Senex

Senex Energy Limited

Atlas to Reedy Creek Pipeline Environmental Management Plan

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Contents

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1 Introduction

ARC Pipeline Pty Ltd (**ARCP P/L**) is planning to construct and operate the Atlas to Reedy Creek Pipeline (**ARCP**), a buried high pressure natural gas pipeline (**Project**).

The ARCP will transport natural gas produced from Surat Basin gas tenements southwest of Wandoan (including Senex Energy Pty Ltd's (**Senex**) Project Atlas CSG Project (EPBC 2018/8329), Atlas Stage 3 Project (EPBC 2022/09410), other potential future Senex projects, and other third-party projects) to the Reedy Creek to Wallumbilla Pipeline (**RCWP**) north of Yuleba (owned and operated by APA Reedy Creek Wallumbilla Pty Limited). The Project Area is shown in ***Figure 1***.

The Project Area encompasses an area of 6.54 square kilometres (**km^2**) and is located north of the Warrego Highway, between the townships of Wandoan and Yuleba (***Figure 1***). PPL 2075 runs for 56.3km between PL 1037 and the Origin Energy Reedy Creek Gas Plant. The Project Area has been subject to extensive previous disturbance, with only a small percentage of native vegetation remaining.

The total Project Area and potential disturbance footprint is 654.4 hectares (**ha**). However, the maximum disturbance limit will be 209.2ha within the potential disturbance footprint.

1.1 Proposed Development

The Project comprises construction, operation, rehabilitation and decommissioning of:

- A buried steel pipeline (with 750 millimetre (**mm**) minimum depth of cover, increased as required at crossings and locations susceptible to external interference or erosion) that:
    - is approximately (~) 57 kilometre (**km**) in length with a diameter (**DN**) of up to 400mm, a 40 year system design life and an operating pressure of ~15.3 megapascals;
    - is designed, and will be constructed and operated, in accordance with "*Australian Standard 2885: the Standard for High Pressure Pipeline Systems*" (**AS2885**); and
    - has a linear disturbance within a 30 metre (**m**) wide unfenced Right of Way (**ROW**).
- Corrosion integrity protection for the ARCP:
    - externally, via coating (primarily) and cathodic protection system (being, buried anode beds at each end of the ARCP and above ground test boxes (within a 20m by 20m unfenced disturbance area), with a buried cable and dirt access tracks between the ARCP and the anode beds); and
    - internally, via gas dehydration prior to entering the pipeline. A maintenance and monitoring program of 'pigging' will occur for the life of the ARCP.
- A single cold vent for safe depressurisation in emergencies. However, noting that with rigorous design and protection measures applied to high pressure gas pipelines, emergency events are expected to occur only once in the life of the ARCP. The cold vent will be installed near the ARCP inlet with:
    - ~DN200mm vent line and ~2.4m high vent;
    - a peak flow rate of ~141,300 kilogram (**kg**) per hour (**hr**); and
    - a nominal 20 m^2 disturbance footprint.
- Associated above ground infrastructure (for the life of the Project), including:
    - pipeline marker signage;
    - access tracks within the ROW;
    - 6m wide access track (within a 10m wide corridor) to the ARCP inlet (~100m long);
    - an end of line facility at the RCWP tie-in with pressure control system and gas scrubber to remove any free liquid;
    - metering skid upstream of the delivery point at RCWP; and
    - pig launcher and receiver at ARCP start and end.

The technical specifications of the pipeline are detailed in Table 5.1-1.

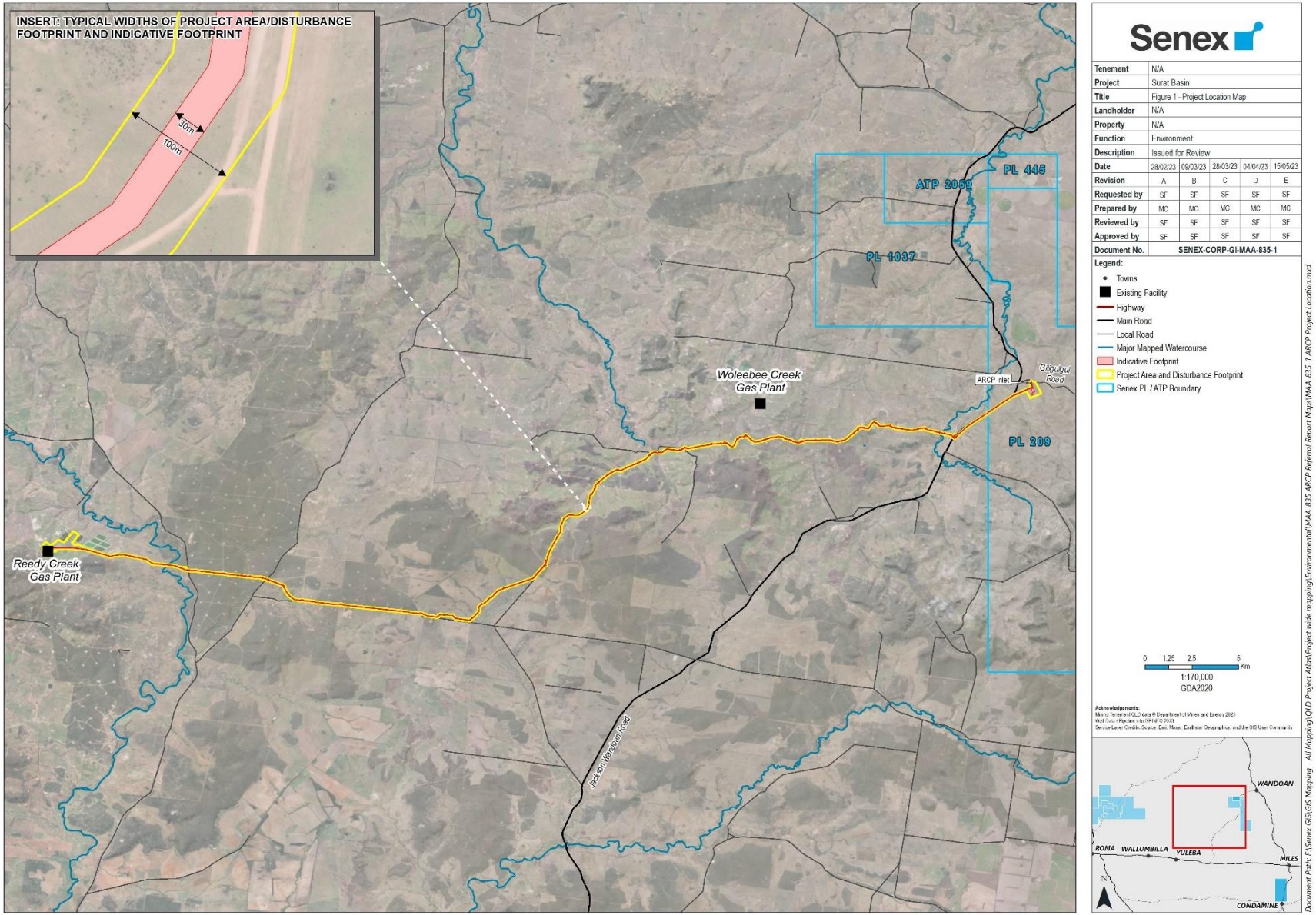


Figure 1: ARCP Project Area and Location

1.2 Purpose and Scope

This Environmental Management Plan (**EMP**) describes how Senex will manage potential environmental impacts associated with construction, operation and decommissioning of the ARCP in the Project Area and ensure compliance with its Environmental Authority (**EA**) conditions, industry guidelines and regulatory requirements, including those conditions associated with Occupation Permit for Combabula State Forest.

The objectives of this EMP are to ensure:

- potential impacts upon the surrounding environment are identified and addressed within an internal planning process and incorporated into field management procedures;
- activities that have, or are likely to have, temporary impacts on the environment are monitored and managed; and
- activities which have, or are likely to have, long term significant impacts on the environment or land use are managed appropriately and mitigated wherever practicable.

Broadly, this EMP covers:

- specific requirements for compliance with government regulatory requirements, EA and other approval conditions;
- activities authorised to be undertaken in the Project Area;
- communication and documentation of environmental compliance activities for all activities; and
- environmental management measures to be implemented to minimise identified potential environmental impacts.

1.3 Supporting Plans and Procedures

The EMP will be updated:

- to reflect new or additional permit conditions, regulatory requirements; or
- as required by a risk assessment or changed project outcomes.

Senex contractors will be provided with a copy of the EMP and will be required to comply with its contents.

This EMP is supported by a number of internal plans, procedures and processes including but not limited to the following:

- Senex Health, Safety and Environmental Management System [SENEX-CORP-HS-STD-001] (**HSEMS**) which outlines procedures for incident notification, response, investigation and reporting procedures and which references the:
    - Incident Management Procedure [SENEX-CORP-HS-PRC-004]; and
    - Senex Spill Response Plan [SENEX-CORP-ER-PLN-006]; and

  includes contingency procedures for emergency environmental incidents;
- Environmental Constraints and Field Development Protocol [SENEX-CORP-EN-PRC-019] (the **Constraints Protocol**), comprising a GIS analysis tool and integrated within infrastructure development and land access planning processes;
- Senex Action Item Tracking Register (**AITR**) database which tracks complaints, grievances and all other items required to be actioned;
- Queensland Operations Biosecurity Management Plan [SENEX-QLDS-EN-PLN-001];
- Queensland Weed Hygiene Procedure [SENEX-QLDS-EN-PRC-023];
- Senex Waste Management Procedure Qld [SENEX-QLDS-EN-PRC-022];
- ARCP Rehabilitation Management Plan [SENEX-ARCP-EN-PLN-003_A];

- Queensland Erosion and Sediment Control Procedure [SENEX-QLDS-EN-PRC-003];
- Queensland Fauna and Stock Management Procedure [SENEX-QLDS-EN-PRC-021]
- Atlas Biodiversity Offset Strategy in accordance with *Environmental Offsets Act 2014* (Qld).

1.4 Terms of Reference

The following terms and abbreviations are used throughout this EMP.

Term	Definition
AITR	means the Senex Action Item Tracking Register.
AREMP	means an Air Receiving Environment Monitoring Program.
AS	means Australian Standards.
ATP	means Authority to Prospect.
ATW	means Access to Work documentation.
BUA	means Beneficial Use Approval.
CCA	means Conduct and Compensation Agreement.
Constraints Protocol	means the Environmental Constraints and Field development Protocol [SENEX-CORP-EN-PRC-019].
DAF	means the Department of Agriculture and Fisheries.
DES	means the Department of Environment and Science.
DTMR	means the Department of Transport and Main Roads.
EA	means Environmental Authority.
EMP	means this Environmental Management Plan for Atlas to Reedy Creek Pipeline Project.
EMS	means Senex's Environmental Management System.
EP Act	means the *Environmental Protection Act 1994* (Qld).
EP Regulation	means the *Environmental Protection Regulation 2008* (Qld).
EPBC Act	means the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth).
ESA	means Environmentally Sensitive Areas.
HSEMS	means the Senex Health, Safety and Environment Management System.
MAOP	means maximum allowable operating pressure.
MNES	means matters of "national environmental significance" as that term is defined under the EPBC Act.
NC Act	means the *Nature Conservation Act 1992* (Qld).
P&G Act	means the *Petroleum and Gas (Production and Safety) Act 2004* (Qld).
PL	means Petroleum Lease.
PPL	means Pipeline Licence
Project Area	means PPL 2075
RO	means reverse osmosis.
ROW	means Right of Way.
RTU	means remote terminal unit.
SCADA	means supervisory control and data acquisition.
SDS	means the Safety Data Sheets.

Term	Definition
Senex	means Senex Assets Ltd and Senex Assets 2 Ltd and ARC Pipeline Pty Ltd.
SP Act	means the *Sustainable Planning Act 2009* (Qld).
Water Act	means the *Water Act 2000* (Qld).
Waterway Code	means the *Code for self-assessable development, Minor waterway barrier works, Part 4: bed level crossings (Code number: WWBW01 April 2013*.
WRR Act	means the *Waste Reduction and Recycling Act 2011* (Qld).
WSA	means Water Supply Agreement.

2 Legislative Requirements

2.1 State Legislation

The principal legislation regulating petroleum and gas activities for the project is the *Petroleum and Gas (Production and Safety) Act 2004* (Qld) (**P&G Act**). The principal environmental legislation is the *Environmental Protection Act 1994* (Qld) (**EP Act**) and associated regulation and protection policies.

The EP Act introduces the 'general environmental duty' which specifies that a person must not perform their duties in a manner which will cause, or is likely to cause, environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm.

The EA authorises petroleum activities under the EP Act, and Senex and all contractors undertaking petroleum activities within the Project Area must comply with the conditions of the EA, to meet their respective obligations under the EP Act.

Fisheries resources and development in fisheries habitat areas in Queensland are regulated under the *Fisheries Act 1994* (Qld). The most relevant provisions in the *Fisheries Act 1994* (Qld) relate to installation of temporary and permanent waterway barriers ("waterway barrier works"), which may be assessable development under the *Sustainable Planning Act 2009* (Qld) (**SP Act**).

The *Nature Conservation Act 1992* (Qld) (**NC Act**) provides a framework for the creation and management of protected areas and the protection of native flora and fauna, which are classified as being either endangered, vulnerable, near threatened or least concern, and are referred to as "protected plants" and "protected animals", respectively.

There is a general prohibition on using, taking, keeping and interfering with protected plants and animals in Queensland, although there are various exemptions where the take may be lawful (depending on the purpose and the location in which the activity occurs).

The *Waste Reduction and Recycling Act 2011* (Qld) (**WRR Act**) establishes the framework for waste management and resource recovery in Queensland, including the waste and resource management hierarchy, the "user pays" principle, the proximity principle and product stewardship principles. Waste management strategies must be aligned with the hierarchy and principles under this Act.

The *Water Act 2000* (Qld) (**Water Act**) provides a framework for planning and regulating the use and control of water in Queensland. The Act provides a wide range of tools to regulate in-stream (that is, watercourses, lakes and springs) and overland water flow and groundwater within the context of "sustainable management and efficient use" of water.

Obligations also exist under other Queensland legislation for carrying out petroleum activities on the project area, a number of which are identified in the following sections of this EMP. It remains the duty of Senex employees and contractors to meet all obligations under Queensland legislation before undertaking activities in the project area. The Senex Environment Manager should be contacted where assistance is required.

2.2 Commonwealth Legislation

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) is the principal piece of environmental legislation administered by the Commonwealth Government. It provides a legal framework to

protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places defined in the EPBC Act as “matters of national environmental significance” (**MNES**).

The EPBC Act requires the principles of ecologically sustainable development to be taken into account for a new development proposal if that proposal is likely to a result in a significant impact on the environment.

3 Roles and Responsibilities

Senex is responsible for the ongoing management of activities in the Project Area. All Senex employees and contractors are responsible for conforming to applicable Australian and Queensland laws and regulations and for conducting work in accordance with permit requirements and this plan.

Roles and responsibilities of Senex personnel and contractors in relation to this EMP are summarised in the table below.

Role	Responsibility
Senex Environmental Manager	• Secure and manage environmental and associated approvals. • Overall responsibility for environmental compliance, including monitoring, data collection and reporting. • Report incidents to the Department of Environment and Science (**DES**) and other Government agencies / stakeholders as required. • Ensure resources are available to manage environmental obligations and responsibilities. • Ensure that all personnel are competent to perform their assigned duties and have received appropriate training and inductions. • Implement an environmental compliance system that includes audits and assurance to help ensure compliance with Approval conditions and other regulatory requirements. • Keep up to date environmental management documentation including this EMP and associated plans and procedures.
Senex Land Access Manager	• Secure land access for Senex activities including land access agreements/land access rules or Conduct and Compensation Agreements (**CCA**) with landholders whose properties will be impacted by Senex activities. • Engage with landholders and liaise with Senex Site Supervisor(s) to ensure activities are undertaken in accordance with the Queensland Land Access Code 2016 and conditions of any land access agreements/land access rules or CCAs. • Compile and distribute Access to Work documentation (**ATW**) prior to commencement of activities on site.
Senex Site Supervisors (Drilling, Completions, Civil Construction etc.)	• Represent Senex on site. • Responsible for ensuring this EMP and other relevant environmental procedures are implemented on site, including any site-specific requirements identified during the planning phase. • Ensure that Senex staff and contractors comply with regulatory requirements including all relevant Approval conditions and requirements of the ATW. • Induct the Contractor Site Supervisor into relevant requirements of the EA, EMP, and supporting plans and procedures applicable to their activities on site. • Conduct inductions of any visitors to site. • Ensure toolbox and other safety talks adequately address environmental matters to be considered on site as relevant to the work being undertaken including those identified in the ATW (for example, property-specific weed hygiene requirements). • Ensure that the Contractor Site supervisor is adequately supervised.

Role	Responsibility
	• Ensure activities do not harm or disturb cultural heritage objects or areas of significance. • Ensure that the requirements under any native title agreement are adhered to. • Ensure compliance with landholder agreements or CCA conditions as defined in the ATW. • Ensure vehicle and machinery weed washdown requirements are complied with as specified in this EMP and supporting procedures and plans. • Empower all project staff to stop work when the potential for environmental harm is perceived. • Report to the Senex Environmental Manager on environmental matters and provide all relevant reporting and monitoring documentation as required. • Report to the Land Access Manager on landholder and property matters.
Contractor Site Supervisor	• Adequately identify and address any risks associated with the Contractor's activities prior to commencing and develop a construction methodology that has due regard for identified risks. • Ensure that appropriate training and inductions in the requirements of this EMP, EA conditions and other regulatory requirements as relates to their activities have been carried out for all Contractor personnel. • Ensure that Contractor personnel are adequately supervised. • Implement this EMP on site, including any site-specific requirements identified in Site Environmental Requirements documents, the ATW or as directed by the Senex Site Supervisor. • Ensure all activities are carried out in accordance with the requirements set out in the EMP, EA conditions, regulatory requirements and as specified in other relevant documents including tender documentation and contract with Senex. • Immediately notify the Senex Site Supervisor if cultural heritage sites, objects or human remains are found. • Immediately notify the Senex Site Supervisor of any incidents and non-compliances with the EA, this EMP, supporting plans or procedures. • Report to the Senex Site Supervisor as instructed and provide all reporting and monitoring information to the Senex Site Supervisor as required. • Ensure that records are maintained of all monitoring activities. • Empower all project staff to stop work when the potential for environmental harm is perceived. • Implement a program of internal environmental audit against this EMP and supporting plans and procedure.
Contractor Personnel	• Undertake training and induction as required to competently undertake activities on the project area. • Carry out all activities in compliance with this EMP, Approval conditions, site environmental requirements identified in planning, the ATW or as directed by the Contractor Site Supervisor and/or Senex Site Supervisor. • Immediately notify the Contractor Site Supervisor if cultural heritage sites, objects or human remains are found. • Immediately notify the Contractor Site Supervisor of any incidents and non-compliances with the EA, this EMP, supporting plans or procedures.

Role	Responsibility
Senex Environment Team and/or Field Environment Representative	• Assist the Senex Site Supervisor as required in ensuring that all petroleum activities including those undertaken by Contractors are conducted in accordance with the EMP and in compliance with EA conditions. • Promote environmental awareness amongst the workforce and hold site meetings on environmental matters as required. • Assist the Senex Site Supervisor in providing training in the form of toolbox talks and pre-works meetings on environmental matters. • Notify the Senex Site Supervisor and Environment Manager of any environmental incidents and non–compliances with EA conditions, the EMP and associated plans and procedures within specified timeframes in the Senex Health, Safety and Environmental Management System [SENEX-CORP-HS-STD-001] and liaise with the Construction Site Supervisor to investigate and report on the incident or noncompliance. • Ensure that all records, environmental approvals, and permits are managed, maintained and stored as appropriate and copies of the EMP, Approval conditions and supporting procedures and plans are available as required. • Co-ordinate implementation of rehabilitation plans and programs as required for the project area. • Undertake monitoring in accordance with this EMP, supporting plans and procedures and Approval conditions as directed by the Senex Environment Manager. • Complete Environmental Audits as directed by the Environment Manager.

4 Environmental Training and Inductions

Environmental awareness training and inductions appropriate to the level of risk and type of work being performed will be provided to personnel, contractors and visitors as relevant. Senex contractors and consultants are made aware of the requirements of this EMP and associated procedures through the contracts and procurement process. Senex staff will undergo formal induction into the requirements of the EMP and associated plans and procedures.

4.1 General Training and Inductions

Training and inductions will cover:

- environmental obligations responsibilities under the EP Act, *Environmental Protection Regulation 2008* (Qld) (**EP Regulation**) and the EA;
- requirements of this EMP and other project management plans and procedures;
- environmental hazards and control measures;
- emergency, incident and spill response procedures and incident notification procedures, including duty to report environmental incidents;
- weed management and hygiene procedures;
- water and waste management obligations; and
- interactions with flora and fauna.

Relevant site-specific environmental information will be considered during site planning and disseminated through contract documentation to Contractors, through Site Environmental Requirement plans, ATW documentation to site personnel and to all during toolbox sessions. Information may include:

- land access requirements;

- areas identified as containing weeds or being clean and weed free, and procedures for moving between these areas;
- weed hygiene certification requirements;
- environmentally sensitive areas that must be avoided;
- any areas for which specific management measures must be implemented prior to working adjacent to or within; and
- any significant flora and fauna species identified as potentially present in the work areas.

Records of training and inductions will be maintained to demonstrate achievement of competence. Training and induction material will be reviewed following change, incident investigations and hazard studies. Separate training and inductions are provided covering the topics of safety, cultural heritage and land access.

4.2 Fire Prevention Training

Fire on site has the potential to cause significant damage and/or injury to personnel, property, stock and the environment. The likelihood of fire starting in rural locations can be influenced by the condition of ground cover (for example, tall, dry grass), the type and working condition of machinery, and human behaviour such as inappropriate disposal of cigarette butts.

Fire prevention will be covered as part of safety training and/or toolbox meetings to ensure all personnel are fully aware of the potential for fire to start in the area in which work is being performed. Fire-fighting equipment and procedures will be in place at all Senex operated sites. Measures to aid in the prevention of fires may include:

- provision of appropriate fire-fighting equipment at Senex work sites;
- training of personnel in fire-fighting procedures appropriate to the workplace;
- fitting of Senex vehicles and/or other machinery with fire extinguishers which comply with the relevant Australian standards;
- ensuring Senex vehicles and/or machinery have efficient exhaust systems free from leaks and, where appropriate, spark arresters; and
- inspection of the underneath of vehicles for, and removal of, collected flammable material as required (for example, after working in long grass).

5 Description of Petroleum Activities

5.1 Gas Transmission Pipeline

Gas produced in the Project Atlas area will be transported from the Atlas East CPF to the existing APA Reedy Creek to Wallumbilla Pipeline (RCWP), adjacent to the APLNG Reedy Creek Gas Plant via the Atlas to Reedy Creek Pipeline (ARCP) (PPL 2075).The ARCP design parameters are detailed in Table 5.1-1 below.

Table 5.1-1 Design Parameters of PPL 2075

Parameter	Value
System design life	40 years
Total pipeline length	56.3 km
Pipeline capacity (initial)	28.75 TJ/d
Pipeline capacity (expanded)	189 TJ/d
Pipeline diameter	DN300
Line pipe material	API 5L X65 PSL2

MAOP = Design Pressure	15.3 MPa(g)
Design temperature	-20°C to 70°C

The ARCP will be buried with a minimum depth of cover of 750 mm which will be increased as required (e.g. at crossings, locations susceptible to external interference or erosion, Rural-Residential [R2] location classes etc).

To install the ARCP a 30m Right of Way (**ROW**) will be cleared. However, pipeline survey activities have allowed the alignment to be optimised in terms of minimizing disturbance to environmental values and land users through avoidance or alignment with existing roads/tracks, fence or power lines or other linear infrastructure.

As the pipeline is buried, land users will be able to resume previous land use activities over the pipeline, provided that the use does not include excavation activities. Whilst deep-rooted vegetation cannot be re-established directly across the pipeline (approx. 10m wide area due to the potential to damage the pipeline); shallow root cropping and grassland re-establishment will be encouraged, and no long-term impacts would be expected to such areas. once constructed,

Routine operations and maintenance program may include ground and aerial patrols, routine inspection and overhauls of infrastructure, repairs (which may include excavating the pipeline), cleaning the pipeline, easement maintenance including access tracks and signage, and control of weed species or vegetation impeding line of site between pipeline markers.

An indicative footprint for the ROW of the pipeline and associated infrastructure has been identified for the project. The actual ground disturbance locations will be subject to further design refinement based on constraints assessment and land access negotiation. The locations of the anode beds are still to be determined and require owner/operator agreement at RCWP end. The indicative footprint (and allowance for the anode beds, further ROW refinement and up to 3ha of additional workspaces) has been used for the purposes of calculating maximum disturbance limits for each Matter of National Environmental Significance (MNES) and completing the significant impact assessment for the project activities. Where any deviations from the indicative footprint are required, these will only be adopted where the overall maximum disturbance limit and the maximum disturbance limit for each MNES are not exceeded.

- 1.11ha of Brigalow (*Acacia harpophylla*) dominant and co-dominant Threatened Ecological Community (**Brigalow TEC**) which represents less than 1% of that which occurs within 10km of the Project Area;
- 0.12ha of the Poplar Box Grassy Woodland Threatened Ecological Community (**Grassy Box TEC**) which represents approximately (~) 0.00001% of that which occurs within 10km of the Project Area;
- 209.2ha of White-throated Needletail (*Hirundapus caudacutus*) habitat (however, this is a predominantly aerial species and likely to be restricted to the airspace above the Project Area);
- 27.8ha of Dulacca Woodland Snail (*Adclarkia dulacca*) critical habitat which represents ~0.14% of that which occurs within 10km of the Project Area;
- 25.39ha of Glossy Black-cockatoo (*Calyptorhynchus lathami lathami*) critical habitat and 1.08ha of general habitat which together represents ~0.09% of the habitat which occurs within 10km of the Project Area;
- 11.96ha of Squatter Pigeon (southern) (*Geophaps scripta scripta*) breeding habitat and 22.89ha of foraging and dispersal habitat which together represents ~0.26% of that which occurs within 10km of the Project Area;
- 25.31ha of Greater Glider (*Petauroides volans* / *Petauroides armillatus*) critical habitat and 6.86ha of general habitat which together represents ~0.12% of that which occurs within 10km of the Project Area; and
- 28.15ha of Koala (*Phascolarctos cinereus*) critical habitat and 11.59ha of general habitat which together represents ~0.15% of that which occurs within 10km of the Project Area.

It is noted that impacts to fauna dispersal and mobility will be largely temporary (during construction) as the pipeline will be buried and no fencing of the ROW will be required. The ROW and additional workspaces will be rehabilitated once construction is completed.

5.2 Pipeline Construction Activities

The pipelines will have a minimum depth of cover of 750 mm, which will be increased as required at crossings, locations susceptible to external interference or erosion, and rural-residential location classes. Construction will take approximately 6 months, and typical activities required to construct pipelines to be utilised for the ARCP are listed below:

- establishment of temporary facilities such as work areas for equipment delivery and storage, access and turn-around areas for construction;
- clearing and stockpiling of vegetation and grading of the ROW to prepare a safe working area;
- separation and stockpiling of topsoil and subsoil to protect and preserve topsoil and to ensure soil profile is reinstated during backfill and rehabilitation;
- stringing and bending the pipe lengths along the ROW;
- welding the pipe lengths together;
- non-destructive testing of pipeline welds;
- coating pipeline joints;
- excavation of trench for pipeline;
- placing sand or trench sub-soil (padding and shading) into trench to protect the pipe coating from external damage;
- placing the pipeline into trench;
- returning subsoil and topsoil to their original horizons;
- testing pipeline integrity by pre-commissioning that may include filling it with water and pressurising it to above maximum operating pressure (hydrotest); and
- reinstating and rehabilitating the ROW and all temporary facilities.

Other construction activities include:

- line pipe delivery direct to the ROW;
- traffic management on and around the ROW;
- installation of end of pipeline facilities and connection to existing infrastructure; and
- horizontal directional drilling (HDD) for the crossing of Woleebee Creek.

Senex will utilise an existing camp (which is not part of the Project) during construction.

While an indicative footprint is illustrated in ***Figure 1***, the actual ground disturbance location is subject to further design refinement within the approximately 100m wide corridor. The total area to be disturbed for the project (including a 10% allowance to accommodate any potential refinements) will be approximately 209.2ha.

Approximately 39km of pipeline and ROW will be located as close to the existing Origin Energy Woleebee Lateral Pipeline (Petroleum Pipeline Licence (**PPL**) 2040) and the Jemena Atlas Gas Pipeline (PPL163) as practicable to minimise impacts.

The actual ground disturbance locations will be subject to further design refinement based on any final constraints and land access negotiation. However, the maximum disturbance limit will be 209.2ha within the (potential) Disturbance Footprint. For 192.3 ha of the maximum disturbance limit the specific locations are locked down or proposed. The project may also require up to 3 ha of additional clearing within remnant vegetation / mature regrowth (to allow for any potential future ROW refinements). The remaining 18.4ha, including the anode beds and up to 3ha of additional workspaces will be sited within existing cleared areas.

5.3 Access Tracks

Access tracks are required to allow the construction and operation of pipelines and associated infrastructure. Established access tracks will be used wherever possible with purpose-built access tracks constructed where existing tracks are not suitably located. Appropriate erosion and sediment controls are to be installed maintained for both construction and ongoing use of access tracks. A typical access track consists of a 6 m carriageway but may be wider in certain areas to provide for areas where more area is required, that is, truck turnarounds.

Where access tracks are required to cross waterways the *Code for self-assessable development, Minor waterway barrier works, Part 4: bed level crossings (Code number: WWBW01 April 2013)* (**Waterway Code**) must be complied with. If the waterway crossings proposed cannot comply with the Waterway Code, Senex is required to obtain a Development Approval under the SP Act.

Once construction is complete, the access track disturbance is rehabilitated to the minimum width possible whilst ensuring safe use of the track or road. Rehabilitation requirements for waterway crossings are specified in the Codes.

5.4 Associated above ground infrastructure

Associated above ground infrastructure required for the safe operation of the pipeline for its 40 year design life are listed below. Typically, these areas will be cleared, graded and set up with the following equipment and facilities:

- Pipeline marker signage
- Cathodic protection beds, for pipeline corrosion protection
- Pressure control / reduction system at either end of the pipeline
- Metering skid upstream of the delivery point at the Reedy Creek tie-in
- Pig launcher and receiver at start and end of pipeline respectively
- Gas Scrubber to remove any free water vapour
- Cold vent at the inlet end of the pipeline to allow for safe depressurisation of the pipeline.

5.4.1 Cold Vent

The ARCP will have one cold vent located at the inlet facility which will be used for safely depressurising the pipeline during upset conditions and small vents at pig receiver and launcher facilities. The requirement to vent is driven by safety considerations and by its nature is unpredictable and unavoidable.

The cold vent is for the purpose of safe depressurisation of the pipeline in cases of emergency situation / incident, namely either a:

- Loss of containment that cannot be controlled (gas leak through corrosion or external interference causing a gas release)
- Pipeline defect that has been identified as requiring immediate repair that cannot be performed whilst the pipeline is pressurised.

With the rigorous design and protection measures applied to high pressure gas pipelines in Queensland, this type of emergency event is expected to occur only once within the life of the pipeline.

A single cold vent for safe depressurisation in emergencies (e.g. uncontrollable loss of containment), will be installed close to the inlet of the ARCP with:

- ~DN200mm vent line and ~2.4 m high vent;
- a peak flow rate of ~141,300 kilogram per hour; and
- a nominal 20 metres squared disturbance footprint.

5.4.2 Drainage control

Run-off from the hardstand areas between the inlet and end of line facilities within the plant footprint shall be captured at the perimeter of the plant platform in open drains and channelled off site to practical discharge points at non-erosive flow velocities.

5.4.3 Process Maintenance Wastes

When pipeline pigging occurs, small quantities of wastes accumulated within the pipeline will be released onto bunded hardstand areas and disposed of at facilities licensed to receive such wastes. The gas scrubber may also produce waste with small quantities of TEG. Wastes generated from the gas scrubber will be disposed of at facilities licensed to receive such wastes.

5.5 Rehabilitation of ROW and Buried Infrastructure

The ARCP ROW and all buried infrastructure will be rehabilitated post-installation, allowing land users to conduct activities in the ROW, with the exception of heavy vehicles and excavation activities (unless authorised by Senex). Deep-rooted vegetation (such as, trees) will not be reinstated for the operational width of the ROW to ensure pipeline integrity, however shallow root pasture/grass re-establishment will be encouraged throughout.

Pipelines trenches will be backfilled and topsoil reinstated within three (3) months after pipe laying. During backfilling of pipeline trenches, soils will be replaced back into the trench so that the topsoil and subsoil are consistent with the immediately surrounding area, allowing for natural regeneration. Areas that have been disturbed for operational purposes (i.e. access tracks and areas above pipelines) shall be revegetated with pasture grasses, or native grasses and ground cover species, as required, depending on the final land use.

The disturbed areas no longer required for operational activities or maintenance will be rehabilitated to either the pre-disturbance land use or agreed post disturbance land use. The pipeline trench will be reinstated with the C, B and A horizons intact and not mixed. The surface pipeline right of way will be rehabilitated to a stable landform minimizing the risk of erosion and encourage the re-establishment of stabilising vegetation consistent with the surrounding land use.

Where appropriate, disturbed areas may be lightly cross ripped to aid binding of soil layers and increase water retention and seed germination. Revegetation will be pasture or native grasses and ground cover species, based on the proposed post-disturbance land use (for example, grazing or State Forest land use) and include measures required by the management plans.

Where open trenching through watercourse crossings are required, these will be rehabilitated by re-contouring to match the surrounding land. The surface may be lightly ripped before spreading topsoil. Temporary waterway barriers will be removed, and disturbed areas stabilised to minimise erosion and promote regeneration of riparian vegetation.

Revegetation and regeneration will improve soil retention and reduce erosion across the ROW.

5.6 Operations

Senex will conduct operations in accordance with:

- All required approvals, relevant codes, standards and an operations environmental management plan.
- A routine maintenance program, including:
    - regular ground and aerial inspections – including monitoring third party activities (for example, heavy vehicle crossings, unauthorised excavations and encroachments etc.) on or near the ROW, erosion, subsidence and weeds, and rehabilitation success;
    - periodic pipe and pipe coating repairs;
    - repairs (with possible excavations);
    - internal cleaning of the pipeline (through pigging); and
    - easement maintenance including access tracks and signage, and control of weed species or vegetation.
- An approved Pipeline Management System (**PMS**) per Part 3 of AS2885. The PMS will be continually reviewed and updated over the life of the Project to ensure adequate pipeline integrity management but will cover operational policies, plans and procedures for the management of the pipeline including:
    - pipeline structural integrity, including technical maintenance aspects;
    - anomaly assessment and defect repair;
    - external interference threats;
    - operating condition changes and remaining life review;
    - stations operations and maintenance;
    - vegetation management; and
    - gas detection inspections.

5.7 Decommissioning

When decommissioning the Project at end of life, Senex's overall objective is to leave the ROW in a condition that is as near as practical to pre-existing conditions.

The ARCP will be isolated, capped and purged of hydrocarbons and liquids. The anode beds will be disconnected, and the steel pipeline will remain in situ, where practical and safe to do so to avoid disturbing re-established vegetation. If left in-situ, an abandonment plan will be developed in accordance with regulatory requirements to ensure that ground subsidence and the risk of contamination of the soil or groundwater is minimised.

If it is either unsafe or not practical to leave the steel pipeline in-situ, the infrastructure will be removed using similar methods as construction, and in compliance with AS2885 and other State approvals.

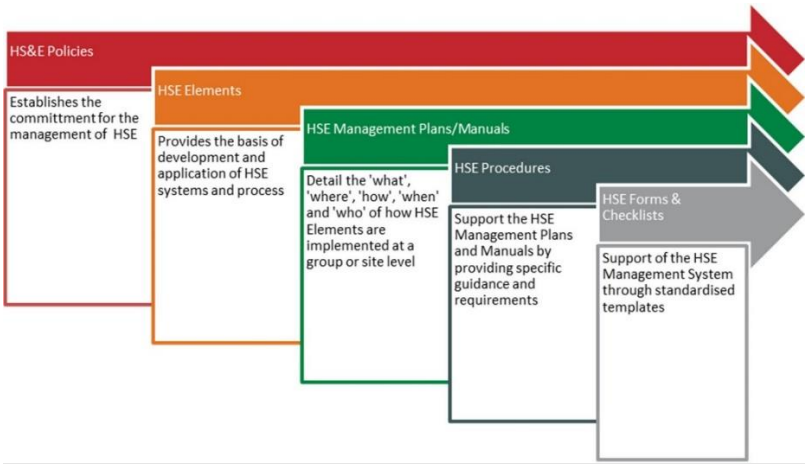
6 Environmental Management

6.1 Health, Safety and Environment Management System

The Senex HSEMS provides a framework that establishes expectations and parameters to drive continuous improvement in HSE performance. The HSEMS is applicable to all Senex worksites and personnel working for or on behalf of Senex.

The HSEMS (Figure 2) has a hierarchical document structure, with Health, Safety and Environment policies setting the corporate commitments for HSE management. The HSEMS framework includes 10 HSE elements, of which environmental impacts and effects is one. Potential environmental impacts and effects of Senex operations and activities are identified and managed, using a risk based and systematic approach.

Figure 2: Health, Safety and Environment Management System



Senex is committed to conducting its operations and activities in an environmentally sound and responsible manner. Activities are planned and managed to minimise disturbance to the environment as far as practicable by utilising environmental standards consistent with development in technology, industry codes of practice and relevant statutory requirements.

Environmental impacts are to be identified and measures are set in place to mitigate, measure and review impacts and environmental performance. This EMP is a component of the HSEMS.

By implementing the HSEMS, Senex aims to:

- Conduct operations in compliance with all relevant environmental legislation, regulations, licences, permits, standards, approvals and authorities;
- Clearly allocate responsibilities for environmental performance at all levels within Senex and its contractors;
- Develop environmental competency through instructing and educating employees and contractors;
- Continuously improve environmental performance through setting appropriate objectives and

targets, providing sufficient financial and human resources to meet these objectives and targets, and where reasonably practicable applying research and development outcomes, cleaner production principles and using environmentally sustainable products and resources;

- Apply best industry practice in the management, supply and delivery of oil and gas product; and
- Communicate with stakeholders and the community about environmental commitments, its application and Senex's performance.

6.2 Senex Environmental Policy

Senex's Environmental Policy (Appendix A) governs the development and implementation of Senex's Environmental Management System (**EMS**), and, along with the EMP, are the key tools used by Senex to carry out petroleum activities in an environmentally acceptable manner.

7 Environmental Management Controls

7.1 Site Assessment and Internal Approval Process

To assist in meeting EA conditions, prior to carrying out any disturbance, construction or operational activities on the project area, approval must be obtained from the Senex cultural heritage, land access and environmental managers. Approval for disturbance is to be initiated using the Constraints Protocol. Site selection also considers engineering requirements, geological constraints, cultural heritage requirements and landholder requirements. As part of the site selection and approval process a site survey will be conducted. The site survey findings will be captured in Site Environmental Instructions prepared for specific activities and areas. This report is used to decide whether the activity can proceed in that location and inform development of appropriate impact mitigation measures. Requirements for other approvals such as vegetation clearing permits, waterway barriers works permits and the requirement for offsets will also be determined at this stage.

Once all clearances, permits and approvals are in place, including any measures required under this EMP, final approval will be granted for the work to proceed by way of the ATW permit.

All personnel and contractors will familiarise themselves with ATW requirements prior to commencing works.

7.2 Housekeeping Measures

The following housekeeping measures will be undertaken within the Project Area.

Category	Measures
Environmental Controls	• No firearms, traps, nets or pets are permitted on site or in camp. Traps can be authorised for use by the Environment Manager for ecological assessments. • No fires are permitted on site or in camp. • Feeding of native animals is not permitted. • Personnel must stay within areas approved for operations (cleared work zones) and not drive off approved access tracks or enter exclusion areas or 'no-go' zones. • All rubbish and waste materials including cigarette butts are to be disposed of in the appropriate bins, or in the absence of bins, removed daily from site. All personnel are responsible for ensuring that sites remain litter free. • Only water from a Senex approved source should be used. • Adequate and properly maintained firefighting equipment will be present on site and potential ignition sources controlled.

7.3 Vehicle Management

The following vehicle management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• All site vehicles must be equipped, maintained and operated in a safe manner. • All access to private property must be in accordance with landholder agreements and CCAs, as identified in the ATW. • Signage must be in place to warn third parties of access restrictions to construction and operational areas, with particular warnings when potentially dangerous activities are being undertaken. • All works on public roads must be in accordance with relevant approvals from local council or Department of Transport and Main Roads (**DTMR**).
Management Measures	• Vehicles and personnel will only enter and exit the site at designated access points from designated access tracks and roads. Vehicles, plant, machinery and equipment must remain on formed access tracks at all times unless agreed otherwise as specified in the CCA and identified in the ATW. • All gates must be left in the condition in which they are found. Damage caused to gates or fences by Senex activities is to be reported to the Senex Site Supervisor immediately. • Vehicles must carry adequate firefighting equipment including a fire extinguisher. • The integrity of private roads and tracks must be maintained at all times. • All vehicles must be maintained weed free.
Monitoring and Reporting	Heavy equipment and vehicle movements will be managed according to local council/DTMR requirements.

7.4 Pest and Weed Management

The following pest and weed management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• No spread of invasive plants (declared weeds) or high priority pest flora or fauna species within or outside of works area due to Senex activities (refer definitions and species in Atlas Biosecurity Management Plan. • Invasive plants (declared) and high priority weeds identified in the Atlas Biosecurity Management Plan must be managed in accordance with ATWs, CCAs, Land Access Code 2016 requirements, *Biosecurity Act 2014* (Qld) and other regulatory requirements, and relevant Senex supporting procedures and plans.
Management Measures	• Activities must be planned so that movement of vehicles, plant, machinery and equipment avoid moving between properties, corridors or areas with weed infestations. • Site specific weed management requirements must be defined prior to access to any property or work site. • Pest and weed management control activities will be undertaken as directed by Senex. • Weed management and control methods will depend upon the location, weed species identified, the degree of the infestation, relevant landholder agreement or CCA provisions, and local, state and national regulatory requirements. • All vehicles, plant and equipment must be maintained weed free.
Relevant Plans and Procedures	• Queensland Operations Biosecurity Management Plan [SENEX-QLDS-EN-PLN-001] • Queensland Weed Hygiene Procedure [SENEX-QLDS-EN-PRC-023].

Category	Controls
Monitoring and Reporting	• The Senex Site Supervisor must be notified of any pest sightings or weed infestations found on site, including infestations which have been reported by others (for example, drilling staff and landholders). • Records of all weed notifications and inspection data is to be maintained by the Senex Environment Manager. • Records of weed washdown and certification must be kept in the vehicle at all times and made available to landholders on request and presented to the Senex Site Supervisor upon initial entry to site.

7.5 Chemical Use and Fuel Storage

The following chemical use and fuel storage controls will apply within the Project Area.

Category	Controls
Performance Criteria	• No uncontrolled release of chemicals, oil or fuel is to occur to the environment. • All chemicals, oil and fuel must be handled, stored and effectively contained, and transported appropriately and in accordance with relevant Australian Standards (**AS**) and Australian Dangerous Good Code.
Management Measures	• All fuel, oil and chemicals are to be stored, transported and handled in accordance appropriate standards including AS 3780:2008 – The storage and handling of corrosive substances, AS 1940:2004 – The storage and handling of flammable and combustible liquids, AS 3833:2007 – Storage and handling of mixed classes of dangerous goods in packaged and intermediate bulk containers. • Bulk fuel tanks stored outside a bunded area must be contained within a self-bunded tank with safety valves. • Appropriate spill response equipment must be available on site and/or with vehicles, and regularly maintained. • An inventory of all chemicals maintained on each site is to be maintained by the Senex Site Supervisor. • Safety Data Sheets (**SDS**) are to be maintained on site at all times and for all chemicals. • Storage areas must be sealed, bunded, and adequately ventilated. • Storage and refuelling areas will be preferentially located away from watercourses, sensitive areas and any source of ignition as determined by the Senex Site Supervisor. • Incompatible substances are to be segregated according to SDS specifications. • All flammable liquids used are to be stored and dispensed only from approved containers. • Substances not in use are to be sealed and safely stored in a secure area. • Substance storage/containment and disposal must be in accordance with the SDS (including personal protective equipment, ventilation, spill containment and precautions to avoid fire). • Containment bunds and/or sumps will be drained periodically of accumulated rainwater to prevent overflow and subsequent pollution of the surrounding land and watercourses.
Relevant Plans and Procedures	• Health, Safety and Environmental Management System [SENEX-CORP-HS-STD-001] • Senex Spill Response Plan [SENEX-CORP-ER-PLN-006] • Senex Hazardous Substances and Dangerous Goods Procedure [SENEX-CORP-HS-PRC-010]

Category	Controls
	• Senex Personal Protective Equipment Procedure [SENEX-CORP-HS-PRC-12].
Monitoring and Reporting	• All chemical, oil and fuel storage areas are to be inspected at least weekly for temporary storage, and monthly for permanent storage areas during the operating phase by the Contractor Site Supervisor and/or the Senex Site Supervisor. • All spills are to be contained immediately and managed through the Senex Spill Response Procedure. • Emergency events will be managed in accordance with the contingency procedures in the Atlas Emergency Response Plan. • Incident details must be recorded immediately and notified through the Senex Incident reporting systems, reported and investigated accordingly.

7.6 Cultural Heritage

The following cultural heritage controls will apply within the Project Area.

Category	Controls
Performance Criteria	• No avoidable loss or disturbance of items or areas of cultural value due to Senex activities. • No valid complaints related to impacts on cultural heritage from the local community or traditional owners.
Management Measures	• Corporate cultural heritage inductions. • Cultural heritage clearance is to be undertaken prior to commencing any works other than preliminary walk-over type surveys (for example, ecology surveys and bore baseline assessments) within the Project Area. • No works are to be undertaken or access permitted within areas marked as cultural heritage 'no go' areas. • The Senex Site Supervisor must be notified immediately if any cultural heritage sites, objects or remains are located. Should this occur, work must cease immediately.
Relevant Plans and Procedures	Cultural Heritage and Native Title Management Procedure (Queensland) [SENEX-CORP-NT-PRC-002].
Monitoring and Reporting	• Any incidents including access into cultural heritage no-go zones or damage to any items or areas of cultural heritage value must be reported to the Senex Site Supervisor who in turn will report to the Approvals Manager. • Non-compliance and incident reporting will be closed out by management to ensure prompt rectification, as required.

7.7 Produced Water Management

The following produced water management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Contaminants must not be directly or indirectly released to water. • No accidental or uncontrolled release of water to waterways or drainage lines. • No use of produced water on site except in accordance with EA conditions or approved End of Waste Codes as relevant.
Management Measures	• No discharges of water to land or surface waters will occur without authorisation from the Senex Site Supervisor having consulted with the Senex Environment Manager. • Produced water may be used for dust suppression and construction purposes provided the use:

Category	Controls
	○ does not result in negative impacts on the composition and structure of soil or subsoils; ○ is not directly or indirectly released to waters; ○ does not result in runoff from the construction site; and ○ does not harm vegetation surrounding the construction site. • The use of produced water for dust suppression must: ○ not cause on-site ponding or runoff; ○ be directly applied to the area requiring suppression; ○ not harm vegetation surrounding the area being dust suppressed; and ○ not cause visible salting. • Produced water may be disposed of for domestic purposes or stock purposes and must meet the irrigation or livestock watering criteria as relevant to those purposes in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)*. It must be disposed of in accordance with the BUAs where approved by Senex Site Supervisor having consulted with the Senex Environment Manager. • Pipeline waste water (for example, hydrostatic test water or trench water), may be released to land provided, if it meets the following water quality parameters: ○ electrical conductivity does not exceed 3000µS/cm; ○ sodium adsorption ratio (SAR) not exceeding 8; ○ pH between 6.0 and 9.0; ○ heavy metals (measured as a total) meets the respective short-term trigger value in section 4.2.6, Table 4.2.10- Heavy metals and metalloids in Australian and New Zealand Guidelines for Fresh and Marine Water Quality; and ○ does not contain biocides. • Pipeline wastewater must be released in a way that does not result in visible scouring or erosion or pooling or run-off or vegetation die-off. • Dams must only be constructed as authorised by the ATW and under the design and conditions specified by the Senex Project Execution and Environment teams.
Relevant Plans and Procedures	• End of Waste Code Associated Water (including coal seam gas water) (ENEW07547018)
Monitoring and Reporting	• Visual inspection of areas where produced water is used will be undertaken during and post-application as required to ensure conditions are being met.

7.8 Noise and vibration

The following noise and vibration controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Noise generated by activities must not cause environmental nuisance at any sensitive receptor, per limits specified in the EA. • No noise-related complaints received.
Management Measures	• Potentially impacted sensitive receptors will be identified in the ATW. • Prior to construction and other noisy activities, landholders will be notified of the nature and expected duration of noisy activities. • Construction hours will be in accordance with EA conditions and requirements of the *Environmental Protection (Noise) Policy 2008*. • Noise impacts and requirements for noise mitigation will be considered during the engineering design and site planning processes. Noise impacts will be minimised by adopting measures in the EPP Noise hierarchy as appropriate

Category	Controls
	(for example, locating activities at suitable distances from noise sensitive places). Facility specific noise modelling will be undertaken during the design phase, where required. • Noise modelling or assessment will be undertaken for temporary and operational activities to assess expected noise emissions at potential sensitive receptors. • Operators of construction equipment will be made aware of potential noise impacts and will be required to employ techniques and/or equipment to minimise noise emissions where necessary.
Relevant Plans and Procedures	• Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC-004].
Monitoring and Reporting	• Noise complaints will be recorded in the Senex Stakeholder Management database and appropriate corrective actions taken (commensurate to the magnitude of the impact and non-conformance). • Noise must be measured in accordance with the prescribed standards in the Environmental Protection Regulation 2008. • Noise monitoring during construction activities will be undertaken where required as part of the investigation of noise incidents or complaints. Where required, noise monitoring will be carried out in accordance with EA conditions and provisions of the EPP Noise. • Where noise levels exceed those prescribed in the EA, corrective actions will be defined as part of the incident investigation. • Non-compliance and incident reporting will be closed out by senior management to ensure prompt rectification and change management as required and appropriate.

7.9 Air Quality

The following air quality controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Dust or other air quality emissions must not cause environmental nuisance at any sensitive place as provided by EA conditions. • Where required, for authorised point sources, the fuel burning and combustion facilities will be operated so that releases to air do not exceed authorised EA limits.
Management Measures	• Landholders or residents of any adjacent sensitive places will be advised of planned works prior to the commencement of activities. • Staff and contractors will be made aware through general site induction and training of the potential to generate dust emissions and mitigation and management measures that should be implemented. • Vehicles, plant and equipment will be regularly maintained to ensure all machinery is in good working order and does not generate excessive air emissions. Plant and equipment must be operated in their proper and effective condition. • Vehicles will be operated in a fuel-efficient manner and will not be left turned on or idling at the site for longer than required. • Vehicles, plant and machinery must comply with site-specific speed limits to minimise dust generation. • Disturbed areas and access roads will be watered using a water cart/truck on an as-required basis to minimise the potential for environmental nuisance due to dust. Watering frequency may be increased where required (for example, during periods of high risk (prolonged dry periods and under windy conditions), if excessive levels of dust is visible or as reasonably requested by the landholder). Dust suppression using produced water must comply with EA

Category	Controls
	conditions. **Venting:** • Where authorised under the P&G Act, short duration cold venting during emergency depressurisation measures.
Relevant Plans and Procedures	• Health, Safety and Environmental Management System [SENEX-CORP-HS-STD- 001] • Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC-004]
Monitoring and Reporting	• In the event of an environmental nuisance complaint, an incident report will be raised in accordance with the Senex Incident Reporting and Investigation Procedure and investigated. Where undertaken, dust/air quality must be monitored in accordance with EA requirements. • Any complaints relating to air quality including environmental nuisance will be recorded and actioned in a timely manner through the Senex Stakeholder Management database.

7.10 Waste Management

The following waste management controls will apply within the Project Area.

Category	Controls

Performance Criteria	• Contaminants must not be directly or indirectly released to land.
	• Waste is appropriately managed to avoid or minimise the potential for:
	  ○ Release of hazardous waste to land or waters either through inappropriate waste disposal or accidental release;
	  ○ Inadequate waste management leading to inappropriate disposal or inadequate re-use and recycling; or
	  ○ Impacts to the environment, land use or well-being of people resulting from inappropriate storage, handling or disposal of waste.
	• Waste is managed at all Senex sites in accordance with the waste and resource management hierarchy and the waste and resource management principles under the EP Regulation and the WRR Act.

Management Measures	• All waste generated must be stored, handled and transported in accordance with the waste and resource management hierarchy, waste and resource management principles, appropriate standards and regulatory requirements as outlined in the Senex Waste Management Procedure – Qld Operations [SENEX-QLDS-EN-PRC-022]. • The SDS for materials should be referenced to assist with the appropriate identification for handling and disposal of waste material. • All wastes must be transported in covered or sealed containers to prevent the loss of waste materials during transport. • All sites will be kept free from litter. • Items of general waste are not to be disposed of in trench or pits. • Waste material (including domestic waste) must be collected and stored in covered bins to prevent loss and scavenging by animals. • Recyclable materials will be segregated (for example, glass and cans, scrap metals, used chemical and fuel drums and timber pallets) in designated containers for recycling where reasonably practicable. • All wastes regulated wastes are to be transported offsite by a licensed contractor to a suitably licensed facility for reuse, recycling or disposed unless authorised under the EA as being able to be disposed of on-site. • All waste materials must be removed from site once activities are completed. • Green waste may be used on site for both rehabilitation and sediment and erosion control.

Category	Controls
	• Only licensed waste contractors may collect, transport and dispose of regulated waste from the site.
Relevant Plans and Procedures	• Senex Waste Management Procedure – Qld Operations [SENEX-QLDS-EN-PRC-022]. • Waste Tracking Procedure [SENEX-QLDS-EN-PRC-006].
Monitoring and Reporting	• Records will be maintained for all wastes removed from the site, including waste type and volume or weight as outlined in the Waste Tracking Procedure. • Waste tracking documentation will be maintained by the Contractors Supervisor and provided to the Senex Site Supervisor for all trackable waste removed from site. • All waste records will be provided to the Senex Environment Manager by the Senex Site Supervisor on a monthly basis or upon request.

7.11 Land Disturbance and Flora Management

The following land disturbance and flora management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Clearing of native vegetation must be minimised to that necessary for construction and operational activities. • No land disturbance or vegetation clearing is undertaken without appropriate authorisation and approval. • Clearing of vegetation and protected plants must be in accordance with relevant permits or exemptions issued under the Nature Conservation Act 1992, MNES as required by the EPBC Act and relevant EA conditions.
Management Measures	• During project planning for unsited infrastructure, the Environmental Protocol for Field Development and Constraints Protocol will be used to preferentially minimise disturbance to biodiversity values. • Vegetation must not be cleared unless authorised under a Senex ATW. The ATW must be approved prior to any vegetation clearance or disturbance occurring. • Positive visual markings or pegs are to be used to identify the extent of any vegetation to be removed. • Any sensitive areas, such as ESAs or threatened plants/communities adjacent to the work area should be communicated via toolboxes to project staff and contractors. • 'No-go' areas will be GPS located and clearly marked (for example, with bunting and/or flagging tape). No-go areas will be prohibited to enter for construction staff and contractors and will only be accessed by authorised persons for relevant activities, where necessary. • Wherever reasonably practicable, vegetation will be removed at ground level by cutting or slashing rather than removing root stock. • Measures to minimise stormwater entering significantly disturbed land must be implemented and maintained. • Sediment and erosion control measures to prevent soil loss and deposition beyond significantly disturbed land will be implemented and maintained. • Mature trees, including hollow bearing trees, will preferentially be avoided, or clearing will be minimised where possible. • Hollow bearing trees, where cleared, will be retained as habitat, where possible. • Cleared vegetation/green waste that cannot be used on-site for rehabilitation and/or sediment erosion control should be stockpiled to facilitate re-spreading

Category	Controls
	or salvaging. • Vehicles or equipment are to remain within authorised work zones, particularly during vegetation clearing activities to prevent unnecessary land and vegetation disturbance.
Relevant Plans and Procedures	• Environmental Protocol for Constraints Planning and Field Development [SENEX- LDS-EN-PRC-019]. • Significant Species Management Plan [SENEX-ARCP-EN-PLN-002] • Queensland Erosion and Sediment Control Procedure [SENEX-QLDS-EN-PLN-003] • Site Environmental Instructions issued for each phase of the project.
Monitoring and Reporting	• Each site will be ground-truthed and the extent and biodiversity value recorded (including GIS coordinates of the area) during pre-clearance surveys by a suitably qualified ecologist. • This data will be retained on Senex record management and GIS systems. • Vegetation clearance works will be supervised by the Senex Site Supervisor or designated representative. • Coordinates of areas cleared of vegetation and/or where ground disturbance takes place will be recorded in GIS format by the Construction Site Supervisor and provided to the Senex Site Supervisor and managed by the GIS team.

7.12 Fauna and Stock Management

The following fauna and stock management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Damage to, or destruction of wildlife habitat is avoided or minimised. • No injury, entrapment or death of wildlife or domestic stock, as a result of Senex's activities.
Management Measures	• Implement the Queensland Fauna Stock Management Procedure [SENEX-CORP-EN-PRC-021]. • Implement ARCP Significant Species Management Plan and where relevant Species Management Program. • Active work areas, pits, sumps and other areas hazardous to fauna and stock must be fenced or covered to prevent access. • Clearing of mature or hollow bearing trees will be avoided where reasonably practicable, and otherwise undertaken in accordance with the Queensland fauna and stock management procedure. • Measures to prevent fauna entrapment and facilitate escape must be implemented during the construction where required (for example, open excavations). • Excavations and trenches must be inspected for trapped fauna on a daily basis. • Where identified as required, a qualified fauna spotter-catcher will conduct a search immediately prior to clearing of vegetation for the presence of fauna species. Where fauna is detected, the spotter catcher will assess and implement the most appropriate method to avoid or minimise impacts on that fauna as a result of clearing. • Stockpiled timber where left for more than 24 hours should be to be inspected for fauna prior to mulching. • Natural vegetation buffers along creeks and rivers shall not be disturbed unless authorised under an ATW and only at the location specified. • Where activities may impose barriers to the movement of fauna for extended period of time, reasonable measures will be implemented to facilitate fauna

Category	Controls
	movement around or through active work areas. • Any waterway barrier works (works that pose a barrier to water flow and fish movement) must only be undertaken where authorised under an ATW and only at the location indicated on the Site Environmental Instruction. • Any restrictions placed on stock movements in the vicinity of work areas will be agreed with landholders and identified in the ATW so that any disruption is minimised.
Relevant Plans and Procedures	• Queensland Fauna and Stock Management Procedure [SENEX-CORP-EN-PRC-021]. • Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC-004]. • Significant Species Management Plan [SENEX-ARCP-EN-PLN-002] • Site Environmental Instructions issued for each phase of the project.
Monitoring and Reporting	• Fauna and stock deaths must be immediately communicated to the Contractor Site Supervisor or Senex Site Supervisor as appropriate and then the Senex Environment Manager/ Senex Land Manager-Queensland • Fauna spotter-catcher update on interactions and reporting must be provided as required to the Senex Site Supervisor then to the Senex Environment Manager. • Reports on fauna interactions are to be provided to regulatory authorities as required.

7.13 Watercourse and Wetlands

The following watercourse and wetlands controls will apply within the Project Area.

Category	Controls

Performance Criteria	• Water quality during construction and maintenance does not exceed authorised release limits.
	• The construction or maintenance of linear infrastructure in a wetland must not result in the:
	  ○ Land disturbance and clearing of riparian vegetation outside of the minimum area practicable to carry out the works; or
	  ○ Ingress of saline water into freshwater aquifers; or
	  ○ Draining or filling of the wetland beyond the minimum area practicable to carry out the works.
	• After the construction or maintenance works for linear infrastructure in a wetland are completed, the linear infrastructure must not:
	  ○ Drain or fill the wetland;
	  ○ Prohibit the flow of surface water in or out of the wetland;
	  ○ Lower or raise the water table and hydrostatic pressure outside the bounds of natural variability that existed before the activities commenced;
	  ○ Result in ongoing negative impacts to water quality;
	  ○ Result in bank instability; or
	  ○ Result in fauna ceasing to use adjacent areas for habitat, feeding, roosting or nesting.

Management Measures	• Petroleum activities within any wetland area or watercourse must be carried out in accordance with an approved ATW. Watercourse crossings will be limited to those strictly necessary for construction or operation of infrastructure and only at locations approved in the ATW. • Other than linear infrastructure, petroleum activities must be 200 metres from a wetland, lake or spring; or 100 metres from the outer bank of a watercourse. • Construction and maintenance of linear infrastructure must be conducted in accordance with the following preference: when no water is present, in times

<table>
<tr><th>Category</th><th>Controls</th></tr>
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of no flow, in times of flow but in a way that does not impede low flow.

Construction and maintenance of infrastructure resulting in a significant disturbance to a wetland or watercourse must be undertaken by a suitably qualified person in accordance with the guideline Activities in a watercourse, lake or spring associated with a resource activity or mining operations.
Any waterway barrier works (works that pose a barrier to water flow) must only be undertaken where authorised under an ATW and only at the location specified.
Measures to minimise stormwater entering significantly disturbed land must be implemented and maintained.
Sediment and erosion control measures to prevent soil loss and deposition beyond significantly disturbed land will be implemented and maintained.
Where required, watercourse crossing points will be adequately stabilised to prevent erosion.
Positive visual markings or pegs are to be used to identify the extent of any vegetation to be removed.
‘No-go’ areas will be GPS located and clearly marked (for example, with bunting and/or flagging tape).
Construction activities must be managed to minimise interference with overland flow paths.
Clean stormwater will be diverted around disturbed land wherever practicable.
For linear Infrastructure (for example, pipelines) – construction or maintenance activities in wetlands or a watercourse must be only be carried out under the authorisation of an ATW and under the supervision of a Senex environment representative to ensure conditions of the EA are achieved.

</td></tr>
<tr><td>Relevant Plans and Procedures</td><td>

Site Environmental Instructions issued for each phase of the project.
Queensland Erosion and Sediment Control Plan [SENEX-QLDS-EN-PRC-003].
ATW for the specific scope of work.

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<tr><td>Monitoring and Reporting</td><td>

Records of all erosion and sediment control and water quality checks will be maintained by the Senex Site Supervisor and provided weekly during period of activity in the wet season and monthly at other times to the Senex Environment Manager.
Watercourse crossings must be monitored for erosion and sedimentation during construction, with at least weekly inspections during dry conditions, and daily inspections during rainfall of >50mm in one day or >100mm over 4 days or as soon as watercourse access is re-established after flooding
Release limits for construction or maintenance of linear infrastructure;

<table>
<tr><th>Water Quality Parameters</th><th>Units</th><th>Assessment procedure</th></tr>
<tr><td rowspan="2">Turbidity</td><td rowspan="2">Nephelometric Turbidity Units (NTU)</td><td>For a wetland of other environmental value, if background water turbidity is above 45 NTU, no greater than 25% above background water turbidity measured within a 50m radius of the construction or maintenance activity.
For a watercourse, if background water turbidity is above 45 NTU, no greater than 25% above background water turbidity measured within 50m downstream of the construction or maintenance activity.</td></tr>
<tr><td>For a wetland of other environmental value, if background water turbidity is equal to, or below 45 NTU, a turbidity limit of no greater than 55 NTU applies, measured within a 50m radius of the construction or maintenance activity.
For a watercourse, if background water turbidity is equal to, or below 45 NTU, a turbidity limit of no greater than 55 NTU applies, measured within 50m downstream of the construction or maintenance activity</td></tr>
</table>
</td></tr>
</table>

Category	Controls
	<table><tr><td>Hydrocarbons</td><td></td><td>For a wetland of other environmental value, or watercourse, no visible sheen or slick.</td></tr></table> • Construction or maintenance works on linear infrastructure in wetlands or watercourses must be monitored by a Senex Environment representative to ensure compliance with the EA conditions.

7.14 Soil and Erosion Management

The following soil and erosion management controls will apply within the Project Area.

Category	Controls
Performance Criteria	• Compliance with the Queensland Erosion and Sediment Control Procedure [SENEX-QLDS-EN-PRC-003] and any contractor erosion and sediment control procedures. • Minimise soil erosion resulting from wind, rain and flowing water. • Mass movement, gully erosion, sheet erosion and tunnel erosion do not occur. • Topsoil managed to preserve its biological and chemical properties. • No preventable irreversible erosion or loss of soil from sites.
Management Measures	• Works on site will not commence until any relevant Contractor erosion and sediment control procedures have been approved by the Senex Site Supervisor and been installed as required on significantly disturbed land. • Measures to minimise stormwater entering significantly disturbed land must be implemented and maintained. • Sediment and erosion control measures to prevent soil loss and deposition beyond significantly disturbed land will be implemented and maintained. • Sediment and erosion control must be managed in accordance with the Senex Queensland Erosion and Sediment Procedure [SENEX-QLDS-EN-PRC-003] and the Contractor's erosion and sediment control procedures. • Erosion and sediment control structures must be inspected periodically as required and after rain events and maintenance carried out where required. • All contaminated soils will be managed and remediated in accordance with EP Act requirements. • Where soil is moved to the site, a weed declaration will be provided. **Erosion and Sediment Control** • Ensure stormwater passes through the site in a controlled manner and at non- erosive flow velocities. Divert clean water from the work site where practical. • Minimise the duration that disturbed soils are exposed to the erosive forces of wind rain and flowing water. • Minimise work-related soil erosion and sediment runoff. • Minimise negative impacts to land or properties adjacent to the activities (including roads). • Be periodically inspected at worksites as required, before expected rainfall events, and after rain events and maintenance undertaken where required as per the Queensland Erosion and Sediment Control Procedure [SENEX-QLDS-EN-PRC-003]. **Topsoil** • Soil stripping (where necessary), where reasonably practicable, will not be undertaken in periods of high wind, rainfall or within the immediate period after rainfall to help avoid soil degradation. • Topsoil (approx. upper 100 to 200 mm depending on soil type), which contains the bulk of the natural seed bank and organic matter will be

Category	Controls
	stockpiled separately from subsoil. • Topsoil is to be stockpiled in mounds no greater than 2 metres height where reasonably practicable. • Where reasonably practicable, topsoil will not be mixed with subsoil either during stockpiling or during re-placement on disturbed areas. • Topsoil stockpiles will be located away from watercourses, natural drainage and flow lines to minimise erosion and waterway sedimentation. • Erosion and sediment controls are to be established around topsoil stockpiles to minimise the loss of soil during rain and slumping events. Stockpiles and sediment controls are to be routinely checked. • Once construction activities are complete, soil horizons will be reinstated in the order in which they are excavated to the extent practicable.
Relevant Plans and Procedures	• Queensland Erosion and Sediment Control Procedure [SENEX-QLDS-EN-PRC- 003]. • Site Environmental Instructions issued for each phase of the project.
Monitoring and Reporting	• Regular inspections to monitor for potential erosion and sedimentation during construction works will be undertaken. These inspections will include at least weekly inspections during dry conditions, and daily inspections during rainfall of >50 mm in one day or >100 mm over 4 days or as soon as site access is re- established. • Records of all erosion and sediment control and water quality monitoring will be maintained by the Senex Site Supervisor and provided weekly during period of activity in the wet season and monthly at other times to the Senex Environment Manager.

8 Environmental Incident and Notification

8.1 Emergency and Incident Response

The following emergency and incident response controls will apply within the Project Area.

Category	Controls
Performance Criteria	• All emergencies on site will be managed in accordance with the project Emergency Response Plan. • All incidents are reported, notified and investigated in accordance with the HSE management system and Senex Incident Reporting and Investigation Procedures [SENEX-CORP-HS-PRC- 004]. • All spills are managed in accordance with the Senex Spill Response Plan [SENEX-CORP-ER-PLN-006].
Management Measures	• Personnel who observe an environmental incident including a spill must immediately notify the Contractor Site Supervisor who will then notify the Senex Site Supervisor. • In the event of a chemical, oil or fuel spill, the spill will be contained and cleaned up as outlined in the Senex Spill Response Plan [SENEX-CORP-ER-PLN-006]. • Contractors must have in place procedures for spill response which are in accordance with the Senex Spill Response Plan [SENEX-CORP-ER-PLN-006] and will include details requirements for: ○ minimising release; ○ containing spilled material; ○ raising the alarm and response; ○ locations of spill kits; and ○ management of contaminated material if necessary.

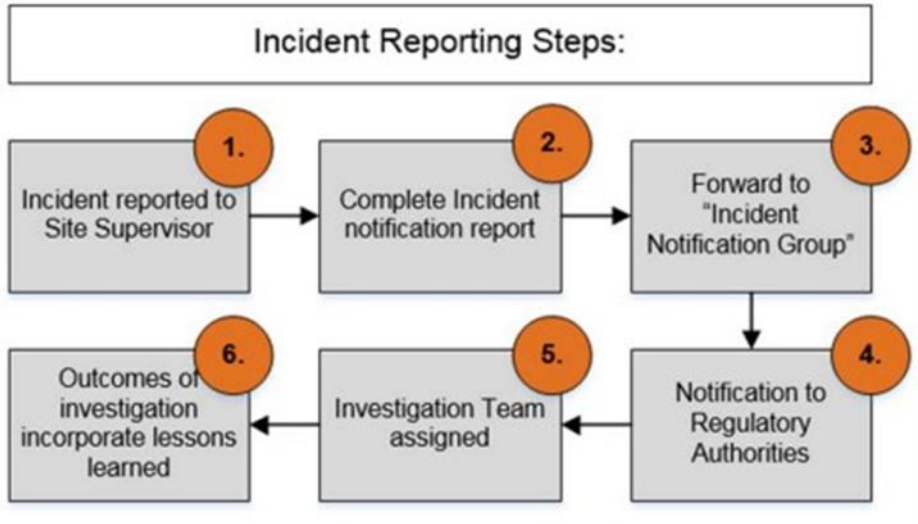
	• Any spills will be assessed by the Senex Site Supervisor supported by the Senex Environment Manager as required to determine appropriate remediation options such as the removal of contaminated material. • Incident reports must contain information required by the HSE Management System and Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC- 004]. • Emergency Response drills will be performed to ensure readiness and identify opportunities for improvement.
Relevant Plans and Procedures	• HSE Management System [SENEX-CORP-HS-STD-001]. • Senex Spill Response Plan [SENEX-CORP-ER-PLN-006]. • Senex Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC-004].
Monitoring and Reporting	• Refer to section 8.2 for reporting and notification requirements for environmental incidents. • Regular inspection of spill response kits and general emergency preparedness.

8.2 Environmental Incident Notification

Senex requires that all incidents including spills are reported and fully investigated in accordance with their specific level of potential risk. The Senex Incident Reporting and Investigation Procedure [SENEX-CORP-HS-PRC-004] defines the process for the investigation and reporting of incidents and ensures that Senex meets all regulatory notification requirements. Senex's Spill Response Plan [SENEX-CORP-ER-PLN-006] provides the standard protocols that must be used to respond in an appropriate and timely manner in the event of a spill. The procedure details the following steps:

- Prevention – take actions to reduce or eliminate the likelihood of effects of an incident.
- Preparedness – take steps before an incident to ensure effective response and recovery.
- Response – contain, control or minimise the impacts of an incident.
- Recovery – take steps to minimise disruption and recovery times.

Figure 3: Incident Reporting Steps



Activities that have caused or are likely to cause environmental nuisance or environmental harm under the EP Act must be notified to DES. Additionally, the EA requires the following notification process to be complied with in the event of an incident.

Events that must be notified under the EA conditions include:

- a person carries out activities or becomes aware of an act of another person arising from or connected to those activities which causes or threatens serious or material environmental harm;
- the activity negatively affects (or is reasonably likely to negatively affect) the water quality of an aquifer;
- the activity has caused the unauthorised connection of 2 or more aquifers; and
- activation of the contingency procedures[1] (within 5 business days of activation).

All notification of environmental incidents or events will be reported in accordance with the process in the Senex Regulatory Reporting Requirements [SENEX-CORP-ER-CHA-002].

9 Rehabilitation

9.1 Transmission Pipelines

Pipelines trenches will be backfilled, and topsoil reinstated within three months after pipe laying. During backfilling of pipeline trenches, soils should be replaced so that the topsoil and subsoil are consistent with the immediately surrounding area, this will allow for natural regeneration. Following soil replacement, areas will be revegetated. Areas required for operational purposes (that is, access tracks and areas above pipelines) should be revegetated with pasture grasses, or native grasses and ground cover species depending on the final land use. Remaining areas no longer required for operational activities or maintenance will be rehabilitated to the post-disturbance land use.

Final rehabilitation of the pipelines will occur after decommissioning. Where it is practical and safe to do so, the pipelines will be abandoned and left in- situ in accordance with *Australia Standard (AS) 2885 section 10.6 and section 8 of the Australian Pipeline Industry Association Code of Environmental Practice*. The pipelines will be left in-situ to avoid disturbing the re-established vegetation through excavation and removal. The overall objective is to leave the ROW in a condition that is as near as practical to pre- existing environmental conditions. If the pipelines are to be abandoned and left in-situ, an abandonment plan will be developed in accordance with regulatory requirements. When abandoning *in-situ*, the pipeline section shall be abandoned in such a way to ensure that ground subsidence and the risk of contamination of the soil or groundwater is minimised.

The pipelines are to be disconnected from all sources of hydrocarbons that may be present in other pipelines, processing plant, meter stations, control lines and other appurtenances, and shall be purged of all hydrocarbons and vapour with a non-flammable fluid and then capped. Disposal of the purging fluid shall meet all relevant environmental and safety requirements. The pipeline will be decommissioned in a manner that minimises potential impacts to the environment, land use and third parties and guidance should be taken from AS 2885. All above ground pipes and supports along the pipeline should be cut-off at a minimum depth of 750mm below the natural surface, or at pipeline depth as determined by AS 2885.3. These pipes should be removed and capped off below the surface. All above ground signs and markers above the pipeline should be removed.

When it's either unsafe or not practical, decommissioning will be undertaken via removal, and the removal methods should be considered similar to those for pipeline construction and shall comply with the relevant requirements of AS 2885.1.

After decommissioning of the pipeline compacted hardstands, access tracks and stockpile areas should be ripped to aid binding of the soil layers, increase water retention, helping water infiltrate into the soil, and thus increase seed germination success. Seeding will be undertaken on the remaining areas with an appropriate seed mix, depending on the post-disturbance land use to be achieved.

9.2 Access Tracks

Temporary access tracks no longer required for ongoing operational activities or not to be retained by the landholder will be closed and reinstated to a condition compatible with the surrounding land use. This will generally involve ripping to remove compaction, re-spreading stockpiled topsoil and revegetating. Landholder

[1] Contingency measures must be prepared prior to petroleum activities commencing under Schedule B of the EA.

tracks in existence prior to construction will have access re-instated and will not be blocked in anyway. Where tracks are to be retained by landholders, any wheel ruts should be graded and erosion-control measures such as diversion drains installed to an agreed condition.

9.3 Waterway Crossings

Waterway crossings will be rehabilitated by re-contouring disturbed areas to match the surrounding land as soon as practicable after petroleum activities have ceased. The surface will usually be lightly scarified before spreading the topsoil, to promote vegetation re-growth and protect against the topsoil loss. Temporary waterway barriers will be removed and reseeding undertaken to minimise erosion and promote regeneration of riparian vegetation.

9.4 Laydown and Stockpile Areas

Rehabilitation will be undertaken when the area for infrastructure, laydowns, or stockpile areas is no longer required for operational activities. Once infrastructure is removed or transported off site, gravel is generally removed from the hardstand and any areas of contamination remediated or excavated for disposal at an off-site licensed facility. Compacted areas should be ripped and the area seeded with a species mix determined by the post-disturbance land use.

10 Environmental Monitoring and Auditing

Monitoring, auditing of, and reporting on, contractor and Senex on-site activities provides a direct measure of Senex's compliance with environmental regulations, EA conditions and other permits, together with an indication of the effectiveness of the HEMS, EMP and supporting procedures and plans.

Environmental inspection, monitoring and auditing will be undertaken by the Senex Site Supervisor and Senex Environmental representative on a periodic basis to assess whether activities are in compliance with the requirements of these systems and documents.

10.1 Complaints and Grievances

Complaints and grievances will be recorded and responses (actions) tracked. Records of complaints will be kept and must include the date, complainant's details, source, reason for the complaint, description of investigation and actions undertaken in resolving the complaint.

Depending on the nature of the complaint or grievance the responsibility and associated timeframes for addressing and closing out the complaint or grievance will be assigned to the relevant Senex personnel. Any investigations required to be carried out will be undertaken with input from relevant personnel. Results of any investigation including proposed mitigation or management measures will be recorded and the complainant informed of how Senex either proposes to, or has, resolved the issue.

10.2 Monitoring

All monitoring must be undertaken by a suitably qualified person who has professional qualifications, training or skills or experience relevant to the monitored subject matter as defined in the EA conditions. Monitoring to be undertaken on the project area includes the following:

- Monitoring implementation of the EMP and supporting procedures and plans by the Senex Site Supervisor or the Senex Environmental representative as appropriate;
- Regular inspection of construction and operational activities by the Senex Site Supervisor or the Senex Environmental representative as appropriate.
- Environmental monitoring of over time for weed infestations with reference to the Atlas Biosecurity Management Plan [SENEX-ATLS-EN-PLN-002] and rehabilitation progress (for example, photo-monitoring and audits).
- Reporting and analysis of regulated discharges, emissions and waste disposal.

- Any other prescribed monitoring in accordance with the conditions of the EA.

10.3 Auditing

Environmental audits will be undertaken as both scheduled and unscheduled activities. The audit program may include the use of external auditors and will include regular (for example, annual) environmental compliance audits to assess compliance with this EMP, EA conditions and other regulatory requirements. The audit program will include audits of Contractor procedures and management plans and will be undertaken by the Senex Site Supervisor or Senex Environmental representative as appropriate.

11 Record Keeping and Reporting

Senex and its contractors will maintain an appropriate and auditable record system. Environmental reporting information will include as relevant:

- inspection / monitoring reports;
- photographic records;
- training and induction attendance and associated dates;
- incident reports;
- remedial actions taken following incident reports;
- records of waste removal including waste tracking certificates; and
- audit reports.

All records and data required to be maintained by EA conditions will be retained for a minimum of 5 years.

The annual reporting to DES (annual return) will require providing details of activities conducted during the annual return period, demonstrating actions such as:

- the area of significant disturbance from the project;
- rehabilitation undertaken;
- a list of all valid complaints relating to environmental issues made including the date, source, reason for the complaint and a description of investigations undertaken in resolving the complaint; and
- the results of all monitoring undertaken.

Appendix A - Senex Environmental Management Policy

See next page.

Environmental Management Policy

Document Number

SENEX-CORP-EN-POL-001

Senex Energy Limited

ENVIRONMENTAL MANAGEMENT POLICY

Senex Energy Limited (Senex) is an environmentally responsible company committed to conducting our business in a manner which ensures high standards of environmental management performance.

Senex will achieve this commitment through applying our core values to promote and maintain a culture of sustainability and continuously review and improve our environmental performance across the business.

We will achieve our environmental goals by actively focusing on:

- Assessing the potential impacts of our operations and activities on the local environment to limit disturbance;
- Operate in a safe and environmentally responsible manner;
- Empowering employees and contractors to achieve environmentally responsible operations and to improve environmental performance; and
- Maintaining and continuously improving environmental standards, systems and controls across all activities and operational areas.

Senex will ensure effective implementation of this policy through:

- Ensuring that environmental goals and standards are understood and adopted at all levels across the Company;
- Instructing and educating employees and contractors where appropriate of their environmental responsibilities;
- Reporting environmental incidents, determining the cause and where appropriate implementing changes to prevent a recurrence;
- Measuring our performance through regular monitoring, environmental audits and reporting; and
- Ensuring compliance with relevant laws, regulations and where appropriate industry codes.

Ian Davies
Managing Director
Senex Energy Limited

Approved – 15 December 2016

Review Date – 15 December 2018

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SENEX-ARCP-EN-PLN-001_0 - Att D ARCP Environmental Management Plan

Final Audit Report 2023-06-19

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