
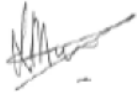



**Environment
Plan
Summary**

COT.2373-PL-HSE-0002

COSMOS GAS PIPELINE

**OPERATIONS ENVIRONMENT MANAGEMENT
PLAN SUMMARY**

Rev	Date	Status	Originated/ Custodian	Checked	Approved
0.1	04/09/2024	First submission			
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Revision	Date	Status
-	-	-

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1. Introduction

This Operations Environment Management Plan (OEMP) Summary provides an overview of the environmental management requirements for the operation of the Cosmos Gas Lateral (COT).

The nominated operator for the pipelines listed in is APT Goldfields Pty Ltd (APA).

1.1 Purpose and Scope

The purpose of this OEMP Summary is to provide information to the public regarding environmental management requirements.

The scope of this OEMP Summary is limited to operational works associated with the COT.

1.2 Health, Safety, Environment and Heritage Policy

At APA we strive to be world class in health, safety, environment and heritage performance. Our foremost priorities include protection of the environment, heritage and the communities we operate.

APA is committed to managing and minimising our impact on the environment and heritage. We foster a culture of responsibility, leadership and awareness of our environment and heritage obligations and practices.

1.3 Abbreviations

Table 1 Abbreviations

Acronym	Definition
APA	APA Group
ASS	Acid Sulfate Soils
COT	Cosmos Gas Lateral
CS	Compressor Station
DBCA	Department of Biodiversity, Conservation and Attraction
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEMIRS	Department of Mines, Industry Regulation and Safety
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water and Environmental Regulation
EMP	Environment Management Plan
ERP	Emergency Response Plan
GGP	Goldfields Gas Pipeline
IBRA	Interim Biogeographic Regionalisation for Australia
LCP	Landholder Contact Program
LMS	Learning Management System
LOS	Line of Sight
MB	Maintenance Base
NORM	Naturally occurring radioactive material
OEMP	Operations Environment Management Plan
OSCP	Oil Spill Contingency Plan

Acronym	Definition
PDWSA	Public drinking water source area
PL	Pipeline Licence
PTW	Permit to Work
ROW	Right of Way
TDS	Total Dissolved Salts
TPA	Third-Party Awareness Program
WBH	Water Bath Heaters
WO	Work Order

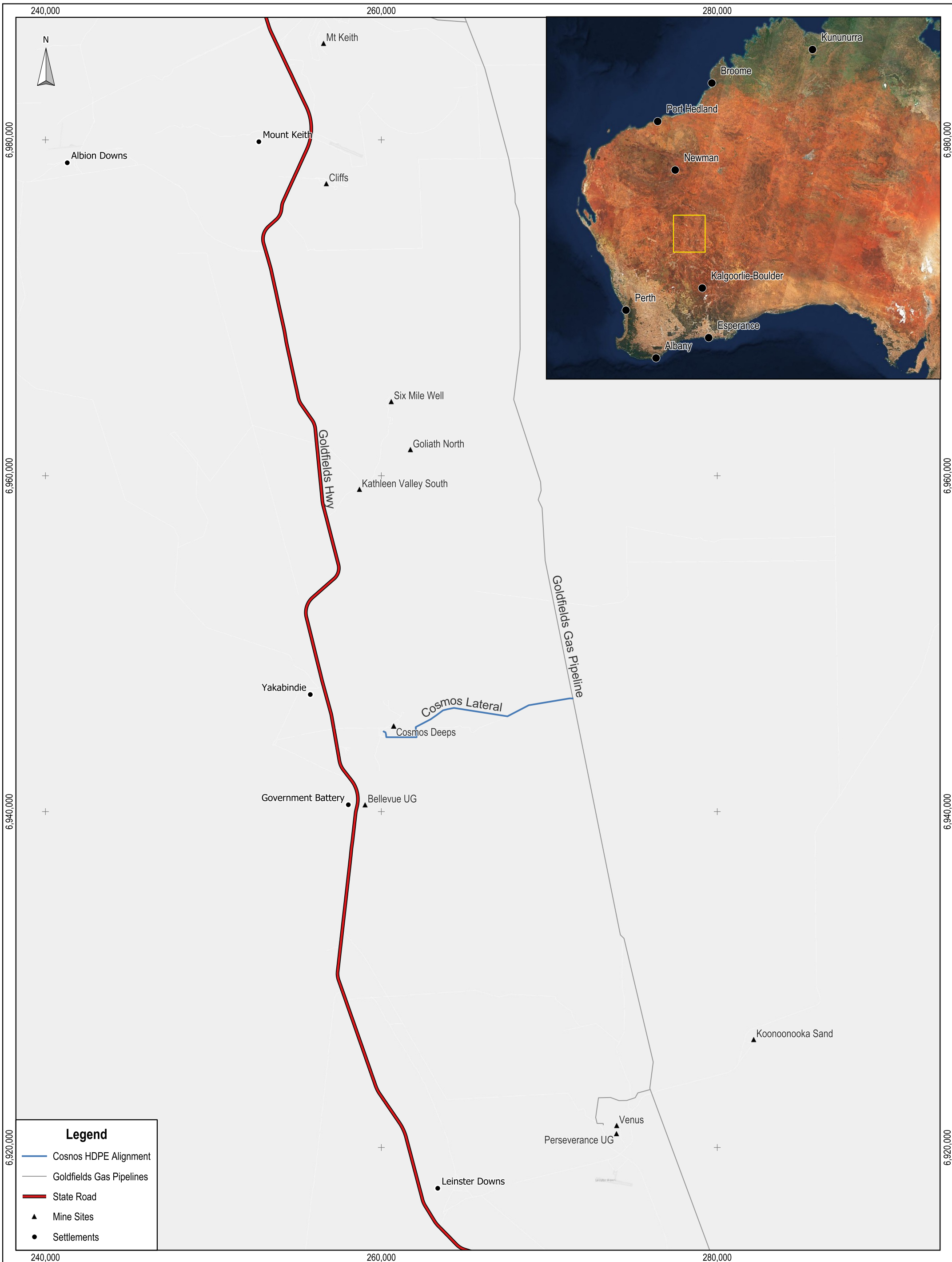
2. Location

The COT commences at the Cosmos Offtake Station, an offtake at KP 987.7 on the Goldfields Gas Pipeline (GGP, PL 24), 37 kms north of Leinster. The COT traverses 12.7km due west of the offtake and terminates at a delivery station located at the Cosmos Mine Site.

The COT traverses land tenure that is not affected by stock routes or crown reserves but and overlies the Yakabindi Pastoral Lease (PL N049076), owned by BHP (Nickel West). The pipeline sits in miscellaneous licences and mining leases L36/119, L36/189, L36/199, M36/127, M36/180, M36/212, M36/371 & M36/659 all held by IGO Cosmos Pty Ltd a company owned by Australian Nickel Investments Pty Ltd.

COT commencement point: Longitude 120.684 degrees, Latitude -27.584 degrees

COT termination point: Longitude 120.570 degrees, Latitude -27.600 degrees



Scale: 1: 200,000
 Original Size: A3
 Grid: GDA94 / MGA zone 51 (EPSG:28351)

APA
 Cosmos Gas Pipeline
 Operations Environmental Plan

Figure 1
 COT Locality

Martnick Bosch Sell Pty Ltd
 4 Cook St
 West Perth WA 6005
 Australia
 t: +61 8 9226 3166
 info@mbsenvironmental.com.au
 www.mbsenvironmental.com.au



Figure 1 COT Locality Map

3. Activity Description

3.1 General Equipment & Facility Maintenance

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

- Equipment inspections and testing;
- Monitoring;
- Erosion management and remediation (inclusive of import of fill); and
- Small scale facility works.

The above activities involve various mechanical and electrical tasks which are undertaken by appropriately qualified technicians.

Pipeline warning signs are in accordance with AS2885. Signs are placed so as to be inter-visible and may require replacement.

Erosion and subsidence management requiring the import of fill, ground/surface compaction and the mobilisation of earth-moving machinery, may be required intermittently to ensure ongoing pipeline integrity. Fill will be clean of weeds and disease and sourced locally, where possible.

Small scale upgrades are required intermittently to allow for increased services or changes in pipeline requirements. Works may include minor concreting for footings, maintenance of temporary site offices, ablutions, laydown and parking areas to facilitate the small-scale installations. Works will be restricted to the pipeline licence area.

3.2 Pipeline Excavation

Pipeline excavations are undertaken periodically typically for pipeline repairs. The scales of excavations are generally single defect dig-ups.

Pipeline excavations are managed through Gas Transmission Excavation and Trenching Procedure.

Dewatering is sometimes required where the water table is present at less than a few metres from the ground surface, however this is rare (once every 5-10 years).

Abrasive blasting and coating activities may be conducted on an ad-hoc basis (likely once every ten years, based on similar APA pipelines).

3.3 Venting

Venting of gas is undertaken to purge pipelines or facilities for maintenance or emergency response purposes.

The Integrated Operations Centre Controller assists to monitor and respond to any unplanned/uncontrolled venting or gas release incidents via information provided on the on the operator interface (SCADA).

3.4 Pigging

COT is a HDPE pipeline; no pigging activities will occur on the COT.

3.5 Easement Inspections

Pipeline easement inspections are conducted as aerial or vehicle patrols. Scope of these patrols aim to identify:

- Third Party encroachments;
- Vegetation growth;
- Indicators of gas leaks;
- Line of sight;
- Presence of weed infestation greater than land immediately adjoining the corridor;
- Erosion;
- Exposed pipe; and
- Condition of signage and aerial markers.

Vehicle patrols are completed by pipeline technicians on a six-monthly basis or as per the Maximo Maintenance Regime. This work is conducted from light vehicles and managed through MAXIMO with Work Orders (WOs) being generated for completion. Any issues identified are documented and where necessary additional WO raised for corrective action to be completed.

Aerial patrols are completed monthly, or as per Maximo schedule. The aerial patrol is undertaken via a contractor and any issues / occurrences that are recorded during the flight are uploaded into Field Maps directly by the contractor for APA to action. The contractors follow the Corridor Surveillance Procedure.

Any changes to the above frequencies will go through a Management of Change process via Maximo prior to the change being in effect.

3.6 Vegetation Clearing

The PPA requires upstream and downstream pipeline warning markers to be visible (line of sight). In some areas, plant regrowth obscures line of sight between pipeline warning markers and inhibits vehicle access for maintenance purposes and emergency response. In these instances, vegetation mulching becomes necessary. The operation does not comprise soil disturbance and hence vegetative root stock and soil quality is maintained.

Vegetation disturbance may also be required to facilitate minor excavations/dig-ups.

3.7 Waste Management

General waste, contaminated waste, controlled waste and potentially NORMS waste are produced during the activity. No general waste is stored at COT facilities. All waste is removed from site and stored at off-site APA Compressor Station or Maintenance Base, which is collected by a waste contractor regularly.

3.8 Vehicle Access

Vehicle activity predominantly comprises of light vehicles and occasional heavy vehicles for excavations, LOS clearing and associated maintenance activities. All access is restricted to the ROW and existing roads and tracks.

3.9 Planning for closure

APA has not been selected as the operator for decommissioning, remediation, closure or rehabilitation activities.

The Pipeline Owner will develop a separate environment plan for the decommissioning and rehabilitation of the COT which will be submitted to DEMIRS for review and approval prior to any work commencing for this activity.

Rehabilitation of the pipeline easement will be back to safe, stable and no polluting form consistent with existing land use.

4. Receiving Environment

4.1 Climate

The COT is located within the Murchison Province, which has been divided into different soil-landscape zones including the Salinaland Plains Zone, experiencing a desert climate of hot summers and mild winters. Rainfall in the Murchison area is low, with a mean annual rainfall of 240 mm, however the area can experience considerable rainfall from degenerating cyclonic depressions from the northern parts of the State. Mean temperatures ranging between 6°C and 38°C (BOM, 2024) and evaporation rates in the region varying from 3000-3200 mm annually.

Regional wind patterns consist of morning north-easterly, easterly and south-easterly winds of up to 40km/hr throughout the year. Afternoon wind patterns vary seasonally from east to south-easterly winds in the summer and autumn, and more varied northwest to south-easterly winds in the winter and spring (Dames and Moore, 1994).

Refer to Table 2 for mean monthly rainfall data (BOM 2024) and Table 3 for the mean monthly maximum and minimum temperatures (BOM 2024).

Table 2 Mean Monthly Rainfall Data (Leinster Aero; Site 012314; mm)

J	F	M	A	M	J	J	A	S	O	N	D	Annual
39.4	39.9	35.1	23.9	14.1	13.5	15.0	8.5	4.1	11.3	16.2	22.4	244.7

Table 3 Mean Monthly Maximum and Minimum Temperature (Leinster Aero; Site 012314; °C)

	J	F	M	A	M	J	J	A	S	O	N	D
Max	37.3	35.6	32.2	28.0	23.2	19.3	19.1	21.8	25.8	29.9	32.8	35.8
Min	23.3	22.2	19.4	15.4	10.4	7.2	6.2	7.8	10.9	14.9	18.3	21.4

4.2 Physical Environment

4.2.1 Topography, Geology and Soils

The topography of the Murchison Region largely consists of gently undulating aeolian sandplains with areas of lateritic caprock and calcrete hardpan. Lateritic sand overlies salt flats, broad valleys and interfluves. Granite outcrops form sheets and tors. Outcrops or ridges of hills occur in the landscape where resistant, metamorphic belts are present (Dames and Moore 1994).

Soils consist mainly of shallow red earthy loams over red brown hardpans and large areas of sheet calcrete (Tille 2006).

The COT is located within gently undulating sandplain areas typical of the Salinaland Plains Zone of the Murchison Province as defined by Tille (2006).

The Murchison Province stretches across the northern third of the Yilgarn Craton. Colluvial and alluvial deposits are often present in watercourses, while hills are capped with weathered bedrock and colluvial quartz-based soils. Quartz veins and dolerite dykes are also present (Tille 2006).

4.2.2 Hydrology

Surface water in the region is sourced from direct precipitation and surface runoff following rainfall events. The Murchison area often receives considerable rainfall from degenerating cyclonic depressions from the northern parts of the State. However, overall, the mean

annual rainfall is only 240 mm. Evaporation rates in the region vary from 3000-3200 mm annually. With such high mean annual evaporation rates, there is little surface flow during normal seasonal rains (GRM, 2016).

The hydraulic gradient of the regional area is shallow and trends south towards Lake Miranda, the main groundwater sink. The region is characterised by areas of surficial sediments, rocks of low permeability and fractured and weathered rocks. Flow systems are described as local and intermediate within Precambrian rocks. Local systems have recharge and discharge areas within a few kilometres of one another and respond relatively rapidly (10 years) to increased groundwater recharge from large scale clearing and land activity changes. Groundwater levels are primarily sustained by rainfall recharge and groundwater salinity ranges from brackish to hypersaline. The pre-mining groundwater levels in the area of the Cosmos ranged between 15 to 20 metres below ground level (mbgl), equivalent to about 460 metres Reduced Level (mRL) Australian Height Datum (AHD) (GRM, 2016).

There is no surface water of significance, large drainage lines, lakes or swamps in or in close proximity to the COT. Nor does it fall within a Public Drinking Water Source Area (PDWSA) or PDWSA Protection Zone (www.dow.wa.gov.au).

4.2.3 Acid Sulfate Soils

Acid Sulfate Soils (ASS) are not expected to be an issue along the COT as soils do not contain sufficient sulphide minerals, and route selection avoided wetlands and salt lakes where present. As per the Australian Soil Resource Information System, COT is located in areas of extremely low probability of ASS.

4.2.4 Contaminated Sites

COT does not intersect any registered contaminated sites.

4.3 Biological Environment

4.3.1 Fauna

Several terrestrial fauna surveys have been completed over the Cosmos area (Biota 2004, PEK 2017). No conservation significant fauna or habitat types have been recorded during these surveys.

Prominent fauna known to occur in the wider region include *Macropus rufus* (Red Kangaroo), *Lepoeceros ocellatus* (Malleefowl), *Macropus robustus erubescens* (Common Wallaroo or Euro), *Canis lupus* (Dingo), *Dromaius novaehollandiae* (Emu) and large flocks of *Cacatua sanguinea* (Corella) and *Cacatua roseicapilla* (Galah). Numerous species of snakes and lizards are also likely to be present. Wetlands of subregional significance in the broader districts also support a wide diversity of both resident and migratory birds (McKenzie et al, 2002, Biota 2004, Lindbeck 2022).

Feral animals including goats, foxes, cats, camels, and rabbits have been observed in the region. These species are widespread and responsible for significant declines in native fauna presence in the region as a result of habitat destruction, competitive influences and hunting tendencies (DCCEEW, 2023).

4.3.2 Flora

Mattiske (2006) completed a flora and vegetation assessment of the gas pipeline route corridor (L36/189, L36/194, M36/212 – now L36/199) (Clark Lindbeck and Associates 2022).

The survey area recorded eight vegetation groups and all were considered to be widespread and well represented outside of the surveyed area with the exception of A2. The A2 vegetation group (occurring in red gravelly clays in minor flow lines, Mattiske 2006)

comprises a very small section of the proposed clearing area and is expected to be contiguous either side of the surveyed area (Clark Lindbeck and Associates 2022).

The survey recorded a total of 23 families, 39 genera, 59 species and 68 taxa. Two weed species were recorded: *Lysimachia arvensis* and *Citrullus colocynthis* (Clark Lindbeck and Associates 2022).

No DRF or Priority flora

No Threatened Ecological Communities, Priority Ecological Communities or Threatened/Priority Flora were recorded along the gas pipeline route by Mattiske (2005; 2006) (Clark Lindbeck and Associates 2022). The nearest priority flora (*Grevillea inconspicua* (P4)) was recorded at Kathleen Valley over 14kms to the north.

There are no conservation or nature reserves within the Project area. The Wanjarri Nature Reserve is approximately 12 km northeast of the COT.

4.3.3 Weeds

No declared weeds have been identified within the Cosmos Operations area (IGO Limited 2022).

4.3.4 Disease

Phytophthora Dieback is not an issue in the Pilbara or Goldfields regions (CALM 1994). This is due to the mean annual rainfall ranging between only 250 mm and 320 mm per annum. There is also a lack of susceptible vegetation required by *Phytophthora cinnamomi* along the pipeline route.

4.4 Social Environment

4.4.1 Heritage and Native Title

Heritage surveys, assessing the ethnographic and archeological history, of the COT easement were undertaken prior to construction of the COT pipeline (Trace Archaeology, 2021) These studies identified that the proposed pipeline did not intersect any significant areas of Aboriginal heritage. Subsequent reports were lodged with the Department of Planning Lands and Heritage (DPLH), which identified that the closest site of significant heritage was found to be 2 km away.

ANI and Knowledge Holders shall be contacted prior to any ground disturbing activities within registered or other heritage sites as part of the cultural heritage management plan, between IGO and TAC.

4.4.2 Socio-Economic

The predominant land use in the Eastern Murchison is grazing sheep, cattle, and goats on native pastures (Cowan 2001). Numerous operating, suspended or abandoned gold and nickel mines, are also present in the region surrounding the COT, although their combined footprint is relatively small.

The COT is within the Shire of Leonora; the nearest town is Leinster, located approximately 37 km south of the pipeline. Leinster has a population of approximately 716 people and was established by Agnew Mining in 1976, to support nickel and gold mining in the region (ABS 2021).

5. Implementation Strategy

All works will be conducted in accordance with the APA Corporate Environment and Heritage Policy. It is the responsibility of the APA WA Manager Operations and Maintenance to ensure that APA Environment and Heritage policies and commitments are observed throughout all operational activities.

The APA Health, Safety, Environment and Heritage (HSEH) Management System is called 'Safeguard' (SG). SG provides a framework by which the processes relating to APA's HSEH activities are defined, implemented and controlled. Local business unit processes and procedures operating under SG management systems, provide further instruction to workers on performing activities.

SG is supported by a database, referred to as SG+. SG+ is used for functions such as incident reporting, auditing, action tracking and reporting.

The APA business tools and system used to manage and maintain all information relating to asset operations required for the implementation of management include:

- Maximo – Asset maintenance system (Work Order / Job Plan / Work Instruction)
- SG+ - Risk, actions, auditing and incident reporting system
- XIC – Landholder Contact Program, landholder information, access conditions, stakeholder consultation
- Learning Management System (LMS) – Training system used to capture APA staff information and learning materials
- SkillPASS – Contractor training, competency and accreditation system (under LMS)

SG defines the requirements for environmental management under APA's Environmental Corporate Framework. Procedures, forms and other guidance materials for environmental management is available to all personnel via APA intranet Empower.

A Goldfields North Management Region ERA workshop was conducted to assess environmental risks associated with the operation of the Goldfields North pipeline assets (including COT) on the 13th of March 2023.

The Environmental Risk Assessment is conducted in accordance with APA's 'Risk Management System – Group Procedure' which "aligns with the principles in the international risk standard ISO 31000:2018 - Risk Management". A summary of the primary environmental hazards, control measures and mitigating factors identified for the Activity has been provided in Table 4.

Note: Table 4 is intended to be indicative of major hazards and controls only and is not comprehensive of all commitments made by APA in the EMP.

Table 4 Primary Operations Environmental Hazards and Controls / Mitigating Factors

Summary of risks and impacts	Control Measures and Mitigation Factors
Overarching	<ul style="list-style-type: none"> • Regular legislation reviews • Toolbox talks • Works Environmental Assessment Form Process • Environmental audits • Site inspection • Inductions • Environment Procedures

Summary of risks and impacts	Control Measures and Mitigation Factors
<p>Aspect: Contamination</p> <p>Activity: transport, handling, waste disposal</p> <p>Impact: Ground and water contamination</p>	<ul style="list-style-type: none"> • Site inspected for leaks/spill during periodic site inspections • Vehicle prestart • OSCP testing • Drip trays • Licenced controlled waste carrier engaged for all controlled waste transport on public roads • Spill kits • Reportable spills reported to relevant regulator verbally within 2 hours and via report within 3 days. • No refuelling on COT • Documented mobile plant pre-start checks completed before mobilisation • Regular documented LV pre-start checks completed • Capture in place to cover ground during coating • Spill kit inspections conducted in accordance with Maximo regime • Spill response equipment appropriate to the type and amount of chemical must be available at point of use or transport
<p>Aspect: Waste</p> <p>Activity: controlled, general, hydrocarbon, NORM waste storage, handling, transport and disposal</p> <p>Impact: Ground contamination, unauthorised discharge or community nuisance</p>	<ul style="list-style-type: none"> • Licenced controlled waste carrier engaged for all controlled waste transport on public roads. Tracking receipts retained for seven years. • Abrasive blasting activities not to occur within close proximity to watercourses without sufficient capture in place. • Spent garnet is wrapped up and disposed of in hydrocarbon bin for Class III landfill disposal • Identify/label as NORM contaminated waste • Arrange for APA approved (licensed) NORM waste contractor for management/ disposal • Designated temporary concrete wash-down bay set up to contain liquid waste where significant volumes of concreting and equipment wash-down is required • Concrete wash-down and waste shall be captured, tested and disposed of in accordance with Landfill Waste Classification and Waste Definitions 1996 • Concrete tanker utilised wherever possible to minimise mixing of concrete on site • Bags of dry concrete to be stored in a designated, dry undercover area • All waste to be removed from site and stored at MB or CS
<p>Aspect: Heritage</p> <p>Activity: Driving, vegetation clearing, excavation</p> <p>Impact: unauthorised impact to heritage</p>	<ul style="list-style-type: none"> • Mulcher with GIS capabilities (geofencing or similar) or heritage boundaries flagged prior to clearing through heritage areas • Knowledge Holders contacted prior to any ground disturbing works inside heritage areas • Works Environmental Assessment Form completed prior to clearing or excavation • Spotter/guide engaged during LOS clearing • If heritage values or suspected human remains are unexpectedly discovered, or suspected to exist in the activity area, the activity must immediately cease in the vicinity (10m from extent) of the heritage discovery and be reported as per current APA HSE GP 07.01 Incident Reporting
<p>Aspect: Native Vegetation</p> <p>Activity: driving, vegetation clearing, excavation, weed spraying</p>	<ul style="list-style-type: none"> • Spotter/guide engaged during LOS clearing • Fire response equipment inspections in accordance with Maximo regime • Fire awareness to be reinforced during toolbox meeting • Works Environmental Assessment Form completed prior to clearing or excavation • Vehicles travelling on easement must have a fire extinguisher

Summary of risks and impacts	Control Measures and Mitigation Factors
Impact: Loss of biodiversity, fire	
Aspect: PWD Activity: Driving, vegetation clearing, excavation Impact: Introduction of new and /or spread of PWD	<ul style="list-style-type: none"> • APA vehicle washdowns bay maintained in good working order • All vehicle washdowns recorded in Washdown Register or similar • Vehicles and equipment kept clean and free of weeds and seeds • Clearing and excavation: equipment clean upon arrival
Aspect: Fauna Activity: Driving, vegetation clearing, excavation Impact: Negative or unauthorised impact to biodiversity	<ul style="list-style-type: none"> • Ramps for excavations left overnight • Fauna inspections undertaken in excavations and trenches that are left open overnight prior to work commencing • Works Environmental Assessment Form completed prior to clearing or excavation
Aspect: Gas, Light and Dust Activity: controlled and uncontrolled gas release, rupture Impact: Contribution to global warming	<ul style="list-style-type: none"> • NGI reporting in accordance with Environmental Protection (NEPM-NPI) Regulations 1998 • ERP is triggered for significant unplanned gas emission incidents • Site personnel are trained in the ERP
Aspect: Noise, Vibration, Amenity Activity: facility operation Impact: Stakeholder nuisance	<ul style="list-style-type: none"> • Fire response equipment inspections in accordance with Maximo regime • Fire awareness to be reinforced during toolbox meeting • Landowner notification prior to excavation and clearing • PTW for hot works in hazardous area • Vehicles travelling on easement must have a fire extinguisher
Aspect: Soil and Watercourse Activity: Excavation, dewatering/discharge, vegetation clearing Impact: acidification, erosion, unauthorised dewatering, unauthorised impact to beds and banks	<ul style="list-style-type: none"> • Where ASS/PASS cannot be avoided, APA will manage in-line with DWER treatment and management of soil and water in acid sulphate landscape guidelines • ASS desktop assessment completed prior to excavations • Topsoil must be stripped and stockpiled prior to, or at the commencement of, land disturbance activities • Vegetation/mulch to be respread following reinstatement • Easement patrols completed in accordance with maintenance regime (Maximo) • Dewatering conducted inline with DWER Water Quality Protection Note 13 • No disturbance to watercourse without Permit to Interfere with Beds and Banks • No discharge to watercourse permitted • Works Environmental Assessment Form completed prior to excavation and dewatering

6. Stakeholder Consultation

Stakeholders are identified by looking at the underlying land parcel and other layers of tenure or constraints intersecting each parcel. Stakeholder consultation is managed in the APA X-Info Connect (XIC) database, maintained by the Infrastructure Protection Team. X-Info stores all contact details, communications, land parcel details, APA access, risk level of each parcel, requirements for access and any documentation associated with the parcel. APA completes annual updates of the parcel information stored in X-Info. X-Info is used in conjunction with ARGO (Assets, Resources and GIS Online) to show the geometry for each parcel.

The main form of planned ongoing stakeholder consultation for APA pipelines is via the Third-Party Awareness Program (TPA) and the Landholder Contact Program (LCP) to achieve compliance with AS2885. Consultation is also done on an ad hoc basis for maintenance programs. Table 5 below shows the main forms of consultation that APA performs.

The following stakeholders have been identified as having an interest in COT operations:

- ANI (Pipeline Owner / Comos Mine Site)
- DEMIRS
- Yakabindie Pastoral Station Owner (BHP Nickel West)
- Local Knowledge Holders / Native Title Claimants (Tjiwarl Group- various claims)
- DCCEEW
- District Emergency Management Committee

6.1 Third Party Awareness Program

The TPA (APA-PR-QM-0006) is used to contact relevant industry, local government and utilities. The types of consultation for the TPA is in the form of meetings, emails, materials (i.e. toolbox, engagement letters, emails, calendar), multimedia (i.e. CodeSafe and e-learning), personal (i.e. meeting, face to face group presentations, conference or industry group presentation), and promotion (i.e. advertising, text message or email message, industry event, social media post). The TPA is used for providing these stakeholders with the location of the pipeline, safety and emergency requirements and APA contact if they propose to do any works in the vicinity of the pipelines. Response from recipients is not mandatory.

6.2 Landholder Contact Program

The LCP alerts landowners to the pipeline location, safety and emergency requirements, ongoing landholder contact processes and details during APA operations. Landholders are visited annually each financial year as part of the LCP (560-PR-QM-0001).

For rural or remote landholders, contact will be made via phone / email prior to APA travelling to them. There will be at least three attempts to contact the landholder to arrange a visit. If a face-to-face meeting is not desired by the landholder, the meeting will be conducted via phone. Recorded stored in X-Info.

LCP also conducts annual notification and APA branded promotional materials. APA does not require a response from the LCP recipients. The notifications are letter form.

6.3 Routine Maintenance Works

Ad hoc consultation to notify landholders of routine works that will be carried out. APA endeavours to provide advanced notice of easement works to landholders and affected stakeholders. This is via letter or email. The notifications will outline the type, duration, date

works are scheduled, APA's right of access and APA contact information. If the landholder has particular access requirements, they will also be reiterated on the notification.

Responses to these communications are not required by APA due to APA's right of access.

6.4 Third Party Works

Third party works are when an external party contacts APA as they have a project that will impact an APA pipeline. These can be activities that involve excavations, vertical and horizontal boring / drilling or installation of power lines. It may also be a connection into the APA pipeline. Third party works cannot proceed until APA has completed the necessary protection works.

The main communications to the impacted stakeholders will include description, date and duration of works. Government approvals may also be required for works, APA shall arrange approvals prior to works.

If responses are required by APA, this will be noted in the correspondence with an initial period of one month to reply. For individuals (freehold landowners), that don't reply, then APA will communicate again via the same method as well as others. If there is still no response, site visits will be made to attempt to make contact with the individual. The more time from the initial contact, the more frequent the ongoing contact is made.

For companies and government departments, when there is no reply, then alternative contacts will be used. If still no response, then the client may get involved until a determination is made. As above, the timing of the contact attempts shall become more frequent overtime.

There may be times where the client takes the lead for stakeholder consultation due to wider commitments, APA will still be a part of the process. These communications shall be recorded in X-Info.

6.5 Emergency Services

The APA emergency management team aims to consult with the district emergency management committee biennially, where possible. This is usually via a presentation at the committee meeting. The purpose of this consultation is to increase awareness of APA assets, emergency management plans and processes.

6.6 Emergency Works

Emergency works are completed when the emergency response plan is enacted.

For the consultation during an emergency, the impacted stakeholders are contacted, usually via phone with a follow up email, however APA doesn't always wait for a response. At the end of emergencies, there will be a closeout notification with the impacted parties.

Table 5: Consultation Programs

Program	Communication Methods / Materials	Frequency
TPA	Face to face meetings Letters Emails Phone calls Promotional materials Multimedia materials Presentations	Annual. The frequency of each group will be determined through the AS2885 safety management study, with high-risk groups contacted annually.
LCP – Rural / Remote	Face to face meetings	Annual contact as a minimum, however maybe more frequent if

Program	Communication Methods / Materials	Frequency
	Letters Emails Phone calls Promotional materials	determined through the AS2885 safety management study.
Routine Works	Letters Emails Phone calls	Ad hoc basis
Third Party Works	Face to face meetings Letters Emails Phone calls Risk assessments Permits / Approvals	Ad hoc basis
Emergency Services Consultation	Committee meeting Presentation Phone call Email	Biennially
Emergency works	Emails Phone calls	Ad hoc basis

6.7 EMP Development Consultation

The COT has been operating since 2007. Stakeholders are aware of the pipeline activity via the abovementioned ongoing stakeholder consultation programs.

Relevant stakeholders were consulted with during the EMP development. During the consultation program, if no response was received by the due date, APA will call or email the stakeholder to confirm they received the correspondence.

Please refer to Table 6 for the consultation completed during EMP development.

The ANI (Pipeline Owner and Cosmos Mine Site) was provided the opportunity to review the EMP in October 2023.

DEMIRS (Mining) was consulted with regarding the EMP development in August 2022.

Yakabindie Pastoral Station Owner (BHP Nickel West) is contacted annually during the LCP and prior to routine maintenance works. A review of the LCP consultation records confirm there are no management requirements that need to be incorporated into the EMP. Yakabindie Pastoral Station Owner (BHP Nickel West) has raised no concerns regarding APA's activity.

APA does not consider the DCCEEW a relevant stakeholder to be contacted during the EMP development. DCCEEW is relevant stakeholder for NPI reporting only. NPI reports are submitted annually and consultation with DCCEEW is through the APA Emissions Reporting Lead. The DCCEEW have raised no concerns regarding the COT reporting over the past five years.

APA does not consider District Emergency Management Committee a relevant stakeholder to be consulted during the COT EMP development. APA consults with District Emergency

Management Committee biennially and any feedback is incorporated into the Emergency Management Plan and processes.

Table 6 Stakeholder Consultation for EMP Development

Stakeholder	Method	Detail	Date
ANI	Email	<p>APA to ANI:</p> <p>As you're aware it was recently agreed that the Cosmos Pipeline should be licenced under the Petroleum Pipelines Act. In order to be licenced, the pipeline must have an Environment Management Plan approved by DMIRS and in line with the DMIRS Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia.</p> <p>Draft Cosmos Pipeline EMP is ready for IGO input, see attached.</p> <p>Actions for IGO:</p> <ol style="list-style-type: none"> 1.Address comments throughout document addressed to Pipeline Owner. 2.Complete 'Section 4.10 Planning for Closure' in accordance with DMIRS Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia, Draft Policy - Decommissioning of petroleum and geothermal energy property, equipment and infrastructure in Western Australian onshore areas and State coastal waters and Draft Guideline - Decommissioning of petroleum and geothermal energy property, equipment and infrastructure in Western Australian onshore areas and State coastal waters. 3.Complete 'Section 5.3.2 Fauna' 4.Complete 'Section 5.4.1 Heritage' 5.Complete stakeholder consultation in accordance with Section 3.8 and 3.8.4 of DMIRS Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia. APA suggests the Pipeline Owner conducts consultation with the Knowledge Holders and Landholders regarding the EMP development. The EMP must contain stakeholder engagement records in accordance with Section 3.8.6 of DMIRS Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia. <p>APA can't proceed any further with EMP approvals until IGO has closed out the above actions.</p>	13/11/23
	Email	<p>ANI to APA:</p> <p>Please find attached updated EMP with answers to your queries and additional text from J (cc'd) and myself.</p>	11/12/23
	Email	<p>APA to ANI:</p> <p>As detailed below, unfortunately DMIRS will not accept a simple reference to the MCP.</p> <p>Could you please update 'Section 4.10 Planning for Closure' of the attached and return.</p> <p>Below are the relevant guidance documents:</p>	13/12/23

		<p>•DMIRS Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia</p> <p>•Draft Policy - Decommissioning of petroleum and geothermal energy property, equipment and infrastructure in Western Australian onshore areas and State coastal waters</p> <p>•Draft Guideline - Decommissioning of petroleum and geothermal energy property, equipment and infrastructure in Western Australian onshore areas and State coastal waters.</p> <p>Please don't hesitate to contact DEMIRS directly if you have any queries re the above.</p> <p>APA won't be able to progress any further with the Cosmos Pipeline Licence until we have the abovementioned information.</p>	
	Email	<p>ANI to APA:</p> <p>Apologies for the delay with this.</p> <p>Please see attached an updated draft. We have gone through 'Section 4.10 Planning for Closure' and made some minor edits, but generally we found that the information supplied was in alignment with our closure strategy.</p>	16/01/24
DEMIRS Goldfields Team Leader (Mining)	Meeting	<p>ANI consultation with DEMIRS (mining):</p> <p>Scoping meeting for MP/MCP for gas pipeline.</p> <p>IGO and APA are liaising with DMIRS petroleum in regards to approvals under the Pipeline Act. The existing pipeline was deemed to be exempt back in 2007 when the original MP was granted (REGID 19073)</p>	24 August 2022
Tjiwarl Native Title Claimants	In person	Aboriginal Heritage survey of Cosmos project area (including Cosmos Lateral Gas Pipeline).	26 to 30 July 2021

Table 7: Ongoing Stakeholder Consultation

Stakeholder	Detail	Method	Frequency
DEMIRS	Updates to OEMP Changes to activity Reporting as per Section 9 Clearing referrals/permit applications	Email Telephone Meetings	As required
DWER	Permits/approvals/licences Controlled waste transport / contaminated sites		As required
DPLH	Heritage assessments		As required
DPIRD	Report declared weeds		As required
DCCEEW	NPI reporting		Annual
Local Knowledge Holder	Contacted prior to conducting ground disturbance works in registered and other sites		As required
WARC	Licensing of APA facilities to temporarily store NORM waste		As required

7. APA Contact Details

For further queries regarding the Activity please contact the WA APA Environment & Heritage Team on (08) 6189 4300 or via the APA Website <https://www.apa.com.au/contact/>.

8. References

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- Trace Archaeology (2021). Archaeological and Ethnographic heritage survey for overhead powerline corridor (L36/159 and M36/371), Paste Plant, Yakabindie pipeline realignment (L36/199 and L36/94), and Cosmos Lateral Gas pipeline (M36/371, M36/127, M36/180, M36/212 and L36/119). Unpublished Report.
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