



Cliff Head Field Offshore Operations Environment Plan

This document provides notification of NOPSEMA's decision made under regulation 10 of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations) to accept an environment plan.

Submission information

Titleholder ¹ :	Triangle Energy (Operations) Pty Ltd
Environment plan:	Cliff Head Field Offshore Operations Environment Plan (Document No. 10/HSEQ/ENV/PL01, Revision 9, dated 11/10/2017)
Petroleum titles:	WA-12-PL, WA-31-L
Date first submitted to NOPSEMA:	22/03/2017
Activities types ² :	 Operation of a facility used for the recovery or processing of petroleum Operation of a licensed petroleum pipeline Any other petroleum-related operations or works carried out under an instrument, authority or consent granted or issued under the OPGGSA

Activity overview:

As described in the accepted environment plan.

Production from the Cliff Head Oil Field Development involves transferring oil and produced formation water (PFW) from the offshore wellhead to the Arrowsmith Stabilisation Plant (ASP) via the offshore and onshore pipeline. At the ASP, the PFW is removed from the product stream, the crude oil is stabilised and then transferred to road tankers and transported for refining.

This Environment Plan considers only the offshore components of the Cliff Head development, namely those that occur beyond the Commonwealth-State boundaries at 3nm from the coastline, these are:

- An unmanned well head platform, Cliff Head Alpha (CHA) to accommodate the well heads and support equipment;
- Eight well heads with the current arrangement of five production wells with electrical submersible pumps to enable artificial lifting of the produced fluid (i.e. crude oil and water), and three water injection wells;
- An insulated subsea production pipeline, which transports the produced fluids from CHA to the onshore ASP;
- An insulated subsea water injection pipeline from ASP to the three injection wells at CHA; and
- A subsea power and communication cable, and chemical supply umbilical running from ASP to CHA.

The production pipeline transports the produced fluids from the CHA to the ASP where oil is separated from the PFW. The PFW is then transported via the water injection pipeline to the injection wells, where it is then injected into the geological formation that hosts the hydrocarbon reservoir.

The offshore components of the pipelines that lie within Commonwealth



	waters are approximately 4.9 km in length and are operated under pipeline licence WA-12-PL. The offshore components of the pipelines that lie within state waters (i.e. between the state waters limit and the mean low water mark) are approximately 6.9 km in length and are operated under pipeline licence TPL/18, which is administered by the Western Australian Department of Mines and Petroleum.
Decision:	Accepted
Decision date:	17/10/2017
Decision made by:	Representative of NOPSEMA: Environment Manager - Seismic & Production Operations

Basis of decision

NOPSEMA has assessed the environment plan in accordance with its assessment policies and procedures. Having regard to all information provided by, and referred to in the environment plan, NOPSEMA is reasonably satisfied that the environment plan meets the criteria set out in regulation 10A of the Environment Regulations.

Next steps for the petroleum activity

An environment plan summary must be provided to NOPSEMA within 10 days of this acceptance. regulation 11(4) requires that this document provide material from the accepted environment plan.

Once the summary document has been prepared to NOPSEMA satisfaction it will be published on NOPSEMA's website. NOPSEMA aims to have all environment plan summary documents published within 20 days of acceptance. This timeframe may vary should the document require amendment by the titleholder.

The titleholder is required to notify NOPSEMA 10 days prior to the commencement of the activity. This notification will be published on NOPSEMA's website.

Titleholder environmental performance requirements

A titleholder is required to undertake a petroleum activity in accordance with the accepted environment plan. It is an offence under the Environment Regulations to act in a manner contrary to the accepted environment plan. A titleholder must submit a revision to the environment plan in response to a new or increased environmental impact or risk, or a significant modification or stage of the activity not provided for in the accepted environment plan.

How to get further information

If you have any further questions regarding the activity it is suggested you contact the titleholder's nominated liaison person for the activity.

If you would like to access any further information regarding this decision, or would like to contact NOPSEMA please email environment@nopsema.gov.au.

National Offshore Petroleum Safety and Environmental Management Authority

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¹ A titleholder includes an applicant for a petroleum access authority, petroleum special prospecting authority, pipeline licence, greenhouse gas search authority or greenhouse gas special authority under sub-regulation 9(2).
² Activity type as listed in the Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Regulations 2004