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Western Surat Gas Project Plan of Operations

7 November 2024 - 15 September 2027

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Revision:	0

1. Plan Requirements

Table 1-1 provides an outline of the Plan of Operations (PoO) requirements as described in Section 292 of the *Environmental Protection Act 1994* (EP Act) and references the sections of this PoO that satisfy these requirements.

This PoO Replacement has been submitted to DESI using the approved form, *Submission of a Plan Operations*, ESR/2018/4340, Version 4.03, 16 April 2024 (PoO Form), inclusive of a Compliance Statement as per Section 292(2) of the EP Act. An application for an ERC decision has also been submitted with this PoO using *Application for a decision on the estimated rehabilitation cost*, ESR/2018/4426, Version 6.03, 19 August 2024 (ERC Application Form).

Table 1-1 Plan of Operations requirements (Section 292 of EP Act)

Section 292 EP Act Requirements	Section of this PoO that addresses the requirement
(1) A plan of operations must:	
a) Be in the approved form	The PoO has been submitted using the approved form (the PoO Form, ESR/2018/4340)
b) describe the following:	
(i) each relevant lease for the environmental authority;	PoO Form Section 5 Spatial data
(ii) the land to which each relevant lease applies;	PoO Form Section 6 Spatial data
(iii) the land to which the plan applies;	PoO Form Section 7 Spatial data
c) state the period to which the plan applies (the plan period); and	PoO Form Section 4 Spatial data
d) include the following:	
(i) a map showing where all activities are to be carried out on the land;	PoO Figure 2-1
(ii) an action program for complying with the conditions of the environmental authority;	PoO Section 4
(iii) a program for rehabilitation of land disturbed or proposed to be disturbed under each relevant lease;	PoO Section 5

Section 292 EP Act Requirements	Section of this PoO that addresses the requirement
(iv) the matters prescribed under an environmental protection policy or a regulation; and	N/A - There are no matters prescribed under an environmental protection policy or by regulation for a PoO
e) be accompanied by a compliance statement for the plan; and	PoO Form Section 11
f) be accompanied by the fee prescribed by regulation.	N/A – there is no fee prescribed by regulation for a PoO
(2) A compliance statement under subsection (1)(e) must - (a) state the extent to which the plan complies with the conditions of the environmental authority; and b) be made- 1) If the holder is an individual- by the holder; or 2) If the holder is a corporation- by an executive officer of the corporation.	PoO Form Section 11
(3) The plan period cannot be more than 5 years.	The plan period is less than 5 years. PoO Form Section 4
(4) A plan of operations may relate to 1 or more relevant petroleum leases.	The PoO relates to 1 or more petroleum leases. PoO Form Section 5 Spatial data

2. Plan of Activities

Section 8 of the PoO Form requires the plan to describe all activities to be carried out on the land within the plan period. The proposed disturbance provided below in **Table 2-1** addresses the requirements of Appendix 1 – Plan of Activities: Part B (Proposed Activities) of the PoO Form. Proposed activities are shown in **Figure 2-1**.

The number and location of proposed petroleum activities to be carried out / constructed on relevant land during the PoO period is subject to change dependent on landholder agreements, regulatory approval constraints, cultural heritage, and detailed design.

Spatial information detailing all existing petroleum activities will be provided to DES at the time of PoO submission in accordance with ESR/2018/4337.

Table 2-1 Plan of Activities

Activity	Proposed Disturbance Details			Proposed Disturbance Details		
	Year 1			Year 2/Year 3		
	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)
Domain 2: Roads, Track, Laydown and Borrow Pits						
Access tracks	PL1022, 1023, 1024	154.7	92.8	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Laydown yards		N/A	24.5			
Borrow pits		N/A	**4**			
Total Disturbance Area (ha)			**121.3**			**N/A**
Domain 3: Camps and Buildings						
Camps	PL1022, 1023, 1024	0	0	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Demountable/ Temporary Building[1]		15	Included in Laydown yards			
Sewage Treatment Plant[1]		1				
Irrigation area for Sewage Treatment Plant		N/A	**4**			
Total Disturbance Area (ha)			**4**			**N/A**
Domain 4: Power Generation and Distribution						
Power Generation Facility	PL1022, 1023, 1024	7	Included in gas compression facility area and water transfer station areas	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Communication Tower		2	1			
Total Disturbance Area (ha)			**1**			**N/A**
Domain 5: Well Pads and Associated Infrastructure						
Wells – Operational	PL1022, 1023, 1024	157	157	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Total Disturbance Area (ha)			**157**			**N/A**
Domain 6: pipelines						
Gas pipeline	PL1022, 1023, 1024	181.7[2]	340.5	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	

Activity	Proposed Disturbance Details			Proposed Disturbance Details		
	Year 1			Year 2/Year 3		
	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)
Total Disturbance Area (ha)			**340.5**			**N/A**
Domain 7: Gas Processing and Oil Storage Facilities						
Stand-alone gas compressors	PL1022, 1023, 1024	2	0.2	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Total Disturbance Area (ha)			**0.2**			**N/A**
Domain 9: Water Treatment Plants and Transfer Stations						
Water Treatment Plant	PL1022, 1023, 1024	1	2	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Water Transfer Station		2	3.5			
Total Disturbance Area (ha)			**5.5**			**N/A**
Domain 10: Water Storage Infrastructure (Dams and tanks)						
Dam – Regulated	PL1022, 1023, 1024	1	25	PL1022, 1023, 1024	Activities not completed in year 1 will carry over to year 2 and/or year 3	
Tank		3	15			
Total Disturbance Area (ha)			**40**			**N/A**
TOTAL DISTURBANCE AREA (ha)			**670**			**N/A**

[1] *Rental infrastructure not owned by Senex.*

[2] *Senex anticipate that no more than 20km of open fronts at any one time during the PoO period, with the balance to be reinstated to an operational width.*

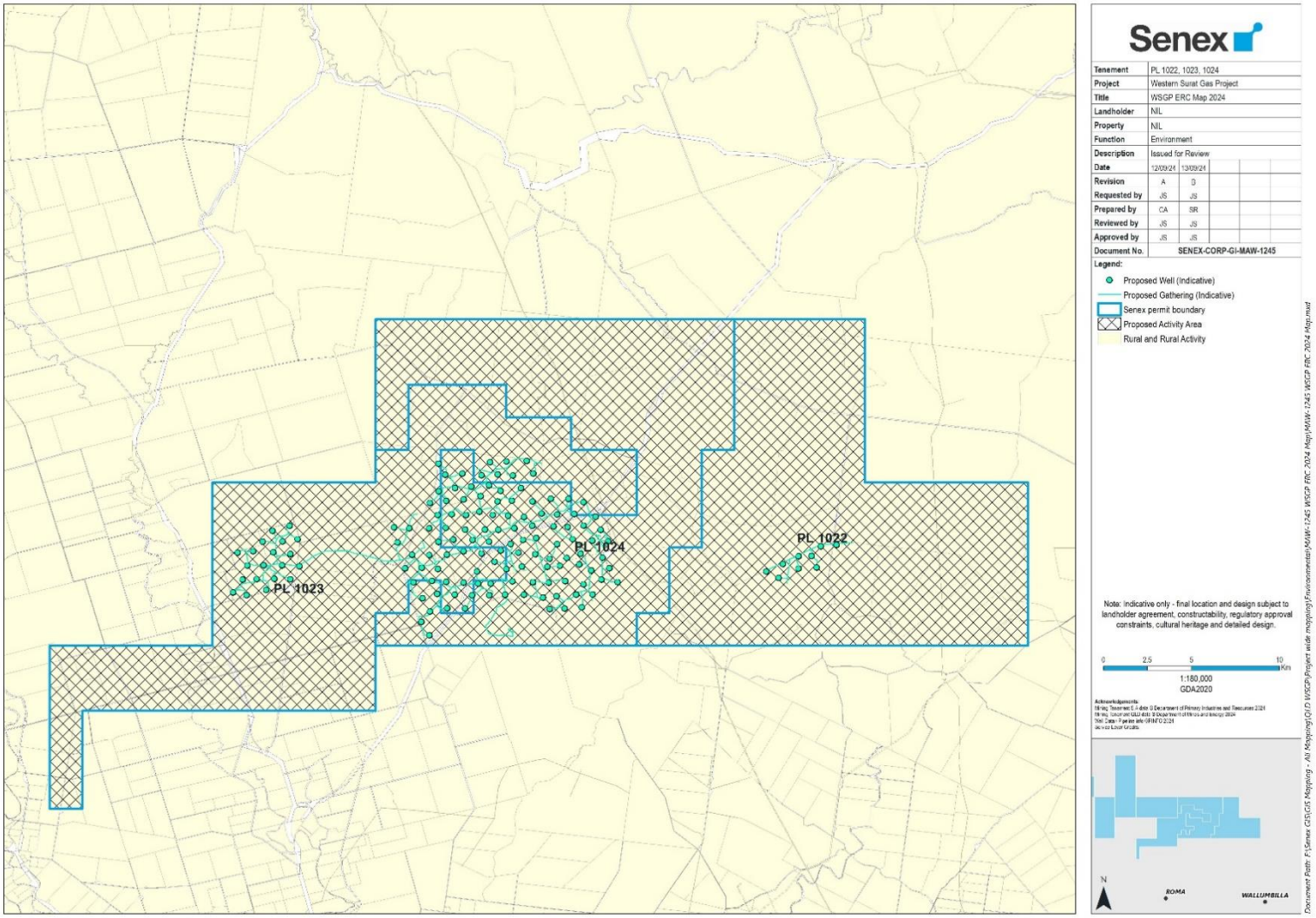


Figure 2-1 Indicative location of proposed activities

3. Water Management

With reference to Section 8 of the Estimated Rehabilitation Cost (ERC) Application Form (ESR/2018/4425), the water balance modelling and water management practices for the Project relevant to the plan period are summarised below.

Further information regarding water management practices for the Project are detailed in the WSGP Coal Seam Gas Water Management Plan[1] provided for the previous plan period.

3.1. Water management system

The WSGP water management system comprises three water storage facilities for the management of produced water. Produced water is gathered to Eos Dam, Glenora Dam and Tethys Dam (under construction). An additional dam ('Proposed Dam') is proposed for construction during the plan period.

The existing facilities are designed and operated as low consequence structures, while the proposed facility is to be designed and operated as a regulated structure. All water storages will be designed and operated in accordance with the requirements of the WSGP environmental authority (EA) and EP Act. Details of these water storage facilities is overviewed in **Table 3-1** below.

Table 3-1 Water storage facilities

Asset	Purpose	Dam Construction	Liner Composition	Leak Detection Type	Maximum Allowable Storage Volume (ML)
Glenora Dam	Produced water storage	Turkeys nest	Single HPDE	Underliner leakage detection	308
Eos Dam	Produced water storage	Turkeys nest	Single HPDE	Underliner leakage detection	180
Tethys Dam	Produced water storage	In ground and above ground	Single HPDE	Leakage Collection Sumps w/ Pumps & Seepage Bores	600
Proposed Dam	Produced water storage / Concentrate storage	In ground and above ground	Double HPDE	Seepage bores	600

[1] Senex 2024, WSGP Coal Seam Gas Water Management Plan, 05 April 2024, Revision 3

WSGP water management also incorporates storage tanks. These are precast concrete panel above-ground tanks that have HDPE double liners and leak detection systems. They are designed and constructed to Australian Standards for strength and structural integrity. Key attributes for each of the tanks are summarised in **Table 3-2.**

Table 3-2: Storage Tank Attributes

Service	Equipment Tag	Double/Single Walled	Bund/Self Contained	Above/Below Ground	Total Volume (ML)
Produced Water Storage	Glenora Tank (GLEG-TK-001)	Double	Self-contained	Above	20 ML
Proposed Concentrate Storage	Proposed Tank (TBC)	Double	Self-contained	Above	50 ML
Proposed Concentrate Storage	Proposed Tank (TBC)	Double	Self-contained	Above	50 ML
Proposed Concentrate Storage	Proposed Tank (TBC)	Double	Self-contained	Above	75ML

Figure 3-1 shows a schematic of the existing water management system for the WSGP.

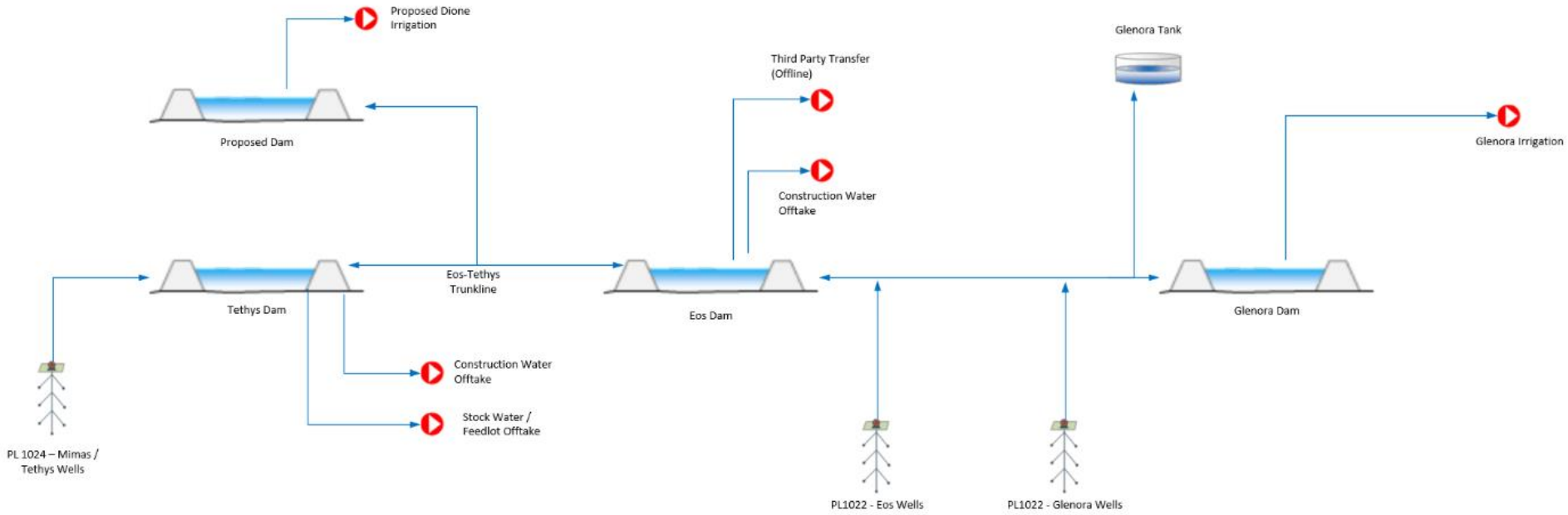


Figure 3-1 WSGP water management schematic

3.2. Water quality

Produced water quality is summarised in **Table 3-3.**

Table 3-3 Water quality composition

Parameter (unit)	Limit of detection	P10	Median	P90
Electrical Conductivity @ 25°C (µS/cm)	<1	3,048	4,080	5,651
Total Dissolved Solids @ 180 °C (mg/L)	<10	1,680	2,260	3,310
pH (-)	<0.01	8.44	8.63	8.83
Arsenic (mg/L)	<0.001	<LOR	<LOR	<LOR
Boron (mg/L)	<0.05	0.27	0.33	0.40
Cadmium (mg/L)	<0.0001	<LOR	<LOR	<LOR
Chromium (mg/L)	<0.001	<LOR	<LOR	<LOR
Cobalt (mg/L)	<0.001	<LOR	<LOR	<LOR
Copper (mg/L)	<0.001	<LOR	<LOR	<LOR
Iron (mg/L)	<0.05	<LOR	0.05	0.446
Lead (mg/L)	<0.001	<LOR	<LOR	<LOR
Manganese (mg/L)	<0.001	0.009	0.019	0.041
Nickel (mg/L)	<0.001	<LOR	<LOR	0.017
Zinc (mg/L)	<0.005	<LOR	<LOR	<LOR
Calcium (mg/L)	<1	2	4	9
Magnesium (mg/L)	<1	<LOR	<LOR	2
Sodium (mg/L)	<1	700	924	1320
Potassium (mg/L)	<1	4	7	19
Fluoride (mg/L)	<0.1	1.7	2.3	3.0
Mercury (mg/L)	<0.0001	<LOR	<LOR	<LOR

Note: Half the LOR has been assumed as the result value for statistic generator where results below LOR were returned

All metals/metalloids are dissolved

3.3. Treatment of water

The WSGP produced water is primarily used for irrigation purposes by third party landholders, facilitated through water supply agreements and in accordance with the End of Waste Codes under the *Waste*

Reduction and Recycling Act 2011 and any associated Resource Monitoring and Management Plans (RMMP).

Where required to achieve the requisite water quality for beneficial re-use of water, the WSGP produced water will be processed through a water treatment facility (i.e. desalination unit). The water treatment facility works by partitioning select constituents entrained within produced water into a waste stream (concentrate) leaving a permeate stream of significantly better quality water.

The permeate stream may be blended with produced water to result in a water composition suitable for the intended end use, and to optimise the operation of the water treatment facility. Concentrate stream will be transferred from the water treatment facility to a dam and/or storage tanks.

3.4. Water balance

A water balance model has been developed for the plan period. The water balance model incorporates the water production forecasts, dam storage levels and rainfall as inputs, and provides a forecast on system outflows including evaporation and landholder uses (e.g. irrigation and feedlot stock water provided under Landowner Water Supply Agreements).

The site water balance for the WSGP during the plan period is overviewed in **Table 3-4**. During the plan period, the total system inflow is 5,583 ML and the outflow is 5,727 ML. This results in a net inventory change (reduction) of 144 ML during the plan period.

Based on a median value of total dissolved solids (TDS) for WSGP produced water, Senex forecast that treatment of produced water will generate in the order of 2.3 tonnes of salt per ML of produced water. Total brine volume and salt mass produced at the end of the plan period is forecast to be approximately 82ML and 6,811 tonnes, respectively. These forecasts have informed water salt removal, water pumping and salt disposal quantities in the ERC Calculation.

Table 3-4 WSGP water balance

	Parameter	Quantity (ML)
Total System	**System inflows**	**5583**
	Well produced water	5351
	Direct rainfall	232
	System outflows	**5727**
	Field water usage	138
	Evaporation	442
	Irrigation	4590
	Feedlot Stock Water	557
	Change in inventory	-144

4. Action Program

Section 9 of the PoO Form requires an action program for compliance with each schedule of conditions within the EA. The action program in **Table 4-1** below presents this information consistent with the approved format of Appendix 2 of the PoO Form (ESR/2018/4340). The internal processes including the plans and procedures presented below provide a means to ensure compliance with conditions in each EA schedule.

Table 4-1 Action program

EA Condition/Schedule	Internal Process/Management System	Environmental Management Strategies
Schedule A - General	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006) Contingency Procedures for Emergency Environmental Incidents SENEX-QLDS-EN-PRC-005	Throughout project planning, assessments are completed against Schedule A, Table 1 to provide a means of ensuring compliance with the approved disturbance activities. Staff undertake project-specific inductions to increase awareness of relevant conditions of the EA and management plans. All monitoring required by conditions of the EA is undertaken by suitably qualified persons and by using NATA accredited laboratories where required. Complaints and incidents, reporting is undertaken in accordance with EA conditions. Senex implement incident notification procedures to ensure accurate and timely reporting and notification of any environmental incidents. Further details are available in the WSGP Environmental Management Plan (EMP) (SENEX-WSGP-EN-PLN-006) that was provided to DESI on 23/06/2017 and subsequently approved on 5/12/2017). The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule B - Waste	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006)	All waste generated is stored, handled and transported in accordance with the waste and resource management hierarchy, waste and resource management principles, appropriate standards and regulatory requirements. All chemicals, oil and fuel are handled, stored and effectively contained, and transported appropriately and in accordance with relevant Australian Standards (AS) and Australian Dangerous Good Code. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule C - Noise; Schedule D - Air	WSGP Environmental Management Plan	Prior to construction and other high noise generating activities, landholders are notified of the nature and expected duration of these activities.

EA Condition/Schedule	Internal Process/Management System	Environmental Management Strategies
	(SENEX-WSGP-EN-PLN-006)	Construction hours are in accordance with EA conditions and requirements of the Environmental Protection (Noise) Policy 2008. Noise impacts and requirements for noise mitigation are considered during the engineering design and site planning processes. Noise impacts are minimised by adopting measures in the EPP Noise hierarchy as appropriate (e.g. locating activities at suitable distances from noise sensitive places). Facility specific noise modelling is undertaken during the design phase, where required. Noise modelling or assessment is undertaken for temporary and operational activities to assess expected noise emissions at potential sensitive receptors. Operators of construction equipment are made aware of potential noise impacts and required to employ techniques and/or equipment to minimise noise emissions where necessary. Where blasting is required, a blast management plan is developed in accordance with AS 2187, and EA conditions for blasting operations. Site specific modelling or assessments are undertaken to assess potential air emissions at the design stage for the operating infrastructure to assess air quality at potential sensitive receptors and to meet approval requirements. Point source air emissions are managed to remain within the limits of the EA. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.

EA Condition/Schedule	Internal Process/Management System	Environmental Management Strategies
Schedule E - Land	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006)	Minimise the extent and duration of exposed soils as far as practicable. Ensure stripped topsoil is stored separately to subsoil where practicable. Once construction activities are complete, soil horizons are replaced in the order in which they are excavated where practicable. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule F – Biodiversity	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006)	Clearing of native vegetation is 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 is undertaken in accordance with relevant permits or exemptions issued under the Nature Conservation Act 1992 and relevant EA conditions. During project planning, the Environmental Protocol for Field Development and Constraints (SENEX-CORP-EN-PRC-019) is used to preferentially minimise disturbance to biodiversity values. Within ESAs, infrastructure is preferentially located in areas of non-remnant vegetation. Prior to undertaking activities that result in significant disturbance to land, an ecological survey is undertaken by a suitably qualified person. Vegetation is not cleared unless authorised under a Senex internal Access To Work (ATW) approval. The ATW is approved prior to any vegetation clearance or disturbance occurring. Positive visual markings or pegs are 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 is communicated via toolboxes to project staff and contractors. ‘No-go’ areas are GPS located and clearly marked e.g. with bunting, flagging tape. No-go areas are prohibited to enter for construction staff and contractors and only accessed by authorised persons for relevant activities, where necessary.

EA Condition/Schedule	Internal Process/Management System	Environmental Management Strategies
		Wherever reasonably practicable, vegetation is removed at ground level by cutting or slashing rather than removing root stock. Mature trees, including hollow bearing trees, are preferentially avoided, or clearing is minimised where possible. Hollow bearing trees, where cleared, are retained as habitat, where possible. Cleared vegetation/green waste that cannot be used on-site for rehabilitation and/or sediment erosion control is stockpiled to facilitate re-spreading or salvaging. Significant residual impacts to prescribed environmental matters have been approved in the EA and an EPBC approval. Proposed activities continue to be assessed on a progressive basis to ensure conditions of approval in this Schedule are considered in any project development plans. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule G - Water	WSGP CSG Water Management Plan	Petroleum activities within any wetland area or watercourse are carried out in accordance with the EA conditions. Watercourse crossings are limited to those strictly necessary for construction or operation of linear infrastructure and only at locations where site-specific controls have been identified. Other than linear infrastructure, petroleum activities are kept at least 200m from a wetland, lake or spring. Further details are avaialble in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule H - Well construction and maintenance	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006)	CSG production wells are drilled and constructed in accordance with the *Code of Practice the construction and abandonment of coal seam gas and petroleum wells, and associated bores in Queensland* (Version 2). The purpose of this Code is to ensure that all petroleum wells, CSG wells and associated bores are constructed, maintained and abandoned to a minimum acceptable standard resulting in long-term well integrity, containment of petroleum and the protection of groundwater resources. No stimulation activities are approved or undertaken.

EA Condition/Schedule	Internal Process/Management System	Environmental Management Strategies
		Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule I - Dams	WSGP Environmental Management Plan (SENEX-WSGP-EN-PLN-006) WSGP CSG Water Management Plan	Design, construction and operation of all regulated structures is in accordance with the requirements of the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures* (ESR/2016/1933 v5.03) New regulated structures are proposed for construction during the plan period. Prior to commissioing a regulated structure register will be developed, and relevant documentation (e.g. category assessment report, certification and operational plan) provided to DESI. Undertake assessment and reporting in accordance with EA requirements. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the EMP have been accepted as appropriate to achieve compliance with the conditions of this EA.
Schedule J - Rehabilitation	Western Surat Gas Project Rehabilitation Plan (SENEX-WSGP-EN-PLN-003).	Reinstatement activities are undertaken within pipeline RoWs in accordance with the methods outlined in the Rehabilitation Plan (Section 5.1)and as per the conditions of the EA. The timing and works undertaken as part of rehabilitation activities are dependent on the activity type and operational stage of the Project and governed by EA requirements. Some project activities such as drilling are temporary in nature, enabling transitional rehabilitation (also called progressive rehabilitation) to be undertaken once the disturbance area is no longer required for operational activities. Other infrastructure and disturbance is longer-term, requiring decommissioning and rehabilitation at the end of project life. All infrastructure constructed by Senex will be removed from site except where it is to remain with the written agreement of the landholder. All decommissioning and rehabilitation activities will be undertaken in accordance with the Rehabilitation Plan acceptance criteria and EA conditions. Further details are available in the EMP (SENEX-WSGP-EN-PLN-006) that was provded to DESI on 23/06/2017 and subsequently approved on 5/12/2017.The measures in the Rehabiliation Plan have been accepted as appropriate to achieve compliance with the conditions of this EA.

5. Rehabilitation Program

Section 10 of the PoO Form requires the PoO to include a rehabilitation program, including a rehabilitation plan and rehabilitation schedule outlining the rehabilitation activities completed to date and planned to be completed during the plan period.

Spatial information detailing all existing rehabilitation present on the land at the commencement of this plan period will be provided to DESI at the time of Plan of Operations submission in accordance with ESR/2018/4340.

5.1. Rehabilitation Plan

Rehabilitation, both transitional and final rehabilitation, will be implemented in accordance with the WSGP Rehabilitation Plan and the applicable EA conditions.

Transitional rehabilitation activities will continue during the plan period. Transitional rehabilitation is to include reinstatement of well pads and RoWs to operational width.

Rehabilitation activities typically include (but may not be limited to) the following measures:

- Backfilling of RoW trenches after pipe laying
- Soil amelioration
- Surface preparation including ripping of subsoil and compacted areas (as required), re-profiling natural contours and drainage lines, respreading of topsoil
- Installation of temporary erosion and sediment controls, as per the Senex Erosion and Sediment Control Plan (ESCP)
- Seeding where rapid restoration is required (e.g. watercourse crossings and high potential erosion areas). Otherwise, natural regeneration is encouraged monitored
- Respreading mulch or felled vegetation for stability and fauna habitat
- Monitoring and maintenance activities to confirm performance against rehabilitation criteria

Domain-specific rehabilitation measures are presented in the Rehabilitation Schedule (**Section 5.2**). Monitoring of both transitional rehabilitation and final rehabilitation success through identified completion criteria of the EA will be undertaken in any available areas during the plan period along with any maintenance required on previous rehabilitation.

5.2. Rehabilitation Schedule

The Rehabilitation Schedule is presented in **Table 5-1** and presents the information required within Appendix 3 of the PoO Form.

Table 5-1 Rehabilitation Schedule

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
Exploration	Seismic	PL1022, PL1023, PL1024	-	Agriculture/grazing, as per the pre-existing land and surrounding land use at each intra-domain location, and agreements with the landholder(s) at the time of final rehabilitation (which is beyond the period of this PoO) (refer to spatial information)	As per environmental authority requirements	• Stabilise significantly disturbed land, topsoil and re-establish natural drainage. • Lightly rip surface to relieve any compaction. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Listed pest plant control, where required.	All seismic lines (if significantly disturbed) rehabilitated immediately following program including: • Stabilise significantly disturbed land, topsoil and re- establish natural drainage. • Lightly rip surface to relieve any compaction. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Listed pest plant control, where required. Rehabilitation of historic seismic activities commenced prior to Senex operations.
	Land area covered by demountable camps, water treatment plants, earthen laydown where infrastructure / equipment will be removed	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Modules / equipment are owned by third-parties responsible for the decommissioning and removal of infrastructure (e.g. demountables) on this area. Senex to complete grade and seed of the area. Rehabilitation work to be undertaken includes trimming area and seeding with pasture species.	Demountables and associated areas to remain in use throughout the plan period

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
Road, Tracks, Laydown and Borrow pits	Access Track	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Strip capping material and reinstate topsoil, where required • Rip to relieve compaction, where required. • Reinstate natural drainage lines and contours. • Installation of erosion and sediment controls as required. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Listed pest plant control, where required.	Access tracks to remain in use throughout the plan period
Road, Tracks, Laydown and Borrow pits	Laydown	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Strip capping material and reprofile pad, where required. • Rip to relieve compaction, where required. • Reinstate natural drainage lines and contours. • Reinstate topsoil. • Installation of erosion and sediment controls as required. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Installation of fencing as required. • Listed pest plant control,	Laydowns to remain in use throughout the plan period

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
						where required.	
Road, Tracks, Laydown and Borrow pits	Borrow Pit	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Stabilise landform by surface re-profiling, contouring or benching. • Reinstate topsoil. • Installation of erosion and sediment controls as required. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Installation of fencing as required. • Listed pest plant control, where required.	Borrow pits to remain in use throughout the plan period
Camps and buildings	Portable building	PL1022, PL1023, PL1024	N/A (Area included under 'laydowns')		As per environmental authority requirements	• Electrical and mechanical disconnection. • Crane to lift to truck and transport to storage location.	Portable buildings to remain in use throughout the plan period
	Irrigation area	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Salvage local growth media, rip, seed.	Irrigation area to remain in use throughout the plan period
Power Generation and Distribution	Power generation	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• De-energise, disconnect, • Load and transport modules. • Disconnect portable buildings and transport.	Power generation to remain in use throughout the plan period

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
						• Remove gravel surface and transport to re-use area. • Grade and seed. • Potential land investigation around transformers.	
	Communications towers	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Equivalent of steel lattice towers with electronics. • Electronics removed and transported to storage. • Tower pulled down, steel cut-up and transported to re-use yard.	Communication tower to remain in use throughout the plan period
Well pads and associated infrastructure	Well Pads	PL1022, PL1023, PL1024	~100.5		As per environmental authority requirements	• Installation of fencing as required. • Listed pest plant control, where required. • Reinstate topsoil. • Removal of infrastructure. • Strip capping material and reprofile pad. • Rip to relieve compaction, where required. • Reinstate natural drainage lines and contours. • Reinstate topsoil. • Installation of erosion and sediment controls as required. • Application of seed and fertiliser or alternative soil stabilisation, as required. • Decommissioning and removal of surface well	Completed rehabilitation (not yet certified) achieved for 19.4 ha. Transitional rehabilitation is undertaken in associated with ongoing operational activities where part of the disturbed area is no longer required. Once the well is constructed, the construction area of the well pad is reduced from approximately 1 ha to an operational area of approximately 0.36 ha. Transitional rehabilitation involves recontouring the land surface (as required), replacing topsoil, and direct seeding of groundcover species to compliment the post-operation land use. Ongoing monitoring and maintenance of these areas is completed as per EA requirements.

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
						infrastructure (final rehabilitation only), including cut casing and cement backfill well.	Rehabilitation has commenced on well pad rehabilitation including: • Strip capping material and reprofile pad. • Rip to relieve compaction, where required. • Reinstate natural drainage lines and contours. • Installation of erosion and sediment controls as required. • Removal of infrastructure (decommissioned wells only). • Plugging of wells (decommissioned wells only).
Pipelines	Right of Way (RoW)	PL1022, PL1023, PL1024	~226		As per environmental authority requirements	• Backfill trenches and compact. • Re-instate topsoil, natural channels, and drainage. • Application of soil amelioration as required. • Install erosion and sediment controls (watercourse crossings stabilisation, diversion berms, fencing etc.) as required. • Application of seed and fertiliser or alternative soil	Rehabilitation completed (not yet certified) for approximately 178.7 ha. Transitional rehabilitation is undertaken in disturbance associated with ongoing operational activities where part of the disturbed area is no longer required. RoWs are reinstated from their full construction width to a narrower operational width adequate for vehicle access and maintenance, generally 6 m. Transitional rehabilitation involves recontouring the land surface (as required), replacing topsoil, and direct

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
						stabilisation, as required. • In some instances, temporary fencing may be installed during rehabilitation of high-risk sites e.g. watercourse crossings. • Listed pest plant control, where required. • Decommissioning and removal of surface infrastructure (final rehabilitation only).	seeding of groundcover species to compliment the post-operation land use. Ongoing monitoring and maintenance of these areas is completed as per EA requirements. Rehabilitation has commenced on pipeline RoW following construction. The rehabilitation includes: • Backfill trenches and compact. • Re-instate topsoil, natural channels, and drainage. • Application of soil amelioration as required. • Install erosion and sediment controls (watercourse crossings stabilisation, diversion berms, fencing etc) as required. • Application of seed and fertiliser or alternative soil stabilisation, as required. • In some instances, temporary fencing may be installed during rehabilitation of high-risk sites e.g. watercourse crossings. • Listed pest plant control, where required. • Pipeline removal or decommissioning will

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
							occur at end of project life.
Gas Processing and Oil Storage Facilities	Gas processing facility of user entered TJ/day	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Purging of vapours and removal and disposal of liquids. • Electrical and mechanical disconnection / cutting of process modules, skids and buildings. • Lifting and transport of process modules / portable buildings to a storage location. • Demolition of on-site constructed buildings and transport refuse for disposal. • Demolition / rip-up and transport for disposal of concrete and asphalt hardstand. • Potential contaminated land investigation. • Grade and seed of entire footprint. • Removal of security fencing.	Gas processing facility is to remain in use throughout the plan period
	Stand-alone gas compressor	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Minor purging, electrical and mechanical disconnection, lifting and transport to a storage location.	Gas processing facility is to remain in use throughout the plan period

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
Water Treatment Plants and Transfer Stations	Water Treatment Plant	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Electrical and mechanical disconnection / cutting of process modules, skids and buildings. • Lifting and transport of process modules / portable buildings to a storage location. • Demolition of on-site constructed buildings and transport refuse for disposal. • Demolition / rip-up and transport for disposal of concrete and asphalt hardstand. • Excavate gravel and transport to re-use site. • Potential contaminated land investigation. • Grade and seed of entire footprint. • Removal of security fencing.	WTP and transfer facilities to remain in use throughout the plan period
Water Storage Infrastructure	Dams	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Treatment (where required) and removal of stored water. • Removal and disposal of sediment, salt residue (where present) and liner. • Earthworks to fill dams using soil in berms. • Place growth media. • Grade and seed with appropriate species.	Dams to remain in use throughout the plan period

Domain	Activity	Location	Area (ha)[1]	Post-Operation Land Use	Timing (When)	Summary of rehabilitation methodology	Rehabilitation works already undertaken
						• Potential land investigation.	
	Tanks	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Treatment (where required) and removal of stored water. • Removal and disposal of sediment, salt residue (where present) and liner. • Electrical and mechanical disconnection of tanks and pumps. • Cut-up of liners and piping. • Transport of waste to disposal facility. • Grade and seed.	Tanks to remain in use throughout the plan period
General Land Rehabilitation	Maintenance of rehabilitated areas	PL1022, PL1023, PL1024	226.9		As per environmental authority requirements	• General maintenance of existing rehabilitation, including weed management, re-seeding, amelioration and minor rehabilitation repairs, as required.	Rehabilitation completed (not yet certified) for approximately 199.1ha.
	Bore Grouting	PL1022, PL1023, PL1024	-		As per environmental authority requirements	• Grout seal bore and seed associated area.	Bores to remain in use throughout the plan period

[1] This identifies areas of proposed rehabilitation to be undertaking during the plan period. Areas of existing disturbance and/or rehabilitation completed prior to plan period are provided within the spatial data.