

# **Exploration drilling in EP TP/3 Part 1 and Roller Oilfield, offshore Onslow**

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**West Australian Petroleum Pty Ltd**

**Proposed change to Environmental Conditions**

**Report and recommendation of the Environmental Protection Authority  
(as requested under section 46 of the Environmental Protection Act,  
1986)**

**Environmental Protection Authority  
Perth, Western Australia  
Bulletin 732  
February 1994**

## THE PURPOSE OF THIS REPORT

This report contains the Environmental Protection Authority's environmental assessment and recommendations to the Minister for the Environment on the environmental acceptability of the proposal.

Immediately following the release of the report there is a 14-day period when anyone may appeal to the Minister against the Environmental Protection Authority's report.

After the appeal period, and determination of any appeals, the Minister consults with the other relevant ministers and agencies and then issues his decision about whether the proposal may or may not proceed. The Minister also announces the legally binding environmental conditions which might apply to any approval.

## APPEALS

If you disagree with any of the contents of the assessment report or recommendations you may appeal in writing to the Minister for the Environment outlining the environmental reasons for your concern and enclosing the appeal fee of \$10.

It is important that you clearly indicate the part of the report you disagree with and the reasons for your concern so that the grounds of your appeal can be properly considered by the Minister for the Environment.

## ADDRESS

Hon Minister for the Environment  
12th Floor, Dumas House  
2 Havelock Street  
WEST PERTH WA 6005

## CLOSING DATE

Your appeal (with the \$10 fee) must reach the Minister's office no later than 5.00 pm on 4 March, 1994.

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## Environmental Impact Assessment (EIA)

### Process Timelines in weeks

Date	Timeline commences from receipt of full details of proposal by proponent	Time (weeks)
7 October 1993	Request for changes to proposal referred to EPA	5
9 December 1993	Minister requested EPA to report on proposed changes to proposal	
3 February 1994	EPA reported to the Minister for the Environment	8

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## Summary and recommendation

West Australian Petroleum Pty Ltd (WAPET) has sought approval for changes to refuelling practices and oil spill response plans in its offshore permit area, TP/3 Part 1, located west of Onslow (Figure 1). The changes would be effective whilst oil production in Roller Oilfield and drilling elsewhere in Exploration Permit TP/3 Part 1 are under way. These projects were both previously assessed and reported on by the Environmental Protection Authority in September 1991 and environmental conditions were set by the Minister for the Environment in October and December 1991.

One of the proposed changes would involve a variation to the refuelling procedures in the permit area. WAPET has proposed a detailed commitment to minimise the risk of oil spills during refuelling procedures and has requested that this commitment replaces the condition restricting refuelling to specific weather and sea conditions. The proposed commitment is based upon a review of the refuelling procedures and identifies the following technical aspects:

- specific equipment that would be in place during refuelling operations (see Section 2.1); and
- weather conditions suitable for refuelling from deep water vessels and those suitable for shallow water supply vessels.

WAPET has also sought permission to store appropriate oil spill equipment (eg oil spill containment booms) on nearby Thevenard Island where they would be readily accessible and could be deployed by experienced, WAPET-trained personnel. Other equipment such as skimmers and chemical dispersants are already stored on Thevenard Island. The equipment could be transported by boat or helicopter to a spill and deployed at least as quickly as they could if they were stored on the rig. The proposal as previously assessed stated that oil spill response equipment was to be kept on the drilling rig itself.

Space on the drill rig is limited and the boom must be stored out of the way (i.e. in a container). It would take time to mobilise equipment in the case of an oil spill. WAPET states that the proposed change would enable a more timely and effective deployment capability for its oil spill equipment.

Both the Department of Transport and the Department of Minerals and Energy have been consulted on the proposed changes and have advised that they would be acceptable. The Department of Transport has advised that refuelling guidelines, based upon the proposed commitment, could be applied industry wide to operations in similar marine environments.

The Minister for the Environment decided that these changes to the previously assessed proposal required advice from the Environmental Protection Authority in the form of a report under Section 46 of the Environmental Protection Act.

This report addresses the proposed changes to oil spill equipment storage and refuelling procedures. The principal issues considered by the Authority included minimising:

- the risk of oils spill during routine refuelling procedures; and
- the time taken to respond effectively to an oil spill.

It is the Authority's view, based on the information provided and consultation with the proponent and relevant government departments, that environmental impacts could be minimised and that these changes are environmentally acceptable.

## **Recommendation**

The Environmental Protection Authority concludes that these changes to the storage of oil spill response equipment and refuelling procedures proposed by West Australian Petroleum Pty Ltd are environmentally acceptable and could be implemented.

The proposals assessed and reported on by the Authority in Roller Oilfield Development, Bulletin 578, and Exploration Drilling Programme within Permit Area TP/3 Part 1, Bulletin 581, should be amended to incorporate these changes as follows:

- both Environmental Condition 6 of the Roller Oilfield Development and Environmental Condition 7 of the Exploration Drilling Programme within Permit Area TP/3 Part 1 should be deleted to allow refuelling procedures to follow the detailed commitment proposed in this Bulletin (see Section 2.1).

# 1. Introduction

West Australian Petroleum Pty Ltd (WAPET) has sought approval for changes to refuelling practices and oil spill response plans in its offshore permit area, TP/3 Part 1, located west of Onslow (Figure 1). The changes would be effective whilst oil production in Roller Oilfield and exploration drilling elsewhere within Permit Area TP/3 Part 1 are under way.

Roller Oilfield Development and Exploration Drilling Programme within Permit Area TP/3 Part 1 were both previously assessed and reported on by the Environmental Protection Authority in September 1991 and conditions were set by the Minister for the Environment in October and December 1991 respectively. Copies of the Ministerial Conditions and Proponent's Summary of Commitments for both of these projects are Appended.

Two significant issues considered during the assessments included minimising:

- the risk of oil spills during routine refuelling procedures; and
- the time taken to respond effectively to an oil spill.

In order to minimise the risk of oil spill during refuelling operations, WAPET has requested that a change to the refuelling procedures be permitted in the permit area. WAPET has made a detailed commitment regarding technical aspects of refuelling procedures and has requested that this commitment replaces the condition restricting refuelling to specific weather and sea conditions.

Following a review of the details of oil spill contingency plans, WAPET has also requested that oil spill containment equipment, including booms and skimmers, are held on nearby Thevenard Island and Barrow Island, as opposed to storing any equipment on the drilling rig as required by the Minister's Environmental conditions for the Roller oilfield project. WAPET contends that this would improve the effectiveness and safety of oil spill response.

WAPET has sought agreement from the Minister for the Environment to alter those portions of the projects relating to refuelling procedures and storage of oil spill response equipment. Following that request, the Minister has asked the Authority to inquire into the proposed changes and report in accordance with Section 46 of the Environmental Protection Act.

This report is the Authority's advice on these proposed changes.

## 2. Description of proposed changes

### 2.1 Revised refuelling procedures

In order to minimise the risk of oil spills during refuelling procedures, WAPET has requested that refuelling procedures during oil production and exploration in the offshore permit area, TP/3 Part 1, are amended and carried out according to agreed guidelines. WAPET has proposed a detailed commitment and has requested that this commitment replaces the condition restricting refuelling to specific weather and sea conditions.

WAPET's proposed commitment regarding refuelling procedures in the entire permit area provides technical details of equipment to be used during refuelling and details of the weather and sea conditions under which refuelling would take place. The following provisions would apply:

- the rig fuel transfer hoses would be fitted with dry break couplings;
- a vacuum breaking system would be in place to drain the fuel left in the hose, after completing the transfer, back into the supply vessel tanks;
- drip trays would be provided on the supply vessel and rig beneath refuelling hose connections;
- suitable absorbent material would be held on the supply vessel and rig to mop up any small spills;

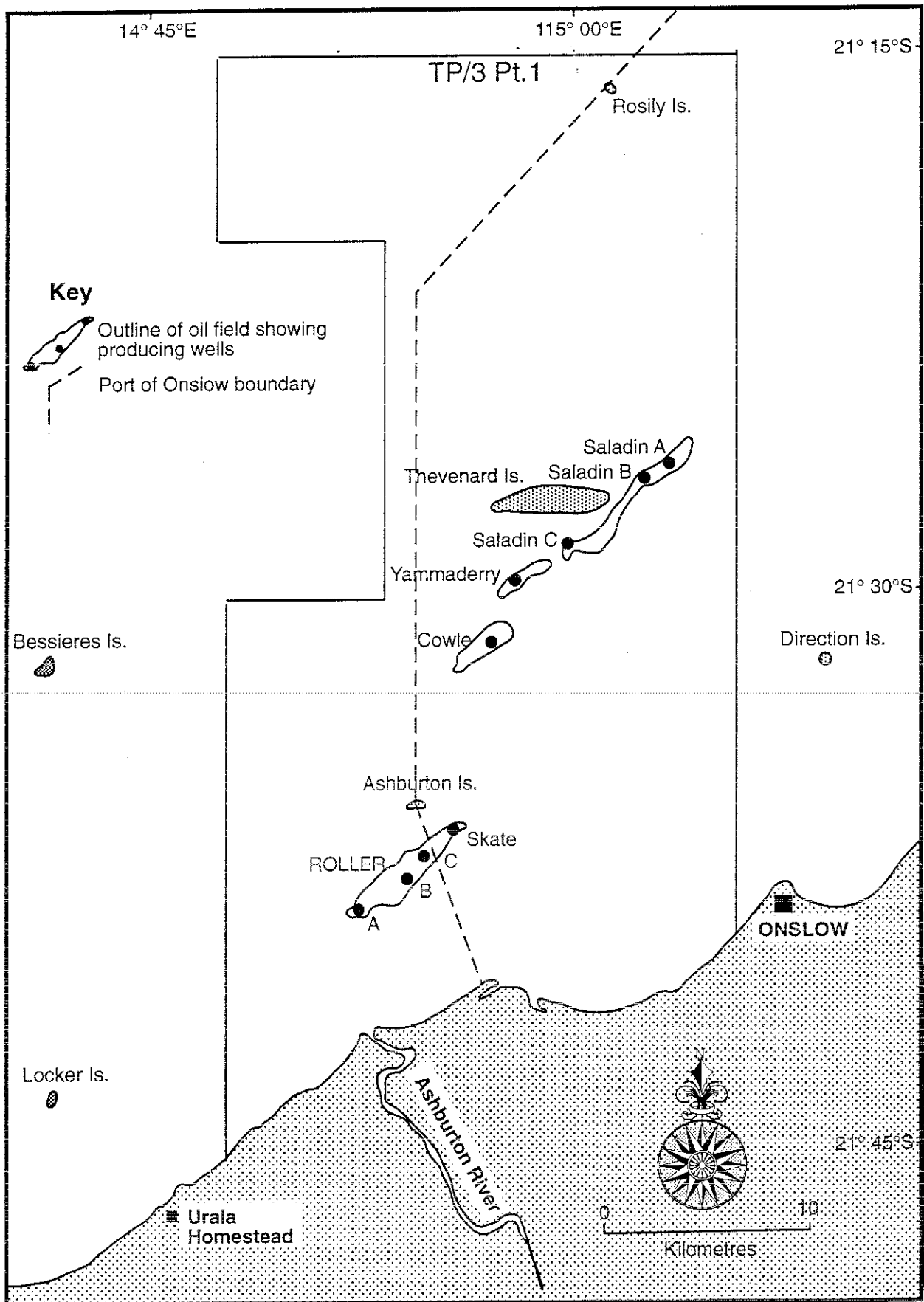


Figure 1. Location of Roller Oilfield and Exploration Permit Area TP/3 Part 1

- the entire refuelling operation would be visually monitored from the supply vessel and from the rig; and
- transfer of fuel would take place only when the Masters of the supply vessel and the rig agree that it is safe to do so, and would not take place:
  - for deep water vessels, when winds are greater than 25 knots and swell in excess of one metre; or
  - for shallow water supply vessels, when winds are greater than 15 knots and swell in excess of 0.5 metres; and

providing the supply vessel Master may postpone the transfer should he consider conditions unsuitable for its safe completion.

This proposed change to the proposal is related to Environmental Condition 6 of the Roller Oilfield Development and Environmental Condition 7 of the Exploration Drilling Program within Permit Area TP/3 Part 1, both of which state:

*The proponent shall only refuel the drill rig when weather and sea conditions are sufficiently calm to permit containment and recovery of any fuel oil which may be spilt, to the satisfaction of the Environmental Protection Authority on advice of the Department of Minerals and Energy.*

## 2.2 Relocation of oil retrieval equipment

WAPET has also requested permission to relocate oil retrieval equipment. Currently WAPET is expected to store the boom on the drill rig or on the standby vessel. At the time of assessment this was thought to be the most effective way to ensure rapid deployment in the event of a spill.

Space restrictions on both rigs and boats, however, mean that the boom has to be stored out of the way (i.e. in a container) and its deployment from the rig could therefore take up to one hour. Alternatively, the proponent has stated that equipment held on Thevenard Island and Barrow Island can be mobilised to site within one hour of call out. Other oil spill equipment, such as the skimmer, is stored on Thevenard Island. The proponent also stated that handling of the equipment by trained WAPET staff, rather than contractors staffing the rig and standby vessel, would also reduce the risk of damage to equipment and injury to personnel, resulting in a more efficient response.

WAPET's proposal to relocate the oil spill containment equipment affects a number of conditions and a commitment. The proponent is required by Ministerial Condition 5 to notify the Environmental Protection Authority of any permanent change to the location of oil retrieval equipment.

This proposed change is also related to Ministerial Condition 6 of the Exploration Drilling Programme within Permit Area TP/3 Part 1 which states:

*Prior to drilling the first well, the proponent shall provide on or adjacent to the rig the capability for containing small oil spillages, to the satisfaction of the Environmental Protection Authority on advice of the Department of Minerals and Energy.*

Proponent Commitment 5 of the Roller Oilfield Development, Bulletin 578, states:

*An oil spill containment boom will be present at the site during drilling. A vessel will be in the vicinity of the drilling rig at all times to deploy the boom and skimmer in the event of an oil spill.*

If the Minister for the Environment grants permission to relocate the oil spill equipment, the above conditions and commitment should be amended accordingly.



## **3. Environmental implications**

### **3.1 Oil spill risk minimisation during refuelling**

A common type of oil spill is a minor spill of between 1m<sup>3</sup> and 20m<sup>3</sup> arising from refuelling of the drill rig. Refuelling of the rig usually occurs once every 10 days on average while drilling is under way. The proponent has committed to containing and collecting spills of this order with a boom and a skimmer if the need arises. Absorbent material is held on board the drilling rig to mop up small spills if they occur.

For a reasonable chance of a successful recovery of spilt oil, weather conditions need to be near optimal (current speed <0.7 knot, wind speed <15 knots and wave height <1m). The brisk winds common to the area could cause, with the tides, rapid movement of a slick and create difficulties in the containment and collection of oil. Therefore, it is vitally important for stringent spill preventative measures to be in place to reduce the chances of an accident occurring.

According to the current Ministerial condition, the agency responsible for giving permission to refuel rigs offshore from Onslow is located in Perth. The proposed change would permit the operators in port to use their own judgement in selecting the most appropriate conditions for refuelling, as long as they fall within specified guidelines.

The Department of Transport (formerly Marine and Harbours) and the Department of Minerals and Energy have corresponded with WAPET regarding this request and have provided advice that these proposed changes would be acceptable and would more accurately reflect refuelling operational procedures (Appendix 2).

It was noted that the whole of the area surrounding Onslow Port limits experiences similar sea conditions. Therefore the variation in the refuelling condition could be applied to all of industry within Onslow Port limits and to offshore oil projects outside TP/3 that are in a similar marine environment.

### **3.2 Oil spill response time**

The key factor when considering the environmental implications of WAPET's proposal to relocate the oil spill containment equipment is the time taken in moving the gear to the site of a spill and then to deploy it. WAPET advises that a faster and more effective response from the base at Thevenard Island and Barrow Island, where more equipment is stored in an easily accessible position (unpacked, ready to go) is achievable.

WAPET also states the weather and dispersability studies carried out on WAPET oils indicate that a typical spill would need at least half an hour to evaporate before the spill could be safely approached. Thus the mobilisation time lag from Thevenard Island would not compromise WAPET's ability to deal with a spill effectively.

Equipment from Thevenard Island (and, to a lesser extent Barrow Island) is effectively "on site", as it is only a few minutes flying time from there to the Roller Oilfield. WAPET's operations range from Barrow Island to the Roller Field and oil spill response equipment and trained personnel are available for use throughout this area.

## **4. Conclusion and recommendation**

Following consideration of the request from WAPET, the previous assessment and after consultation with other government agencies, the Authority considers that the environmental issues related to the proposal are manageable and has concluded that the proposal is environmentally acceptable. Accordingly, the Authority has made the following recommendation:

## Recommendation

The Environmental Protection Authority concludes that these changes to the storage of oil spill response equipment and refuelling procedures proposed by West Australian Petroleum Pty Ltd are environmentally acceptable and could be implemented.

The proposals assessed and reported on by the Authority in Roller Oilfield Development, Bulletin 578, and Exploration Drilling Program within Permit Area TP/3 Part 1, Bulletin 581, should be amended to incorporate these changes as follows:

- both Environmental Condition 6 of the Roller Oilfield Development and Environmental Condition 7 of the Exploration Drilling Program within Permit Area TP/3 Part 1 should be deleted to allow refuelling procedures to follow the detailed commitment proposed in this Bulletin (see Section 2.1).

## 5. Recommended amended Conditions

### STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

PROPOSAL: Roller Oilfield Development, Offshore Onslow (419/856)  
CURRENT PROPONENT: West Australian Petroleum Pty Ltd  
CONDITIONS SET ON: 9 December 1991

Condition 6 is deleted to allow refuelling procedures in accordance with the addendum to the commitments dated February 1994.

Conditions 1 and 2 are amended to read as follows:

1. In implementing the proposal, the proponent shall fulfil the commitments made in the Consultative Environmental Review for all developmental, constructional and operational activities proposed as part of the programme specified in the Consultative Environmental Review, as amended on February 1994 and reported on in EPA Bulletin 732, provided that the commitments are not inconsistent with the conditions or procedures contained in this statement. (A copy of the commitments, including the addendum of February 1994, is attached).

2. Subject to the conditions in this amended statement, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

The following condition and procedure are inserted following condition 12:

### 13. Compliance Auditing

In order to ensure that environmental conditions and commitments are met, an audit system is required.

13-1. The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.

## Procedure

The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

PROPOSAL: Exploration Drilling Programme within Permit Area TP/3 Part 1, Offshore Onslow (575/868)  
CURRENT PROPONENT: West Australian Petroleum Pty Ltd  
CONDITIONS SET ON: 25 October 1991

Condition 6 is deleted.

Condition 7 is deleted to allow refuelling procedures in accordance with the addendum to the commitments dated February 1994.

Conditions 1 and 2 are amended to read as follows:

1. In implementing the proposal, the proponent shall fulfil the commitments made in the Consultative Environmental Review for all wells proposed as part of the programme specified in the Consultative Environmental Review, as amended on February 1994 and reported on in EPA Bulletin 732, provided that the commitments are not inconsistent with the conditions or procedures contained in this statement. (A copy of the commitments, including the addendum of February 1994, is attached).

2. Subject to the conditions in this amended statement, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

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If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

## **Appendix 1**

**Ministerial Conditions and proponent's commitments for  
Roller Oilfield Development and  
Exploration Drilling Programme within Permit Area TP/3 Part 1**

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WESTERN AUSTRALIA  
MINISTER FOR THE ENVIRONMENT

Mr C Prattini  
West Australian Petroleum Pty Ltd  
GPO Box C 1580  
PERTH WA 6001

Dear Mr Prattini

**PROPOSED EXPLORATION DRILLING PROGRAMME WITHIN  
PERMIT AREA TP3 PART 1 OFFSHORE ONSLOW (575)**

I have issued a statement that the above proposal may be implemented subject to the conditions contained in that statement (copy attached).

The statement does not remove requirements for you to obtain other statutory approvals.

As proponent you have the right to appeal against the conditions set in the statement within fourteen days of the date of publication.

Following that period and determination of any appeals, I will advise the decision-making authority that it may give final approvals permitting the proposal to proceed.

I would be prepared to issue that advice earlier on receiving written confirmation that you accept the conditions and waive your right of appeal.

Yours sincerely

Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT

**25 OCT 1991**

Att



WESTERN AUSTRALIA  
MINISTER FOR THE ENVIRONMENT

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

**EXPLORATION DRILLING PROGRAMME WITHIN PERMIT AREA TP/3 PART 1  
OFFSHORE ONSLOW (575)**

**WEST AUSTRALIAN PETROLEUM PTY LTD**

This proposal may be implemented subject to the following conditions:

1. In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Consultative Environmental Review for all wells proposed as part of the programme specified in the Consultative Environmental Review. (A copy of the commitments is attached).
2. Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.
3. Prior to implementing any drilling beyond that in the programme proposed in the Consultative Environmental Review or development plans resulting from that programme, the proponent shall refer proposals for such further work to the Environmental Protection Authority and the Department of Mines.
4. At least three weeks prior to the commencement of drilling of exploration wells contained within the programme described in the Consultative Environmental Review, the proponent shall provide details of the exact locations of the wells and descriptions of the adjacent environment together with any proposed site-specific modifications to environmental management provisions for those locations, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines. The proponent shall subsequently implement the proposals to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.

Published on

5. Prior to drilling the first well, the proponent shall implement arrangements to accept responsibility for any adverse environmental impacts which may occur as a consequence of the proposal proceeding, to the satisfaction of the Minister for the Environment after consultation with the Minister for Fisheries and the Minister for Mines.
6. Prior to drilling the first well, the proponent shall provide on or adjacent to the rig the capability for containing small oil spillages, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.
7. The proponent shall only refuel the rig when weather and sea conditions are sufficiently calm to permit containment and recovery of any fuel oil which may be spilt, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.
8. Prior to commencement of the first well, the proponent shall successfully trial run the oil spill contingency plan, up to the point of the deployment of resources, to the satisfaction of the Environmental Protection Authority on advice of the State Committee for Combating Marine Oil Pollution.
9. The proponent shall run further oil spill contingency plan trials at least once a year or for each change of rig, whichever is the sooner, for the duration of the programme in the Consultative Environmental Review, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.
10. The proponent shall be responsible for decommissioning the rig and any wells and rehabilitating the site and its environs to the satisfaction of the Environmental Protection Authority on advice of the Director, Petroleum Division, Department of Mines.
11. No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.
12. If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority).



Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT

## LIST OF COMMITMENTS

West Australian Petroleum Pty Limited (WAPET) undertakes to abide by all of the commitments made in the Consultative Environmental Review (CER) for the Permit Area TP/3 Part 1 Five Year Exploration Drilling Programme, and in all cases will fulfil those commitments to the satisfaction of the appropriate statutory authority(s).

The major commitments given within the CER are listed in the following sections.

### ENVIRONMENTAL EDUCATION

- (1) Before commencement of their duties, each worker or contractor (including workboat and supply vessel crews) will be given an induction course including advice on the sensitive nature of the environment in which the drilling rig is located.

### SAFETY AND OIL SPILL CONTINGENCY

- (1) To improve operational safety, commercial and recreational vessels will not be permitted closer than 500 m to the drilling rig during the construction phase.
- (2) The drilling rig to be contracted will be capable of withstanding cyclonic wind and wave conditions. Detailed procedures which set out the various levels of responses to cyclones will be contained in the operator's Emergency Procedures Manual.
- (3) WAPET will abide by all procedures detailed in the Permit Area TP/3 Part 1 Oil Spill Contingency Plan (OSCP).
- (4) An oil spill containment boom will be present at the site during drilling. A vessel will be in the vicinity of the drilling rig at all times to deploy the boom and skimmer in the event of an oil spill.
- (5) During any spill event, WAPET would make available oil spill equipment, vessels, aircraft and personnel to help with containment and clean-up measures.
- (6) Existing WAPET and rig operator procedures for cyclone response will be followed to safeguard the wells, rig, offshore structures, vessels and personnel.



- (7) With regard to any oil spill or discharge resulting from the drilling of any wells in the Permit Area WAPET makes the following commitments:
- (a) to be fully responsible for the cost of operations conducted by it or any Governmental agency aimed at containing or dispersing or recovering any such petroleum or cleaning up any areas polluted by such petroleum;
  - (b) to promptly pay to any person, company or Government (Federal, State or Local) any damages to which any of those entities is lawfully entitled from WAPET.

### DRILLING RIG OPERATIONS

- (1) Prior to spudding in, the rig operator will conduct surveys and tests in accordance with Department of Mines regulations to ensure stability of the rig and to minimise the risk of abnormal penetration of the seabed during storm conditions.
- (2) The blowout preventer (BOP) stack will be tested in accordance with Department of Mines regulations after the surface casing has been installed.
- (3) All casing strings installed below the BOP stack will be pressure tested in accordance with Department of Mines regulations before drilling is resumed.
- (4) Drilling fluids used will be those approved for offshore use by the Department of Mines.
- (5) Chrome lignosulphates will not be used in drilling any well.
- (6) At prospects within 500 m of sensitive marine resources drillers will only drill 17.5" and 36" holes during times when the tidal currents will transport the cuttings away from sensitive resources. Drill cuttings and excess fluids produced after the 36" hole will be disposed of between the down hole casings and into the lost circulation zone. If this zone is not available, drilling of the hole will only continue during favourable tidal conditions.
- (7) At prospects within 500 m and 2 km of sensitive marine resources, cuttings will be separated on board the rig and continuously discharged overboard through a conductor pipe to the seabed. Drilling fluid will be stored and discharged down the conductor pipe on tides that will carry the fluids away from sensitive marine resources.
- (8) At prospects more than 2 km from sensitive marine resources, cuttings will be separated and disposed overboard continuously. Drilling fluids will be

stored and released at a controlled rate during tide and wind conditions that will move the plume away from the closest sensitive resources.

- (9) Deck drainage and other oily wastes will be collected and transported to Port Hedland for recycling.
- (10) Sanitary wastes from the kitchen, showers and laundry will be passed through a sewage treatment plant for comminution and disinfection before being discharged overboard. Solid food waste will be macerated before disposal overboard. Biodegradable detergents will be used for cleaning functions. Combustible materials will be burnt on the rig. All non-combustible material will be returned to the shore base for disposal at an approved land site.

#### OPERATION OF VESSELS AND AIRCRAFT

- (1) Helicopter pilots will be instructed not to overfly islands.
- (2) Regular crew transfers between the drilling rig, Thevenard Island and Perth will use existing routes involving helicopter/light aircraft transfers to Barrow Island, and chartered commercial flight direct to Perth.
- (3) All refuelling operations for the supply vessels will be conducted in accordance with strict Port Authority requirements, including continuous visual monitoring and the use of reinforced hoses and fail-safe valves and fittings.
- (4) It will be a contractual requirement for the supply vessels and rig to comply with all State and Commonwealth legislation for the control of pollution and dumping at sea.
- (5) Masters of supply vessels will be instructed not to allow crew to disturb islands or wreck sites, nor to anchor close to coral reefs.



WESTERN AUSTRALIA  
MINISTER FOR THE ENVIRONMENT

Mr R Stallings  
West Australian Petroleum Pty Ltd  
GPO Box C1580  
PERTH WA 6001

IN 12 DEC 1991		
PLEASE INITIAL		
TO	DATE	INITIAL
RLS	✓	/
MSS	✓	/
SSM/RAB		di
LNB	✓	RDL
		cl Files

Dear Mr Stallings

**PROPOSED ROLLER OILFIELD DEVELOPMENT, OFFSHORE  
ONslow (419)**

I have issued a statement that the above proposal may be implemented subject to the conditions contained in that statement (copy attached).

The statement does not remove requirements for you to obtain other statutory approvals.

As proponent you have the right to appeal against the conditions set in the statement within fourteen days of the date of publication.

Following that period and determination of any appeals, I will advise the decision-making authority that it may give final approvals permitting the proposal to proceed.

I would be prepared to issue that advice earlier on receiving written confirmation that you accept the conditions and waive your right of appeal.

Yours sincerely

Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT  
9 DEC 1991

Att

DEPARTMENT OF ENVIRONMENTAL PROTECTION	
3 - FEB 1994	
File No 1	10/3611 Initials DEE
File No 2	Initials



WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT

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

**ROLLER OILFIELD DEVELOPMENT, OFFSHORE ONSLOW (419)**

**WEST AUSTRALIAN PETROLEUM PTY LTD**

This proposal may be implemented subject to the following conditions:

1. In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Consultative Environmental Review for all developmental, constructional and operational activities proposed as part of the programme specified in the Consultative Environmental Review. (A copy of the commitments is attached).
2. Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.
3. The proponent shall refer any proposal for marine blasting to the Environmental Protection Authority.
4. Prior to drilling the first well, the proponent shall implement arrangements to accept responsibility for any adverse environmental impacts which may occur as a consequence of the proposal proceeding, to the satisfaction of the Minister for the Environment after consultation with the Minister for Fisheries and the Minister for Mines.
5. The proponent shall notify the Environmental Protection Authority of any permanent change to the location of oil retrieval equipment.
6. The proponent shall only refuel the drill rig when weather and sea conditions are sufficiently calm to permit containment and recovery of any fuel oil which may be spilt, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.
7. Prior to commencement of the first well, the proponent shall successfully trial run the oil spill contingency plan, up to the point of the deployment of resources, to the satisfaction of the Environmental Protection Authority on advice of the State Committee for Combating Marine Oil Pollution.
8. The proponent shall run further oil spill contingency plan trials at least once a year or for each change of rig, whichever is the sooner, for the duration of the programme in the Consultative Environmental Review, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines.

Published on

10 DEC 1991

9. The proponent shall be responsible for decommissioning all constructed facilities, both onshore and offshore, and rehabilitating the sites and their environs to the satisfaction of the Environmental Protection Authority on advice of the Department of Conservation and Land Management and the Director, Petroleum Division, Department of Mines.
10. At least six months prior to cessation of operations, the proponent shall prepare and subsequently implement a decommissioning and rehabilitation plan, to the satisfaction of the Environmental Protection Authority on advice of the Department of Mines and the Department of Conservation and Land Management.
11. No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.
12. If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority).



Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT

9 DEC 1991

## LIST OF COMMITMENTS

West Australian Petroleum Pty. Limited (WAPET) undertakes to abide by all of the commitments made in the Roller Oilfield Development Consultative Environmental Review (CER), and in all cases will fulfill those commitments to the satisfaction of the appropriate statutory authority(s).

The major commitments given by WAPET within the CER are listed in the following section.

### ENVIRONMENTAL MONITORING AND EDUCATION

1. Prior to start of construction, the existing Marine Biological Monitoring Programme for the Saladin Field will be expanded to ensure that important marine resources that could be affected by either the development or operation of the Roller field are covered by the monitoring programme, to the satisfaction of the EPA.
2. Before commencement of their duties, each worker or contractor (including workboat and supply vessel crews) will be given an induction including advice on the sensitive nature of the environment in which the drilling rig and oilfield is located.

### SAFETY AND OIL SPILL CONTINGENCY

1. Drilling procedure, production operation and maintenance procedure manuals based on WAPET's experience of the Barrow Island and Saladin Fields will be prepared and made available for review by relevant statutory authorities prior to commencement of the relevant operation. These manuals will cover normal and emergency procedures to the satisfaction of EPA on advice from the WA Department of Mines.
2. To improve operational safety, commercial and recreational vessels will not be permitted closer than 500 m to the drilling rig during the construction phase.
3. The drilling rig to be contracted will be capable of withstanding cyclonic wind and wave conditions. Detailed procedures which set out the various levels of responses to cyclones will be contained in the operator's Emergency Procedures Manual.
4. The existing Permit Area TP/3 Oil Spill Contingency Plan (OSCP) will be expanded with insertion of relevant information for the Roller field. WAPET will abide by all procedures detailed in the OSCP, as summarised in Section 6.4.2 of the CER, to the satisfaction of EPA on advice from WA Department of Mines.
5. An oil spill containment boom will be present at the site during drilling. A vessel will be in the vicinity of the drilling rig at all times to deploy the boom and skimmer in the event of an oil spill.
6. During any spill event, WAPET would make available oil spill equipment, vessels, aircraft and personnel to help with containment and clean-up measures.

7. Existing WAPET procedures for cyclone response will be followed to safeguard the wells, rig, offshore structures, vessels and personnel.
8. Where practicable rig refuelling will only take place under favourable metocean conditions.
9. With regard to any oil spill or discharge resulting from the drilling of any well in the Roller Oilfield or production of petroleum there from WAPET makes the following commitments:
  - a) to be fully responsible for the cost of operations conducted by it or any Governmental agency aimed at containing or dispersing or recovering any such petroleum or cleaning-up any areas polluted by such petroleum;
  - b) to promptly pay to any person, company or Government (Federal, State or Local) any damages to which any of those entities is lawfully entitled from WAPET;

to the satisfaction of the Minister for Environment after consultation with the Minister for Fisheries.

#### DRILLING RIG OPERATIONS

1. Prior to spudding in, the rig operator will conduct surveys and tests in accordance with Department of Mines regulations to ensure stability of the rig and to minimise the risk of abnormal penetration of the seabed during storm conditions.
2. The blowout preventor (BOP) stack will be tested in accordance with Department of Mines regulations after the surface casing has been installed.
3. All casing strings installed below the BOP stack will be pressure tested in accordance with Department of Mines regulations before drilling is resumed.
4. Drilling fluids used will be those approved for offshore use by the Department of Mines.
5. Chrome lignosulphonates will not be used in any drilling fluids.
6. Drill cuttings will be disposed of into the ocean after separation from the drilling fluid through solids control equipment.
7. Drilling fluid residue will be disposed of into the ocean at controlled intervals, under the direction of the drilling superintendent.
8. Oily water collected from the rig floor drains will be ducted to a separation tank where oil is drawn off into drums for shipment to Port Hedland for recycling. Separated water is discharged overboard.
9. Sanitary wastes from the kitchen, showers and laundry will be passed through a sewage treatment plant for comminution and disinfection by chlorination before being discharged overboard. Biodegradable detergents will be used for cleaning functions.

Combustible materials will be burnt on the rig. All non-combustible material including solid food wastes will be returned to the shore base for disposal at an approved land site.

#### PIPELINES AND OFFSHORE STRUCTURES

1. Surveyors and divers contracted for pipe laying operations will be informed that the discovery of any new shipwreck must be promptly reported to the Marine Department at the Western Australian Museum in accordance with the Marine Archaeology Act 1973.
2. All subsea lines will be stabilised. Pipelines will be trenched where they cross commercial trawling grounds (as identified by members of the Onslow Prawn Trawling Association) lying between Roller A and Ashburton Island. If Option 2 is selected, the various lines between the monopod at Roller D and the modified jack-up rig will run along a piperack bridge.
3. A marine exclusion zone will be required around the monopods and the subsea pipelines (where they cannot be buried). The location and width of the exclusion zones will be determined by consultations between WAPET and the appropriate government authorities.
4. Flowlines transmitting unseparated product (two-phase or three-phase) will be hydrostatically tested, with the test waters disposed of through the production plant at Thevenard Island.
5. Corrosion control of subsurface structures will be by paints, cathodic protection or by a continuous external coating to standards cited by Government codes.

#### THEVENARD ISLAND FACILITIES

1. No additional temporary accommodation is likely to be needed for the construction and drilling workforce, other than that currently deployed on Thevenard Island for the Cowle and Yammaderry development, and such accommodation will not be installed without first obtaining approval from the Department of Conservation and Land Management (CALM).
2. No additional terminal storage or tanker facilities will be required on Thevenard Island.
3. In the event that the total amount of discharged water at Thevenard Island is likely to exceed the existing total oil and water treatment capacity of the Thevenard Island facility, then additional equipment will be installed to comply with (4) below.
4. The quality of all produced water discharged from the Thevenard Island outfall will comply with Clause 616 of the Specific Requirements as to Offshore Petroleum Exploration and Production 1990 [issued under the provisions of the Petroleum (Submerged Lands) Act 1992].
5. Gas will be flared either offshore beside Roller D (Option 2), or from the ground flare presently located on Thevenard Island.



6. Existing procedures on Thevenard Island for fire control, workforce movements, island flora and fauna protection, custody transfer of produced crude to tankers will be maintained.

#### OPERATION OF VESSELS AND AIRCRAFT

1. Helicopter pilots will be instructed not to overfly islands.
2. Regular crew transfers between Roller, Thevenard Island and Perth will use existing routes involving helicopter/light aircraft transfers to Barrow Island or other regional airports and chartered commercial flight direct to Perth.
3. All refuelling operations for the supply vessels will be conducted in accordance with strict Port Authority requirements, including continuous visual monitoring and the use of reinforced hoses and fail-safe valves and fittings.
4. It will be a contractual requirement for the various vessels and barges to comply with all State and Commonwealth legislation for the control of pollution and dumping at sea.
5. Masters of barges and supply vessels will be instructed not to allow crew to disturb islands or wreck sites, not to anchor close to coral reefs.

#### FIELD CLOSURE

1. The wells will be plugged and sealed with concrete and cut off at 4 m below the surfloor, as is presently required by the Department of Mines for the abandonment of dry wells.
2. No subsurface structure will be left protruding from the seabed so as to cause a hazard to navigation or fishing operations.
3. Subsea flow and gas-lift lines will be flooded with seawater and left in situ, unless specific requirements deem their removal in certain areas.

## **Appendix 2**

**Advice from the Department of Transport  
on refuelling of rigs within Port limits**

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Your Ref:  
Our Ref: PE/89/93 & 103/93  
Enquiries: Capt P Evelegh

DEPARTMENT OF  
**MARINE & HARBOURS**  
WESTERN AUSTRALIA



1 ESSEX ST., FREMANTLE  
P.O. BOX 402 FREMANTLE, W.A. 6160  
TELEPHONE (09) 335 0888  
TLX. 94784 FAX. 335 0850

26 July 1993

Mr D Betts  
Senior Environmental Officer  
Environment Protection Authority  
38 Mounts Bay Road  
PERTH 6000

ENVIRONMENTAL PROTECTION AUTHORITY
29 JUL 1993
File No 10/86 Initials DSE

**REFUELLING OF OIL RIGS WITHIN PORT LIMITS**

This Department administers the Shipping & Pilotage Act 1967 which provides for special powers and duties of harbour masters. The Ports and Harbours Regulations specify restrictions on transfer of oil in ports, as well as listing signals to be shown by vessels transferring oil cargoes.

The control of vessels transferring fuel in a port is entirely within the powers of the harbour master. Therefore, there appears to be no reason why the fuelling of drilling rigs should not be treated similarly, certainly when they are within port limits. The Regulations can be updated as considered necessary to take into account oil-rig refuelling in more open waters.

WAPET staff have recently contacted me as the gazetted Harbour Master for the Port of Onslow in relation to safe parameters for fuelling an oil rig off the Thevenard Island terminal. Discussions with both their Marine Superintendent and Environmental Section have led to the attached suggestions being tabled for consideration.

This fits in with Marine & Harbours' contention that greater responsibility should be placed on to the operators, with this Department playing more of a monitoring role. For practical reasons, this Department feels strongly that operators in port have to accept responsibility for their actions. For them to do this effectively, they should be allowed to use their own judgment in selecting the most appropriate conditions for refuelling, as long as they fall within specified guidelines. There seems to be little point in requiring an operator to seek permission from Perth to fuel off Onslow.

With this in mind, could your Agency add any further stipulations, should you consider such to be necessary, and any comments which may assist in making fuelling procedures less onerous.

68/103

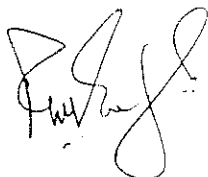
Your comments on the guidelines would be welcomed and, if you are agreeable, on the possibility of lifting the ministerial conditions applicable to fuelling restrictions, bearing in mind the control responsibility of the harbor master. These could then be taken as a standard which could be adopted, or adapted, for use in other ports and areas around the coast.

It is also considered that oil pollution response equipment, appropriate to the fuel and sensitivity of the location of the transfer location, be placed on stand-by on Thevenard Island

For diesel and light oils in an open environment, there is minimal chance of containment, as rapid spreading will dispose of the oil.

The Chairman of the State Combat Committee (Captain Purkiss) and Captain Oliver from this Department support such an approach.

I attach the letter from WAPET and my response to them for your perusal.



P J M EVELEGH  
SUP'T NAVIGATION & PILOTAGE SERVICES

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Encl: Proposed Guidelines  
Letter from WAPET  
Letter to WAPET

cc: Mr K Gammie  
Dept of Minerals & Energy



**West Australian  
Petroleum  
Pty. Limited**

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Facsimile (09) 263 6699  
Telex AA92008 WAPET

15 February 1994

The Chief Executive Officer  
Department of Environmental Protection  
Westralia Square  
141 St George's Terrace  
PERTH WA 6000

**ATTENTION: MR WARREN TACEY**

Dear Sir

**SUBJECT: RIG REFUELLING PROCEDURES WITHIN ONSLOW PORT LIMITS**

We refer to our letter to WA Department of Marine and Harbours dated 2 July 1993 on the above subject (copy attached).

WAPET requests the Department of Environmental Protection review the refuelling procedures outlined in that letter and if they are found suitable, recommend changes to the Ministerial conditions to reflect those new procedures.

Yours faithfully  
**WEST AUSTRALIAN PETROLEUM PTY. LIMITED**

*R J B Young*

*RJB*  
**R J B YOUNG**  
Managing Director

Attachment: Letter to Marine and Harbours 2/7/93

2 July 1993

Superintendent Navigation and Pilotage  
WA Department of Marine and Harbours  
PO Box 402  
FREMANTLE WA 6959

**ATTENTION: CAPTAIN PJM EVELEGH**

Dear Sir

**SUBJECT: RIG REFUELLING PROCEDURES WITHIN ONSLOW PORT LIMITS**

Following your telephone conversation with Captain C J Sutton and Kellie Pendoley of West Australian Petroleum Pty Limited could you please confirm, in writing, your agreement to the following conditions for refuelling drilling rigs within the Onslow port limits.

1. The rig fuel transfer hoses to be fitted with dry break couplings.
2. A vacuum breaking system to be in place to drain the fuel left in the hose, after completing the transfer, back into the supply vessel tanks.
3. Drip trays to be provided on the supply vessel and rig beneath refuelling hose connections.
4. Suitable absorbent material to be held on the supply vessel and rig to mop up any small spills.
5. The entire refuelling operation will be visually monitored from the supply vessel and from the rig.
6. Transfer of fuel will take place only when the masters of the supply vessel and the rig agree that it is safe to do so and will not take place;
  - (i) for deep water vessels, when winds are greater than 25 kts and swell in excess of 1 m, or
  - (ii) for shallow water supply vessels, when winds are greater than 15 kts and swell in excess of 0.5 m,and providing the supply vessel Master may postpone the transfer should he consider conditions unsuitable for its safe completion.

If you have any questions please contact Kellie Pendoley on Tel No 263 6663.

Yours faithfully

WEST AUSTRALIAN PETROLEUM PTY. LIMITED

ORIGINAL SIGNED BY

R.A. DOWIE

R J B YOUNG

Managing Director

KLP:jst

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