

**MAUI STAGE II DEVELOPMENT
ENVIRONMENTAL IMPACT REPORT ADDENDUM**

REVIEW

Office of the
PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT
Te Kaitiaki Taiao a Te Whare Pāremata

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I SUBMISSIONS

II CORRESPONDENCE

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SUMMARY OF RECOMMENDATIONS

The Review of the Addendum to the Environmental Impact Report of the Maui Stage II Development has identified a number of actions by public authorities and the Company that would contribute to sound environmental management.

Recommendations to Central Government

That the Ministers of Energy and the Environment ensure that the Government receives balanced policy advice on the management of energy resources and the efficiency of their use. (Section 2.2)

That the Minister of Energy, in response to the UK Department of Energy findings, review the existing policies for the formal safety assessment of offshore installations. (Section 4.1)

That the Minister of Energy ensures a comparative safety evaluation of the manned versus unmanned platform proposals is carried out, and the implications for operational safety and the possible need for legislative changes to deal with the unmanned situation is examined. (Section 4.2.1)

That the Minister of Energy ensure the retrofit of new process items on Maui A is included in the Certifying Authorities check of the pipeline tie-in for Maui A. (Section 4.2.2)

That the Minister of Energy require an evaluation by the safety regulatory authority of the Company's decision on safety valve placement position at the MPA end of the pipeline. (Section 4.2.4)

That the Minister of Transport and the Minister for the Environment examine the need for a review of administration and resources for response to oil spills in New Zealand, bearing in mind the recent changes to regional and central government responsibilities and the Resource Management Bill proposals. (Section 4.3.3)

That the Ministry for the Environment ensure the formulation of appropriate guidelines for abandonment of fixed offshore installations and ensure adequate regulations for abandonment are in place. (Section 4.3.4)

That DOC Regional Conservancy, Wanganui, convene a working group of interested parties including Manawatu-Wanganui Regional Council, Paneke Conservation Corp, MAFTech (Levin), pingao experts, Botany and/or Ecology Division DSIR and kaitiaki of local iwi to develop a foredune reinstatement guideline and management plan. (Section 6.3)

Recommendations to Local Government

That the Taranaki Regional Council resolve the apparent discrepancy in various agencies' data bases regarding accommodation availability and determine whether there is a need for a temporary, housing advisory service. (Section 3.1)

That the New Plymouth District Council clarify with the Company whether the proposed activity is 'marine engineering' or 'construction' in terms of their District Scheme. (Section 3.3)

That the New Plymouth District Council advise the company of the District Scheme and planning ordinances and restrictions that would be applied to topside construction at Blyde Wharf. (Section 3.3)

That the South Taranaki District Council formulate and make available to the Oaonui district community a Civil Defence plan for any emergency at the Maui Production Station. (Section 4.1)

That the Taranaki Regional Council in consultation with a Regional Oil Spill Action Committee prepare a regional oil spills response plan which includes priority areas for environmental protection. (Section 4.3.3)

That the Manawatu District Council convene a meeting with the Department of Conservation and the Regional Council to simplify the consent granting process for the Tangimoana project. (Section 6.1)

That the appropriate consent granting authorities (DOC, Manawatu-Wanganui Regional Council, Manawatu District Council) note the foredune reinstatement guideline and management plan when setting rehabilitation conditions concerned with breaching the sand-dunes. (Section 6.3)

Recommendations to Maui Development Ltd and the Company

That Maui Development Ltd negotiate a grant-in-lieu of a development levy for the off shore component of Maui Stage II once final decisions to proceed have been taken. (Section 3.2)

That the Company in consultation with the New Plymouth District Council design and implement a noise monitoring programme to ensure standards are met. (Section 3.3)

That the Company discuss with the DSIR NECAL Laboratory, Auckland, or other relevant agency, appropriate noise mitigation methods. (Section 3.3)

That the Company discuss with the New Zealand Fire Service the design for extended fire protection at the Maui Production Station. (Section 4.1)

That the Company brief the New Zealand Fire Service on its proposals for fire safety at the satellite platform. (Section 4.2.6)

That the Company ensure adequate monitoring systems are in place on the platform and drilling vessels to provide assurance that the various discharges are not excessive and meet agreed specifications. (Section 4.3.1)

That the Company complete a survey of the inshore section of the pipeline tow route in terms of the physical obstructions to the pipeline tow and the biota at risk as a result of the pipeline launching and tow. (Section 5.2)

1 INTRODUCTION

As a result of the 1973 Government White Paper on the Development of the Maui Gas Field in which an obligation for environmental assessment of offshore and onshore facilities was made, an Environmental Impact Report (EIR) of the Maui Stage II development was prepared in 1988.

The EIR was addressed to the Minister of Energy. The Parliamentary Commissioner for the Environment agreed to audit the EIR in terms of Section 16(1)c of the Environment Act 1986 and in accordance with Government Environmental Protection and Enhancement Procedures (EP & EP) to the extent the latter are consistent with the Act.

Since the Audit was published in October 1988, the proponent (Shell BP and Todd Oil Services Ltd) as agents for Maui Development Ltd have advised that as a result of further investigation they have amended their original proposal with the effect that:

- 1 Maui B platform becomes an unmanned wellhead platform with no process equipment;
- 2 a buried single multiphase (ie gas, condensate and oil) pipeline links Maui B to Maui A instead of separate gas and condensate pipelines;
- 3 additional process equipment is installed on the Maui A platform;
- 4 consideration is being given to installing the pipeline by bottom towing (on the sea floor) three, 5 km long lengths of pipe from a fabrication site at Tangimoana just south of the Rangitikei River;
- 5 the launching of the pipeline from the Tangimoana Beach will necessitate a cut through the beachfront sand-dunes and disturbance of the inshore area immediately below mean high water;
- 6 there will be a more certain opportunity for local industry to be involved in topside construction.

As a result of these amendments to the original proposal the Minister of Energy agreed to receive an Addendum to the Maui Stage II Environmental Impact Report and refer this to the Parliamentary Commissioner for review and subsequent audit if she wished.

The Parliamentary Commissioner for the Environment decided to review the Addendum under Section 16(1)c of the Environment Act 1986 rather than under the EP & EP. This enabled the Commissioner to check on the outcome of recommendations made in the Audit. Appendix B of the Addendum, details the Company's response to 19 recommendations. The Commissioner is pleased

to note the positive response of the Company to the recommendations. However, concern still exists about the use of the 'Tasman Corner' of Golden Bay as a rigging and shelter area for vessels concerned with the jacket tow and placement and is discussed in section 4.3.2. The response of several Public Authorities has not been as positive or committed as the Company. Of the 25 recommendations made to public authorities only nine have been accepted while the remainder are 'under consideration' or the Commissioner considers the response inadequate. These recommendations are discussed further in this review.

The Addendum is specifically concerned with the impact of changes to the concept of the second platform (MPB) originally proposed by the proponents. An element of the changes is the possibility of prefabricating a pipeline on-shore and bottom towing it from its construction site to the Maui field. Should this option be selected, instead of barge laying the pipe between the two platforms, the Company will require a number of consents from local authorities in the Manawatu-Wanganui region. To provide background information to accompany the consent applications, the Company prepared an environmental impact assessment (EIA) for the pipeline fabrication site at Tangimoana.

As the two assessments are interrelated, the Parliamentary Commissioner for the Environment requested that the Company release the EIA at the same time as the Addendum.

The Parliamentary Commissioner for the Environment has:

- 1 noted and verified the information provided in the Addendum in relation to the environmental impacts of the new features of the proposal. This has been assisted by consultation with appropriate experts and information supplied through public consultation;
- 2 assessed the adequacy of mitigation and remedial measures proposed by the Company in relation to new environmental impacts and/or risks dictated by the new proposals;
- 3 reviewed the outcome of previous recommendations to public authorities made in the Maui Stage II Environmental Impact Audit;
- 4 ensured the public in general had sufficient information and opportunity to participate in the future approval process for the Tangimoana project;
- 5 checked the concerns of central and local Government agencies to forewarn the Company and consent granting authorities of possible areas of concern to be addressed in the Tangimoana consent granting process;

- 6 checked that concerns of the tangata whenua have been canvassed and addressed.

This review has been greatly aided by those who wrote submissions, the willing assistance of representatives of the tangata whenua in Taranaki and Manawatu, and a number of agencies in New Zealand and overseas. Information was obtained from the Western Australia Environmental Protection Authority, the Victorian Department of Industry Technology and Resources, the Safety Technology Department of Lloyd's Register, and Dr R. Engelhardt formerly of the Canadian Oil and Gas Lands Administration as well as officials in New Zealand government departments and local authorities.

2 RESOURCE USE

The Audit of the Maui Stage II EIR noted public concerns about inefficient use of Maui gas. One submission to the Addendum from the Taranaki Branch of the Royal Forest and Bird Protection Society of NZ (Appendix I. item 3) reiterated this concern.

The Audit contained three recommendations (1-3) to the Minister of Energy with respect to the efficient use of the Maui Gas Field. The Minister on behalf of the Government indicated he would:

- 1 do what he could to ensure that the maximum quantity of gas would be recovered from the gas field,
- 2 establish a monitoring regime and publicly release data on the economically recoverable reserves of the gas field, and
- 3 consider gathering and releasing energy resource information to enable the market to identify and plan transition strategies.

However, these were all subject to the agreement of Maui Development Ltd to release commercially sensitive information on the Maui Gas Field.

The Minister undertook to approach Maui Development Ltd to discuss what information they would be willing to release. An update of these undertakings was requested.

The Minister indicated (II.10) that:

"Shell BP and Todd Oil Services is concerned to protect its commercial position and thus is reluctant to have released information ... (on) reserves estimates and remaining resources for both the Maui and Kapuni fields. Discussions are ongoing". Publication of the "...remaining reserve estimates for the various New Zealand oil and gas fields, including Maui ... is to continue..."

- 2 Minimal alignment requirements for pipeline and riser joints to avoid unacceptable stresses in the connection.
- 3 The maximum allowable misalignment at the end of each tow, before the pipeline is deflected into position to be connected to the riser, recognising that excessive deflection will cause stresses in the pipeline.
- 4 Recovery procedures if recoverable buoyancy canisters are to be used on the towed pipeline option.

The Commissioner will seek assurance from the Chief Petroleum Inspector that the above details have been obtained and used as control standards.

5.2 INSTALLATION

The Addendum proposes an alternative method of laying the pipeline to link the Maui B platform to Maui A. This involves the bottom tow of three, 5 km long lengths of pipe from a fabrication site at Tangimoana just south of the Rangitikei River to the platform site.

Unfortunately there is no comparative assessment of the environmental impact of this method in comparison to the original intention of laying the 15 km of pipe from a pipe laying barge.

A detailed study of the seafloor along the tow route and between the platform sites (Audit Recommendation 13) has been carried out. This has not identified any major obstructions which hinder this pipe laying method. However, the inshore area from the beach to about 0.8 km off shore has not yet been surveyed. The Commissioner understands this is currently in progress and believe it is necessary to ensure there are no large troughs or ridges which would require the pipeline to bend in excess of its design criteria.

The detailed study of the seafloor revealed a fairly rich community in terms of species but fewer live specimens than the North Taranaki Shelf. The New Zealand Oceanographic Institute (NZOI) (II.3) stated one reason for this may have been the smaller grab samples collected but also the fact that parts of the South Taranaki Bight are geologically very old relic surfaces. Since the last post glacial rise in sea level, sedimentation has been very slow and consequently there is "...a seabed that is a graveyard of all the things that have lived there in the last 12,000 years, which is not a particularly desirable habitat for many animals to live in".

There will be a greater environmental impact from towing the pipeline along the seabed rather than laying from a barge. However, both Dr Engelhardt (II.2) and the NZOI consider the impact will be negligible given the light pipe loading on the seafloor, the low benthic population and the relatively small area of disturbance in comparison with the total area of the South Taranaki Bight.

Launching of the pipeline through the inshore area at Tangimoana Beach is not considered to have any significant long-term effects. Natural storm-wave scour will have a greater impact and inshore biological communities are adapted to sedimentation by wave action according to the NZOI. This is in contrast to the view of the Auckland University submission (I.9) which claims the "...biota of the shore and inshore areas will be destroyed as the sediment is churned or compacted ...".

Shell BP and Todd Oil Services Ltd in their record of a public meeting at Tangimoana on Wednesday 24 May 1989 note only one comment on the effects on fish life. On being advised that some sediment would be stirred up the resident replied "...don't do it during the white-baiting season!". Similarly Appendix I (pg 34) of the EIA notes that commentators at meetings or interviews, even when pressed, seemed unconcerned about the effects of pipeline launching on shellfish and other kaimoana.

Burying the pipeline in a trench between the platforms is required to aid heat retention. This will have only minor physical effect and reinvasion of the narrow strip of worked sediments by biota from adjacent areas should be rapid. (II.2)

Because the seafloor is composed of mud varying from 2-12 metres deep over sand, there should not be a debris problem from trench excavation.

Recommendation

That the Company complete a survey of the inshore section of the pipeline tow route in terms of the physical obstructions to the pipeline tow and the biota at risk as a result of the pipeline launching and tow.

6 TANGIMOANA EIA

6.1 CONSENTS

The Company identifies a number of statutory consents required for fabrication and launching of the pipeline from Tangimoana but has not identified the sequence in which these need to be addressed.

Three agencies are involved with the Manawatu District Council (II.6) being the principal agency as the "...proposed industrial use of rurally-zoned land will require consent by way of a specified departure from the District Scheme," and without this consent the project cannot proceed.

Consent from the District Council which has a Grant of Control Authority in terms of section 165 of the Harbours Act 1950 over the intertidal foreshore for the foreshore crossing by the pipe will also be required.

The Manawatu-Wanganui Regional Council (II.5) administers the former Rangitikei-Wanganui Catchment Board's Conservation of Ground Cover Bylaw 1979 and breaching the foredune to move the pipes will require consent in terms of this Bylaw.

Water rights will be required from the Regional Council for:

- 1 taking water from bores;
- 2 sewage discharges probably after septic tank pretreatment;
- 3 discharge of the hydrotest water used in testing the pipeline. This water may have been chemically treated with biocide and an oxygen scavenger to kill naturally occurring bacteria and reduce the dissolved oxygen content of the water;
- 4 a general authorisation to divert existing drains.

The applications for water rights is a process open to public scrutiny and objection. The drain diversion requires consent of owners or occupiers of land adjoining the water course in the vicinity of the diversion.

DOC (II.4) advise that the Minister of Conservation becomes the consent grantee for access across the 'marginal strip' pursuant to section 24 of the Conservation Act 1987 as amended by the proposed Conservation Law Reform Act. Currently the Minister of Lands' consent would be required. DOC also advise that a large part of the land to be affected by the proposal is within a designated 'Proposed Regional Park' within the operative Manawatu District Scheme. A consent is required under section 124(1) of the Town and Country Planning Act provides for the imposition of conditions which in this case would cover such aspects as physical impacts of the work, dune rehabilitation and reinstatement of vegetation.

Consent from DOC under section 178 of the Harbours Act 1950 will be required for all works undertaken below mean high water mark (MHW), including dragging the pipes across the beach. For this consent the department would consult with interested parties who may be affected. The Company has already consulted the local community.

From the range of consents required it appears there are several opportunities for consultation and public participation.

- 1 The general public will have the opportunity to make submissions to the Regional Council concerning water right applications and to the District Council concerning the specified departure to the District Scheme.
- 2 DOC will consult directly with interested parties who may be affected by works below MHW under section 178 of the Harbours Act; and with the Wellington National Parks and Reserves Board or the new

Conservation Board in relation to the designated 'Proposed Regional Park' under section 124(1) of the Town and Country Planning Act.

The consent granting authorities have indicated a need for additional information. The Manawatu District Council (II.6), the Manawatu-Wanganui Regional Council (II.5) and DOC (II.4) are likely to impose conditions to mitigate environmental impacts of the pipeline fabrication, sand-dune breaching, pipeline launching and tow, and for site reinstatement and rehabilitation.

The Manawatu-Wanganui Regional Council (II.5) notes existing legislation lacks strong incentives to ensure conditions of consent are met and considers the taking of a bond to ensure rehabilitation is probably the most effective means.

The number of agencies involved and consents required suggests a tortuous process for obtaining approvals.

The consent for a specified departure appears to be the key for the approval of the Tangimoana project. In order to simplify matters the application for a specified departure could also constitute an application to the Minister of Conservation for consents under the Harbours Act and section 124(1) of the Town and Country Planning Act.

This would enable Conservation officials to discharge their advocacy role for local government consents and give advice to the Minister on conservation consents at the same time. It would be hoped that the Minister's decision could immediately follow the decision made by the District Council.

Recommendation

That the Manawatu District Council convene a meeting with the Department of Conservation and the Regional Council to simplify the consent granting process for the Tangimoana project.

6.2 CONSULTATION

The local community has had the opportunity to give their views on the project through a survey questionnaire, delivered to every resident and holiday home owner, two public meetings and the distribution of the EIA. Also the company advises that since the release of the EIA they have received no critical comments (II.8). Specific Maori concerns were additionally canvassed by consultants to the Company as detailed in Appendix I of the EIA.

The Company's consultants expressed the view that provided certain precautions were taken and assurances given, the Maori people consulted approve of the project.

The Commissioner in discussion with designated Maori spokespeople has not been requested to intervene, her offer to meet with Maori representatives locally was not considered necessary, and the general comment was that provided the recommendations embodied in the Consultant's report were taken up and assurances given by the Company honoured, the various sections of the Maori community found the proposal acceptable.

In broad terms the issues highlighted were:

- 1 No transfer of land title (for pipeline fabrication) from crown (or existing) ownership.
- 2 The Company rather than its contractors to hold a lease over the fabrication site for the duration of the project.
- 3 A pre-construction survey of the fabrication site and pipeline launching route for archaeological sites before earthworks begin. The Company has indicated it is prepared to undertake this work (section 7.2 p 40 of EIA) and has had an offer of assistance from the Historic Places Trust (II.8).
- 4 Pre-construction tuition of site development supervisors and machine operators about the features of archaeological sites by an archaeologist and Maori representatives. The purpose being to ensure that any unmapped sites which are unearthed during construction are recognised.
- 5 In the event of an unmapped site being unearthed, work to cease immediately, the archaeologist and Maori representatives to be contacted and time allowed for survey and/or excavation to be undertaken.

It was suggested these concerns would be helped if a local tangata whenua is employed on the staff, then that person could be invited to act as a watchdog over such matters.

The Company acknowledged the concerns of items 4 and 5 above and will incorporate them in the conditions of contract for the work.

6.3 ECOLOGICAL CONCERNS

Pingao, an attractive native grass of the foreshore is a highly valued traditional local resource used both locally and with prior approval of kaitiaki of local iwi, by weavers of marae from all over New Zealand. Pingao habitat has been severely restricted over the past and there is increasing concern to protect and improve its long-term sustainability. Since the foredune area to be breached for the pipeline contains a pingao community, special efforts are required to ensure the pingao community is restored and retains its long term viability.

Tangata whenua have recommended that:

- 1 Pingao growing along the line of eventual access to the beach must be removed to an appropriate safe area by a specialist skilled in the growth habits of pingao.
- 2 A complementary programme to propagate nursery plants for planting out after reinstatement of the site is required.
- 3 The pingao expert should advise on the reinstatement and stabilisation of the dunes and carry out the replanting programme. The person should monitor the reinstatement and carry out further replanting if required.

Whilst acknowledging these concerns the Company has not stated they will implement these recommended actions.

DOC (II.4) shares the Maori concern for reestablishing native flora on the sand-dunes and has listed seven requirements regarding breaching the sand-dunes and subsequent rehabilitation. These differ from those suggested by the Regional Council (II.5) in the concept of the final climax vegetation to be achieved after reinstatement. The submission from Auckland University (I.9) notes a lack of detail about the existing vegetative community on the sand-dunes to be disturbed. Without such base data the success of reinstatement can not be judged.

Recommendation

That DOC Regional Conservancy, Wanganui, convene a working group of interested parties including Manawatu-Wanganui Regional Council, Paneke Conservation Corp, MAFTech (Levin), pingao experts, Botany and/or Ecology Division DSIR and kaitiaki of local iwi to develop a foredune reinstatement guideline and management plan.

Recommendation

That the appropriate consent granting authorities (DOC, Manawatu-Wanganui Regional Council, Manawatu District Council) note the foredune reinstatement guideline and management plan when setting rehabilitation conditions concerned with breaching the sand-dunes.

7 CONCLUSION

The review of the Addendum to the Maui Stage II Development Environmental Impact Report has not identified any new significant environmental concerns. However, the review enabled a check to be made on the response of public authorities and Shell BP and Todd Oil Services Ltd to Audit recommendations. The reluctance of the Ministry of Energy to act on

concerns of safety and environmental risk is in contrast to the progress in systems of safety assessment which are being made by government agencies in other countries.

The disestablishment of the Ministry of Energy is resulting in uncertainty as to where future responsibilities for regulation of the petroleum industry will lie. The presence of a good operator such as the Company should not be a reason for the regulator to neglect improvements to safety procedures.

It is claimed there is also a potential disaster risk from oil spills in the Taranaki region. This is an unsatisfactory state of affairs for the energy province of New Zealand. Positive action is urgently required to ensure a system for oil spill containment is properly resourced at regional as well as national levels, and can be implemented speedily.

The Commissioner was pleased that the Environmental Impact Assessment (EIA) of the Pipeline Fabrication Site Tangimoana was made available at the same time as the Addendum. The EIA will assist public authorities to impose appropriate conditions on the necessary consents. However, the variety of consents required, calls for early consultation and coordination of the agencies involved. The Manawatu District Council is urged to take a leading role.

APPENDIX I

SUBMISSIONS RECEIVED ON THE ADDENDUM

Submissions were invited from the public by way of notices in local newspapers, and by direct letter to those who had previously made submissions on the EIR.

The following submissions listed in order of receipt were received

- 1 Fisheries Research Centre, MAFFish, Wellington
- 2 Occupational Safety and Health, Department of Labour, Wellington
- 3 Royal Forest and Bird Protection Society of New Zealand, North Taranaki Branch
- 4 New Zealand Fire Service, New Plymouth
- 5 Taranaki Harbours Board
- 6 New Plymouth District Council
- 7 Taranaki Area Health Board
- 8 Housing Corporation of New Zealand, New Plymouth
- 9 University of Auckland, Zoology Department (Professors P R Bergquist and M C Miller)
- 10 Taranaki Regional Council (Taranaki Social Needs Committee)
- 11 Taranaki Regional Council
- 12 Department of Scientific and Industrial Research
- 13 Ministry for the Environment, Wellington
- 14 Ms D Ratahi (oral submission)