



Ass # 965

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MINISTER FOR THE ENVIRONMENT WESTER

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

PROJECT: EXMOUTH BOAT HARBOUR, EXMOUTH (223 / 965)
PROPOSAL: CORAL COAST MARINA, RESIDENTIAL
SUBDIVISION AND QUARRY, EXMOUTH (223)
CURRENT PROPONENT: DEPARTMENT OF TRANSPORT
CONDITIONS SET ON: 20 JANUARY 1992

The implementation of this proposal is now subject to the following conditions which replace all previous conditions:

1 Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal, including the documented modifications of August 1995 described in "Exmouth Boat Harbour, Proposed Changes to Environmental Conditions" and reported on in Environmental Protection Authority Bulletin 806, the proponent shall fulfil the relevant environmental management commitments made in "Proposed Coral Coast Marina Resort, Exmouth - Notice of Intent" (August 1989) and reported on in Environmental Protection Authority Bulletin 498, in documentation on the modifications to the proposal (August 1995), and those made in response to issues raised following public submissions; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

A schedule of environmental management commitments (January 1996) which will be audited by the Department of Environmental Protection is attached.

Published on

1 1 1996

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 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.
- 2-2 Where, in the course of the detailed implementation referred to in condition 2-1, the proponent seeks to change the designs, specifications, plans or other technical material submitted to the Environmental Protection Authority 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 Quarry Management (Water Supply Reserve 34055)

Quarry operations should be managed so as to prevent unacceptable environmental impacts.

- 3-1 Prior to the commencement of quarry operations, the proponent shall prepare an Environmental Management Programme, giving due consideration to the draft guidelines of the Working Party on Conservation and Rehabilitation in the Mining Industry, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Shire of Exmouth and the Water Corporation.

This programme shall include, but not be limited to the following:

- 1 measures to protect the groundwater quality below the quarry, particularly with respect to management and contingency plans for liquids (eg oil, fuel) used on site;
 - 2 consideration of impacts on Water Corporation operations on or adjacent to the quarry site;
 - 3 effects on site drainage;
 - 4 rehabilitation of the quarry and access roads; and
 - 5 monitoring and reporting of compliance with measures outlined in the Environmental Management Programme.
- 3-2 The proponent shall implement the Environmental Management Programme required by condition 3-1.

4 Alternative Quarry Site (Whitecrest)

Environmental approval for the alternative quarry on the Whitecrest site has not been given at this time.

- 4-1 The proponent shall not use limestone extracted from the Whitecrest site unless and until approved by the Minister for the Environment following completion of the assessment of the Whitecrest Enterprises Pty Ltd Limestone and Quicklime proposal (Assessment No. 715).

5 Residential Development

- 5-1 Prior to filling the residential area, the proponent shall prepare a plan of slopes and their stabilisation programme to be used in the residential subdivision, to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection and the Ministry for Planning.
- 5-2 The proponent shall implement the plan of slopes and their stabilisation programme to be used in the residential subdivision, required by condition 5-1.

- 5-3 Prior to construction of the residential area, the proponent shall prepare a drainage management plan showing amongst other things the location of outlets for drainage downstream of the residential subdivision, to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection and the Shire of Exmouth. The drainage system shall be designed so that there is minimal impact from sediments on important biological communities, such as corals.
- 5-4 The proponent shall implement the drainage management plan required by condition 5-3.
- 5-5 The proponent shall advise all prospective purchasers of land within the subdivision development area that private groundwater bores will not be permitted nor licences issued by the Water Corporation for private bores within the subdivision development area.
- 5-6 If as a result of further research it can be demonstrated to the requirements of the Environmental Protection Authority on advice of the Western Australian Museum that a limited degree of groundwater extraction would not adversely affect cave-dwelling fauna, then limited groundwater extraction may be permitted to the requirements of the Environmental Protection Authority.

6 Time Limit on Approval

The environmental approval for the proposal is limited.

- 6-1 If the proponent has not substantially commenced the modified project within two years of the date of this statement, then approval to implement the modified proposal shall lapse and be void. The Minister for the Environment shall determine any question as to whether the modified project has been substantially commenced.

Any application to extend the period of two years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment.

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

7 Proponent

These conditions legally apply to the nominated proponent.

- 7-1 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.

8 Compliance Auditing

To help determine environmental performance, periodic reports on progress in implementation of the proposal are required.

- 8-1 The proponent shall submit periodic Progress and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

Procedure

- 1 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions contained in this statement and for issuing formal clearance of conditions.
- 2 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

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Hon. Peter Foss QC MLC
MINISTER FOR THE ENVIRONMENT

11 MAR 1996

Schedule of Environmental Management Commitments

which will be audited

by the Department of Environmental Protection

January 1996

**EXMOUTH BOAT HARBOUR
(223/965)**

**FORMERLY CORAL COAST MARINA, RESIDENTIAL SUBDIVISION
AND QUARRY, EXMOUTH (223)**

DEPARTMENT OF TRANSPORT

N.B. * indicates commitments to be audited by the Department of Environmental Protection.

- 1* An environmental management plan for the rehabilitation and conservation of the dunes bordering the development site will be prepared in consultation with the Shire, the Ministry for Planning and the Commissioner for Soil Conservation and implemented by the proponent to the satisfaction of the Commissioner for Soil Conservation and the Department of Environmental Protection.
- 2 The marina and all associated facilities will comply fully with applicable legislation, regulations and by-laws. All construction materials and practices would be in accordance with the relevant Australian and international codes.
- 3 Construction activities will be restricted to normal daylight hours and, if found to be necessary, appropriate dust suppression techniques would be employed. Any blasting that is required to enable excavation of the marina harbour and entrance channel will be conducted between 9.00 am and 5.00 pm on weekdays, and will be publicised in the Exmouth community.
- 4 During earthworks and construction, appropriate care will be taken to exclude incursion of machinery into conserved areas of the dune and foreshore.
- 5* The proponent will be responsible for quarrying operations to provide armourstone for the breakwaters and will liaise with the Department of Minerals and Energy, the Shire and the Department of Environmental Protection to define appropriate environmental management measures, including rehabilitation of the quarry site and access roads.
- 6* If the harbour is to be de-watered for excavation then the extracted water will be directed to a settling pond to reduce suspended solids prior to discharge to Exmouth Gulf. If excavation were to occur "in the wet", drainage water from the excavated material will be similarly directed to a settling basin prior to discharge to Exmouth Gulf. This commitment will be to the requirements of the Department of Environmental Protection.
- 7 Recontouring of areas receiving fill material will meet the following objectives:
 - 1 The redeveloped areas should form a stable and varied landscape, reflecting naturally occurring topography elsewhere within the coastal strip.
 - 2 The boundary relief should co-ordinate with existing contours.
 - 3 The filled sites will be compacted in accordance with the requirements for building purposes and covered with previously stockpiled topsoil. Filled areas will be stabilised, if necessary, using brush matting, sprayed membranes or mulch.
- 8* The proponent will undertake further investigations to define the nature of the sediments to be dredged from the entrance channel, and to identify the preferred dredging methodology and requirements for blasting. The results and proposed works will be submitted to the Environmental Protection Authority for approval prior to initiation of dredging.
- 9 As an interim measure, sewage from facilities within the harbour development will be disposed to sillage tanks and the proponent will be responsible for regular pump out and delivery of the sewage to the Exmouth treatment works. The proponent will connect the harbour facilities to deep sewerage when deep sewerage is extended to any reasonably proximate development.

- 10 Drainage from marina hardstand areas will be directed away from the harbour and discharged to general drainage via silt traps.
- 11 Fuel storage facilities in the marina will be above ground and contained within a sealed bund capable of holding the entire tank contents. Boat refuelling facilities will include manually operated nozzle valves with automatic shut-off. The fuel storage and refuelling facilities will comply with the requirements of the Explosives and Dangerous Goods Division of the Department of Minerals and Energy.
- 12 The discharge of sewage, hydrocarbons or litter from boats into the marina will be prohibited, with appropriate signs to inform all users of the marina. Waste disposal facilities, including rubbish bins, oil recycling bins and sewerage public toilets will be provided around the marina. A sewage pump out facility for boats equipped with a holding tank will be provided once demand for such a facility is demonstrated.
- 13 The use of antifouling paints containing tributyl tin will be prohibited in the marina, and this will be included as a lease condition for boat repair facilities in the marina.
- 14 Operation and maintenance of the marina will remain the responsibility of the Department of Transport, and will include:
 - 1 Daily inspection of the marina harbour and immediate implementation of any corrective action required to maintain water quality and aesthetics to the required standard;
 - 2 Maintenance of specified navigable depths;
 - 3 Maintenance of breakwaters, jetties, wharves, revetments and foreshores.
- 15* Water quality in the marina harbour and the adjacent area of Exmouth Gulf will be monitored to confirm the predictions made in the NOI regarding the adequacy of flushing and the maintenance of suitable water quality. The minimum water quality criteria required to be met are described in Table 2.2 of Environmental Protection Authority Bulletin 711 (Environmental Protection Authority, 1993). The proposed monitoring programme is described in Section 7.4.2 of the NOI, and the results will be reported to the Environmental Protection Authority.

Section 7.4.2 of the NOI reads:

"Water quality and contaminant levels in sediments and organisms will be monitored during operation of the marina.

Water quality parameters measured will be those specified in the Canal Guidelines (Steering Committee on Canal Developments, 1984), and will include suspended solids, pH, dissolved oxygen, temperature, bacterial counts and nutrient concentrations. Monitoring will be conducted quarterly for the first year and thereafter at intervals dictated by experience. Samples will be collected from surface and bottom water at representative sites in the marina and adjacent Gulf waters.

Sediments and mussels within the marina will be monitored for toxic trace metals and hydrocarbons. Surface sediments will be sampled from the central basin of the marina where deposition is anticipated, and the fine fraction would be analysed for nickel, zinc, copper, lead, polycyclic aromatic hydrocarbons (PAHs) and phosphorus levels. Mussels collected from the marina will be analysed for tissue concentrations of nickel, zinc, copper, lead and PAHs, using standard methods for the mussel watch programme. Lipid levels would also be determined to assist in data interpretation. The sediment and mussels will initially be monitored at six-monthly intervals.

Specialist marine scientists engaged by the Department of Transport will supervise monitoring and interpretation of the results and recommend management action. The results will be presented to the Department of Environmental Protection for review on an annual basis."

- 16 The level of revetments and areas surrounding the proposed harbour will be +3.0m CD, and floor levels will be a least +4.0m CD. This floor level is sufficient to contain extreme seawater levels, including anticipated seawater level rises due to the "Greenhouse Effect".
- 17* Coastal sediment movement will be monitored following construction of the marina as outlined in Section 7.4.1. If by-passing of sand around the breakwaters is occasionally necessary it will be undertaken by the Department of Transport.

Section 7.4.1 of the Notice of Intent is reproduced below:

"The position of the shoreline, vegetation line and dune profiles adjacent to the breakwaters will be established prior to construction. Surveys will be conducted at distances of 50 m, 100 m, 200 m, 500 m, 1 km and 2 km to the north and south of the entrance channel.

Following construction, water depth in the marina and entrance channel, and the position of the shoreline, vegetation line and the dune profile, will be regularly monitored. Surveys will be conducted quarterly for the first year and thereafter at intervals to be determined in consultation with the Commissioner for Soil Conservation."

- 18* In the event that de-watering of the harbour basin is proposed for excavation "in the dry", then the proponent would apply the recommendations of the Test Pit Report. Recommendations adopted from Test Pit Report:

- 1 Prior to commencement of harbour excavations, it is strongly advised that a series of piezometers be drilled and constructed along the perimeter of the harbour and along the estimated radius of influence, which is expected to be approximately 200 m from the western perimeter of the harbour basin.

These will allow the monitoring of any effects of de-watering on the adjacent areas.

- 2 Piezometer monitoring will be performed by a technician not employed by the earthmoving contractor (possibly the Water Authority). The data should be analysed and reported on by a hydrogeologist.
- 3 One or two de-watering bores should be sunk into suitable locations to penetrate the hard rock layer and pumping tests carried out to determine:
 - a Magnitude of water flow expected in the full scale operation.
 - b Allow for a more accurate method of de-watering design, and
 - c Provide more reliable data on the possible zone of influence during the main excavation phase.
- 19* Blasting operations will be managed to minimise any impact to the environment or residences beyond the project area, or nuisance as was previously proposed and approved.
 - 1 The earthworks Contract document will include Clauses that require the Contractor to consider weather conditions prior to and during blasting, with the aim of minimising adverse impacts.

- 2 The Department of Transport undertakes to repair obvious damage caused by blasting activity associated with excavation of the marina.
- 20 All promotional material under the control of the proponent will incorporate a conservation ethic as advocated by the Department of Conservation & Land Management.
- 21* If de-watering of the harbour basin is proposed and if the de-watering investigations described in Commitment 18 indicate that possible de-watering effects to groundwater quality or quantity may extend as far as Murat Road to the west or 500 m to the north or south of the harbour perimeter then, prior to commencement of de-watering, the proponent shall develop a monitoring program and then subsequently monitor groundwater levels and salinity near the marina basin. The monitoring program will be to the requirements of the Department of Environmental Protection on advice from the Geological Survey of Western Australia, the Water Authority of Western Australia and the Western Australian Museum.
- 22* If the results of groundwater monitoring proposed in Commitment 21 indicate unacceptable de-watering effects at Murat Road to the west or 500m to the north or south of the harbour perimeter, then the proponent shall cease de-watering activities. The commitment shall be implemented to the requirements of the Department of Environmental Protection on advice from the Geological Survey of Western Australia and the Water Authority of Western Australia.
- 23* Prior to the commencement of de-watering or to construction of the marina "in the wet", the Department of Transport shall construct and subsequently utilise settling ponds as near as practicable to the ocean, to the satisfaction of the Department of Environmental Protection.
- 24 Material excavated from the harbour and entrance channel will be exclusively used for fill within the proposed development area.
- 25 Any accidental spillage of hydrocarbon based fuels and oils or hydraulic fluids or potentially contaminating fluids will be cleared immediately and the contaminated soil/materials will be disposed of offsite at a suitable approved disposal site. An incident logbook will be maintained and a record will be kept of any incident that has the potential to pollute. The Regional Water Resources Officer will be informed within 24 hours of any incident.
- 26 The servicing of any plant will only be undertaken at an approved site outside of Water Reserve 34055.
- 27 Should voids be encountered during mining operations, the proponent will facilitate inspection by a nominated speleological group and assist their assessment within the limitations of an on-going quarry operation.
- 28 Turbidity will be reduced to a minimum during breakwater construction and filling operations to the requirements of the Department of Environmental Protection.
- 29 The proponent will construct the marina to blend in with visual values of the coastline, to the satisfaction of the Department of Environmental Protection.



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PO Box 402
FREMANTLE WA 6959

Our ref 185/93
Enq Dr R Holmes 9222 7075

**EXMOUTH BOAT HARBOUR: NON-SUBSTANTIAL CHANGE
TO PROPOSAL (STATEMENT 406)**

In regard to the letter of request with technical appendices, from your consultant Bowman Bishaw and Gorham dated 7 July 1998, to construct and implement a wastewater treatment plant for the Exmouth Harbour ablution facilities, I advise that I consider the change to the proposal to be not substantial and you may proceed to implement the change subject to the following:

the wastewater treatment plant may be installed and implemented according to the technical specifications which are provided in the assessment by Bowman Bishaw and Gorham dated 7 July 1998.

Please note that the above approval refers to environmental issues in Statement 406. This does not remove the necessity to obtain any approvals which may be required by the Shire of Exmouth or other Government agencies.

(Dr) 
CHIEF EXECUTIVE OFFICER

date: 7.8.98

cc. Bowman Bishaw Gorham
Shire of Exmouth





MINISTER FOR THE ENVIRONMENT WESTERN AUSTRALIA

Your Ref:
Our Ref: 97882 & 185/93

Executive Director
Department of Transport
1 Essex Street
FREMANTLE WA 6959

Attention: Mr P Boreham

EXMOUTH BOAT HARBOUR (STATEMENT NO. 406)

I refer to your request of 5 June 1996, for approval to make a change to the above proposal, which received environmental approval on 11 March 1996.

The Department of Environmental Protection has provided advice to me regarding a change to the quarry boundary of the quarry established near Exmouth to provide material for the Exmouth Boat Harbour. The change consists of modifying the quarry boundary approximately 140m to the west and 50m to the north. I also understand that the total area contained within the quarry boundary will not be increased.

I consider the proposed change to the project to be not substantial. Accordingly, under Condition 2, I advise that the proposed change, as referred in correspondence of 5 June 1996, may be implemented as part of the Exmouth Boat Harbour development.

I am aware, however, that the Water and Rivers Commission has expressed concern about some aspects of the operation of the existing quarry. I would expect that quarry management would improve given the sensitivity of the quarry location.

It should be noted that the above information refers to environmental issues in the Statement. This does not remove the necessity to obtain approvals which may be required by other agencies.

Hon Peter Foss, QC MLC
ATTORNEY GENERAL,
MINISTER FOR JUSTICE; THE ENVIRONMENT; THE ARTS

20 AUG 1996



EPA's COPY

MINISTER FOR THE ENVIRONMENT WESTERN AUSTRALIA

Our Ref: 185/93

Executive Director
Department of Transport
1 Essex Street
FREMANTLE WA 6959

Attention: Mr P Boreham

EXMOUTH BOAT HARBOUR (STATEMENT NO. 406)

I refer to the request of 11 November 1996, for approval to make a change to the above proposal, which received environmental approval on 11 March 1996.

The Department of Environmental Protection has provided advice to me regarding a change to the quarry boundary of the quarry established near Exmouth to provide material for the Exmouth Boat Harbour. The change consists of modifying the quarry boundary approximately as indicated in the attached diagram in order to preserve a cave which has been discovered and also to secure the resources which are required to complete the Exmouth Boat Harbour. I also understand that the total area contained within the quarry boundary will remain unchanged.

I consider the proposed change to the project to be not substantial. Accordingly, under Condition 2, I advise that the proposed change, as referred in correspondence of 11 and 12 November 1996, may be implemented as part of the Exmouth Boat Harbour development.

I am aware, however, of concerns which were raised as a result of the compliance audit inspection of the project site on 10 September 1996 by the Department of Environmental Protection. I would expect that quarry management would significantly improve given the sensitivity of the quarry location.

It should be noted that the above information refers to environmental issues in the Statement. This does not remove the necessity to obtain approvals which may be required by other agencies.

Hon Peter Foss, QC MLC
ATTORNEY GENERAL,
MINISTER FOR JUSTICE; THE ENVIRONMENT; THE ARTS

cc Mr T Mitchell, Department of Transport, Exmouth.

26 Nov 96.

Sketch 3,

Proposed Alternative
HATCHED Area
ONLY

