

Statement No.

000573

### MINISTER FOR THE ENVIRONMENT AND HERITAGE

### STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

SIMPSON OIL FIELD DEVELOPMENT, OFFSHORE ABUTILON ISLAND, LOWENDAL ISLANDS, NORTH WEST SHELF

Proposal:

Construction and operation of two offshore oil and gas miniplatforms and undersea pipeline bundle connecting Tanami-4, Tanami-5, Simpson-1 and Simpson-3H wells to existing facilities at the Varanus Island Hub, as documented in schedule 1 of this statement.

Proponent:

Apache Northwest-Pty Ltd

**Proponent Address:** 

3rd Floor, 256 St George's Terrace, PERTH WA 6000

**Assessment Number:** 

1358

Report of the Environmental Protection Authority: Bulletin 1023

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following conditions and procedures:

Procedural conditions

#### 1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

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1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

#### 2 Proponent Commitments

- 2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in this statement.

#### 3 Proponent

- 3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment and Heritage has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.
- 3-2 Any request for the exercise of that power of the Minister referred to in condition 3-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.
- 3-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

#### 4 Commencement

- 4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced.
- 4-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment and Heritage will determine any question as to whether the proposal has been substantially commenced.
- 4-3 The proponent shall make application to the Minister for the Environment and Heritage for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 4-1 and 4-2.

4-4 Where the proponent demonstrates to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

#### Environmental conditions

#### 5 Compliance Audit and Performance Review

- 5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:
  - the implementation of the proposal as defined in schedule 1 of this statement;
  - evidence of compliance with the conditions and commitments; and
  - the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the Environmental Protection Act 1986, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement. Usually, the Department of Environmental Protection prepares an audit table that can be utilised by the proponent, if required, to prepare an audit program to ensure the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off either by the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

DR JUDY EDWARDS MLA MINISTER FOR THE ENVIRONMENT AND HERITAGE

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#### Proposal (Assessment No. 1358)

The Simpson development consists of:

- the Simpson Alpha offshore mini-platform located at the Tanami-4 and Tanami-5 wells surface location;
- the Simpson Bravo offshore mini-platform located at the Simpson-1 and Simpson-3H well locations; and
- a sub-sea pipeline bundle linking the two mini-platforms to each other and to existing facilities on Varanus Island.

#### The pipeline bundle consists of:

- a production pipeline transporting oil, produced formation water and natural gas;
- a return water pipeline for disposal of produced formation water into a deep disposal well;
- a return gas pipeline containing lift gas; and
- an umbilical containing corrosion inhibitor chemicals and dry utilities gas.

The well fluids produced from the Tanami and Simpson wells will flow into a production pipeline connecting to the existing processing facilities on Varanus Island. These processing facilities include an oil/gas/water separator and a gas compressor. Produced formation water (PFW) will be injected into the Alkimos-1 deep disposal well or via the return PFW pipeline to the Tanami-5 water disposal well, as process conditions dictate.

Any produced natural gas from the Simpson field will be recovered from the separator, compressed and delivered to the low temperature separation plant on Varanus Island. No flaring or venting of the associated gas will occur unless under emergency conditions.

The oil produced from the Simpson field will be stored in the existing bulk storage tanks for loading to oil tankers via the Varanus Island offloading marine terminal. There will not be an overall increase in the frequency of tanker activity into the marine terminal.

To ensure that oil wells can produce at optimal rates, artificial lift in the form of gas lift will be made available to the Tanami-4, Simpson-1 and Simpson-3H wells. A return gas pipeline from the island to the two mini-platforms will contain natural gas to cater for the gas lift requirements.

Key proposal characteristics are presented in table 1.

Table 1 - Key Proposal Characteristics (Assessment No. 1358)

Element	Description
Name of proposal	Simpson development
Name of proponent	Apache Northwest Pty Ltd
Life of the project	10 years (estimated)
Location	Lowendal Islands
Major components	The Simpson Alpha offshore mini-platform located at the Tanami-4 and Tanami-5 wells surface location;
	The Simpson Bravo offshore mini-platform located at the Simpson-1 and Simpson-3H well locations; and
	A sub-sea pipeline bundle linking the two mini-platforms to each other and to existing facilities on Varanus Island.
Area of disturbance	Temporary disturbance to about 1,800 m <sup>2</sup> of shallow marine, macroalgae habitat and 200 m <sup>2</sup> of terrestrial habitat with sparse vegetation.
Estimated production	Annual average production of 2,500 bbls per day at the commencement of the project in 2001.
	Peak annual average production of approximately 8,000 bbls per day in 2002.
	Decrease in annual average production to approximately 800 bbls per day by 2010.
Waste management	Produced formation water and production chemicals will be disposed of down deep disposal wells.

Abbreviations:

m<sup>2</sup> = square metres; bbls per day = barrels per day.

#### **Figures**

The project location and regional context are shown in figure 1, a schematic of the Simpson Development proposal shown in figure 2, and a map of the on-shore pipeline route is shown in figure 3.

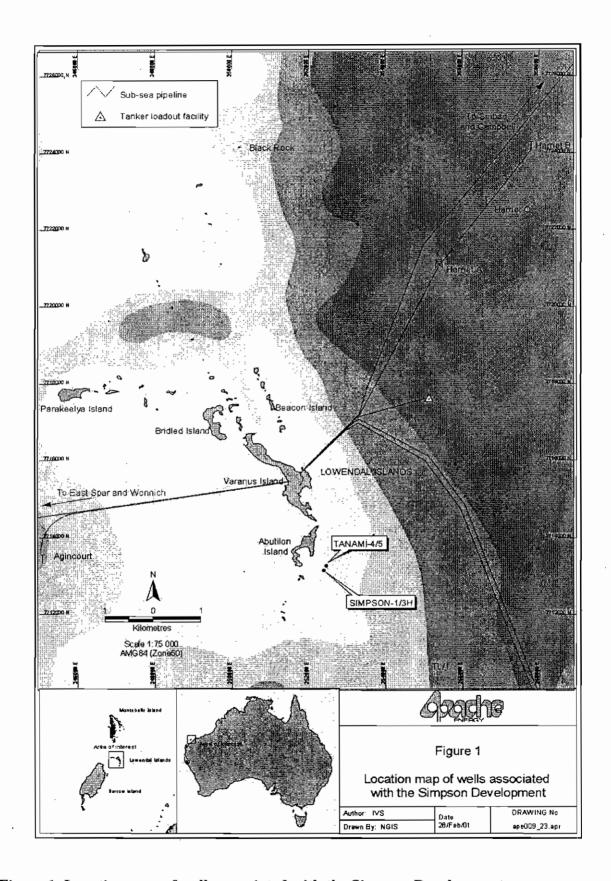


Figure 1. Location map of wells associated with the Simpson Development

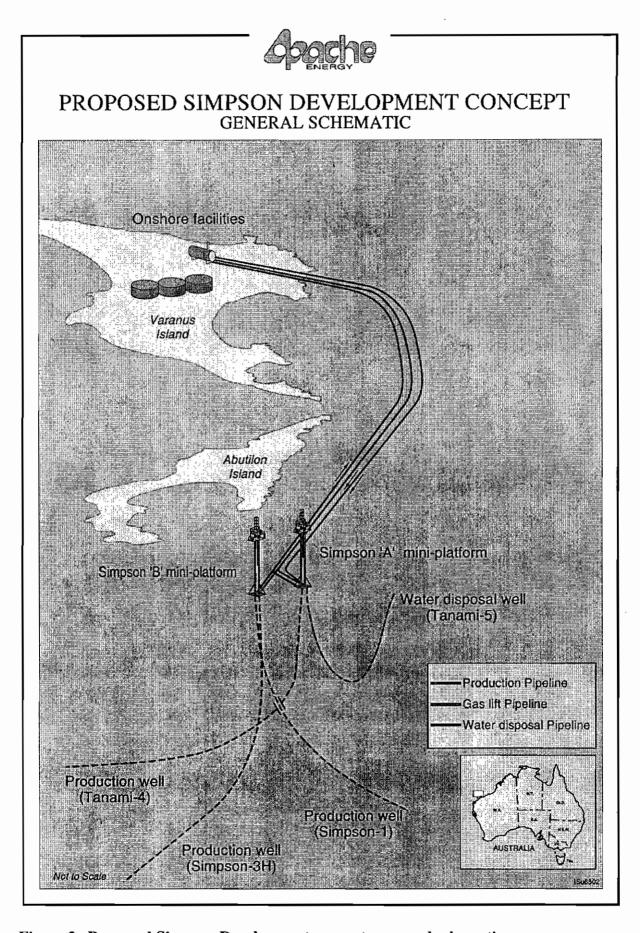


Figure 2. Proposed Simpson Development concept - general schematic

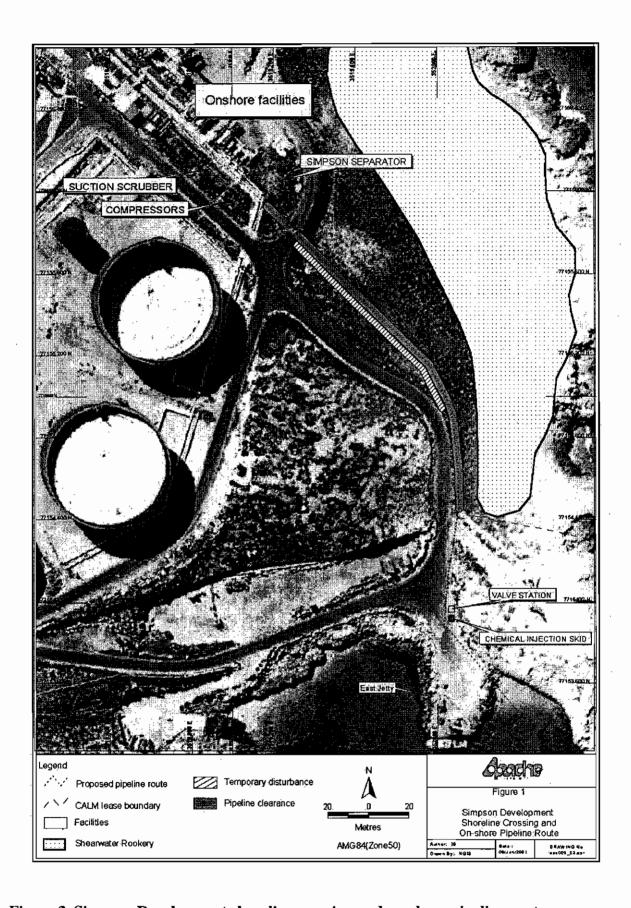


Figure 3. Simpson Development shoreline crossing and on-shore pipeline route

# **Proponent's Environmental Management Commitments**

September 2001

# SIMPSON OIL FIELD DEVELOPMENT OFFSHORE ABUTILON ISLAND LOWENDAL ISLANDS, NORTH WEST SHELF (Assessment No. 1358)

Apache Northwest Pty Ltd

Simpson Oil Field Development (Assessment No. 1358)

	Simpson Oil Field Development (Assessment No. 1358)					
N o.	Topic	Actions	Objectives	Timing	Advice	
1.	Construction Impacts	Prepare a Construction Environmental Management Plan which addresses:  selection of pipeline route; navigation warning light colour and flashing configuration; vessel anchoring/refuelling access to islands and Varanus Is. shearwater (Puffinus pacificus) rookery; clearing of vegetation; drainage/bunding of onshore pipeline; timing of activities to minimise impacts on threatened fauna; quarantine of islands; waste disposal / spills; and notification of archaeological/heritage discoveries to DIA.	To protect corals and soft bottom benthos.  To protect island flora and fauna  To avoid impacts on threatened fauna.  To prevent shoreline erosion.  To protect the marine environment.  To protect indigenous heritage.	Before construction	DOC DMPR DIA	
2.	Construct- ion Impacts	Implement the approved Construction Environmental Management Plan.	Achieve the objectives of commitment 1.	During construction.	DOC DMPR	
3.	Operational Impacts - Emissions	Prepare an Emissions Management Plan which addresses disposal of:  Produced Formation Water;  process chemicals such as corrosion/scale inhibitors and hydrotest waters;  sewage; and solid wastes.	To protect the marine environment and island flora and fauna.	Prior to construction	DMPR	
4.	Operational Impacts - Emissions	Implement the Emissions Management Plan.	Achieve the objectives of commitment 3.	Construction and operation phase.	DMPR	
5.	Oil Spill Response	Update the Apache Oil Spill Contingency Plan to include the Simpson Development area and in particular a program of training exercises centred on the Simpson Area.	To facilitate prompt and effective oil spill response.	Prior to commissioning	DMPR	
6.	Oil Spill Response	Implement the revised Oil Spill Contingency Plan.	Achieve the objectives of commitment 5.	Prior to commission-ing	DMPR	
7.	Decomm- issioning	Prepare a Decommissioning Plan which addresses the removal of the mini platforms and pipeline bundles and well plugging.	To protect the marine environment.	Broad plan before construction, detailed plan 1 year before decommiss- ioning.	DMPR	
8.	Decomm- issioning	Implement the Decommissioning Plan.	Achieve the objectives of commitment 7.	During decomm- issioning.	DMPR	

Abbreviations:

DIA = Department of Indigenous Affairs; DOC = Department of Conservation and Land Management; DMPR = Department of Mineral and Petroleum Resources.

## Attachment to Statement 573 – Change to Definition of Proposal.

Proposal: Simpson Oilfield Development, Offshore Abuliton Island,

Lowendal Islands, North West Shelf

Proponent: Apache Northwest Pty Ltd

**Change**: to key proposal characteristics in schedule 1.

#### From:

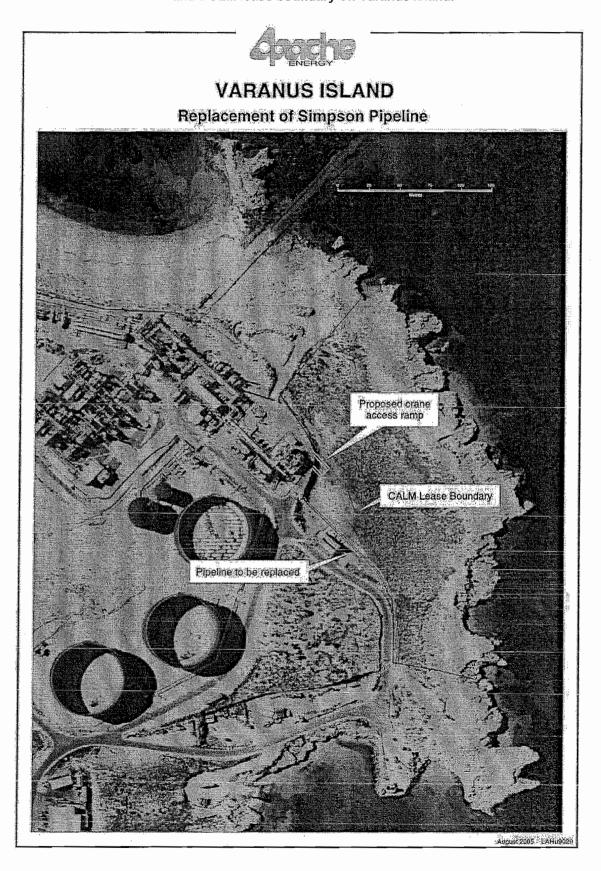
Element	Quantities/Description
Area of disturbance	$200\text{m}^2$
Type of pipeline	Not specified originally, but 2 x 12 inch production pipelines were installed.

#### To:

Element	Quantities/Description
Area of disturbance	Additional 465m <sup>2</sup>
	1 x 16 inch pipeline installed above the current pipelines.

Approval Date: 25 August, 2005

Figure 2: Aerial view showing location of Simpson pipelines, proposed access track and DCLM lease boundary on Varanus Island.



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