



**MINISTER FOR THE ENVIRONMENT;
LABOUR RELATIONS**

Statement No.

000556

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

**UPGRADING OF WESFARMERS LIQUEFIED PETROLEUM GAS PLANT
MASON ROAD, KWINANA**

Proposal: The upgrading of Wesfarmers liquefied petroleum gas plant at Mason Road, Kwinana, consisting of the construction of a parallel extraction plant that is capable of processing 120 terajoules per day of natural gas.

The upgrade coincides with a decrease in the concentration of liquefied petroleum gas in the natural gas feed stock. Liquefied petroleum gas production will remain at the current maximum production rate of approximately 845 tonnes per day, as documented in schedule 1 of this statement.

Proponent: Wesfarmers LPG Pty Ltd

Proponent Address: Mason Road, KWINANA WA 6167

Assessment Number: 1354

Report of the Environmental Protection Authority: Bulletin 993

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

1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.

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- 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 determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 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 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 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 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 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 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 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 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.

5 Decommissioning Plans

- 5-1 Prior to commissioning of the upgraded plant, the proponent shall prepare a Preliminary Decommissioning Plan that provides the framework to ensure that the site is left in a suitable condition, with no liability to the State, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

The Preliminary Decommissioning Plan shall address:

- 1 rationale for the siting and design of the upgraded section of plant and infrastructure and conceptual plans for its removal or, if appropriate, retention;
 - 2 conceptual rehabilitation plans for all disturbed areas and a process to agree on the end land use(s); and
 - 3 management of noxious materials to avoid the creation of contaminated areas.
- 5-2 At least six months prior to the anticipated date of decommissioning, or at a time agreed with the Department of Environmental Protection, the proponent shall prepare a Final Decommissioning Plan designed to ensure that the site is left in a suitable condition, with no liability to the State, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

The Final Decommissioning Plan shall address:

- 1 removal or, if appropriate, retention of plant and infrastructure;
 - 2 rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and
 - 3 identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.
- 5-3 The proponent shall implement the Final Decommissioning Plan required by condition 5-2 until such time as the Minister for the Environment determines that decommissioning is complete.
- 5-4 The proponent shall make the Final Decommissioning Plan required by condition 5-2 publicly available, to the requirements of the Environmental Protection Authority.

6 Compliance Auditing

- 6-1 The proponent shall submit periodic Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.

- 6-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal, written advice that the requirements have been met.
- 6-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

Note

- 1 The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act.



CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT

31 OCT 2000

Schedule 1

The Proposal (1354)

The proposal is to upgrade the existing Wesfarmers liquefied petroleum gas (LPG) plant at Mason Road, Kwinana by the addition of a parallel LPG extraction section. The additional section is to be constructed at the north end of the existing process plant as shown in Figure 1 (attached).

The extraction process for the upgraded plant is the same as that used in the existing plant. The new parallel LPG extraction section has a maximum design natural gas flow of 120 terajoules per day.

The plant upgrade will allow the natural gas flow-rate to the LPG plant to be increased by approximately 25%. The additional natural gas is required by the proponent to maintain current LPG production levels, since in the near future the concentration of LPG in the contracted natural gas supply will decrease. The LPG production will remain essentially the same, therefore requiring no additional LPG storage (refrigerated or pressurised), loading facilities or transport.

The main characteristics of the proposal are summarised in Table 1. They provide an outline of the proposal and should not be viewed as restricting improvements in environmental outcomes.

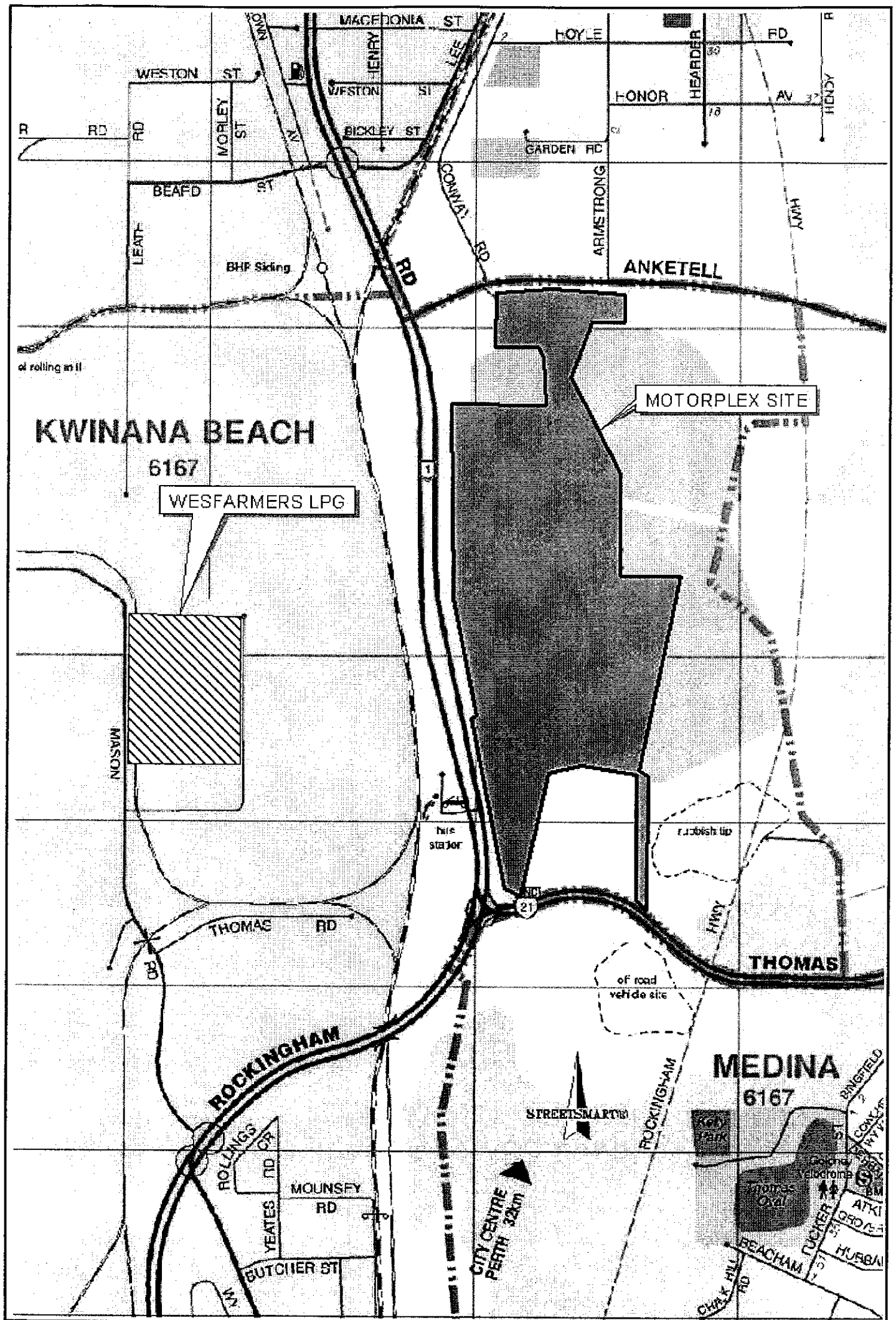


Figure 1. Location of Wesfarmers LPG Plant

Table 1: Summary of key proposal characteristics (1354)

Element	Description
Project purpose	To upgrade the existing LPG plant by the addition of a parallel extraction plant. The plant upgrade will allow a nominal increase of 25% feed gas flow and enable the proponent to maintain existing production rates of LPG, after the concentration of LPG in natural gas is reduced.
Plant Location	Mason Road, Kwinana. The additional plant is directly adjacent to the north end of existing process plant.
Plant site area	The site area is approximately 1200 square metres which is 20% of the total process area.
New plant equipment	<ol style="list-style-type: none"> 1. Turbo expander / compressor. 2. Aluminium plate fin heat exchangers (2 units). 3. Gas turbine driven gas centrifugal re-compressor. 4. Absorber distillation column. 5. De-ethaniser distillation column. 6. Cold separator vessel. 7. Re-compressor scrubber vessel. 8. De-ethaniser feed centrifugal pumps (2 units). 9. De-ethaniser kettle type reboiler. 10. Residue gas air cooler.
Plant operation	Continuous – up to 24 hours per day, 365 days per year.
Plant storage capacities:	
Propane	No increase. (48,000 kilolitres refrigerated storage, 625 kilolitres pressure storage.)
Butane	No increase. (24,000 kilolitres refrigerated storage, 625 kilolitres pressure storage.)
Condensate	No increase. (136 kilolitres pressure storage.)
Ethyl Mercaptan	No increase. (3.6 kilolitres pressure storage.)
Plant inputs:	
Natural gas feed stock	Nominal increase of 25% to approximately 500 terajoules per day.
Natural gas consumption	Nominal increase of 19% to approximately 30,200 tonnes per annum.
Electricity consumption	Nominal increase of 8% to approximately 4.3 MW.
Production capacity:	
LPG	Nominally 845 tonnes per day.
Condensate	Nominally 30,000 tonnes per annum.
Plant Emissions:	
Carbon monoxide	Increased by 4% to approximately 23 tonnes per annum.
Carbon dioxide	Increased by 19% to approximately 77,600 tonnes per annum.
Oxides of nitrogen	Increased by 6% to approximately 435 tonnes per annum.
Liquid waste	No increase.
Solid waste	No increase.
Noise emissions	No significant increase.
Risk	No net increase in off-site risk following implementation of risk reduction measures arising from approved Quantitative Risk Assessment.

**Proponent's Consolidated Environmental Management
Commitments**

26 October 2000

**UPGRADING OF WESFARMERS LIQUEFIED
PETROLEUM GAS PLANT,
MASON ROAD, KWINANA (1354)**

WESFARMERS LPG PTY LTD

Schedule 2

Proponent's Consolidated Commitments - Upgrading of Wesfarmers LPG Plant, Mason Road, Kwinana (1354)

No	Topic	Action	Objective	Timing	Advice
1	Risk	Provide a QRA to the satisfaction of the DEP and DME for the existing plant and the expansion.	To demonstrate that the EPA's Individual Risk from Hazardous Plants will be met. Any net increase above current off-site individual risk levels as a result of the plant upgrade will be offset through a real reduction in risk in the existing plant.	Prior to commissioning the new LPG extraction section.	DEP/DME
2	Risk	Implement the risk reduction measures identified in the risk assessment to achieve no net increase in risk and meet the "As Low As Reasonably Practical" (ALARP) principle.	To reduce off-site individual risk.	Within a time frame approved by the DEP/DME.	DEP/DME
3	Risk	Consult with BHP on the results of the QRA, including provision of a summary of results of the QRA.	To ensure that BHP and any future occupiers of BHP land is aware of the exceedance.	Prior to commissioning the new LPG extraction section.	
4	Risk	Update the Safety Report to incorporate the outcomes of the QRA, HAZOP of the new facilities and the latest plant audits.	Ensure the current safety standards are maintained.	As agreed with DME.	DME
5	Noise	Develop a Noise Reduction Management Plan for the gas extraction plant. The plan will be a comprehensive action plan that specifies the noise reduction measures.	To determine a strategy to reduce noise emissions from major noise sources in the plant to the DEP's satisfaction.	Plan completed by 31 December 2000.	DEP

6	Noise	Implement the Noise Reduction Management Plan.	To achieve compliance with the Environmental Protection (Noise) Regulations 1997 or to reduce noise emissions to as low as reasonably practicable.	(a) For practicable noise reduction measures, within 12 months of commissioning. (b) Other noise reduction measures, within a time frame agreed with the DEP.	DEP
7	Noise	Conduct a noise signature analysis of the plant at the nearest residence in Medina and implement noise reduction measures.	To achieve compliance with the Environmental Protection (Noise) Regulations 1997 or to reduce noise emissions to as low as reasonably practicable.	(a) For practicable noise reduction measures, within 12 months of commissioning. (b) Other noise reduction measures, within a time frame agreed with the DEP.	DEP
8	Noise	Participate and be actively involved in the Kwinana Industries Council's cumulative noise impact study.	To reduce cumulative noise impacts from Kwinana Industrial Area.	As required until completion of the study.	DEP

9	Gas Emissions	Install NOx reduction equipment on the gas turbine for the new parallel extraction section and operate the gas turbine such that it meets the AEC/NHMRC (1985) National Guidelines for the Control of Emissions of Air Pollutants from New Stationary Sources.	To reduce emissions of NOx to atmosphere.	Within a time frame approved by the DEP.	DEP
10	Gas Emissions	Minimise discharges from the accidental release of hydrocarbons and PSV emissions, including flaring.	To achieve "best practice" for the plant.	Within a time frame approved by DEP.	DEP/DME

Abbreviations:

AEC/NHMRC = Australian Environmental Council / National Health and Medical Research Council.

DEP = Department of Environmental Protection.

DME = Department of Minerals and Energy.

EPA = Environmental Protection Authority.

LPG = Liquefied Petroleum Gas.

NOx = Oxides of nitrogen.

PSV = Pressure safety valve.

QRA = Quantitative Risk Assessment.