



Vermilion Oil & Gas Australia

Wandoo Producing Facility Environment Plan Summary

INTRODUCTION

This document presents a Summary Environment Plan (EP) for the Wandoo production facility which is located in Commonwealth waters on the North West Shelf (NWS) of Western Australia. The facility, located in production license area WA-14L, is operated by Vermilion Energy Trust's Australian company, Vermilion Oil & Gas Australia (VOGA).

This Summary EP covers the following main infrastructure within the production license area:

Wandoo A Monopod; Wandoo B Platform, Single Point Tanker Mooring and Offloading Facility.

COORDINATES OF ACTIVITY

The Wandoo field is located approximately 80 km north west of the town of Karratha. Geographical coordinates of Wandoo production various facilities are given in Table 1.

Table 1 **Coordinates of the Wandoo Facility**

Facility	Latitude	Longitude
Wandoo A	20°08' 20" S	116°25' 17.5" E
Wandoo B	20°07' 43" S	116°26' 04" E
Anchorage	20°05' 00" S	116°23' 48" E
Catenary Anchor Leg Mooring Buoy (CALM) Buoy	20°07' 02" S	116°26' 02" E

DESCRIPTION OF ENVIRONMENT

The proposed activity will not impact upon any World Heritage properties, Ramsar wetlands, threatened ecological species or communities or Commonwealth land. There are no areas listed on the Register of the National Estate within the vicinity of the Wandoo facilities. There are no known sites of Aboriginal or European cultural or heritage significance within the vicinity. No record of any declared shipwrecks exists within the acreage. There are no reef structures or landfalls typically associated with high marine productivity, bird or turtle nesting sites or other known areas of biological significance in the vicinity of the project area.

The seabed in the vicinity of the Wandoo facility is considered typical of the deeper offshore areas on the North West Shelf, being flat, featureless and characterised by deep fine to medium-size carbonate sand with the animals inhabiting the seabed being sparsely distributed, consisting primarily of infauna (small invertebrates living in the sediment) with occasional sessile sponge and soft corals.

Species detailed under the EPBC Act: as Listed, threatened and migratory species include cetacean, turtle and bird species which may transit through the project area.

The Pilbara region contains a number of shipping routes for vessels moving around Australia and for international shipping arriving at Western Australian ports. There are approximately 300 vessel movements through the project area per year.

The region supports a small and diverse fishing industry, with the marine and coastal habitats being significant at all life stages for commercial species in the region. Several commercial fisheries are

active off the Pilbara coast, however, fishing effort is low and operators tend to concentrate their efforts in inshore areas.

DESCRIPTION OF THE ACTIVITY

The Wandoo project consists of Wandoo A, a single unmanned monopod wellhead platform supporting a deck and five production wells and Wandoo B, a Concrete Gravity Structure (GCS) connected to Wandoo A by a subsea pipeline. The end of field life is currently modelled to be 2018.

The oil produced from Wandoo A is piped to the Wandoo B platform. Oil is stored in the CGS supporting the Wandoo B processing facilities and then offloaded through flexible pipelines to a CALM Buoy located 1.2 km north of the Wandoo B platform. A floating hose is used in transferring the oil from the CALM Buoy to export tankers situated at a mooring facility. Export tankers are chartered on a spot basis to offload the crude.

The Wandoo oil production facility is capable of processing in excess of 20,000 m³ of well stream fluids per day. In addition to the advanced technical specifications incorporated in the design of the facility it can use re-injection of reservoir gas to increase environmental performance. There is the potential to refloat the Wandoo B platform and move it to another location at end of field life.

The Wandoo B platform is provided with an accommodation module with principal access to the platform by helicopter. The helideck is located on top of the accommodation module.

DETAILS OF MAJOR ENVIRONMENTAL HAZARDS AND CONTROLS

Only moderate ranking risks have been included in this Summary EP as there were no major risks identified. The methods used in the risk assessment and the less significant rankings are included in the full version. The following risks have been assessed as moderate:

- Discharging produced formation water.
- Accidental discharge of production chemicals.
- Air emissions affect the local air quality and contribute to greenhouse gas emissions.
- Export tanker loading could result in an oil spill and lead to mortality and oiling of marine organisms and a decrease in water quality.
- Diesel fuel handling could result in a spill leading to the reduction of water quality and the potential to harm marine organisms.
- Loss of well fluids from subsea infrastructure could lead to an oil spill, reducing water quality and potentially harming marine organisms.
- Vessel collisions resulting in an oil spill would reduce water quality and have the potential to harm marine organisms.

SUMMARY OF MANAGEMENT APPROACH

A systematic approach was taken through the identification and assessment of hazards and risk, the establishment of objectives, performance standards, criteria and the development of appropriate documentation. The approach used for each of the environmental hazards is detailed in the full EP. VOGA's Health, Safety and Environment (HSE) commitments, plans, expectations and objectives are outlined in its HSE Policy, from which the management measures used in the systematic approach have been developed.

CONSULTATION

VOGA acquired the Wandoo Field in early 2005; therefore the field development consultation took place with the previous operator Wandoo Production Alliance. The authorities and stakeholders that were consulted included DoIR, Department of Fisheries, Western Australia Fishing Industry Council, Department of Environment and Heritage, Australian Fisheries Management Authority, Australian Maritime Safety Authority, Australian Marine Oil Spill Centre, National Offshore Petroleum Safety Authority, tourism operators out of Dampier and community stakeholders.

A wide range of consultation methods were used and in each case the approach selected was based on the interests and geographical location of the group being consulted. Present consultation includes periodic meetings with regulators. Future liaison will likely involve the provision of information to regulatory authorities and key stakeholders.

CONTACT DETAILS

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