbed by urban and industrial development, but some native vegetation remains. The PTA has completed heritage and ecological surveys of the Forrestfield site, submitted in support of the API for the FAL (PTA 2015a). Particular environmental and social considerations for the site include the presence or potential presence of:

- Wavy-leaved Smokebush (Conospermum undulatum), listed as "Vulnerable" under the Wildlife Conservation Act 1950 (WC Act) and Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).
- "Banksia attenuata woodland over species-rich dense shrublands", listed as a Threatened Ecological Community (TEC) in Western Australia.
- Quenda (Isodon obesulus obesulus), listed under the EPBC Act as "Endangered", and under the WC Act as "Specially Protected Fauna".
- Weeds and plant diseases, in the wider area.
- Industrial land users within 25 m of the work site, and residences within 150 m.
- Sites or artefacts of significance to Aboriginal heritage, including one registered ethnographic site, Poison Gully Creek, to the north outside of the PRF work site.
- Acid sulfate soils (ASS), identified as a low to moderate risk by DER mapping, should excavations proceed below the water table (unlikely).

The surface hydrology of the area has been heavily modified by urban and industrial development, including installation of the existing PGP and other buried services, and no natural watercourses or well-defined drainage lines cross the PRF site; Poison Gully Creek is the closest watercourse to the works.

5 RISK ASSESSMENT AND MITIGATION

The environmental risks and mitigations associated with all activities conducted on the PGPS are addressed in Section 5 of the PGPS OEP. A review of these risks under the scope of the PRF was undertaken in October 2015, through an environmental risk assessment (ERA) workshop.

The objective of the ERA was to ensure that all aspects, impacts and risks associated with the relocation works were adequately assessed, and control measures identified in the PGPS OEP were adequate for the activities. Any new risks (or risks where the associated hazard was markedly different to that of normal operations) are addressed in this document.

A total of 26 additional or changed environmental aspects and their associated risks were assessed in the ERA, and management measures and mitigation factors were identified or modified to ensure risks were managed ALARP. Most of the aspects and measures were already largely addressed under the PGPS OEP, but were modified slightly to address the specific environmental concerns at the site, and meet the requirements of the PTA CEMP. New aspects predominantly relate to new pipeline installation, old pipeline removal, and hydrotesting, which would not usually be part of PGPS operations.

The APA standard risk methodology (WI-4.21.8 Risk Management (FIRM) Work Instruction) and matrix were used for the ERA. These have been previously developed by APA as per regulatory requirements and are consistent with AS/NZS ISO 31000:2009 (*Risk Management – Principles and Guidelines*) requirements.

The ERA was attended by the:

- APA Environmental Officer.
- APA PRF Project Manager.
- APA Project Approvals Manager.
- APA Mechanical Project Engineer.
- PTA Environmental Manager.
- PTA FAL Project Manager.
- PTA FAL Environmental Officer.
- PTA FAL Tunnel Logistics Advisor.
- ATCO Project Manager.
- DMP Environmental Officer.
- MBS Environmental Consultant, facilitating for APA.

The key environmental risks assessed during the workshop are summarised in Table 3 below. The corresponding control measures and mitigating factors for the PRF project are summarised in Table 4 to Table 11. The summaries in these tables are indicative of major hazards and controls, and are not a comprehensive list of all commitments made by APA in the PRF E-BD or PGPS OEMP.

Table 3: Summary of Environmental Risks and Hazards

Risk (Environmental Aspect)	Hazard (Activity / Cause)
Accidental release of environmentally hazardous substance (small, <50L).	▪ Storage, handling and use of small quantities of fuels, oils and other environmentally hazardous substances, predominantly brought to site as required and stored in individual containers generally <50L. Unwanted events include spills from container handling and transfers. ▪ Equipment and vehicle operation and maintenance. Unwanted events include spills from breakdowns and servicing (oil changes, etc.).
Accidental release of environmentally hazardous substance (large, <2,000L).	▪ Storage and handling of large quantities of fuels, oils and other environmentally hazardous substances on site, predominantly brought to site as required and stored in individual containers generally <200L but including a 1,000 fuel trailer kept at site for heavy equipment refuelling. Unwanted events include spills from container failure, vehicle impacts, container handling and transfers. ▪ Transport of fuels and chemicals (in storage containers or equipment) to and from site. Unwanted events include spills from vehicle collisions and container failures.

Risk (Environmental Aspect)	Hazard (Activity / Cause)
Inappropriate storage or disposal of environmentally hazardous waste.	▪ Generation and disposal of all chemical, contaminated and/or controlled wastes including waste oil and other hydrocarbons, paints, thinners, garnet and other chemicals; contaminated filters, rags, absorbents and soil from spills; septage from site toilets. Unwanted events include loss of containment and inappropriate disposal from inadequate segregation of inert and hazardous wastes.
Inappropriate storage or disposal of inert or putrescible waste.	▪ Generation and disposal of inert and putrescible wastes, including packaging and crib wastes. Unwanted events include windblown waste from poor housekeeping or inadequate storage.
Adverse emissions to air (controlled sources).	▪ Controlled pipeline venting; exhaust from normal vehicle and equipment operation. Unwanted events include excessive emissions from poor maintenance or operation.
Adverse emissions to air (uncontrolled sources).	▪ Uncontrolled / accidental gas release from pipeline or storage cylinders (including LPG or oxyacetylene). Unwanted events include failure of or damage to pipeline, valves and storage cylinders.
Dust generation.	▪ Vehicle and equipment movements on unpaved surfaces; earthworks including pipe trench excavations. Unwanted events include excessive dust blown off-site.
Traffic nuisance to neighbouring land users or landholders (residences, businesses).	▪ Access to site by construction, supply and other vehicles. Unwanted events include excessive noise and congestion on shared or public roads.
Traffic impacts to fauna.	▪ Vehicle and equipment movements on access roads and onsite. Unwanted events include vehicle collisions with native fauna.
Exposure of soil to erosion and deposition by wind and water.	▪ Site preparation, including clearing and grading. Unwanted events include obstruction and redirection natural drainage or lack of vegetation cover leading to soil erosion and deposition off-site.
Exposure of acid sulphate soils.	▪ Excavations including pipeline trench and bell-holes. Unwanted events include acid drainage from spoil stockpiles.
Exposure of existing contaminated material from previous or neighbouring land uses.	▪ Excavations including pipeline trench and bell-holes. Unwanted events include spread of contamination, and inappropriate disposal of contaminated material.
Spread of weeds or plant diseases (e.g., dieback).	▪ Mobilisation of vehicles, equipment, supplies and other facilities to site; vehicle movements to, from, and around site; earthworks including clearing and grading; disposal of unwanted soil or spoil; demobilisation from site. Unwanted events include transport of weeds or diseases into or from site on dirty vehicles and earthmoving equipment.
Disturbance of sites, remains or artefacts of significance to Aboriginal heritage.	▪ Earthworks including clearing, grading and excavation. Unwanted events include damage to sites of significance or loss of significant artefacts.
Initiation of fires.	▪ Operation of vehicles and equipment; welding and other ignition sources. Unwanted events include initiation of bushfire.
Light pollution.	▪ Use of lighting for night-time works and site security. Unwanted events include nuisance to nearby residences.
Noise pollution.	▪ Operation of vehicles and equipment; controlled gas venting. Unwanted events include nuisance to nearby residences and businesses.
Fauna entrapment.	▪ Excavations including pipeline trench and bell-holes. Unwanted events include fauna deaths from exposure or burial in open trench.

Risk (Environmental Aspect)	Hazard (Activity / Cause)
Damage to vegetation and habitat.	▪ Earthworks including clearing, grading and excavation; vehicle movements around site. Unwanted events include unnecessary damage to vegetation from vehicle movement and spoil stockpiles.
Loss of topsoil resources.	▪ Earthworks including clearing, grading and excavation; vehicle movements around site. Unwanted events include loss of topsoil and seedbank from erosion or poor segregation of topsoil and subsoil.
Inappropriate disposal of water.	▪ Hydrotesting of new pipeline section. Unwanted events include erosion, waterlogging, damage to vegetation and habitat, and nuisance to nearby residences and businesses.

Table 4: Management Measures – Site Access and Preparation

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Consultation with neighbouring land users via PTA.
4) Drivers and operators trained and competent.
5) Complaints from neighbouring land users recorded and notified to PTA.
6) Site entry kerb and drainage condition report before and after project works by APA; provided to local authority
Site-based
7) Trapping and relocation of fauna as far as practicable, ahead of works (by PTA).
8) Stockpiling of vegetation and topsoil (by PTA).
9) Heritage monitors present for excavations; work suspended if artefacts, remains or site disturbed; reported to DAA (by PTA).
10) Single entry and exit to site signed and enforced; hygiene requirements signed at entry.
11) All vehicles and equipment clean on entry to site; any dirty vehicles and equipment directed to local commercial vehicle wash (High Wycombe); no clean-down on site.
12) Speed limit on site 10km/hr; on public roads as signed.
13) Vehicle movements into and out of site according to appropriate APA traffic management plan.
14) Vehicles remain within RoW and other designated work areas.
15) Erosion / drainage controls installed where necessary.
16) Vehicle movements minimised as far as practicable.
17) No driving or parking over vegetation or topsoil stockpiles.
18) Declared weeds identified on site reported to DAFWA via PTA and dealt with according to DAFWA guidelines.
19) Other weeds identified on site sprayed or pulled out and safely disposed of.
20) Native fauna in work areas allowed to move-on by themselves where practicable and safe to do so.
21) Approved fauna handler called to move native fauna where necessary; PTA notified.
22) DPaW Wildcare Helpline called for sick or injured native fauna; PTA notified.

Table 5: Management Measures – Chemical Transport, Handling and Storage

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Standard monthly DMP incident reporting.
4) Procedures for fuel and chemical handling and vehicle and equipment refuelling and servicing.
5) SDS available for hydrocarbons, chemicals and all hazardous substances used onsite.
6) SWMS.
7) Drivers and operators trained and competent.
8) ERP and OSCP reviewed.
Site-based
9) Minimal hazardous storage at project site; substances brought in as required; no individual containers >1,000L.
10) Spill containment and recovery equipment kept on site; consistent with CEMP requirements; appropriate to nature and volume of substances used; capable of dealing with up to 1,000L.
11) Hazardous liquids stored in bunded areas or on spill pallets; storage areas designated and signed; secondary containment >110% of largest single container.
12) Storage and handling to comply with AS1940-2004.
13) Drip trays, absorbents, etc. used when handling hazardous liquids outside of bunded areas.
14) Spills stopped at source and spills recovered as soon as possible.
15) Speed limit on site 10km/hr; on public roads as signed.
16) Hazardous substance transport according to Dangerous Goods and other relevant Regulations; large volumes transported by accredited contractor.
17) External services (Police, DFES) called on for accident / spill response if necessary.
18) Hazardous substances properly secured during transport.
19) Vehicles and equipment regularly inspected and maintained to prevent leaks and spills.
20) No major servicing on site.
21) No refuelling within 100m of defined watercourses; fuel trailer refuelled off-site.
22) Waste fuels and chemicals / contaminated materials appropriately stored and disposed of.

Table 6: Management Measures – Waste Storage and Disposal

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Complaints from neighbouring land users recorded and notified to PTA.
Site-based
4) Bins and skips installed at site for inert and putrescible wastes.
5) Bins and skips kept with lids on/ covered to prevent fauna access / windblown litter.
6) Frequent housekeeping inspections to ensure wastes properly contained; litter picked up as necessary.
7) Wastes collected as required to prevent over-filling / spills.
8) Wastes segregated and disposed of at facilities appropriate for class of waste according to DER Landfill Waste Classification and Waste Definitions 2009.
9) Temporary toilets installed at site; septage collected for disposal at licensed facility.
10) APA procedures for chemical waste disposal followed.
11) Chemical or other hazardous wastes held on site for collection kept in bunded storage.
12) Controlled chemical or other hazardous wastes removed from site for disposal by contractors licensed by DER under Environmental Protection (Controlled Waste) Regulations 2004.
13) Non-hazardous by-products of construction, e.g. garnet, will be limited and controlled in release in accordance with general pipeline construction practices.
14) Waste pipe cut up, stockpiled, and removed to recycling facility.
15) Purge water collected for disposal at appropriate facilities.

Table 7: Management Measures – Noise, Dust, Light and Other Emissions

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Complaints from neighbouring land users recorded and notified to PTA.
4) Fuel use and combustion emissions measured or estimated for DMP, NPI and NGERS reporting.
5) Gas emissions measured or estimated for DMP reporting.
6) Consultation with neighbouring land users via PTA.
7) Residents within 200m notified of construction schedule via PTA.
Site-based
8) Site entry from 6.30AM; hours of work 7AM-7PM Monday to Saturday unless otherwise agreed via PTA;
9) Water and/or hydromulch applied to suppress dust on work area and soil/ spoil stockpiles as required (by PTA).
10) Vehicles and equipment operated and maintained to minimise noise and air emissions according to manufacturer specifications.
11) Mufflers / cowlings/ enclosures and other measures installed to attenuate noise from vehicles and equipment.

Management Requirements
12) Equipment conforms to AS 2436-1981 to minimise noise emissions.
13) Work conforms to AS 2436-1981 to manage noise emissions.
14) Site speed limit 10km/hr; on public roads as marked.
15) Lighting directed at working areas only, and away from residences.
16) Earthworks suspended if dust blowing toward sensitive premises.

Table 8: Management Measures –Excavations and Spoil Management

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Drivers and operators trained and competent.
4) Contaminated sites investigations (by PTA).
5) ASS investigations (by PTA).
6) Buried services survey (by PTA).
7) PTA “Unexpected Finds” procedure.
8) Daily reporting to PTA, including log of trench inspections and any native fauna found.
Site-based
9) Trapping and relocation of fauna as far as practicable, ahead of works (by PTA).
10) Trench spoil placed away from vegetation and topsoil stockpile and undisturbed vegetation; centre of site preferred, away from Brookfield boundary.
11) Heritage monitors present for excavations; work suspended if artefacts, remains or site disturbed; reported to DAA via PTA.
12) Fauna ramps <45º installed in pipe trench and bell-holes; hessian sack shelters placed in trench.
13) Open trench inspected for fauna each morning, evening, and before backfill; records maintained.
14) Fauna in trench allowed to leave trench by themselves if practicable; approved handler called to remove if necessary; PTA advised.
15) DPaW Wildcare Helpline called for sick or injured native fauna; PTA notified.
16) Soils tested and treated according to PTA CEMP (Table 28)/ DER ASS guidelines if excavations proceed below the water table; restrictions on open trench times.
17) Any contaminated soil uncovered by earthworks appropriately removed and disposed; validation testing undertaken.
18) Any supplementary backfill material brought to site certified as free of weeds and disease.
19) Any spare/ unsuitable spoil removed from site certified as free of weeds and disease or disposed of appropriately.
20) Spoil piles kept <2m high and separate from PTA stockpiles created during clearing works.
21) Water and/or hydromulch applied to suppress dust/ prevent erosion as required (by PTA).
22) Locating and marking existing pipeline; “Dial before you dig”.

Table 9: Management Measures – Pipeline Works and Fire Prevention

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems.
2) Requirements addressed in project inductions and toolbox talks.
3) Drivers and operators trained and competent.
4) Designated key persons trained in fire response.
5) SWMS/JHAs.
6) Permit to Work system for hot works including welding.
7) Emergency contact details communicated to all project personnel.
8) Neighbouring land users notified of planned venting at least 48 hours in advance via PTA.
9) Venting scheduled for least disruptive date and time.
10) Complaints from neighbouring land users recorded and notified to PTA.
11) Bypass, hot tap, tie-in, welding and venting procedures developed and approved.
12) Venting noise addressed in commissioning HAZID.
13) ERP reviewed.
14) Venting emissions included in DMP, NPI and NGERS reporting.
Site-based
15) Fire response equipment maintained on site and signed.
16) Extinguishers kept with vehicles and equipment according to PTA CEMP requirements
17) Fire watch stationed for hot work.
18) Minimum 3m fire break maintained around hot work areas.
19) Flammable materials removed from hot work areas.
20) Site kept free of litter.
21) Flammable hydrocarbons and other chemicals stored appropriately.
22) Fire bans communicated to site personnel by SMS (mobile text).
23) DFES fire ban exemptions sought for hot work where necessary and appropriate.
24) No smoking on site.
25) No parking over vegetation; engines stopped when parked.

Table 10: Management Measures – Hydrotesting

Management Requirements
Administrative
1) Procedure developed for managed discharge, if necessary. 2) Regulatory approval sought if required. 3) Consultation with neighbouring land users via PTA.
Site-based
4) Hydrotest water re-used for dust suppression or rehabilitation, as far as practicable. 5) If hydrotest water discharge necessary: fresh or potable quality water used; water released slowly; erosion control structures/ matting at discharge point; discharge/ drainage directed away from remnant vegetation, soil and vegetation stockpiles.

Table 11: Management Measures – Site Reinstatement and Demobilisation

Management Requirements
Administrative
1) Hazard and incident reporting via APA and PTA reporting systems. 2) Requirements addressed in project inductions and toolbox talks. 3) Consultation with neighbouring land users via PTA. 4) Complaints from neighbouring land users recorded and notified to PTA.
Site-based
5) Vehicle movements into and out of site according to appropriate traffic management plan. 6) Any spare/ unsuitable soil or spoil removed from site certified as free of weeds and disease or disposed of appropriately. 7) All remaining wastes collected and appropriately disposed of. 8) Redundant pipeline cut up, stockpiled, and removed to recycling facility. 9) Final site reinstatement by PTA.

6 STAKEHOLDER CONSULTATION

6.1 PTA Consultation for the FAL

In November 2014, the PTA referred the FAL to the EPA under the EP Act. In April 2015, the EPA set an assessment level for the project as API, and issued a scoping guideline. Public consultation on matters of national environmental significance that could be affected by the FAL was open from 12 to 25 May 2015, via the EPA website.

In June 2015 the PTA submitted the API documentation (PTA 2015a) for the FAL to the EPA (assessment no. 2048). In July 2015 the EPA issued its report to the Minister (no. 1553) (EPA 2015a), recommending that the project proceed, subject to certain conditions. The EPA recommendations were made public via the EPA website, and were open to appeal from 13 to 27 July 2015. The project was approved under Ministerial Statement 1022 in November 2015 (EPA 2015b).

As proponent of the FAL and forward works at the Forrestfield Station site, the PTA has identified, consulted with, and continues to consult with a range of external stakeholders, including the:

- EPA;
- Department of the Environment (Commonwealth);
- Western Australian Departments of Environment Regulation (DER), Parks and Wildlife (DPaW), Water (DoW), Heath (DoH), Aboriginal Affairs (DAA), Lands (DoL), and Premier and Cabinet (DPC);
- Swan River Trust;
- South West Aboriginal Land and Sea Council;
- Shire of Kalamunda; and
- APA Group, ATCO Gas and other affected service operators.

6.2 APA Consultation for the PRF Works

APA has also consulted on the PRF works specifically with the:

- DMP Petroleum Environment Branch;
- ATCO Gas and other affected service operators; and
- APA Operations Group, who will be responsible for the operation of the modified PGPS infrastructure.

APA stakeholder communications to date include:

- Discussions with PTA on the APA Scope of Works and PTA CEMP.
- Consultation with DMP on environmental documentation requirements.
- Internal consultation with the APA Operations Group on project design and documentation.
- Consultation with ATCO Gas and other affected service operators on coordination of forward works.
- DMP attendance at the ERA workshop.

Consultation and communication with external stakeholders on the PRF will generally be via PTA; APA will generally not communicate directly with external stakeholders regarding the PRF, except where

otherwise agreed with PTA. Any external stakeholder consultation by APA will be managed according to Section 10 of the PGPS OEP.

7 REFERENCES

APA (2013). *Operations Environment Plan Parmelia Gas Pipeline System (PAR-EMP-457; Rev 1.2; 26/06/2013)*. APA Group.

DMP (2012). *WA Department of Mines and Petroleum Guidelines for the Preparation and Submission of an Environment Plan*. State of Western Australia.

EPA (2015a). *Report and recommendations of the Environmental Protection Authority - Forrestfield Airport Link*. *Report 1553, July 2015.* Available at: http://www.epa.wa.gov.au/EPADocLib/Rep%201553%20Forrestfield%20Link%20API%20200715.pdf; accessed 23 October 2015. State of Western Australia.

EPA (2015b). *Statement No. 1022, Forrestfield-Airport Link*. State of Western Australia. Available at: http://edit.epa.wa.gov.au/EPADocLib/Statement%20No.%201022.pdf; accessed 7 December 2015. State of Western Australia.

PTA (2015a). *Forrestfield –Airport Link, Assessment on Proponent Information Environmental Review, June 2015.* Strategen. Available at: http://www.epa.wa.gov.au/EIA/EPAReports/Pages/1553-ForrestfieldAirportLink.aspx; accessed 7 December 2015.

PTA (2015b). *Forrestfield-Airport Link Out of Scope Works, Construction Environmental Management Plan PTA15066_01*. Strategen.

8 APA GROUP CONTACT DETAILS

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APPENDIX A DEFINITIONS AND ABBREVISTIONS

Term	Definition
ALARP	As low as reasonably practicable
APA	APA Group, also incorporating APT Parmelia Pty Ltd, a wholly owned subsidiary of APA
API	Assessment on Proponent Information
ASS	Acid Sulfate soils
CEMP	Construction Environment Management Plan
PTA CEMP	Forrestfield-Airport Link Out of Scope Works, Construction Environmental Management Plan PTA15066_01
DAA	Department of Aboriginal Affairs.
DAFWA	Department of Agriculture and Food Western Australia
DER	Department of Environment Regulation
DFES	Department of Fire and Emergency Services
DMP	Department of Mines and Petroleum
DoH	Department of Health
DoL	Department of Lands
DPaW	Department of Parks and Wildlife
DPC	Department of Premier and Cabinet
E-BD	Environment Plan Bridging Document
ERA	Environmental Risk Assessment
ERP	Emergency Response Plan
EPA	Environmental Protection Authority of Western Australia
EP Act	Environmental Protection Act 1986 (WA)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwth)
FAL	Forrestfield Airport Link
FBE	Fusion Bonded Epoxy
HAZID	Hazard identification study.

Term	Definition
JHA	Job Hazard Analysis
NGERS	National Greenhouse Emissions Reporting Scheme
NPI	National Pollutant Inventory
OEP	Operations Environment Plan
OSCP	Oil Spill Control Plan
PGP	Parmelia Gas Pipeline
PGPS	Parmelia Gas Pipeline System (PL 1, 2, 3, 5, 23, 32, 44, 45, 46, 52, 53 and 61)
PGPS OEP	Operations Environment Plan, Parmelia Gas Pipeline System (PAR-EMP-457; Rev 1.2; 26/06/2013)
PRF	Parmelia Relocation Forrestfield
PTA	Public Transport Authority of Western Australia
ROW	Pipeline construction right-of-way
SDS	Safety Data Sheet (previously Material Safety Data Sheet – MSDS)
SWMS	Safe Work Method Statement
TEC	Threatened Ecological Community
WC Act	Wildlife Conservation Act 1950