Health, Safety and Environment Management System

Plan

870-PL-HSE-0037

VTS Operational Environmental Management Plan

APA safeguard

This document is an Environmental Management Plan and defines the requirements for the Victorian Transmission System.

APA is required to have this Plan and subsequent revisions accepted by DELWP. Where procedural revisions to the document occur (e.g. administrative changes, references, formatting) that do not affect risk, control or assurance measures, APA will approve the document and notify DELWP of the amendment within 5 business days of APA's approval of the revision.

This document is owned by the relevant APA Business Unit, and must be approved by APA's Environment Manager.

In Australian state and territory jurisdictions specific statutory requirements apply to the management of environmental matters. Businesses must ensure that environmental management matters are managed in line with legal requirements. For further information contact APA's Environment Manager your Environment Advisor or equivalent.

Version Control and Authorisation

Version	Date	Status	Originated/Custodian	Checked	Approved
1.0	13/08/2019	Final	Cassi Underwood Cassi Underwood Environment Advisor / contractor	Darren Flaus Manager Operations Victoria	Alicia Zillman Environment Manager

Version No	Name / Location	Date
1.0	Transmission Document Library	13/08/2019
1.0	DELWP	20/08/2019

Revision History

Version No	SUMMARY OF AMENDMENT	Date
1.0	Final version for submission to DELWP	20/08/2019

Icons and their use

!	Important information
	A tool to help implement this Plan.
	A reference that provides further information or assistance.

Table of Contents

1 Scope of Plan

1.1 Context of Document

APA VTS Australia Operations Pty Ltd (APA) is the operator of the Victorian Transmission System (VTS). APA pipelines that make up the VTS are licensed by the Department of Environment, Land, Water & Planning (DELWP) under the *Pipelines Act 2005*.

This Operational Environmental Management Plan (OEMP) has been prepared for use during the operation of the Victoria section of the VTS only in accordance with the *Pipelines Act 2005* and *Pipelines Regulations 2017*.

The OEMP details the environmental management framework that APA operates under and provides guidance on mitigation measures that will assist in preventing or minimising the environmental impact of operation, maintenance, minor construction and suspension activities (where applicable) carried out by APA and its contractors on the pipeline.

The OEMP has been developed to reflect APA systems and incorporates risk based environmental management of the operation of the pipeline. This OEMP also forms part of a network of APA documents related to pipeline management and should be read in conjunction with:

- Emergency Management Plan - Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP);
- VTS Operational Safety Case (MAN-368);
- VTS Emergency Risk Management Plan (MAN-522);
- VTS Safety Management Manual (MAN-107); and
- *Environment Protection Act 1970* Section 20 Licence 73892.

1.1.1 Asset Details

As at 1 January 2018, the VTS comprises of approximately 2,262 km of high pressure gas transmission pipelines throughout Victoria. The VTS is made up of 51 pipelines under 45 individual licences including 1 in NSW. Almost all natural gas consumed in Victoria is transported through the VTS. The VTS serves a total consumption base of approximately 2 million residential consumers and approximately 50,000 industrial and commercial users throughout Victoria. Refer to Appendix 3 – Pipeline License Reference Table for the full list of VTS pipelines.

The VTS supplies gas to the Melbourne metropolitan area and to a number of regional centres including Corio, Ballarat, Bendigo, Wodonga, Koonoomoo and Echuca. The Laverton North, Somerton, Valley Power, Jeeralang and Newport gas-fired power stations are all supplied from the VTS.

The VTS is separated into four regional areas, with each area managed separately by the relevant Regional Manager. The regional areas are:

- Melbourne – metropolitan Melbourne;
- Otway – western Victoria;
- Gippsland – eastern Victoria; and
- Albury – northern Victoria.

The main VTS pipelines and compression facilities include:

- Longford to Melbourne Pipeline (Longford-Dandenong-Wollert) with compression at Gooding;
- South West Pipeline (Port Campbell-Geelong-Brooklyn) with compression at Winchelsea and Brooklyn;
- Northern Lateral and NSW Interconnect (Wollert-Wodonga-Culcairn) with compression at Wollert, Euroa and Springhurst; and

Western Transmission System (Brooklyn – Lara – Iona) with compression at Iona and at Winchelsea. Gas transmitted through the VTS is supplied primarily by Exxon-Mobil and injected into the VTS at the

Longford injection point. Other gas supplies are sourced from the BassGas injection point at Pakenham and from the Iona injection points at Port Campbell. A small portion of gas can enter the VTS through the interconnect pipeline from NSW, the Eastern Gas Pipeline (VicHub) and the Tasmanian Gas Pipeline (TasHub).

From the Longford and BassGas injection points, gas is transported to the Dandenong and Wollert city gate regulating stations on the outskirts of Melbourne via a partially duplicated 750 mm diameter trunk line. The Gooding compressor station, located along the pipeline between Longford and Dandenong, has four compressor units.

The Wollert city gate regulating station supplies the VTS 600 mm diameter pipeline feeding into the distribution networks in metropolitan Melbourne. The Dandenong city gate directly feeds the distribution networks owned by Multinet Gas and Australian Gas Networks (AGN) and also feeds the APA VTS gas transmission system 750 mm diameter trunk pipeline to Brooklyn. Gas from Iona can also enter the trunk pipelines from Brooklyn. The Dandenong to Brooklyn pipeline supplies gas to the AusNet Services distribution network and to a number of Multinet Gas and AGN delivery points. Approximately two thirds of Melbourne's gas demand is met through the Dandenong city gate and one third through the Wollert and Brooklyn city gates.

The VTS extends north to Bendigo, Echuca, Koonoomoo and Wodonga through an extensive network of pipelines with diameters ranging from 150 mm to 400 mm including looped sections of the Melbourne to Wodonga Pipeline (PL101) known as Victorian Northern Interconnet Expansion (VNIE).

APA VTS owns compressor stations located at Gooding, Wollet, Euroa, Springhurst, Brooklyn, Iona and Winchelsea. The network extends from Brooklyn Compressor Station to Corio in the south and to Ballarat/Bendigo in the north.

APA VTS also owns an LNG facility located at Dandenong which provides security of supply/demand balancing and winter peak shaving for the VTS. Operation of the Dandenong City Gate and LNG facility is addressed in a separate OEMP 870-PL-HSE-0023 Dandenong LNG – Environmental Management Plan.

The following typical easement widths are noted along the pipeline routes:

- Most Rural assets are 20.1 m;
- Longford to Dandenong T60 (PL75, PL117, PL120 and PL135) is 24.1 m;
- Wollert to Wodonga T74.2 & T74.3 (sections of PL101) is 35 meters in width along the majority of its length;
- Most Metro assets (in road) have no easement. In this case, three meters either side of the asset is applied in accordance with the Pipelines Act 2005.

A detailed VTS pipeline route is attached in Appendix 4 – Environmental Line List / Mapping / ENV Features.

1.2 Roles and Responsibilities

Key personnel involved in implementing the OEMP including a description of their responsibilities are outlined in Table 1 below.

Table 1 Roles and Responsibilities

Role	Responsibility
Manager Operations	• Directly responsible for ensuring that APA and its contractors fulfil the commitments contained in the OEMP. • Assesses environmental compliance through regular inspections and / or audits. • Ensures external pipeline reporting obligations are met. • Responsible for ensuring that the pipeline is operated in a way so as to minimise adverse environmental impacts.
Environmental Advisor	• Provides instruction and training to workforce on environmental requirements. • Disseminates information on legal updates, environmental alerts. • Conducts Internal Environmental Compliance Audits as per environment audit schedule • Maintains currency of this OEMP. • Report environmental incidents to Regulator
Regional Manager	• Responsible for operation and maintenance of the pipeline • Oversees, schedules and carries out inspections and maintenance on the pipeline. • Conducts site inductions, including environmental provisions. • Escalation of environmental incidents to Environment Advisor • Reports to Manager Operations.
Access and Approvals Manager	• Ensures that the required approvals are obtained for pipeline operations.
Regulatory Specialist/Compliance Officer	• Key point of contact for regulators. • Kept informed of all compliance related activities. • Ensures external reporting obligations are met.
Technical Officer	• Carries out inspections and maintenance on the pipeline in line with environmental requirements. • Reports to Regional Manager
All Staff / Contractors	• Work in line with APA Systems and processes • General Environmental Duty • Cultural Heritage Duty of Care

1.3 APA Group – Environmental Management Expectations

Environmental management is important at APA Group because:

- APA Group has legal obligations and a duty of care to protect the environment from harm; and
- When managed carefully and strategically, environmental externalities and legal obligations can lead to environmental, community and business benefits.

APA is committed to providing a zero harm work environment for our employees, contractors and visitors and protecting the environment from harm.

To realise this commitment, APA expects all activities to be conducted in line with the APA HSE Policy and HSE Group Procedure 13.01 Environmental Management. For further details see Section 6.2

1.4 Objectives

The overall environmental objectives of this OEMP are as follows:

- To minimise environmental impacts resulting from VTS operations;
- To mitigate all identified environmental risks to ALARP;
- To comply with all relevant legal and regulatory environmental requirements; and
- To minimise disturbance to surrounding landholders.

1.5 Emergency Response Management

Planning, testing and response to emergency situations is managed by the Transmission National Emergency Response and Security Management System. The Transmission National Emergency Response and Security Plan (APA Doc 320-PL-ER-0001) (ERSP) is written to reflect the following priorities in all emergency situations:

1 – Protect human life

2 – Protect the environment

3 – Maintain system safety

4 – Ensure system supply

5 – Protect property

The ERSP describes a range of potential emergency situations relating to the Transmission network, and discusses the various incident and response levels, as well as detailing potential environmental harm that may occur during the emergency. The ERSP sets out the response required to the various incident levels, including escalation to emergency services, roles and responsibilities, communications and reporting.

Response in the event of an emergency on the VTS will be managed in accordance with the ERSP and the VTS Safety Management Manual. A copy of the ERSP is attached in Appendix 8 – Emergency Management Plan

1.6 Environment Definitions

Table 2 Definitions

Item	Definition
AEMO	Australian Energy Market Operator
ASS	Acid Sulfate Soil
ASSETHAZ	Asset Hazard
CFA	Country Fire Authority
CHMP	Cultural Heritage Management Plan
CMA	Catchment Management Authority
CP	Cathodic Protection
DBYD	Dial Before You Dig
DCVG	Direct Current Voltage Gradient
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water and Planning
DoEE	Department of Environment and Energy
EPBC	Environment Protection and Biodiversity Conservation (Act)
ELL	Environmental Line List
EMP	Environmental Management Plan
EMT	Emergency Management Team
EPA	Environment Protection Authority
ER&S	APA Transmission National Emergency Response and Security (ER&S) Plan
ERA	Environmental Risk Assessment
ERSP	Emergency Response and Security Plan
ERT	Emergency Response Team
ESV	Energy Safe Victoria
FFG	Flora and Fauna Guarantee (Act)
GHG	Green House Gas
HAZID	Hazard Identification
HAZOP	Hazard and Operability Study

Item	Definition
HSE	Health, Safety & Environment
IECA BPESC	International Erosion Control Association Best Practice Sediment and Erosion Control
ILI	In line inspection
JHEA	Job Hazard and Environmental Analysis
MS	Metering Station
NEPM	National Environment Protection Measure
OEMP	Operational Environmental Management Plan
PIO	Permit Issuing Officer
RAP	Registered Aboriginal Party
RISKACTIV	Risky Activities
SEPP	State Environment Protection Policy
SG+	Safeguard+ (APA incident and hazard reporting system)
SWMS	Safe Work Methods Statement
VTS	Victorian Transmission System

2 Legislative and Regulatory Context

2.1.1 Activity Timeframe

The VTSS encompasses multiple pipelines which have been constructed between 1956 and 2019. This OEMP applies to the whole of the VTS network (excluding NSW licensed pipelines) and review of the OEMP is carried out every five years, in line with the date the ERA was conducted.

2.2 Overview

2.2.1 Regulators and Stakeholders

Project approvals, legal requirements and other relevant requirements such as guidelines and codes of practice have been identified. A summary of key environmental legislation and its applicability to the VTS is presented below.

2.3 Commonwealth

Relevant Commonwealth legislative requirements are outlined in Table 3. For actual requirements please see Obligations Table.

Table 3 Commonwealth Legislation

Legislation	Administering Department	Requirement
Aboriginal and Torres Strait Islander Heritage Protection Act 1984.	Department of Environment and Energy (DoEE)	The pipeline easement is not within a declared Commonwealth listed Aboriginal area. Requirements for notification of Aboriginal remains are found are also covered by State legislation, refer to Table 4.

Legislation	Administering Department	Requirement
Environment Protection and Biodiversity Conservation (EPBC) Act 1999	DoEE	New construction (outside of pre-disturbed area – in particular conservation area), should be assessed on a case by case basis to determine if the EPBC Act is triggered and whether approval is required. If vegetation clearance is required seek advice from Environmental Advisor – detailed site assessment and EPBC Act permit may be required.
National Greenhouse and Energy Reporting Act 2007	Clean Energy Regulator (CER)	Annual reporting of fugitive emissions is to be conducted by APA Corporate. Retain all relevant data regarding energy consumption and emissions for 7 years.
National Environment Protection (National Pollutant Inventory) Measure (NEPM)1998	National Environment Protection Council and EPA Victoria	Victoria is a participating State to this NEPM, and reporting requirements are also described in the State legislation. Gas distribution and transmission is a reportable activity. APA has assessed whether NPI thresholds are exceeded on the VTS, and submit a report of NPI emissions if triggered each year.
Native Title Act 1993	Native Title Tribunal.	New construction (outside of pre-disturbed areas) should be assessed on a case by case basis to determine requirements regarding Cultural Heritage. Future acts on land subject to a registered or determined Native Title Claim may require consultation/ compensation under the Native Title Act if those acts diminish native title rights.

2.4 State

Relevant State and Local legislative requirements are outlined in Table 4. For actual requirements, please see Appendix 6 – VTS Obligations Register.

Table 4 State Legislation

Legislation	Administering Department	Requirement
Aboriginal Heritage Act 2006 Aboriginal Heritage Regulations 2018	Aboriginal Victoria	The VTS pipeline traverses several areas of Aboriginal cultural heritage sensitivity. A Cultural Heritage Management Plan is not required activities in the pipeline easement if it has been subject to significant ground disturbance as defined by the *Aboriginal Heritage Act Regulations 2018*. Evidence of such ground disturbance can be used to support a Preliminary Aboriginal Heritage Test to certify that a CHMP is not required. Any high impact activity (e.g. excavation >25 m^2 or linear works >100 m) that is not in a previously disturbed area but traverses an area of Aboriginal cultural heritage sensitivity or a registered Aboriginal site will require the development of a CHMP to identify and manage potential impacts to Aboriginal heritage. Non-high impact activities in a previously undisturbed location of registered Aboriginal heritage require either a Cultural Heritage permit or a voluntary CHMP. If any unexpected cultural heritage places or objects are identified by a qualified Heritage Advisor, Aboriginal Victoria must be notified. If any human remains are uncovered, Victoria Police are to be notified. Easement width varies across the VTS and can be as little as three metres either side of the asset (Metro only).
Agricultural and Veterinary Chemicals (Control of Use) Act 1992	Department of Economic Development, Jobs, Transport and Resources (DEDJTR) (Agriculture Victoria)	Imposes controls in relation to the use, application and sale of agricultural chemical products including land use restrictions where contamination of agricultural produce may result.

Legislation	Administering Department	Requirement
Catchment and Land Management Act 1994 (CaLP)	DEDJTR	The CaLP Act is the main piece of legislation governing the management of waterways and invasive plants and animals in Victoria. Land owners, including public authorities responsible for crown land management, must take all reasonable steps to prevent the growth and spread of regionally controlled weeds on their land, eradicate regionally prohibited weeds, avoid causing land degradation, conserve soil, protect water resources and prevent spread of established pest species. During the operational activities, APA must take all reasonable steps to prevent the spread of weeds and pest animals. A Permit must be sought to remove or cause to be removed soil, sand, gravel or stone which contains or is likely to contain any part of a noxious weed, or which comes from land on which noxious weeds grow. Any works on or near a waterway must be done with approval from the relevant Catchment Management Authority (CMA) (also see below Water Act).
Country Fire Authority Act 1958	Country Fire Authority CFA	The Act sets out a number of obligations with regard to fires in Victoria. It provides authority for the control of certain activities in fire danger periods. A permit is required from the CFA prior to conducting any hot works on declared total fire ban days.
Environment Protection Act 1970	EPA	Do not pollute air, land or water, or generate objectionable noise. Sources of pollution may include dust, gas, chemicals/fuels, wastes, sediment, herbicides and plant/equipment (noise & dust). Compliance with the requirements of the Licence through implementation of the OEMP.
Environment Protection (Industrial Waste Resource) Regulations 2009	EPA	Describes the process for classifying industrial wastes, and available options for waste reuse, treatment or disposal. Disposal of Regulated wastes must be via an EPA-licensed waste transporter to a site licensed by the EPA to accept the type of waste being consigned. Records must be kept.
Flora and Fauna Guarantee Act 1988	Department Environment Land Water and Planning (DELWP)	A permit may be required to remove listed flora and fish species from public land including road reserves, public land reserves and parks. Approval will be dependent on the impact and threat to FFG Act listed flora and fauna species, however approval may be required for potentially 'threatening' activities including excavation and vegetation removal.

Legislation	Administering Department	Requirement
Heritage Act 2017	Heritage Victoria	A permit may be required from Heritage Victoria to undertake works on, or interact with, sites listed in the Victorian Heritage Inventory (e.g. where access is required on or through land that is listed in the Inventory). A permit may be required from Heritage Victoria to change any place or object in the Victorian Heritage Register. If any human remains are uncovered, Victoria Police are to be notified. If the remains are determined by the Police to be historical, Heritage Victoria is to be contacted.
National Parks Act 1975	Parks Victoria	APA has been declared a Public Authority under S27 of the Act. A consent is required for works within a National, State or Wilderness Park.
Pipelines Act 2005	Energy Safe Victoria (ESV) Department Environment Land Water Planning (DELWP)	This Act provides for the licensing and regulation of transmission-pressure gas pipelines and associated assets in Victoria. EMP is required to be prepared and submitted to DELWP prior to operation. EMP is to be reviewed every 5 years after the date of the risk assessment workshop. The results of each report are to be provided to DELWP within 28 days of completion. Reportable environmental (and safety) incidents must be notified in writing to ESV within 2 hours, or as soon as becoming aware of the incident. Records of pipeline inspections must be kept. Allows for access agreements to Crown Land to be made in order to carry out pipeline operations.
Pipelines Regulations 2017	ESV DELWP	Provides the requirement for and content of an EMP for the operation of a licenced asset. Requirement for reporting environmental incidents to the Minister and ESV. An annual report to the Minister is due by 30 September each year, including performance of the licensee in protecting the environment from pipeline operations.
Planning and Environment Act 1987	DELWP	Where a licence is issued under the Pipelines Act 2005, Section 85 of that Act allows that development and use of the land for the purpose of the pipeline may be carried out without requiring a permit under the Planning and Environment Act. Any requirements under the Planning and Environment Act will be addressed through the Pipelines Act.

Legislation	Administering Department	Requirement
SEPP (Prevention and Management of Contamination of Land) 2002	EPA	Sets out Segments and beneficial uses for Victorian land and associated environmental quality indicators and objectives to be met. Refers to the National Environment Protection (Assessment of Site Contamination) Measure. A site occupier must ensure that land is managed to prevent contamination, including application of best practice to handling, storage and transport of chemicals and wastes. If disturbing, developing or using a site, the occupier must manage the physical or chemical properties of the land (including naturally elevated levels of indicators or acid sulfate characteristics) to avoid adverse impacts on beneficial uses on and off site.
SEPP (Waters) 2018	EPA	Sets out Segments and beneficial uses for Victorian surface waters and groundwaters and associated environmental quality objectives to be met. Refers to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Chemicals, oils, fuel and wastes must be stored and handled away from floodplains, in a manner that will prevent release to the environment. Spill response measures and clean-up will be provided in-case of an accidental release.
Water Act 1989	Victorian Water Authorities CMA's DELWP Parks Victoria	The Act sets out requirements for managing waterways, both surface and groundwater. A waterway includes a river, creek, stream, watercourse, any natural channel, lake, swamp or marsh that water flows through (can be seasonal and flow does not have to be continuous). A permit from the local Catchment Management Authority may be required to undertake works within a waterway bed or banks. A permit may also be required from the CMA to remove vegetation including removal of weed species and clearing of fallen timber from within the waterway.
Wildlife Act 1975	DELWP DEDJTR	Authorisation may be required to take any wildlife (with the exception of pest animals) declared under the *Catchment and Land Protection Act 1994* and wildlife declared to be unprotected wildlife. A permit may be required when removing trees that may provide habitat for native fauna.
Local Planning Scheme	Relevant Local Government	Any requirements under the Local Planning Scheme will be addressed through the Pipelines Act 2005.

2.5 Guidelines and Australian Standards

All operations and maintenance activities are to be conducted in accordance with the relevant guidelines and Australian Standards listed below:

- Australian Standard AS 2885.3:2012 - Pipelines - Gas and liquid petroleum – Operation and maintenance;
- International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control (BPESC);
- AS 1940:2017 - The storage and handling of flammable and combustible liquids.
- Industrial Waste Resource Guidelines:
    - IWRG621: Soil hazard categorisation and management;
    - IWRG631: Solid industrial waste hazard categorisation and management;
    - IWRG701:Sampling & Analysis of Waters, Wastewaters, Soils and Wastes; and
    - IWRG655.1: Acid Sulfate Soils and Rock.
- EPA Victoria (Online) - Your Environment (https://www.epa.vic.gov.au/your-environment).

2.6 Obligations Register and Translation Table

An Obligations Register is provided in Appendix 6 – VTS Obligations Register, which includes specific obligations from licenses and permits that apply to the VTS.

An Obligations Translation Table has been included in Appendix 7 – Victorian Pipelines Legislation Translation Table. This table details the specific regulatory obligations of APA during operation of the VTS in accordance with the requirements of the Pipelines Act and Pipelines Regulations, and then references the relevant sections of this OEMP that address those requirements.

3 Implementation

3.1 Implementation

This OEMP must not be implemented or amended in any way that contravenes any conditions of any development approval, permit or license.

This OEMP should be read and followed in conjunction with the following documents:

- VTS Environmental Risk Assessment (ERA) Appendix 2 – Environmental Risk Assessment (ERA)
- VTS Environmental Line List (ELL) (Appendix 4 – Environmental Line List / Mapping / ENV Features);
- Emergency Management Plan - Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP);
- AS 2885.3;
- VTS Operations Safety Case (MAN-368);
- VTS National Emergency Risk Management Plan (MAN-522);
- VTS Safety Management Manual (MAN-107);
- Environment Protection Act 1970 Section 20 Licence 73892;
- National Parks Act 1975 Approval 39932 VNIE – Chiltern – Mt Pilot; and
- Crown Land access agreement, dated 18 April 2001.

3.2 Environmental Framework

The APA HSE Management System is called 'Safeguard' and provides a framework by which the processes relating to the company's Health, Safety and Environment (HSE) activities are defined, implemented and controlled. Additionally, local business unit processes and procedures provide instruction to workers on performing activities. APA business tools and systems used to manage and maintain all information relating to asset operations include:

- Maximo – Asset maintenance system (Work Order/Job Plan/Work Instruction);
- Safeguard+ (SG+) - Risk, auditing and reporting system;
- Inspections; and
- Learning Management System (LMS) – Training system used to capture APA staff information and learning materials (e.g. localised and corporate inductions).

3.2.1 Environmental Procedures

As part of Safeguard, APA has a suite of procedures for environmental management. There are eighteen procedures across eight environment areas. These procedures provide guidance to all APA staff and contractors for applying management process and considerations to minimise harm to the environment.

These procedures also contain Performance Objectives, which are targeted across all APA sites and facilities. As such, these performance objectives apply to the VTS Pipelines.

The objectives of the procedure are outlined in Table 5 below

Table 5 APA'S Environmental Procedures and Key Objectives

Environment Area	Objectives
Approvals and Planning	• Ensure all required approvals have been obtained prior to works; and • All required EMPs or equivalent are developed in line with legislative and risk requirements.
Vegetation and Fauna	• Avoid and minimize negative impacts to native vegetation; • Protect flora, fauna and conservation areas; and • Zero material breaches associated with permits, approvals or laws which govern native vegetation.
Pest, Weeds, Disease	• No spread of existing pests, diseases, declared/listed weeds or Weeds of National Significance (WONS); • No introduction of new populations/species of pests, diseases and declared/listed weeds; • Effectively control and manage weeds onsite; • Humane pest eradication methods by competent personal; and • Meet biosecurity and land access requirements of public and private landholders.
Emissions	• Minimise potential for unplanned emissions to the atmosphere including dust; • Avoid and minimise noise and/or vibrations emissions; • Prevent the generation of dust in preference to applying dust suppression measures; and • Minimise noise pollution impacts.
Chemicals and Contamination	• Prevent release of fuels, oils or chemicals to the environment; • Chemical spill events are reported immediately; and • Ensure effective cleanup where release of fuels, oils or chemicals occurs.
Waste	• Minimise risk of contamination, particularly to water ways; • Ensure that waste is managed in accordance with EPA requirements; and • Manage waste using the principles of avoidance and minimisation and following the waste management hierarchy.
Soil and Water	• To minimise the impact on the receiving environment and surrounding waterways from sediment laden or contaminated water entering the storm water drains; and • Minimise the transfer of sediment from access roads to the storm water drain and being transported to receiving environment.
Heritage	• Protect and respect items or places of Aboriginal cultural heritage and / or natural and built heritage.
Data and Reporting	• All required data is collected and stored in line with requirement.

4 Surrounding Environment / Features

An Environmental Line List (ELL) desktop assessment of each VTS pipeline was undertaken throughout March 2019 to record environmental and heritage values. The purpose of the ELL is to identify features of environmental and heritage significance that may occur along the pipeline route and that require management measures to mitigate potential risks during pipeline operation and maintenance.

Environmental and heritage datasets were extracted for each pipeline using selected buffer distances. Environmental and heritage features were recorded at 10 kilometre points (KP) along each pipeline where they intersected the pipeline or buffer area.

State and Commonwealth-curated biodiversity datasets were reviewed and analysed using a 50 metre buffer from the pipeline route including:

- The Department of Environment, Land, Water and Planning's (DELWP) Victorian Biodiversity Atlas (VBA);
- Ecological Vegetation Class (EVC) mapping provided by DELWP;
- Commonwealth Department of Environment and Energy (DoEE) *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search Tool (PMST) (DoEE 2016); and
- Relevant ecological Commonwealth and State legislation (*EPBC Act* and *Flora and Fauna Guarantee Act* (FFG Act), policies and strategies.

To identify the heritage values recorded within the vicinity of the pipeline, the following datasets were reviewed and analysed:

- World Heritage List
- National Heritage List
- Commonwealth Heritage List Register of the National Estate (non-statutory)
- Native Title Registers (including ILUAs)
- Victorian Aboriginal Cultural Heritage Register and Information System (ACHRIS)
- Victorian Areas of Aboriginal Cultural Heritage Sensitivity
- Victorian Heritage Register
- Victorian Heritage Inventory
- Victorian WWII Heritage Register (non-statutory)
- Victorian Local Heritage Registers (relevant)
- Victorian Registered Aboriginal Parties

An initial 100 metre buffer was applied to capture all potential heritage sites within proximity to the pipeline route. Further review of these sites was then undertaken, to exclude (based on location or development status) those sites which were not immediate triggers for further heritage assessments along the pipeline easement.

The majority of the data within the ELL (generated every 10 m along each pipeline) was consolidated into 10 km ranges for each feature type (except registered Aboriginal heritage), for ease of presentation. The extracted data has been compiled into a shapefile model of the VTS which will be used for detailed screening assessments by the APA team.

4.1 Key Environmental Features / Constraints

The VTS pipeline routes and surrounding area (within a 50-100 metre buffer) includes a number of environmental and heritage sensitivities as identified during the due diligence process prior to the ERA.

The full ELL is included as a separate electronic document, accessed from http://thehub.apa.com.au/workareap/Safeguard/Environment/default.aspx

4.2 Vegetation and Fauna

The VTS traverses over 2, 262 km of Victoria and intersects numerous Commonwealth and State areas of ecological significance. This includes listed communities and species under the *EPBC Act* and *Flora and Fauna Guarantee Act*. Areas of significance include rural settings as well as urban locations, for example alongside rail corridors. The ELL will be used to check for ecological features prior to accessing the pipeline corridor for any maintenance or clearance works.

Within the ELL, ecological features were grouped into 10 km blocks. For instance, multiple occurrences of the same EVC were grouped into one ELL entry for every 10 km.

PL101 crosses through Chiltern to Mt Pilot National Park. There is an agreement with Parks Victoria governing operation and maintenance of the pipeline within the park boundaries.

4.2.1 Biosecurity

Landholder site access requirements were identified across nine VTS pipelines. General biosecurity requirements may include signing into property upon access and clean, wash down or brush vehicles prior to entry onto property and exit. The list of properties identified as having biosecurity requirements is maintained in X-info Connect and is constantly being updated (refer Section 4.5). Pipelines and transmission numbers with biosecurity requirements as at March 2019 are listed below:

- T1 – PL50
- T60 – PL75, PL117, PL120, PL135
- T61 – PL141
- T74 – PL136
- T98 – P182
- T99 – PL178

Landholders with biosecurity requirements include:

- Individual property owners;
- Melbourne Water Corporation;
- The Victorian Railways Commissioners;
- Yarra Ranges Shire Council; and
- VIC Roads.

4.3 Soils and Water

The VTS pipeline traverses many different water features including:

- Unnamed waterbodies and watercourses;
- Creeks;
- Rivers – for example Yarra River, Werribee River; and
- Stormwater drains.

Within the ELL, water features were grouped into 10 km blocks. For instance, multiple waterbodies of the same type crossing the same pipeline were grouped into one ELL entry for every 10 km.

Maintenance works on or near waterways may require a permit from the applicable Water Authority. If vegetation clearance around a waterway is required a detailed site assessment for threatened flora and fauna habitat may be required.

A specific search for Acid Sulfate Soils (ASS) was not undertaken due to the size of the VTS network and the restrictions on searchability of the ASS dataset. ASS are typically associated with low lying, swampy or coastal areas. Where intrusive works are planned, a project specific check will be made.

4.4 Heritage

The VTS pipeline traverses many areas of Aboriginal cultural heritage sensitivity. A number of registered Aboriginal Heritage sites under the Victoria Aboriginal Heritage Register have been identified within 100 m of the pipeline route. No impacts are permitted within the boundaries of registered Aboriginal Heritage sites without a Cultural Heritage Management Plan (CHMP) or Cultural Heritage Permit.

High Impact Activities (as defined by Aboriginal Heritage Regulations (2018) Division 5, which include significant ground disturbance of >25 m^2, or linear works >100 m) within 50 m of a registered site may also require a CHMP to be prepared; however exemptions are available where is can be demonstrated that the land was previously significantly disturbed.

A number of Registered Aboriginal Parties (RAP) have been identified along the pipeline route. Refer to Section 4.5.

Non-exclusive Native Title determinations have been made that affect a small number of pipeline licenses under the VTS. Consultation with the Native Title Party is required prior to impact in the determination area.

Any land within 200 m of a **named** waterway (registered under the *Geographic Place Names Act 1998*) is classed as an area of Aboriginal Cultural Heritage Sensitivity. In this case, a waterway includes a river, creek, stream, watercourse, lake, lagoon, swamp and marsh. If High Impact Activities as defined by the Aboriginal Heritage Regulations (2018) Division 5 are proposed in this area, a CHMP may be required. For instance, if APA cannot demonstrate prior significant land disturbance.

A number of State and local historical cultural heritage sites have been identified within 100 m of the pipeline route. Should impacts be proposed within the curtilage of these items, there may be a requirement to undertake heritage impact assessments and/or obtain heritage impact permits to facilitate these works.

4.5 Stakeholder Engagement

APA has developed a stakeholder consultation and engagement program applicable to the VTS. On-going stakeholder engagement is important to maintain awareness of APA's assets and allow APA to work with stakeholders to minimise conflict and incidents. Engagement allows landowners and agencies consult with APA on proposed developments or changes to land use that may impact on the pipeline integrity, and vice-versa to notify stakeholders of APA works or changes to our operations.

Table 6 lists the Key Stakeholders on the VTS.

Objectives:

- Maintain an awareness of the pipeline with asset owners, contractors, local government and planners;
- Understand any development activities which may change 'location classes' and associated threats to the pipeline;
- Support effective environmental management of the pipeline easement via input from landowners and land managers;
- Track activities undertaken by landholders that may increase pipeline risk and may cause accidental damage; and
- Minimise disruption to stakeholders during routine and emergency events.

Table 6 Key stakeholders

Stakeholder	Interest / Interaction
Private landowners / tenants along the pipeline route	Land Access Agreements. Pipeline located on property. Potential for landholder works to affect pipeline operation / integrity.
RAPs represented along the VTS include: • Bunurong Land Council Aboriginal Corporation; • Dja Dja Wurrung Clans Aboriginal Corporation; • Eastern Maar Aboriginal Corporation; • Gunaikurnai Land and Waters Aboriginal Corporation; • Gunditj Mirring Traditional Owners Aboriginal Corporation; • Taungurung Land and Waters Council Aboriginal Corporation; • Wathaurung Aboriginal Corporation; • Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation; and • Yorta Yorta Nation Aboriginal Corporation.	Local RAP if intrusive works required outside the previously disturbed pipeline corridor.
Native title holders represented along the VTS include: • Gunai/Kurnai People; • Yorta Yorta; • Eastern Maar People; • Gunditjmara & Eastern Marr People; and • Gunditjmara People.	Consultation with the Native Title Party is required prior to impact in determination area.
Crown Land regional Land Managers	In accordance with the Crown land access agreement, consent is required for works on Crown land that involve disturbance of soil or vegetation, including for construction of access tracks.
State and Commonwealth Regulatory Authorities	Refer to Section 3.2 and 3.3
Local Council (pipeline intersects with several Council areas)	Local Council and public land manager. Pipeline located within road reserve or other Council owned property,
Other utility providers (telecommunications, sewage, drainage, electricity, roads)	Obligation to not damage other utility assets during maintenance works. Manage through DBYD and other utility industry forums.
Parks Victoria	Consent for Public Authority issued to APA for the occupation, use and maintenance of APA pipeline infrastructure in the Chiltern – Mt Pilot National Park.

APA maintains landholder information and access arrangements in X-info Connect (managed by the Infrastructure Protection team). X-info Connect (XIC) contains property access details specific to each property requiring access by APA. All landholders are identified and recorded in XIC along with details of the Landholder Contact Program. Interaction records with registered owners and occupiers are recorded in XIC, including attachment of any communication materials provided or received, where relevant. Further information is available in APA's Landholder Engagement Procedure 560-PR-QM-001and Third Party Awareness Procedure 560-PR-QM-0002.

Each landholder was consulted on the review of this OEMP via a mail out letter. Letter distributions and any feedback obtained were tracked in X-Info Connect.

5 Environmental Risk Assessment

An Environmental Risk Assessment (ERA) was undertaken for the operation of the pipeline, the following APA personnel attended the ERA Workshop:

- Two APA Environment Advisors (East);
- APA Regional Managers – Gippsland, Metro, Albury;
- Corridors Protection Lead ;
- Technical Compliance Manager; and
- Project Delivery Manager.

The pipeline context defined for the ERA workshop was:

- Operation, inspection and maintenance of the existing pipelines;
- Normal and emergency scenarios;
- Credible emergencies arising as part of maintenance works (e.g. vehicle collisions, major spill);
- All pipeline assets operated by APA;
- No change to existing pipeline design, route, depth or surface features;
- Excludes safety risks, pipeline decommissioning and assets managed by other parties;
- Current status of the pipeline is either under nitrogen or contains market-compliant sales gas; and
- No excess pressures from gas plant upsets.

The resulting risk register provides a high level framework to help inform APA and contractor's risk assessment and control processes. The ERA is provided in Appendix 2 – Environmental Risk Assessment (ERA).

The ERA was carried out in accordance with ISO 31000:2009 Risk Management Principles and Guidelines, the APA Enterprise Risk and Compliance Risk Matrices and the APA HSE ENV – Guideline 001 Environmental Risk Assessment guideline. The guideline focuses on assessing the risk associated with ASSETHAZ (Asset Hazards) and RISKACTIV (Risky Activities).

6 Asset Hazards and Activities

The VTS comprises of approximately 2,262 km of high-pressure gas transmission pipelines throughout Victoria. The VTS pipelines have a number of engineering and inherent controls to protect them from external interference that may damage the pipeline. The pipelines are:

- Buried, with minimum cover of 600 mm and between 1200 mm and 1800 mm under watercourse crossings;
- Wall thickness and steel grade for penetration resistance, loading factors and pressure containment;
- Provided with concrete protection slabs at high risk areas per Safety Management System;
- Constructed and maintained in line with AS 2885 or the standard at the time of construction;
- Provided with a coating for corrosion resistance from soils and moisture;
- Detailed in Dial Before You Dig;
- Signed for identification and an emergency response phone number;
- Marked with buried marker tape;
- Cathodic protection system is installed to assist with corrosion protection; and
- Insulated at all pipe ends and provided with a series of sacrificial anodes along the length of the pipe for corrosion resistance.

6.1 Asset Hazards (ASSETHAZ)

Information on potential environmental risks associated with the pipeline is provided in Table 7 below.

Table 7 VTS Asset Hazard and Controls

ERA Risk Ref #	Asset Type	Potential Impact	Mitigating Factors	Management Method
1	Pipelines	Loss of integrity Green House Gas Emissions (fugitive emission loss / venting) Emergency release of gas (odour, GHG, ignition)	Most pipelines are non-rupture pipes.	• VTS Pipeline Integrity Management Plan details the activities that will be taken to ensure the integrity of the VTS pipelines; • Fracture Control Plans for each pipeline; • Regular pipeline inspections and patrols per Section 7.2.1; • 12-18 months high detail inspection traversed on foot; • Pipelines were constructed as per AS2885 or standards at time of construction; • Any design changes to the pipeline are via a management of change process and sign off; • The pipeline is identified in the ground via danger marker tape and above ground via pipeline marker sign on the easement; • Cathodic protection system installed for corrosion resistance, with 24/7 monitoring and 12 month detail survey; • Insulation at both pipe ends and a series of sacrificial anodes along the length of the pipe for corrosion resistance; • Pipeline has fill cover of between 1200 mm and 1800 mm under watercourse crossing to manage risk of pipeline exposure and loss of emissions; • Remote SCADA monitoring; • Training requirements detailed in Appendix B - 430-PL-L-0001 Pipeline Safety Management System; • Third party engagement i.e. working around pipeline emergency services, government,

ERA Risk Ref #	Asset Type	Potential Impact	Mitigating Factors	Management Method
				civil contractors, engineering designers; • In line integrity pigging as determined by Pipeline Risk Assessments.
2	Compressor Station Brooklyn	Noise- nuisance to community Non-compliance with EPA license limits Surface water contaminati on	Commercial and sensitive receptors nearby including local mechanics next door. Commercial operations are during day time hours only. Nearest residents are across highway	• Compressor is on a concrete area and surrounded by crushed rock hard stand; • Compressor is under cover with a shelter roof; • Stack design to facilitate EPA license compliance; • Compressor package design with acoustics control; • Annual stack test monitoring and servicing of compressors; • All chemicals are bunded on site; • Spill kit available on site and adequately replenished; • AEMO operator - Selective operation of compressors – maximum of 2 Centaur units at a time to meet EPA prescribed maximum compressor operations; • General and regulated waste collection bins provided; • Above ground oily water separator with triple interceptor pit; • Use of quick break detergents suitable for oily water separators.
3	Compressor Station Wollert	Noise- nuisance to community Leak from oily water separator to environment causing contaminate d land or ground water Noxious weed spread leading to regulatory action	Solonox packages used on site are lower NOx emission units	• Compressor is on a concrete area and surrounded by crushed rock hard stand; • Compressor is under cover with a shelter roof; • Above ground oily water separator with triple interceptor and underground overflow pit with level sensors. Serviced annually; • Chemicals onsite bunded; • Spill kit available on site and adequately replenished; • General and regulated waste collection bins provided; • Glyphosate used for weed control; • Use of quick break detergents suitable for oily water separators; • APA induction includes waste and weed management; • Residents notified when weed spraying (annual); • Annual stack test monitoring and servicing of compressors.
4	Compressor Station Gooding	Noise- nuisance to community Oily water offsite Non-compliance with EPA license	Nearest residents 600 m south of the Compressor Station	• Compressor is on a concrete area and surrounded by crushed rock hard stand; • Compressor units contained within brick building; • External pipework heavily cladded for acoustic control; • Triple interceptor pit services spoon drains • Chemicals onsite bunded; • Spill kit available on site and adequately replenished; • General and regulated waste collection bins provided; • Use of quick break detergents suitable for oily water separators; • Annual stack test monitoring and servicing of compressors.

ERA Risk Ref #	Asset Type	Potential Impact	Mitigating Factors	Management Method
5, 6	Compressor Station Euroa and Winchelsea	Noise- nuisance to community Oily water offsite Increased air emissions trigger EPA licensing		• Compressor is on a concrete area and surrounded by crushed rock hard stand; • Compressor is within sound proof enclosure; • Acoustic screening and sound deadening; • Oily water separator and 3-stage pit. Served annually; • No chemicals are stored onsite; • Spill kit available on site and adequately replenished; • Waste is taken off-site; • Use of quick break detergents suitable for oily water separators; • Annual stack test monitoring and servicing of compressors.
7	Compressor Station Springhurst	Noise- nuisance to community Leak from oily water separator to environment causing contaminate d land or ground water Increased air emissions trigger EPA licensing	Nearest sensitive receptor 2km from Compressor Station	• Compressor is on a concrete area and surrounded by crushed rock hard stand; • Compressor is within sound proof enclosure; • Oily water 2-stage pit has high level alarms (SCADA) monitored by control room. Currently out of service, oily water retained and collected for off-site disposal; • Maximum of 10 litres of chemicals are stored onsite; • Spill kit available on site and adequately replenished; • Waste is taken off-site; • Use of quick break detergents suitable for oily water separators; • Annual stack test monitoring and servicing of compressors.
30	Iona Compressor Station	Noise and vibration during operation Increased air emissions NOX SOX that require an EPA licence (current not licenced)		• Compressor is on a concrete area and surrounded by crushed rock hard stand. • Compressor is within sound proof enclosure • Minimal chemicals stored onsite • Regulated and general waste taken offsite • Spill kit on site and adequately replenished
8	Dandenong - Workshop	Contaminati on of soil and/or water from chemicals or wastes stored on site	Chemical storage volumes are low.	• All chemical storage is in a dangerous goods cabinet on a bund; • General and regulated waste collection bins provided; • Batteries are stored under cover on a bund.
10	Pressure Reduction Stations / City Gates, Mainline Valves, Scraper Stations	GHG Emissions Weeds Soil and water contaminati on Dust generation		• Constructed and maintained in line with AS2885 or standard at the time of construction; • Regular inspection as part of station checks (fences, weeds, ground conditions, leaks, site security); • Contained within secured site compound; • Weed management as required; • Waste is taken off-site;

ERA Risk Ref #	Asset Type	Potential Impact	Mitigating Factors	Management Method
		Noise emissions Odour emissions		• Liaison with Regional Managers, control room and landholders prior to any activity; • Remote SCADA monitoring at most sites.
12	Water bath Heaters at some City Gates.	Soil/water contamination from leaking of contents or draining	Corrosion inhibitor heavily diluted.	• Quarterly inspection as part of station checks; • Steel tanks on hard stand concrete area surrounded by blue rock; • Contained within secured site compound; • Tank drained prior to major inspection or works; • Alarm on water level; • Site specific Work instruction includes details on spill management and controls; • Quarterly corrosion inhibitor testing; • Waste Tracking Certificates retained if waste taken offsite.
13	Longford Metering Station Odorant Units	Soil/water contamination Community impacted by odorant spill/leak	Odorant injection piping is above-ground Located away from community - no sensitive receptor in the immediate area	• Sealed storage tanks are located inside a bunded and sealed building; • Building is fitted with a carbon filtration system to minimise odour release; • A flare is available for emergency response and used during odorant transfer to minimise the odour released. • Odorant specific spill kits onsite.

6.1.1 Chemicals and Contamination

A small amount of chemicals are stored at the compressor stations and Dandenong workshop only and used for purposes of weed management (glyphosate), minor maintenance and cleaning of gas compressors. Quick break detergents suitable for use with oily water systems are used for compressor cleaning. Chemicals stored at the compressor stations are bunded.

Water bath heaters may be up to 40,000 L in size and are dosed with an inhibitor. The tanks are made of steel and are drained and maintained every five years. Prior to any maintenance, the tanks are pre-drained into large bladder and re-used, the inhibitor is heavily diluted. The water bath heaters are stored on concrete hardstand and are not bunded.

Odorant is stored and dosed into the VTS at Longford. The system is located within a sealed bunded building which is fitted with a carbon filtration system. The tanks are stored on a bund. A flare is provided for use during odorant loading or in the event of a spill, to combust any highly odorous vapor. An odorant spill kits is onsite, which includes odorant neutralizing chemicals.

No permanent storage of fuel or other chemicals occurs along the pipeline corridor. Fuel and chemicals are used for plant and equipment during maintenance or ground inspection works, however these are stored off-site. Weed spraying occurs in the pipeline corridor, which generally consists of diluted herbicide.

6.1.2 Emissions

Three of the compressor stations (Brooklyn, Springhurst and Gooding) are licensed by the Victorian EPA. The licence allows for discharges to air from natural gas compressor stations. Other stations (Wollert, Euroa and Winchelsea) do have emissions however these are currently below the threshold required for EPA licensing. Annual stack emissions tests are conducted to assess compliance with the EPA license, and confirm that the other stations do not require licensing.

6.1.3 Waste

A low level of waste is generated through the operation and maintenance of the network including general waste and regulated waste, such as filters, oily rags, chemical containers, spill waste and clean up material. All wastes are collected, and regulated wastes disposed of by licensed contractors. Table 8 details the various waste streams and associated requirements.

Table 8 Waste streams and Requirements

Waste Type	Waste Source	Annual Volume	Storage Location / Management / Disposal	Regulated Waste	Comments
General Waste (timber, metal, plastic)	Operational personnel, onsite maintenance and operation processes	Minimal quantities	Designated general waste bins	N/A	Recycled where possible. Otherwise trucked off site.
Lubrication oil waste, including oily rags	On-site maintenance and operation of equipment	Minimal quantities	Waste is stored at the compressor stations in steel drums within bunded areas and collected by a licensed regulated waste contractor. Spills of oil or chemicals are cleaned up using suitable absorbent material. This material will is be disposed of by a suitably licensed contractor.	Liquids, oily rags and used spill absorbent are Regulated wastes	Trucked offsite in accordance with EP Act waste transport requirements.
Stormwater	Oily water separators and triple interceptor traps at the compressor stations	Minimal quantities	Stormwater from compressor station areas drains via oily water separators/ triple interceptor trap and is discharged to ground or surface drain (except at Springhurst) Oily water is collected at Springhurst compressor station and disposed of as regulated waste.	Oily Water	Oily water removed offsite in accordance with regulated waste transport requirements (Springhurst compressor station).
Paints, greases, resins, adhesives, glues, cleaning liquids	Maintenance wastes	Minimal quantities	Designated regulated waste storage drums, or taken directly off-site.	Dependent on product	Ensure maintenance contractors address waste requirements.
Liquids/sludge (Potential and confirmed) NORMS	Pigging activities	Minimal quantities	Establish sediment controls and bunds where pigging waste is collected and stored.	Liquids/sludge Potential NORMS	Testing of waste will be arranged by Environment Advisor. Trucked offsite in accordance with EP Act waste transport and disposal requirements.
Septic waste	Hygiene facilities at some compressor and metering stations.	Small quantities	Periodic desludging and pump out of tanks.	Septic waste	Trucked offsite in accordance with EP Act waste transport requirements.

6.2 Activities (RISKACTIV)

Routine maintenance of the VTS is undertaken in accordance with the maintenance plan implemented via APA's dedicated maintenance management system (Maximo). Specific pipeline operations and maintenance activities to which this OEMP applies are detailed in the ERA and include:

- Pipeline patrols, inspections and surveys;
- Pipeline excavation;
- Vegetation clearance;
- Use of plant and machinery;
- Dewatering of pits and trenches;
- Weed spraying;
- Servicing and maintenance of equipment and network facilities;
- Blasting and coating removal;
- Coating application;
- Venting and flaring; and
- Pipeline pigging.

Each of the above activities is discussed in further detail in the sections to follow. Note: the information below is not intended to include the environmental management requirements pertaining to stated activities; this is discussed in section 7.

Work activities carried out are monitored and controlled as per the requirements of the Permit to Work (PTW) System. Refer to the Gas Transmission Permit to Work Procedure for further details (320-PR-HS-0005).

6.2.1 General Equipment & Facility Maintenance

General equipment and facility maintenance typically includes, but is not limited to, the following:

- Servicing and overhauls of machinery and equipment;
- Equipment inspections and testing;
- Monitoring;
- Safety inspections and follow up;
- Filter inspections and replacement; and
- General housekeeping (i.e. as per safety requirements and this OEMP).

The above activities involve various mechanical and electrical tasks which are undertaken by appropriately industry qualified people. Regular monitoring and safety inspections are also undertaken to identify unplanned maintenance requirements as they arise.

Filter inspections are undertaken at regular intervals and filters replaced as required. Filter replacement involves filter removal, wash down with water and transfer to a secure container for transfer to offsite disposal facilities.

General housekeeping includes numerous tasks typically associated with health, safety and / or environmental management. Specific items may include general tidying / cleaning, waste management, maintenance of fire breaks, spraying of weeds and numerous other duties.

6.2.2 Cathodic Protection Surveys

Cathodic protection (CP) refers to the use of electrical current to protect steel pipework against corrosion by way of sacrificial anodes which corrodes instead of the pipeline metal. Detailed CP surveys are undertaken annually to monitor the level of pipeline protection by the system and to ensure the CP system itself remains functional. Six monthly survey of CP test points is undertaken along the pipeline to ensure they are in good working order and properly calibrated.

6.2.3 Pipeline Excavation

Pipeline excavations are undertaken periodically. This is typically for pipeline repairs and/or installation of pipeline crossings by other infrastructure owners. Pipeline excavations are strictly controlled for safety reasons via risk assessment, work permits and procedures. The scale of excavations can vary from single defect dig-ups of a few cubic meters to trenching of a kilometre or more in length to access multiple defects in close proximity.

Pipeline excavations are undertaken in accordance with the Gas Transmission Excavation Procedure (SP-APAT-101-OP-0030) and Excavation Guidelines (SP-APAT-101-OP-0034). A requirement of the procedure is that the top soil removed shall be kept separately from any backfill materials taken from the trench. The pipe must be covered all round with a minimum of 150 mm of clean bedding material/sieved natural backfill before any un-sieved natural backfill material can be used. After padding the trench the remaining backfill can be performed using previously excavated material. Once backfilling is complete the segregated top soil is re-spread over the area.

6.2.4 Venting

Venting of gas is undertaken to purge pipelines and / or facilities for maintenance or emergency response purposes. Venting for maintenance purposes varies depending on the procedure being performed; however, the volume is usually minimal. Venting is managed through Maximo in accordance with the transmission network maintenance schedule. Due to the numerous types of filters etc., it is not possible to accurately estimate annual venting discharges.

6.2.5 Flaring

The only flaring that occurs on the VTS is via the flare stack at the Longford odorant injecting facility during filling of the odorant tanks where the tank blanket gas is burnt off via the flare. The flare would also be used in response to an unplanned release of odorant at the Longford odorant injection facility.

6.2.6 Pigging

Pipeline pigging is undertaken for the purposes of either pipeline cleaning or integrity assessment (intelligent pigging). Intelligent pigging is completed in accordance with the requirements of AS2885.3 Section 6 – Pipeline Structural Integrity. Currently it is APA's policy to run in-line inspection (ILI) pigging approximately every 10 years (risk based). Pigging programs require thorough planning involving specialist Engineering, Operations and Safety personnel.

Pigs are run between pipeline scraper stations containing pig launching and receiving facilities. Gas condensate and particulate matter separated from the gas stream are common by-products of pigging (removal of which is the ultimate goal in the case of a cleaning pig run), these are caught in the pig receiver trap along with the recovered pig and contained for testing and appropriate offsite disposal. Small amounts of general purpose grease and degreaser may be used during the pigging process which is managed as per the waste requirements specified in section 6.1.2 of this OEMP.

6.2.7 Right of Way (ROW) patrols

Pipeline ROW patrols of various sections of the pipeline are conducted as aerial or vehicle patrols as detailed below. Patrols may identify issues such as:

- Third Party encroachments;
- Vegetation growth;
- Line of sight;
- Presence of weeds;
- Erosion, subsidence or stability issues;
- Exposed pipe; and
- Condition of signage and aerial markers.

Vehicle patrols are completed by pipeline technicians on a three monthly basis with corridor condition inspections conducted on a rolling risk-based program that takes approximately 18 months to complete for VTS. This work is conducted from light vehicles and managed through Maximo with work orders being generated for completion. Any issues identified are documented and where necessary additional work orders raised for corrective action to be completed.

6.2.8 Easement Maintenance

Easement maintenance activities include vegetation removal and minor earthworks.

Vegetation removal is undertaken to:

- Maintain line of site between pipeline markers and safe access as per AS 2885;
- Ensure vegetation roots do not establish around the pipeline and cause integrity issues via disruption to coating (or rupture in the event of a tree falling);
- Maintain firebreak and
- Manage weeds.

Minor earthworks are required for activities such as maintenance of access tracks and drainage controls and to stabilize areas of erosion.

6.3 Hazard and Activity Controls

Table 9 below lists the activity-based tasks that were assessed in the ERA. And controls are added to minimise impact to the environment.. Note that emergency situations (e.g. Third party pipeline rupture) and construction / alteration activities that would require DELWP approval for an amended license are not included here.

Table 9 Hazard and Activity Controls

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
14	Access + patrols (including CP, DCVG) Site Access for excavations	• Nuisance; • Dust generation; • Erosion; • Weed spread; • Biosecurity; • Fauna strike.	Majority of access is on sealed roads	• Maintenance of the ROW, speed limits, driving to conditions to minimize noise and dust impacts to community; • Driving at dawn and dusk to be discouraged to minimise likelihood of fauna strike; • Check known landholder requirements on Xinfo and ELL prior to accessing site and set exclusion zones as required for biosecurity requirements advised by landholder; • Contact landholders prior to any site access to check for any changes in access requirements or biosecurity issues; • Wash down/ blowdown of vehicle to remove soil and weed seeds if required by landholder, including completion of clean on entry form; • Limit access and works areas to easement and designated access route to minimise erosion and potential for weed spread; • EMP induction to include biosecurity awareness and equipment wash down procedures with biosecurity awareness at Toolbox; • Maintenance plan provided to Parks Victoria prior to access in Chiltern-Mt. Pilot National Park (PL101 / T119); • Earth moving equipment is to be cleaned prior to entry into the Chiltern-Mt. Pilot National Park (PL101 / T119); • Consent obtained from the Minister (DELWP) for any access tracks required to be constructed on Crown Land.

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
15 **16**	Excavations	• Land contamination; • Water contamination; • Runoff into farm dams or surface water / drains; • Waste generation; • Disturbance to watercourses – sedimentation; • Surface erosion.		• An excavation permit issued by APA is required for all excavations; • Application for external permits as required including works on waterway permit for any works that intersect waterways; • Use the Environmental Line List to identify sensitive KP points (heritage, waterways or ecology) prior to commencement of any works and complete due diligence assessment; • Plan excavation to separate soil layers and stockpile them individually to facilitate correct reinstatement. Site rehabilitation must include restoring existing soil profiles; • Acid sulphate soil (ASS) maps and potential contamination history to be checked prior to any excavation works to identify whether soil testing is required; • Soil testing in high risk areas before works to identify contaminated soils or ASS. ASS Management Plan is to be implemented where required; • Excess or waste soil is to be sampled and classified prior to off-site disposal; • Any contaminated soils / water will be disposed of as regulated waste by an EPA licenced contractor; • Only certified clean fill material is to be brought onto site; • Stockpile soil away from drainage lines to minimise erosion and sediment run-off; • Install erosion controls around stockpiles and downslope (if on sloped terrain), at nearby watercourses and drains to prevent sediment transport into waterways; • Hay bales & sediment fences to be used to control erosion and sediment transport if working in proximity to watercourses, in line with IECA BPESC; • Inspect erosion and sediment controls before and after rainfall and maintain as required to ensure functionality; • Earthworks to be completed by trained/competent APA internal dig-up crew or preferred contractors; • Landholders are to be notified prior to any excavations; • Landholders are to identify any erosion or subsidence on the property to enable APA to manage it; • Any gravel and soil brought into the Chiltern-Mt. Pilot National Park (PL101 / T119 is be approved by the Contract Officer or Park Manager prior to delivery. Any trenching, drainage or culvert works carried out are to be monitored annually in order to guard against and remedy slumping, depressions, tunnelling and other erosion problems; • Consent obtained from the Minister (DELWP) for any soil disturbance or vegetation disturbance on Crown Land.

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
17 **18**	Vegetation clearing for LOS, fire breaks etc. Excavation and vegetation clearing.	• Penalties for clearing without permit; • Harm to listed species (flora and fauna); • Disturbance to cultural heritage and European heritage.	Clearing is restricted to within the pipeline ROW Majority of the pipeline was constructed using open trenching where all watercourses / sensitive landforms were open cut and previously disturbed. Some pipelines were bored.	• Use the ELL to identify sensitive KP points prior to commencement of any works and complete due diligence assessment; • No clearing is to be carried out without Environment team approval; • Access and works areas are limited to easement and designated access routes to minimise disturbance to sensitive receptors; • An excavation permit issued by APA is required for all excavations; • An APA permit and supervision is required for any clearing; • FFG/EPBC permits are to be obtained as required (refer to ELL); • Any protected vegetation is to be flagged on site ahead of conducting clearing activities; • No clearing within 10 m of banks of waterway without a Works on Waterway Permit; • Landholders are to be notified prior to any works and approval sought; • The pipeline traverses areas of heritage sensitivity. Ground disturbance shall be restricted to within the previously disturbed area. If the disturbed area cannot be confirmed, Environment team will advise whether additional permits are required; • Implementation of stop work procedure to be followed in case of accidental (Aboriginal heritage) discovery procedure; • Response to unexpected finds is included in site inductions and toolbox talks; • Approval is to be sought in writing from the Contract Officer or Park Manager for removal of vegetation in Chiltern-Mt. Pilot National Park (PL101 / T119). They are to be present during removal of vegetation; • Consent obtained from the Minister (DELWP) for any soil disturbance or vegetation disturbance on Crown Land, including construction of access tracks.

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
19	Refuelling Use of plant/machinery	• Land contamination; • Water contamination.		• Any fuels or chemicals stored on site must be stored in an AS1940 compliant bund or double skinned tanks to prevent any spills impacting soil or water; • Regular inspections are to be carried out on spill controls/bunding; • Chemical and waste storage and refuelling areas shall be designated away from watercourses to minimise the risk of contamination during handling and use; • Refuelling is to be carried out on hardstand or over a drip tray to capture spills and minor leaks; • Spilt material will be collected into regulated waste bins and taken offsite by licenced third party to an approved facility. Regulated waste disposal records will be provided; • Designated covered bins will be provided for general waste to minimise litter generation; • Spill kits will be made available in chemical storage, refuelling and regulated waste storage areas; • Waste and chemical management requirements are included in site induction and Toolbox awareness; • Pre- start checks of plant, equipment and vehicles will be conducted to check for oil leaks; • Refuelling sites in the Chiltern-Mt. Pilot National Park (PL101 / T119) must be approved by Parks Management.
20	Dewatering of pits and trenches	• Unauthorised release to watercourse or land.		• Review of site contamination risk by environment team. Where low risk and advised by Environment team, pump water to grassed land with filter sock at low velocity with landholder consent (no sensitive receptors, no history of contamination). Where higher/unknown risk, consider testing prior to release. • Any confirmed or suspected contaminated (visual, odour) water is to be taken offsite by an EPA-licenced third party to an approved facility. Appropriate waste classification is to be carried out and a waste tracking receipt is to be provided; • If water quality is in doubt, licensed vacuum trucks will be used for collection of water and disposal as regulated waste. • Release to land requirements are included in induction; • Landholder approval is required prior to any release to land; • Pump outs to land are to be monitored and pumping stopped if any change in quality observed;; • Any water from excavations that is released to land near a drain or watercourse is not to exceed 30 NTU turbidity unless a higher turbidity can be demonstrated to not cause harm.

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
21	Excavation for repairs, maintenance work or third party work	• Lack of revegetation; • Erosion / subsidence; • Landholder complaints.		• Plan excavation to separate soil layers and stockpile them individually to facilitate correct reinstatement. Site rehabilitation must include restoring existing soil profiles; • Compact soil, scarify and re-profile land to original contours to minimise future risk of erosion / subsidence; • All works will be restricted to the easement only. Work areas to be flagged off to minimise disturbance to sensitive features; • Landholder requirements are to be determined prior to commencing works. Landholder is to sign off on any easement works; • Earthworks to be completed by trained/competent APA internal dig-up crew or preferred contractors; • Topsoil stripping awareness to be included in Toolbox; • Any gravel and soil to be brought into the Chiltern-Mt. Pilot National Park (PL101 / T119 is be approved by the Contract Officer or Park Manager prior to delivery. Any trenching, drainage or culvert works carried out are to be monitored annually in order to guard against and remedy slumping, depressions, tunnelling and other erosion problems; • Consent obtained from the Minister (DELWP) for any soil disturbance or vegetation disturbance on Crown Land.
22	Clearing and excavation	• Loss of or injury to fauna / livestock		• Only designated access routes are to be used, to minimise potential impacts to fauna/livestock; • Driving at dawn and dusk to be discouraged to minimise likelihood of fauna strike; • Vehicle speed is to be reduced on landholder properties; • Excavation pits to have ramps, fencing, and to be secured if left open overnight to minimise risk of entrapment; • Daily inspections of open excavations to identify and remove trapped fauna; • A licenced contractor is to be contracted to relocate fauna if required.
23	Weed Spraying	• Land contamination; • Water contamination; • Crop or native vegetation impacts. • Community nuisance.		• Landholder approval is required prior to conducting works including identifying landholder specific requirements; • No spraying is to be undertaken within proximity to watercourse (~10m), to reduce likelihood of run-off to waterway; • Used empty containers and excess herbicide are to be disposed of as regulated waste; • Refer to SDS of products and follow instructions for use to minimise environmental impacts; • Trained and competent contractors are used for weed/pest management.

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
24	Servicing and Maintenance	• Land contamination; • Water contamination; • Litter.	Compressors/Mainline Valves etc. are on hard stand Low level of waste generated	• Any chemical/fuel spill waste to be captured and disposed off-site as regulated waste using EPA licensed waste contractor; • Oily rags and filters are segregated, labelled and securely stored and disposed as regulated waste; • Appropriate waste classification & disposal to be used, including a regulated waste contractor and waste tracking receipt; • Spill kits are maintained onsite at all times and training provided for use of spill kit; • Toolbox includes specific awareness on chemical management /refuelling and differences between waste types to facilitate correct segregation, storage and disposal; • Pre- start checks of plant, equipment and vehicles will be conducted to check for oil leaks.
25, 26	Blasting and coating removal Application of coating materials	• Land contamination; • Water contamination.	Inert garnet used as blasting material.	• Pre-assessment conducted for potential presence of asbestos prior to coating removal and asbestos monitoring used (if required); • Use of tarps to capture blast material and prevent escape to soil or waterway; • Use of tarps to capture overspray during coating and avoid spraying in windy or wet conditions; • Appropriate waste classification & disposal to be used, including a regulated waste contractor and waste tracking receipt (if required).
27	Flaring and Venting	Noise, odour, light nuisance to community, triggers complaints.		• Community liaison and notification of surrounding landholders to be undertaken prior to known flaring or venting events, to minimise complaints. Timing to be taken into consideration i.e. night time to be avoided; • Vent stack and flare is designed to provide controlled burning of blanket gas from odorant storage tanks, to minimise potential for odour impacts; • Operations staff present during flaring or venting to monitor and respond to odour or noise issues; • Exclusion zones established as per the odorant management task risk assessment (JHA/SWMS).

ERA Risk Ref #	Activity Type	Potential Impact	Mitigating Factors	Management Methods
28	Pigging	• Land contamination; • Water contamination.	Pigging of the pipeline occurs every 10 years. Many of the VTS pipelines have built in pig traps on hard stand areas	• A pigging risk assessment, work instruction, and pigging plan is to be completed/reviewed prior to each event, in consultation with Environment Advisor; • Specific awareness will be provided on NORMS and handling and storage of potential NORMS waste in accordance with APA guideline; • Suitable waste capture receptacles will be located at the receiver end, i.e. slug catcher; • Sediment controls and bunds shall be established where pigging waste is collected and stored to minimise potential for loss leading to land or water contamination. Waste is not stored near waterways; • Ensure pigging waste and equipment wash-down water is contained and consult with Environmental Advisor prior to disposal, for assistance with testing requirements. • Appropriate waste testing, classification & disposal to be used, including a regulated waste contractor and waste tracking receipt; • The pigging event is manned for the duration of the process, to ensure all wastes are contained; • Spill kits are provided for use in the event of a loss of containment.
29	General Environmental Compliance	• Breach of environmental legislation; • Environmental harm; • Director liability or penalties; • Reputational harm.	OEMP and environmental management system	• Implement OEMP and ERA controls; • All staff and contractors inducted to APA HSE system; • VTS OEMP specific awareness training provided to all relevant personnel; • Internal audit program used to monitor implementation of OEMP and ERA controls and identify areas for improvement.

7 Competency and Assurance

7.1 Competency Controls

APA has a dedicated procedure in place (APA HSE GP 04.01 HSE Education and Training) to identify the training requirements for all personnel working on its behalf. All Managers are responsible for identifying training and competency requirements for personnel under their control, and for ensuring that personnel have the requisite competencies, skills and training to carry out their assigned tasks. Managers are also responsible for ensuring training records are maintained. Training may include formal external courses, inductions and toolbox meetings.

7.1.1 Induction

7.1.1.1 National Induction

As a minimum, all personnel are required to complete the APA National HSE Level 1 and 2 Inductions covering the standard requirements for HSE management prior to accessing APA sites. This includes generic environmental aspects and management.

7.1.1.2 Local Induction

A site-specific induction will be developed for the VTS highlighting key environmental management measures to address specific environmental risks. All operators and contractors working on the VTS will be required to complete this induction prior to undertaking the works.

Should any small scale construction works be undertaken, site specific induction may be developed commensurate with the size of works.

7.1.2 Training

The training requirements detailed in Table 10 are to be implemented.

Table 10 Training Requirements

ERA Risk Ref #	Who is Trained	Management Method / Control	Integration System / Method	Frequency
All	All staff and contractors conducting work	EMP Induction includes risk and control associated with: • Heritage (chance finds) and excavation requirements; • Locations and type of sensitive flora in the area (refer to ELL); • Awareness and identification of ASS; • Hours of operation; • Compliance with landholder agreements/awareness regarding leaving gates as found, biosecurity awareness and equipment wash down procedures; • Dust minimizing practices; • Waste management; • Chemical management and refueling; • Weed and pest management; • Waste management; • Sediment and erosion control measures; and • Incident Response.	Learning Management System	Prior to completing works and every 2 years
All	All staff and contractors conducting work	Complete the APA National HSE Induction covering the standard requirements for HSE management prior to accessing APA sites.	Learning Management System	Prior to completing works and every 2 years
13	All staff and contractors conducting work at metering station	Odorant management training required for operators working at Longford Metering Station.	Learning Management System	One-off
16 21	All staff and contractors responsible for operating plant	All staff to be deemed competent to operate plant.	Contractor records, Learning Management System	Prior to completing works and every 2 years
22	Fauna handlers	All fauna handlers to be licensed and trained to handle or relocate fauna.	Contractor records, Learning Management System	As per legislation
23	All staff and contractors conducting work	Trained and competent contractors used for weed/pest management.	Contractor records, Learning Management System	Prior to completing works and every 2 years

ERA Risk Ref #	Who is Trained	Management Method / Control	Integration System / Method	Frequency
24	All staff and contractors conducting work	All staff completed spill response training.	Learning Management System	One-off

7.1.3 Awareness

Table 11 below details the awareness activities are to be implemented.

Table 11 Awareness Requirements

ERA Risk Ref #	Who is Trained	Management Method / Control	Integration System / Method
14, 19, 24, 28	All staff and contractors conducting work	Environmental toolbox presentations available for region covering topics such as; - Biosecurity - Chemical management and refueling - Waste .i.e regulated vs general - NORMS	Toolbox

7.2 Assurance Controls

7.2.1 Inspections and Monitoring

Inspections and monitoring are used to ensure the controls outlined in this OEMP are in place and working effectively and are detailed in Table 12 below.

Table 12 Inspection Requirements

ERA Risk Ref #	Inspection Type	Integration System / Method	Responsibility
1	Patrols by Operations (daily, weekly and quarterly) to ensure no building or other obstructions over the pipeline, check vegetation regrowth.	Patrol inspection Maximo	Regional Managers
1	Monthly aerial patrol.	Patrol inspection Maximo	Regional Managers
1	12-18 months inspection program. Traversed on foot. High detail inspection.	Patrol inspection Maximo	Regional Managers
1	In line integrity pigging as determined by Pipeline Risk Assessments.	Maximo	Regional Managers
1 10	Remote SCADA monitoring of pipeline, and pressure reduction station.	Operations Personnel – Control Room	Regional Managers
1	CP checked as per APA procedure (24/7 data loggers and 12 month detail survey)	Maximo	Regional Managers

ERA Risk Ref #	Inspection Type	Integration System / Method	Responsibility
2 3 4 5 6 7	Annual servicing of compressors.	Maximo	Regional Managers
2 4 7	Annual emissions testing in line with license requirements EPA Licence 73892.	Stack test reports stored on HUB EPA – APS submitted each year Maximo	Regional Managers Senior Technical officer Technical Compliance Manager
3 5 6	Annual emissions testing in line with requirements for unlicensed compressor stations.	Stack test reports stored on HUB Maximo	Regional Managers Senior Technical officer Technical Compliance Manager
4	Regular triple interceptor checks at Gooding compressor station. Clean out of pit when required.	Maximo	Regional Managers
3 5 6 7	Annual service of oily water system at Wollert, Euroa, Winchelsea, Springhurst compressor stations.	Maximo	Regional Managers
2, 3, 4, 5 6 7, 8, 10, 13	Monthly compressor and metering station inspections, which include: - Fences; - Vegetation and Weeds; - Ground conditions; - Leaks; - Oily water systems; - Site security; and - Odorant system.	Patrol inspection SCADA monitoring at applicable sites Maximo	Regional Managers
10	Quarterly overall station check at line valves and CTM sites.	Patrol inspection Maximo	Regional Managers
12	Quarterly corrosion inhibitor testing.	Maximo	Regional Managers

7.2.2 Audit

All environmental auditing on the VTS will be undertaken in line with the APA Safeguard Audit and Self Assessment Procedure APA HSE GP 15.01, this EMP will be audited at a minimum once every 3 years. Suitably qualified and experienced environmental professionals undertake the EMP audits. The Audit will be undertaken using the APA Environment Audit tool and focus on the risks identified in this OEMP.

Following an environmental audit, the audit report is circulated to relevant personnel detailing the audit findings, including any non-conformances, corrective actions or opportunities for improvement. A

timeframe for addressing audit actions will be agreed to by management, and audit actions are to be reviewed by the Environment Advisor to ensure they have been adequately addressed and closed out.

Following an environmental audit, the OEMP may be reviewed, updated and re-issued to reflect any findings, including regulatory and organizational changes. Dependent on the type of non-conformances, additional environmental training may be scheduled. Non-conformances may also be entered into Safeguard+. Additional auditing may be undertaken commensurate with the level of works being undertaken on the pipeline.

The requirements for audits are detailed in Table 13 below.

Table 13 Audit requirements

ERA Risk Ref #	Management Method	Integration System	Responsible
29	Internal auditing in line with APA environmental audit schedule	SG+ Action	Environment Manager

7.2.3 Non-conformance and Corrective Actions

Non-conformances managed by this OEMP include the following:

- An incident or near miss with potential or actual environmental impact;
- Controls detailed in this OEMP not being implemented;
- Not meeting environmental objective or target of this OEMP; and
- Scheduled inspection or audit not being undertaken.

The Regional Managers are responsible for identifying, reporting and implementing any preventative and/or corrective actions in response to any non-conformance. Non-conformances and corrective actions will be reported in Safeguard+.

7.3 Review

This OEMP will be updated on a 5 yearly basis, in line with APA HSE EP 13.01.03 Management Plan Process & Design.

Specific instances which may call for review include the following:

- after significant changes in the asset or operations;
- following significant changes in legislation ;
- any reported non-conformance / incident involving the OEMP process and design requiring an investigation; and
- as prescribed in APA HSE GP 03.02 HSE Document Control.

7.4 Record Keeping

Records shall be retained and disposed of in accordance with APA's Information and Records Management Policy and regulatory requirements.

Notes:

1. This document is the property of the APA Group and the information contained within is protected by copyright.
2. Unauthorised changes to this document are prohibited.
3. This document has been prepared to support APA staff in achieving its mission by delivering standardised and safe methods of work. It is recognised that improvements may be made and feedback on this document is encouraged. Please send any improvement ideas or queries to the Head of Health Safety & Environment.

8 Reporting

8.1 Data Capture and Storage Systems and Sources

Table 14 below details the data capture requirements for this OEMP.

Table 14 Data Capture Requirements

Data Type	System Name and Access Info	Data Owner
Worker Induction	LMS	APA Learning Solutions
Toolbox attendance	LMS	Regional Managers
Complaints response records	Safeguard+	Infrastructure Protection and Planning Team
Patrol records and site inspection reports	Maximo	Regional Managers
Landholder communication record	Xinfo	Infrastructure Protection and Planning Team
Landholder approval record	Xinfo	Infrastructure Protection and Planning Team
Incident reporting	Safeguard+	Regional Managers, HSE and Environment Advisors (as required)
Weed free certificates and records	SharePoint	Regional Managers
Spoil, soil and water test results	Sharepoint Environment Directory	Environment Advisor
Excavation permits	Maximo	Regional Managers
Stack test reports	Maximo	Regional Managers
Certificates of NORMs removal	SharePoint Environment Directory (sampling results) and Waste tracking hard/and or soft copy filed at depot	Environment Advisor Regional Managers

8.2 Internal Reporting

8.2.1 Environmental Incident Reporting

Environmental Incident Reporting occurs in line with APA HSE GP 07.01 Incident Reporting. All incidents which cause or hazards which have the potential to cause environmental harm are to be reported, regardless of size of impacts. Environmental internal incident reporting requirements are detailed in Table 15 below.

Table 15 Environmental Internal Incident Reporting

Type	Definition	Requirement
Environmental Incident	An incident is an unplanned event that causes harm to people or the environment. As a result of an incident people could be injured or made ill, while the environment could be damaged. An environmental incident at APA Group is when environmental harm has occurred. Environmental harm can occur because of a breach of one, or a combination of, three environmental management parameters: 1) Environmental law and/or regulation (including license/approval conditions); 2) Environmental harm to a technical environmental area (e.g. physical biological harm, loss of public amenity); and/or 3) Failure of an environmental risk management method.	Reported via Safeguard+ or Incident Report E form or form APAHSEGP07.01T4 Incident Report Form Report and investigate in accordance with : APA HSE GP 07.01 Incident Reporting APA HSE GP 07.02 Incident Investigation and Analysis
Near Miss	A near miss is an unplanned event that doesn't actually cause harm to people or the environment, but had circumstances been different the event could have resulted in harm.	Per Environmental Incident Refer above
Complaint	Complaints are communications from the public, landholders or stakeholders that raise concerns with APA's operations or behaviour of staff. Complaints are received by a number of avenues, including stakeholder engagement meetings, direct call to APA and conversations with APA staff in the field.	Where complaints are of an environmentally related matter, the Environment Advisor will coordinate the investigation and approach with the relevant APA communications group. Where an incident or near miss has occurred, this is handled in accordance with the above. Where external reporting is required, the process in Section 8.3 is followed.

8.3 External Reporting

APA assigns roles and responsibilities to appropriate staff within the business. This assist with ensuring external periodic reporting is completed within the regulatory timelines.

8.3.1 Periodic Reporting

Environmental external periodic reporting requirements are detailed in Table 16 below.

Table 16 Periodic Reporting Requirements

Type	Definition	Requirement	Timing
Annual Pipeline License Reporting	Provide a report to the Minister and DELWP within 90 days of the end of each financial year outlining the performance of the licensee in protecting the environment from the pipeline operations.	Report environmental performance to Minister annually.	Report submitted by September 30
NGERS Reporting	National Greenhouse and Energy Reporting. APA is required to report on its greenhouse gas (GHG) emissions and energy usage annually to NGERs from all activities.	Include GHG emissions and energy use from pipeline operation in APA annual NGER report to CER.	Report submitted by October 31
NPI Reporting	National Pollutant Inventory emissions reporting may be required for the pipeline operation.	If NPI thresholds are triggered, submit an NPI report.	Report by 30 September each year
EPA Licence	Submit an annual performance statement to EPA for the previous financial year in accordance with the Annual Performance Statement Guidelines (EPA Publication 1320.3, released June 2011).	Report annual emissions performance to EPA annually. Retain supporting data for five years.	Report submitted by September 30

8.3.2 Incident Reporting

External reportable incidents can include (but are not limited to) the following:

- Any spill to a watercourse, including drains as defined under the Water Act 1989;
- Loss of hydrocarbons or chemicals greater than 20L in volume to land;
- Spills or releases, including soil movement, which has moved offsite and has a negative impact;
- Death or injury of livestock, wildlife or fauna of any kind caused by the construction activities (excluding off-site incidents);
- Interference with any previously undetected sites of cultural significance without obtaining the appropriate approval;
- Transfer of known noxious weeds as a result of pipeline construction activities;
- Fires;
- Loss of any radioactive equipment, source or material;
- Damage to property outside the Site;
- Unresolved landowner issues whereby agreement on the solution plan cannot be reached; and
- Any other environmental hazard, meaning a state of danger to human beings or the environment whether imminent or otherwise resulting from the location, storage or handling of any substance having toxic, corrosive, flammable, explosive, infectious or otherwise dangerous characteristics.

Notification will be made to either the Pipeline Regulation Unit via email (pipeline.regulation@delwp.vic.gov.au) or incident reporting phone number (0439 799 598).

Environmental external incident reporting requirements are detailed in Table 17 below.

Table 17 Incident Reporting requirements

Type	Definition	Requirement
Reportable Incident	A licensee must notify the Minister and DELWP of a reportable environmental incident or a reportable safety incident in accordance with sub regulation (2) (no later than 2 hours after the incident occurs or after the licensee becomes aware of the incident). A report is to be submitted to the Minister within 7 days of the incident occurring, detailing information on the incident.	Notify Minister of reportable environmental incidents. Provide report to Minister detailing the incident.
Reportable Incident (Compressor Stations)	You must immediately notify EPA of non-compliance with any condition of this licence by calling 1300 EPA VIC (1300 372 842), sending an email to contact@epa.vic.gov.au, or using the EPA Interaction Portal.	Notify EPA of any non-compliance with Licence
Reportable Incident (Chiltern-Mt. Pilot National Park (PL101 / T119))	Should an accidental spillage of a polluting substance occur, the Park Manager and Contract Officer is to be notified including efforts/strategies for cleaning and disposing.	Notify Park Manager of any spillages.

Appendix 1 – Health, Safety and Environmental (HS&E) Policy

HSE Policy Click HERE

Appendix 2 – Environmental Risk Assessment (ERA)

VTS – ERA Transmission 27052019

Appendix 3 – Pipeline License Reference Table

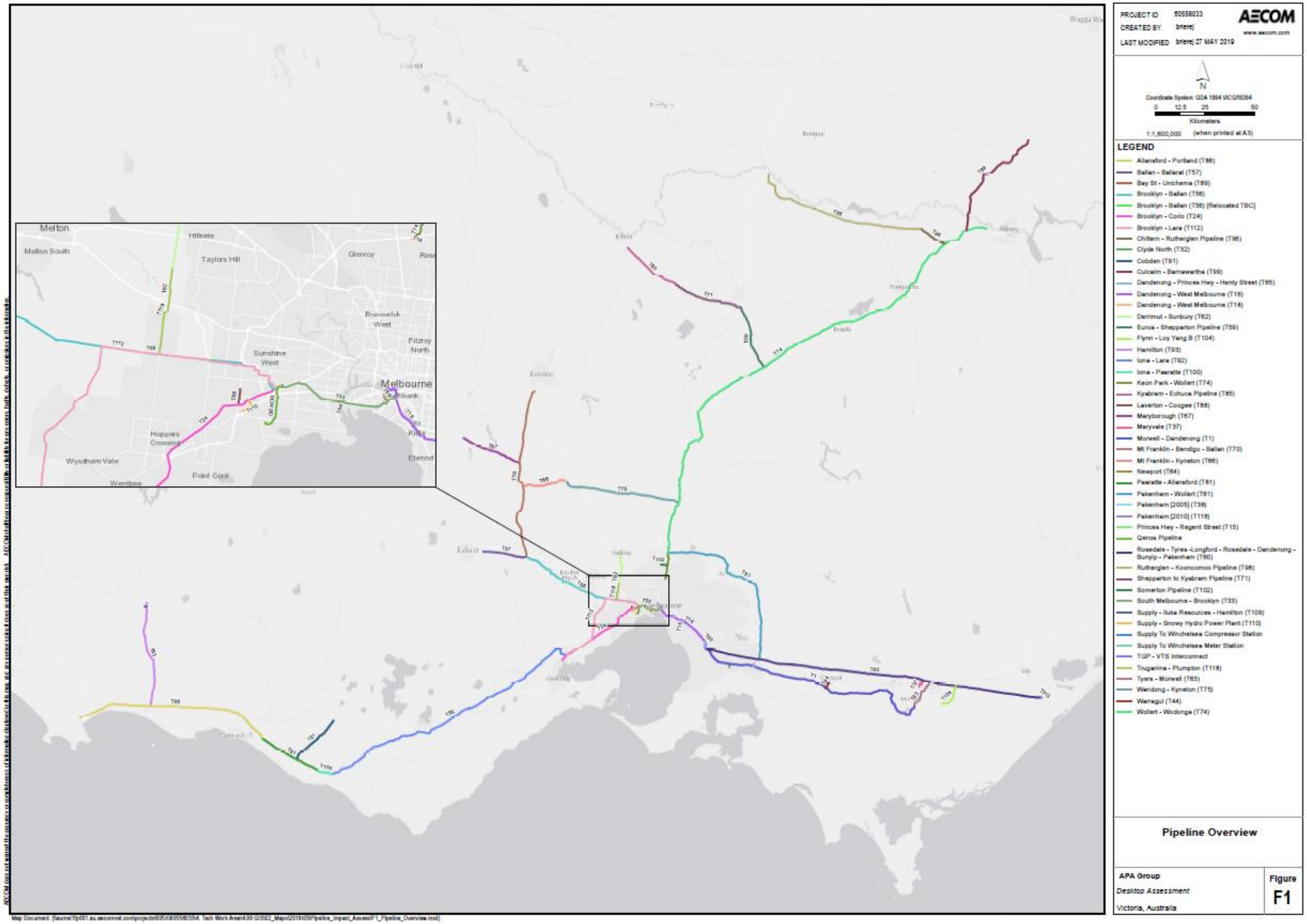
Pipeline Name	VTS Licence	T Number	MAOP [kPa]	Length [km]	Diameter [mm]	Coating Type	Wall Thickness min, max[mm]	Grade[API 5L]	Design Temp. max[°C]
Dandenong to West Melbourne	36	T16	2760	36.2	750	C.T.E.	9.52, 9.52	X42	60
Princes Hwy to Regent St	36	T15	2760	0.8	200	C.T.E.	6.35, 6.35	A	60
Morwell to Dandenong	50	T1	2760	127	450	Bitumen	7.94, 7.94	SAA A.33 Class D	60
Supply to Jeeralang	50	T1	2760	0.4	300	P.E.	6.35, 6.35	B	60
Maryvale	67	T37	6890	5.4	150	C.T.E.	6.35, 6.35	B	60
Pakenham (Koo Wee Rup Rd)	68	T38	2760	0.7	80	C.T.E	5.49, 5.49	B	60
			2760	0.5	150	P.E.	7.11, 7.11	X42	60
Pakenham (Longford to Dandenong)	68	T116	2760	0.5	150	D.L. FBE	8.18, 8.18	X42	60
Longford to Dandenong	75	T60	6890	174.2	750	C.T.E.	10.31, 12.7	X60	60
Brooklyn to Ballan	78	T56	7390	66.6	200	C.T.E.	6.35, 7.04	B	60
Ballan to Ballarat	78	T57	7390	22.7	150	C.T.E.	4.78, 6.35	B	60
Ballan to Bendigo	78	T70	7390	90.8	150	C.T.E.	4.78, 6.35	B	60
Brooklyn to Corio	81	T24	7390	50.7	350	C.T.E.	5.56, 6.35	X60	60
Supply to Anderson St., Warragul	91	T44	2760	4.8	100	C.T.E.	6.02, 6.02	B	60
Keon Park to Wodonga and Shepparton (Keon Park – Wollert)	101	T74	2760	14.1	600	P.E.	7.92, 7.92	X42	60
Keon Park to Wodonga and Shepparton (Wollert – Wodonga)	101	T74	8800	124.2	300	P.E.	6.35, 7.55	X46	60
Keon Park to Wodonga and Shepparton (Euroa PRS – Wodonga)	101	T74	7400	145.2	300	P.E.	6.35, 7.55	X46	60
Keon Park to Wodonga and Shepparton (Euroa – Shepparton)	101	T59	7400	34.5	200	P.E.	5.59, 5.59	X42	60

Pipeline Name	VTS Licence	T Number	MAOP [kPa]	Length [km]	Diameter [mm]	Coating Type	Wall Thickness min, max[mm]	Grade[API 5L]	Design Temp. max[°C]
Keon Park to Wodonga and Shepparton–VNIE Loop	101	T119	15300	258	400	Dual layer F.B.E.	8.00, 12.70	X70	60
Clyde North	107	T32	2760	2	100	P.E.	6.02, 6.02	B	60
South Melbourne to Brooklyn	108	T33	2760	12.8	750	C.T.E.	9.52, 9.52	X42	60
Brooklyn to Altona	112	T112	2760	4.62	250	P.E.	6.35, 6.35	B	60
Rosedale to Tyers	117	T60	7070	34.3	750	C.T.E.	10.9, 13.1	X60	60
Longford to Rosedale	120	T60	7070	30.5	750	C.T.E.	10.9, 13.1	X60	60
Longford to Rosedale (TasHub)	120	T121	6890	0.7	300	Canusa HBE 95	9.50	X52	60
Tyers to Morwell	121	T63	7070	15.7	500	C.T.E.	8.72, 10.59	X60	60
Derrimut to Sunbury	122	T62	7390	24	150	P.E.	6.35, 6.35	B	60
Truganina to Plumpton	122	T118	10200	8.4	500	D.L FBE	7.9, 11.40	X70	60
Newport (supply to Newport Power Station)	124	T64	2760	1	450	C.T.E	7.92, 7.92	B, A	60
Maryborough (Guildford to Maryborough)	125	T67	7390	31.4	150	P.E.	6.35, 6.35	B	60
Mt Franklin to Kyneton	128	T66	7390	24.5	300	P.E.	6.35, 7.55	X46	60
Dandenong to Princes Hwy	129	T65	2760	5	750	C.T.E.	9.52, 9.52	X42	60
Princes Hwy. to Henty St.	129	T65	2760	0.2	500	P.E.	7.92, 7.92	B	60
Mt Franklin to Bendigo	131	T70	7390	50.8	300	P.E.	6.35, 7.55	X46	60
Tatura	132	T71	7390	16.2	200	P.E.	6.35, 6.35	B	60
Ballan to Ballarat	134	T57	7390	22.8	300	P.E.	6.4, 7.6	X46	60
Bunyip to Pakenham	135	T60	7070	18.7	750	C.T.E.	10.9, 13.1	X60	60
Tatura to Kyabram	136	T71	7390	21.3	200	P.E.	6.35, 7.07	B	60
Pakenham to Wollert	141	T61	6890	93.1	750	C.T.E.	10.6, 12.7	X60	60
Wandong to Kyneton	143	T75	7390	59.5	300	P.E.	6.35, 7.6	X46	60

Pipeline Name	VTS Licence	T Number	MAOP [kPa]	Length [km]	Diameter [mm]	Coating Type	Wall Thickness min, max[mm]	Grade[API 5L]	Design Temp. max[°C]
Paaratte to Allansford	145	T81	9890	33.3	150	P.E.	6.35, 6.35	B	60
Kyabram to Echuca	152	T85	7390	30.7	150	P.E.	4.8, 6.35	B	60
Allansford to Portland	155	T86	9890	100.4	150	P.E.	4.8, 6.35	X42	60
Laverton to Coogee	162	T88	2760	1.6	150	P.E.	6.4, 6.4	X42	60
Bay St to Unichema	164	T89	2760	0.4	150	P.E.	6.4, 6.4	X42	60
Cobden (Curdievale to Cobden)	168	T91	9890	27.7	150	P.E.	4.8, 6.4	X42	60
Hamilton (Codrington to Hamilton)	171	T93	9890	54.6	150	P.E.	4.8, 6.4	X42	60
Chiltern Valley to Rutherglen	176	T96	7400	14.7	200	P.E.	4, 4.8	X60	60
Barnawartha to Murray River	178	T99	10200	5.5	450	P.E.	6.8, 9.7	X70	60
Murray River to Culcairn	NSW:24	T99	10200	57.0	450	P.E.	6.8, 9.7	X70	60
Rutherglen to Koonoomoo	182	T98	7400	88.8	200	P.E.	4.32, 5.20 4.32, 8.20	X52 X42	60
Dandenong to West Melbourne (Keon Park East – Keon Park West)	202	T18	2760	0.6	450	C.T.E.	7.92, 7.92	A	60
			2760	0.6	450	C.T.E	7.92, 7.92	X42	60
Iona Paaratte	227	T100	2760	7.8	150	P.E.	7.1, 7.1	X52	60
Iona to Lara	231	T92	10200	143.9	500	FBE	9, 12.7 9, 12.7	X60 X70	45
Somerton Pipeline	238	T102	9890	3.4	250	P.E.	6.4, 6.4	X42	60
Supply to Iluka Resources, Hamilton	252	T109	9890	1.1	100	P.E.	6, 8.6	B	45
Supply to Snowy Hydro Power Plant, Laverton North	253	T110	10200	1.6	350	Tri-laminate	9.5, 9.5	X56	45
Brooklyn to Lara	266	T112	10200	58	500	D.L. FBE	7.9, 12.7	X70	60

Appendix 4 – Environmental Line List / Mapping / ENV Features

VTS – Environmental Line List


PROJECT ID 60558033
CREATED BY briere
LAST MODIFIED briere 27 MAY 2019
AECOM
www.aecom.com
N
Coordinate System: GDA 1994 VICGRID94
0 12.5 25 50
Kilometers
1:1,600,000 (when printed at A3)
LEGEND
Allansford - Portland (T88)
Ballan - Ballarat (T57)
Bay St - Unichema (T89)
Brooklyn - Ballan (T58)
Brooklyn - Ballan (T58) [Relocated TBC]
Brooklyn - Corio (T24)
Brooklyn - Lara (T112)
Chiltern - Rutherglen Pipeline (T96)
Clyde North (T32)
Cobden (T91)
Culcairn - Barnawartha (T99)
Dandenong - Princes Hwy - Henty Street (T65)
Dandenong - West Melbourne (T16)
Dandenong - West Melbourne (T18)
Derrimut - Sunbury (T62)
Euroa - Shepparton Pipeline (T59)
Flynn - Loy Yang B (T104)
Hamilton (T93)
Iona - Lara (T92)
Iona - Paaratte (T100)
Keon Park - Wollert (T74)
Kyabram - Echuca Pipeline (T85)
Laverton - Coogee (T88)
Maryborough (T67)
Maryvale (T37)
Morwell - Dandenong (T1)
Mt Franklin - Bendigo - Ballan (T70)
Mt Franklin - Kyneton (T66)
Newport (T64)
Paaratte - Allansford (T81)
Pakenham - Wollert (T61)
Pakenham [2005] (T38)
Pakenham [2010] (T116)
Princes Hwy - Regent Street (T15)
Qenos Pipeline
Rosedale - Tyers -Longford - Rosedale - Dandenong - Bunyip - Pakenham (T60)
Rutherglen - Koonoomoo Pipeline (T98)
Shepparton to Kyabram Pipeline (T71)
Somerton Pipeline (T102)
South Melbourne - Brooklyn (T33)
Supply - Iluka Resources - Hamilton (T109)
Supply - Snowy Hydro Power Plant (T110)
Supply To Winchelsea Compressor Station
Supply To Winchelsea Meter Station
TGP - VTS Interconnect
Truganina - Plumpton (T118)
Tyers - Morwell (T63)
Wandong - Kyneton (T75)
Warragul (T44)
Wollert - Wodonga (T74)
Melton
Melton South
Taylors Hill
Glenroy
Sunshine West
Melbourne
Hoppers Crossing
Wyndham Vale
Werribee
Point Cook
Fitzroy North
Elwood
Albury
Pipeline Overview
APA Group
Desktop Assessment
Victoria, Australia
Figure
F1

Appendix 5 – Key / High Risks Environmental Requirements Summary

Surrounding Environment:

- The VTS pipeline routes and surrounding area (within a 50-100 m buffer) includes a number of environmental and heritage sensitivities;
- The VTS intersects numerous Commonwealth and State areas of ecological significance including listed communities and species under the EPBC Act and Flora and Fauna Guarantee Act. Areas of significance include rural settings as well as urban locations;
- PL101 crosses through Chiltern to Mt Pilot National Park. There is an agreement with Parks Victoria governing operation and maintenance of the pipeline within the park boundaries;
- The pipeline passes through areas of Crown land. There is an agreement governing access and works on the pipeline in Crown land;
- Refer to Environmental Line List for features lists.

Duty to notify reportable environmental incident - A licensee must notify the Minister and Energy Safe Victoria of a reportable environmental incident or a reportable safety incident in accordance with sub regulation (2) (no later than 2 hours after the incident occurs or after the licensee becomes aware of the incident).

Duty to notify of non-compliance with EPA Licence 73892 (compressors stations) – You must immediately notify EPA of non-compliance with any condition of the licence by calling 1300 EPA VIC (1300 372 842), sending an email to contact@epa.vic.gov.au, or using the EPA Interaction Portal.

Cultural Heritage:

In the event of an accidental find (e.g. Discovery of artefacts, bones, burial site etc.) any activity that may disturb the find is to stop and the Environment Manager notified.

A number of registered Aboriginal heritage sites have been identified in the vicinity of the pipeline as well as areas of Aboriginal cultural heritage sensitivity. No site access or site works are to occur without first consulting with an Environment Advisor.

Wildlife Interactions:

- Use nominated, licenced contractor for all animal relocations;
- Check open excavations daily for trapped fauna;

Vegetation:

- Refer to Environmental Line List prior to vegetation removal;
- Use specialist contractor for all vegetation management;
- No removal of vegetation beyond existing cleared areas;
- Field assessment and permits may be required prior to clearing or access outside corridor, or where regrowth in the corridor has occurred;
- If vegetation clearance around a waterway is required a detailed site assessment for threatened flora and fauna habitat may be required.

Regulated Waste:

- To be stored in a dedicated bin and includes: filters, oily rags, spill waste, wastewater, pigging waste, etc.;
- Licensed contractor and Waste Tracking Certificates required;
- Blasting and coating wastes to be captured using tarps.

Housekeeping/Biosecurity

- Permits may be required for maintenance works on or near waterways;
- Sign into private landholders properties upon access and clean, wash down or brush vehicles and plant prior to entry onto property and exit;
- Pest/weed control to be undertaken by licensed contractor;
- Weed hygiene declaration required for plant and fill coming onto site;
- No placement of soil near watercourse or drainage line.

Access

- Access to corridor via designated access routes to prevent damage and noxious weed spread;
- Refer to X-info for agreed access routes;
- Vehicles and equipment must be washed down and Certified clean upon first arrival as per property requirements in X-info.

Wastewater

- Dewatering to land requires review by Environment Advisor;
- Any suspected contaminated water (visual sheen, odor) or historic contaminated site excess water to be taken off site by licensed waste contractor.

General

- Notify applicable stakeholders prior to any works commencing. Refer to ELL for stakeholder details;
- Ensure storage facilities for hazardous substances are bunded and in good condition;
- Know location of SDS and spill kits;
- No storage of fuels or chemicals near waterways;
- Manage re-instatement of excavated soil to original layers;
- Contractor Awareness – APA HSE induction (including this key requirements) to be completed and recorded.

Resources/Further Info

- VTS OEMP;
- Environment Advisor.

Appendix 6 – VTS Obligations Register

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
1	*Pipelines Act 2005/Pipeline Regulation 2017*	VTS Pipeline licenses	Regulation 11b	Provide a report to the Minister and Energy Safe Victoria within 90 days of the end of each financial year outlining the performance of the licensee in protecting the environment from the pipeline operations.	Pipelines Regulations 2017 - Reg 11	8.3.1
2	*Pipelines Act 2005/Pipeline Regulation 2017*	VTS Pipeline licenses	Regulation 20 (1-6)	A licensee must notify the Minister and Energy Safe Victoria of a reportable environmental incident or a reportable safety incident in accordance with sub regulation (2) (no later than 2 hours after the incident occurs or after the licensee becomes aware of the incident). A report is to be submitted to the Minister within 7 days of the incident occurring, detailing information on the incident.	Pipelines Regulations 2017 - Reg 20	8.3.2
3	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_G1	You must ensure that waste is not discharged, emitted or deposited beyond the boundaries of the premises except in accordance with this licence or under the Act.	EPA Licence 73892	This OEMP

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
4	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_G2	You must immediately notify EPA of non-compliance with any condition of this licence by calling 1300 EPA VIC (1300 372 842), sending an email to contact@epa.vic.gov.au, or using the EPA Interaction Portal.		8.3.2
5	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_G3	By 30 September each year you must submit an annual performance statement to EPA for the previous financial year in accordance with the Annual Performance Statement Guidelines (EPA Publication 1320.3, released June 2011).		8.3.1
6	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_G4	Documents and monitoring records used for preparation of the annual performance statement must be retained at the premises for five years from the date of each statement, and be able to be immediately produced upon request by an officer of the Authority.		8.3.1

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
7	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_G5	You must establish and implement a risk based monitoring program that enables you and EPA to determine compliance with each condition of this licence. The monitoring program must comply with the requirements of the monitoring guidelines (EPA document 1321.2, released June 2011).		7.2
8	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_A1	You must ensure that odours offensive to the senses of human beings are not discharged, emitted or released beyond the boundaries of the premises.		6.1
9	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_A2	You must ensure that there are no emissions of noise and/or vibrations from the premises which are detrimental to either of the following: a) the environment in the area around the premises; and b) the wellbeing of persons and/or their property in the area around the premises.		6.1
10	*Environment Protection Act 1970, Section 20*	EPA Licence 68908 **Brooklyn**	LI_DA1	Discharge of waste to air must be in accordance with the 'Discharge to Air' Table. Refer to maximum air emissions table presented in Licence 68908.		7.2.2

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
11	*Environment Protection Act 1970, Section 20*	EPA Licence 68908 **Brooklyn**	LI_DA2	Visible emissions to air other than steam must not be discharged from the premises, except as permitted by this licence.	EPA Licence 73892	6.1 and 7.2.2
12	*Environment Protection Act 1970, Section 20*	EPA Licence 69011 **Springhurst**	LI_DA1	Discharge of waste to air must be in accordance with the 'Discharge to Air' Table. Refer to maximum air emissions table presented in Licence 69011.	EPA Licence 73892	7.2.1
13	*Environment Protection Act 1970, Section 20*	EPA Licence 72574 **Gooding**	LI_DA1	Discharge of waste to air must be in accordance with the 'Discharge to Air' Table. Refer to maximum air emissions table presented in Licence 72574.	EPA Licence 73892	7.2.1
14	*Environment Protection Act 1970, Section 20*	EPA Licence No. 73892 APA VTS [Brooklyn (68908), Springhurst (69011) & Gooding (72574)]	LI_DW1	You must ensure that surface water discharged from the premises is not contaminated with waste.	EPA Licence 73892	6.1, 6.2
15	National Parks Act 1975 Section 27	39932 VNIE – Chiltern – Mt Pilot 21 year term from 1/02/2016	Section 27	Consent to Public Authority (Chiltern-Mt PIlot National Park), 39932 issued under Section 27 of National Parks Act 1975. Refer to consent for detailed information regarding requirements. Summary of requirements listed below.	EPA Licence 73892	Section 6

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
16	National Parks Act 1975	39932 VNIE – Chiltern – Mt Pilot 21 year term from 1/02/2016	16	A Maintenance Plan is required to be submitted to the Parks Manager prior to commencement of any maintenance works. Upon completion of works, the Park Manager is to be provided written approval of completion. Refer to Consent to Public Authority (Chiltern-Mt Pilot National Park), 39932 for detailed information.		6.3
17	National Parks Act 1975	39932 VNIE – Chiltern – Mt Pilot 21 year term from 1/02/2016	23	Gravel and soil to be brought into the Park must be approved by the Contract Officer or Park Manager prior to delivery. Any trenching, drainage or culvert works carried out are to be monitored annually in order to guard against and remedy slumping, depressions, tunnelling and other erosion problems. Refer to Consent to Public Authority (Chiltern-Mt Pilot National Park), 39932 for detailed information.		6.3
18	National Parks Act 1975	39932 VNIE – Chiltern – Mt Pilot 21 year term from 1/02/2016	24	Approval is to be sought in writing from the Contract Officer or Park Manager for removal of vegetation. They are to be present during removal of vegetation. Refer to Consent to Public Authority (Chiltern-Mt Pilot National Park), 39932 for detailed information.		6.3

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
19	National Parks Act 1975	39932 VNIE – Chiltern – Mt Pilot 21 year term from 1/02/2016	25	Earth moving equipment is to be cleaned prior to entry into the Park. Refuelling sites must be approved by Parks Management. Notify Park Manager and Contract Officer of any spillages and efforts/strategies for cleaning and disposing. Refer to Consent to Public Authority (Chiltern-Mt Pilot National Park), 39932 for detailed information.		6.3
20	Pipelines Act 2005	Crown Land Access Agreement, April 2001	86	An "Agreement Concerning GPU GasNet Operations of Crown Land" has been made pursuant to the Pipelines Act. The access agreement is from 2001 until terminated by mutual agreement or default. It provides the terms under which APA may access Crown Land for maintenance, installation and repair (etc.) of assets located on or under the designated Crown Land.		Section 6
21	Pipelines Act 2005	Crown Land Access Agreement, 18 April 2001	3.1	When entering the crown land for asset installation, maintenance or inspection, there must be no unreasonable interference with the land or any lawful use permitted of it.		6.3

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
22	Pipelines Act 2005	Crown Land Access Agreement, 18 April 2001	3.2	- Legislation and relevant Codes of Practice must be complied with, and any additional consents obtained; - Any contaminants, waste or other chemicals must be cleaned up; - Directions with respect to pest, plant, animal, diseases and soil conservation must be followed; - Plant and equipment must be operated so as to minimise damage to the land and surrounds, and minimise visual impact; - Incorporate any requirements of fire prevention and suppression policies applicable to the land and adjoining Crown Land areas; - Allow quiet enjoyment of the land (subject to rights granted to APA); - Ensure all notices under Native Titles Act are given and the Act complied with.		6.3
23	Pipelines Act 2005	Crown Land Access Agreement, 18 April 2001	4.1	Consent is required to undertake any Works involving soil or vegetation disturbance, except in the event of an emergency.		6.3
24	Pipelines Act 2005	Crown Land Access Agreement, 18 April 2001	4.2	If access tracks are required to be established to undertake Works on the APA assets on Crown Land, the construction of such access tracks is also subject to a consent. Tracks must be maintained and revegetated as directed in the consent.		6.3

#	Obligation Source		Obligation Source Section (reference point)	Requirement	Hyperlink to Original Document	APA EMP Reference Point (Section)
	Statute (Legislation /Regulation)	**Approval Permit / License / Australian Standard** (name and number)				
25	Pipelines Act 2005	Crown Land Access Agreement, 18 April 2001	4.3	Any access tracks constructed under Clause 4.2 must be removed and made good and revegetated when no longer required for access purposes.		6.3

Appendix 7 – Victorian Pipelines Legislation Translation Table

Pipelines Act 2005 / Pipeline Regulation 2017 Compliance Obligation	APA EMP Reference
Pipelines Act 2005, Section 133 - Environment Management Plan to be Prepared	
Environment Management Plan to be prepared (1) Before carrying out any pipeline operation, the licensee must give the Minister an Environment Management Plan— (a) that identifies the risks to the environment arising from the pipeline operation; and (b) that specifies what the licensee will do to eliminate or minimise those risks, including rehabilitation of land; and (c) that sets out any matter prescribed by the regulations.	(Entire EMP)
Pipelines Act 2005, Section 139 - Review of Environment Management Plan	
Review of Environment Management Plan A licensee must— (a) review its Environment Management Plan before the end of each period of 5 years after the date the Plan was accepted; and (b) report the results of each review to the Minister within 28 days after the completion of the review.	7.3 Review
Regulation 11 - Conditions of a Licence	
(1) For the purposes of section 54(1)(a) of the Act, a licence granted under section 53(1) of the Act is subject to the following prescribed terms and conditions— (b) Provide a report to the Minister and Energy Safe Victoria within 90 days of the end of each financial year outlining the performance of the licensee in protecting the environment from the pipeline operations.	8.3.1 Periodic Reporting
Regulation 20 (1-6) - Incident Reporting	
A licensee must notify the Minister and Energy Safe Victoria of a reportable environmental incident or a reportable safety incident in accordance with sub regulation (2) (no later than 2 hours after the incident occurs or after the licensee becomes aware of the incident). A report is to be submitted to the Minister within 7 days of the incident occurring, detailing information on the incident.	8.3.2 Incident Reporting
Regulation 43 – General	
1. For the purposes of section 133(1)(c) of the Act, the prescribed matters to be included in an Environment Management Plan are set out in this Part.	NA
2. An Environment Management Plan given to the Minister under section 133 of the Act must be accompanied by the relevant fee specified in Table 5 of Schedule 2.	NA
Regulation 44 - Description of pipeline operation and environment	
The Environment Management Plan must— (a) describe the pipeline operation, including details and timing of activities involved in the construction and ongoing operation of the pipeline; and	6.2 Activities
(b) describe the existing environment that may be affected by the pipeline operation; and	3 Implementation Appendix 4 – Environmental Line List / Mapping / ENV Features

Pipelines Act 2005 / Pipeline Regulation 2017 Compliance	APA EMP Reference
(c) identify the particular relevant values and sensitivities (if any) of that environment.	3 Implementation Appendix 4 – Environmental Line List / Mapping / ENV Features
Regulation 45 - Description of environmental risks	
The Environment Management Plan must— (a) identify the risks to the environment arising directly or indirectly from the pipeline operation; and	1.4 EMP Objective Sections 4, 5 and 6
(b) assess the environmental risks identified under paragraph	Sections 4, 5 and 6
Regulation 46 - Environmental performance objectives and standards	
The Environment Management Plan must contain— (a) environmental performance objectives and standards, against which the performance by the licensee to eliminate or minimise the risks identified in accordance with regulation 45 so far as reasonably practicable are to be measured, that address—	
(i) the environmental legislative requirements that apply to carrying out the pipeline operation; and	Section 2 and Appendix 6
(ii) any other environmental requirements that the licensee intends to comply with in carrying out the pipeline operation; and	Section 2
(b) a list of the environmental legislative requirements and any other non-legislative requirements referred to in paragraph (a); and	Section 2 and Appendix 6
(c) a statement of the licensee's environmental policy.	Appendix 1
Regulation 47 – Consultation	
The Environment Management Plan must contain a report on all consultation carried out between the licensee and all relevant entities in the course of developing the Environment Management Plan.	Section 4.5
Regulation 48 - Implementation strategy	
(1) The Environment Management Plan must contain an implementation strategy for the pipeline operation.	Section 3
(2) The implementation strategy must specify the systems, practices and procedures to be used to ensure that— (a) any environmental risks identified in accordance with regulation 45(a) are eliminated or minimised so far as reasonably practicable; and	Section 3 and 6
(b) the environmental performance objectives and standards specified in accordance with regulation 46(a) are met.	Section 7.2
(3) The implementation strategy must include measures to enable assessment of the effectiveness of the systems, practices and procedures in sub regulation (2).	Section 7.2
(4) The implementation strategy must provide for— (a) monitoring, auditing and management of compliance with the requirements of sub regulation (2); and	Section 7.2
(b) assessment by the licensee of the licensee's performance in relation to compliance with the requirements of sub regulation (2); and	Section 7.2
(c) the keeping of quantitative records of emissions and discharges of substances from the pipeline.	Section 7.4

Pipelines Act 2005 / Pipeline Regulation 2017 Compliance	APA EMP Reference
(5) The implementation strategy must provide for the establishment and maintenance of an emergency response plan that— (a) identifies all potential emergency situations that may arise in relation to the pipeline operation; and	1.5 Emergency Response Management Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(b) identifies and assesses the environmental risks arising from the potential emergency situations identified in paragraph (a); and	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(c) includes response arrangements for minimising any harm to the environment arising from potential emergency situations identified in paragraph (a).	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(6) The implementation strategy must include procedures to ensure that the response arrangements in the emergency response plan are tested— (a) when the response arrangements are introduced; and	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(b) when the response arrangements are significantly amended; and	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(c) not later than 12 months after the most recent test.	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(7) The implementation strategy must include arrangements for consultation by the licensee with all relevant entities in relation to the pipeline operation and the licensee's performance in protecting the environment, during the life of the pipeline operation.	Section 4.5
(8) The implementation strategy must establish a clear chain of command, setting out the roles and responsibilities of personnel in relation to the implementation, management and review of the Environment Management Plan.	Section 1.2
Regulation 49 – Records	
The Environment Management Plan must contain details of arrangements to record and keep— (a) information about the systems, practices and procedures that the licensee has adopted to meet the obligations in the Environment Management Plan; and	Section 7.4
(b) information about the licensee's performance in relation to compliance with regulation 11(1)(b); and	Section 7.4
(c) details of all reportable and non-reportable environmental incidents, including emergency situations; and	Section 7.4 Section 8.3.2

Pipelines Act 2005 / Pipeline Regulation 2017 Compliance	APA EMP Reference
(d) details of the emergency response testing undertaken in accordance with the requirements of regulation 48(6); and	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
(e) in the case of any emergency situation, information on the effectiveness of the emergency response plan in eliminating or minimising as far as reasonably practicable any harm to the environment.	Attachment: Emergency Management Plan – Transmission National Emergency Response and Security Plan (320-PL-ER-0001) (ERSP)
Regulation 50 – Reporting	
For the purposes of reporting to the Minister under regulation 11(1)(b), the Environment Management Plan must contain details of arrangements for reporting on the licensee's performance in protecting the environment from the pipeline operation.	Section 8.3.1

Appendix 8 – Emergency Management Plan

Attach Transmission National Emergency Response and Security Plan (320-PL-ER-0001)

http://thehub.apa.com.au/workareap/transops/Transmission%20Documents/ERS/Pages/ERS.aspx