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SHIRE OF ROEBOURNE MINING LEASES M47/306 AND M47/331 AND MINING LEASE APPLICATION M47/353 SUPPLEMENT TO CONSULTATIVE ENVIRONMENTAL REVIEW FOR HARD-ROCK QUARRYING BURRUP PENINSULA NOVEMBER 1994

prepared by

W G MARTINICK AND ASSOCIATES PTY LTD

for

THE READYMIX GROUP CSR LIMITED

FEBRUARY 1996

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MAP 1: Aerial photograph showing Nickol Bay Quarry and proposed extension

FIGURE 1:Contour map at 1m intervals of Nickol Bay Quarry and Mining Leases of Project AreaFIGURE 2:Proposed outline of quarry extension based on assumption that approval has been secured to
destroy archaeological sites

1.0 BACKGROUND

In November 1994 a CER was submitted on behalf of Guiseppe, Pamela Margret and Steven Rocca requesting approval to commence quarrying on Mining Leases M47/306, M47/331 and Mining Lease Application M47/353 (now a granted Mining Lease). In June 1995 The Readymix Group agreed to purchase these leases subject to approval being secured to extend their quarry onto these leases. This will permit Readymix to quarry these leases as an extension of their existing Nickol Bay Quarry which adjoins the western boundary of Mining Lease M47/306, and to mine their Mining Lease M47/309 which is located between Mining Leases M47/306 and M47/331. As a result all of these leases can then be quarried in a single operation and in a more efficient and effective procedures, with the entry to the quarry on each of the leases being from the adjoining existing quarry, thereby removing the need for three additional entries, each through the base and lower slopes of the Pistol Ranges. It also provides the opportunity to relocate the crushing and screening operations and the stockpiles from the adjoining plain to within the quarry, thereby hiding them within the Pistol Range.

When Mining Leases M47/306, M47/309, M47/331 and M47/353 were granted, the following condition was imposed on each lease: "cancellation without compensation upon notice in writing from the Minister for Mines that the ground within this tenement or any portion thereof is required for public purposes or industry development". This condition presented considerable insecurity to the owners and this had major implications with respect to the design of the operations. For these reasons the removal of this condition was approved on 20 November 1995 (Appendix 1).

In the CER the proponent stated that they would undertake an Aboriginal heritage survey after environmental approvals had been secured. The Department of Environmental Protection indicated that they would prefer to assess the CER after this survey had been completed, unless the Department of Aboriginal Affairs agreed to Aboriginal heritage issues being resolved after the environmental assessment of the project had been completed.

Aboriginal heritage studies were commenced in November 1995 and the Aboriginal Affairs Department advised in a letter of 29 December 1995 that they did not object to the Department of Environmental Protection assessing the CER prior to and independently of an assessment of Aboriginal heritage issues (Appendix 2).

In this supplement to the CER the:

- amended quarrying, crushing and screening operations are outlined,
- Mining Lease M47/309 is included in the quarrying proposal,
- an environmental appraisal of M47/309 is given,
- possible environmental impacts of the amended operations are discussed, and
- design criteria and management procedures are outlined to avoid or minimise potentially adverse environmental impacts.

1.

2.0 **OBJECTIVES**

The objectives of this supplement to the CER are to:

- inform the Department of Environmental Protection of the transfer of ownership of Mining Leases M47/306, M47/331 and M47/353 from the Rocca family to The Readymix Group,
- advise of the amendments to the proposed quarrying of Mining Leases M47/306, M47/331 and M47/353, and the inclusion of Mining Lease M47/309, as a consequence of this transfer of ownership, and
- secure approval for the amended quarrying project.

3.0 ENVIRONMENTAL APPRAISAL OF MINING LEASE M47/309

The location of Mining Lease M47/309 is shown in Figure 2 of the Consultative Environmental Review and in Figure 1 of this supplement. From the figures it can be seen that it is located between Mining Leases M47/306 and M47/331. Plate 1 is a black and white copy of an aerial photograph of the Project Area with an outline of the proposed pit. From Plate 1 and Figure 1 it can be seen that the terrain, vegetation and habitats are very similar to those described in the CER for Mining Leases M47/309, M47/331 and M47/353.

Mining Lease M47/309 is 8.2ha in area, but the proposal is to confine the quarrying operations to approximately the upper one third, between the contours of about 55m and 73-75m. This will avoid disturbance within Mining Lease M47/309 to the base and lower slopes of the Pistol Ranges and confine the quarrying operations to the upper terrace. For these reasons the environmental appraisal is confined to the area which will be quarried. The descriptions of the terrain, soil, vegetation, flora and habitats of the base and lower slopes of Mining Lease M47/309 are as given in the CER for similar areas within Mining Leases M47/306 and M47/331.

The surface of the terrace of Mining Lease M47/309 varies from rocky to skeletal soils with a hummock grassland dominated by *Triodia pungens*. These surface conditions are as shown in Plates 4 and 5 of the CER. The flora of this terrace was collected by Dr Wolf Martinick in November 1995 during numerous traverses. Specimens of each species were collected and pressed for subsequent verification in the Herbarium of Western Australia. The following plants were collected:

a) Trees

Atalaya hemiglauca Eucalyptus aff. terminalis Grevillea pyramidalis Terminalia canescens

b) Shrubs

Acacia coriacea Acacia farnesiana Acacia pyrifolia Acacia trachycarpa Corchorus sidoides Corchorus walcottii Enchylaena tomentosa Indigofera monophylla Jasminum didymum Maytenus cunninghamii Rhagodia eremaea Senna glutinosa subsp. glutinosa Solanum terraneum Streptoglossa odora Terminalia supranitifolia Triumfetta sp.

c) Creepers

Ipomoea pes-caprae

d) Perennial grasses

Themeda triandra Triodia pungens

e) Annual grass

Aristida sp.

f) Annual herbs

Cleome viscosa Gomphrena cunninghamii Ptilotus exaltatus Ptilotus fusiformis Trachymene glaucifolia Trichodesma zeylanicum

All of the above flora are common and widespread, and none of these species are declared rare. The tree/shrub *Terminalia supranitiflora* is a priority 4 listed species which is widespread on the Burrup Peninsula but has only been reported for one other location in the Pilbara. None of the other species are priority listed. The Priority 4 listed *Brachychiton acuminatus* (Kurrajong) tree is present on adjoining areas. Approval to remove the *Brachychiton acuminatus* and *Terminalia supranitifolia* trees/shrubs has been obtained from CALM.

In common with the mining leases described in the CER, the terrain, vegetation and habitats of Mining Lease M47/309 are widespread in the Pilbara. This applies especially to the terraces which will be destroyed by the proposed quarrying. These terraces do not contain unique or unusual environmental characteristics and they will be conserved in the proposed Conservation Zone for the Burrup Peninsula.

The fauna of the terraces of Mining Lease M47/309 is as described in the CER. The terraces which will be destroyed do not support habitats of outstanding importance to the survival of regionally common and less common fauna species.

The terraces of Mining Lease M47/309 do not have any permanent or semi-permanent waterholes and they contain no drainage lines. All drainage is by surface run-off.

The visual assessment for Mining Lease M47/309 is as given in the CER for Mining Leases M47/306, M47/331 and M47/353, with M47/309 being located between Mining Leases 47/306 and M47/331. This applies to the viewshed, scenic quality and visual sensitivity levels.

4.0 ABORIGINAL HERITAGE SITES

A survey of Aboriginal heritage sites has been undertaken over those areas of Mining Leases M47/306, M47/309, M47/331 and M47/353 which will be affected by the proposed quarrying. This survey was commissioned by The Readymix Group and the consultants for this study were nominated by the Nganga-Ngoona Moora-Joorga Land Council of Roebourne. This Land Council has registered a Native Title Claim over the Burrup Peninsula and other nearby areas.

This survey discovered an Aboriginal stone quarry/reduction site on Mining Lease M47/309 (see Map 1). Seven archaeological sites were recorded elsewhere within the area which will be affected by the proposed quarrying of all of the Mining Leases which make up the quarrying project.

These sites are described by the consultants, McDonald, Hales and Associates Pty Ltd, in a draft report of January 1996. In this draft report they accord the stone quarry/reduction site a high level of scientific significance because of the paucity of information held in the site files of the Department of Aboriginal Affairs for similar sites on the Burrup Peninsula. According to McDonald, Hales and Associates Pty Ltd, stone quarry/reduction sites are common on the Burrup Peninsula. Two such quarries are apparently located within relatively close proximity to Mining Lease M47/309, and it would appear that they have suffered little disturbance.

The seven other sites were considered to be of considerably less scientific significance. The consultants recommended that these sites be discussed with members of the Nganga-Ngoona Moora-Joorga Land Council and that approval for their disturbance or relocation be obtained under Section 18 of the Aboriginal Heritage Act. Consultations are ongoing and the necessary Notices under Section 18 will be submitted as recommended by the McDonald, Hales and Associates Pty Ltd.

The cultural importance of the stone quarry/reduction site is being discussed by the proponent with members of the Nganga-Ngoona Moora-Joorga Land Council, and at this stage this site has been excluded from the proposed quarry pathway.

5.0 **PROPOSED QUARRYING OPERATIONS**

The proposal is to extend the existing Nickol Bay Quarry eastwards, as shown in Figure 2, across Mining Leases M47/306, M47/309, M47/331 and M47/353. From Figure 2 it can be seen that the proposed quarrying will be confined to terraces which occur approximately between the lower contours of 55-60m AHD in the west, rising to 74m AHD in the east, and the upper contour of 75-77m AHD in the west to 85m AHD in the east. The nominated higher contour line will ensure that at all times quarrying will be below the crest of the Pistol Ranges. If approval is secured to quarry the archaeological stone quarry/reduction site, then the upper perimeter in the vicinity of this site will be increased from about the 73m contour to the 75-76m contour line. This will ensure that the upper limit is still well below the crest of the range.

By confining the quarrying operations to between the nominated contour lines, the potential visual impacts of the proposed quarrying will be kept to a minimum, with the new operations being confined within the ranges without disturbing the base and lower slopes. The surrounding plain is at an approximate level of 4 to 10m AHD. From this plain, the slopes up to a height of 55m in the west to 73-75m in the east, will remain undisturbed. These slopes are the areas with the highest scenic quality within the respective Mining Leases, and they are also the areas with the highest visual sensitivity levels. Equally important, the upper contour of the quarry pit will be kept below the crest of the ranges to further minimise potential visual impacts.

Quarrying will be by blasting and excavating as for the existing Nickol Bay Quarry. This is in compliance with the safety and procedural requirements of the Department of Minerals and Energy. The depth of quarrying will be to at least the level of the surrounding plain or deeper if good quality rock persists at depth.

On completion of quarrying the quarry will be rehabilitated as outlined in Section 5.10 of the CER and as approved for the existing Nickol Bay Quarry.

The rate of quarrying is market driven and it has the potential to vary greatly. During the year 1995 about 50,000m³ of material where quarried from the Nickol Bay Quarry. It is anticipated that for the years 1996 and 1997 the annual rate of quarrying will at least equal the 1995 rate.

Wherever possible, topsoil will be stockpiled for rehabilitation purposes. However, topsoil is absent from many of the surfaces which will be quarried, and for the remainder it is present as a thin veneer between rocks. Consequently, all stored topsoil will consist of a mixture of rocks and soil. This mixture will be returned to final surfaces to enhance the establishment of self sustaining local native species. Particular efforts will be made to establish the Priority 4 listed *Brachychiton acuminatus* tree and *Terminalia supranitifolia* shrub/tree on rehabilitated areas and elsewhere.

CRUSHING, SCREENING AND STOCKPILING

The crushing, screening and stockpiling will be undertaken by The Readymix Group using the same equipment and procedures which are currently being used in the Nickol Bay Quarry and which are approved by the Department of Minerals and Energy and Works Approval Number 4741, File Number L10/82 of the Department of Environmental Protection.

The acquisition of Mining Leases M47/306, M47/331 and M47/353 permits an orderly extension of the Nickol Bay Quarry. This will, within a few years, create an open area within the quarry on to which initially the crushing and screening operations and subsequently also the stockpiles can be located. By that time it is also anticipated that the existing stockpiles which are located on the plain to the immediate south of the Nickol Bay Quarry will have been depleted. It is difficult to determine exactly when this will be achieved, but current estimates suggest that this may be achievable within five to seven years. By that time it is likely that all of the crushing, screening and stockpiling will be undertaken within the quarry where these operations will be out of sight. The area in front of the quarry, where the infrastructure is currently located, will then be used for office space, workshop facilities, storage and parking of machinery and vehicles.

Part of the floor of the current quarry will be used for storing run-off water from within the pit. This water will then be used for dust suppression purposes, with make up water being obtained from the reticulated supply as is currently the practice.

7.0 CONSULTATIONS

The amendments outlined in this supplement were presented to a meeting of the Environmental Protection Authority. On 14 November 1995 they were discussed with representatives of the following:

- Department of Minerals and Energy (Karratha),
- Department of Environmental Protection (Karratha),
- Department of Conservation and Land Management (Karratha),
- Pilbara, Development Commission (Karratha), and
- Shire of Roebourne (Karratha).

The project was discussed on several occasions with members of the Nanga-Ngoona Moora-Joorga Land Council of Roebourne. This included a site visit by members of the Land Council to the existing quarry and the areas which are to be quarried. These consultations are ongoing.

8.0 ENVIRONMENTAL AND SOCIAL IMPACTS AND PROPOSED DESIGN AND MANAGEMENT PROCEDURES TO ADDRESS THESE POTENTIAL IMPACTS

8.1 General

The overall impact of the amended quarrying programme is that the change of ownership of all of the leases will permit quarrying to be undertaken in a single quarry rather than in four individual and adjoining quarries, and the relocation in about five to seven years of all of the crushing, screening and stockpiling operations to within the quarry. This will avoid the entry into Mining Leases M47/306 and M47/331 through the base of the Pistol Ranges as outlined in the CER, and subsequently a similar entry by The Readymix Group through the base of these ranges into Mining Lease M47/309. In addition, it will confine all crushing, screening, stockpiling and transportation to single operation, thereby reducing the cumulative impacts of several such adjoining operations. It will also facilitate efficient recovery of a valuable rock resource. This would not be possible if four separate quarry pits were to be established.

8.2 Visual impact

In the CER it was shown that the visual impacts of the two quarries which were to be developed by the Rocca Family were minimal. This was attributed to the careful selection of the entries to the proposed quarries, not quarrying the base and lower scree slopes and quarrying only below the crest of the ranges.

The now proposed operations will have an even lesser visual impact because they will require no additional entries into the Pistol Ranges and, as for the previous proposal, they will be hidden within the ranges by not quarrying the base and lower scree slopes of the these ranges.

Importantly, once the proposed quarrying operations have advanced about five to seven years, they will result in a major improvement of the visual impact of the current Nickol Bay Quarry by permitting all of the crushing, screening and stockpiling to be progressively relocated to within the quarry. This would not be possible if the quarrying outlined in this supplement was not to proceed because of the lack of adequate space in the individual quarry pits.

A considerable volume of rock and soil has been dumped outside of the existing quarry, immediately adjacent to the base of the Pistol Ranges. The space which will be generated in the proposed larger pit will permit the gradual removal of this material. In this area this will re-expose the base of the Pistol Ranges and remove an embankment with a flat surface which has had an adverse impact on the scenic quality of the Pistol Ranges. The result is thus the restoration of the original scenic value of this area.

8.3 Groundwater

The quarrying operations will have no impact on local groundwater resources.

8.4 Surface water and sediment

All of the run-off water from within the pit will be directed to a depression in the floor of the current quarry. Here the water will be stored for application to suppress dust.

The proposed operations do not intercept major drainage lines and they do not destroy any permanent or semi permanent water pools.

All sediment within the quarry will be retained within the quarry, with most of it being directed together with surface run-off into the water storage depression.

8.5 Terrain

The impact on the terrain of the Pistol Range will be kept entirely to the terraces which are common on the Burrup Peninsula. Relative to the impacts of the operations described in the CER, the impacts are further reduced by removing the additional entries through the base of the Pistol Ranges and by ultimately relocating the crushing, screening and stockpiling operations to within the quarry.

8.6 Vegetation

The amended quarrying pathway, with the absence of a need to establish two, and ultimately three, separate entries through the base and lower scree slopes, confines the operations and associated disturbances entirely to the terraces. The proposed operations will thus result in the permanent destruction of hummock grassland with widely scattered shrubs and occasional trees from the proposed quarry pit area, all of this vegetation is widespread and common on the Burrup Peninsula. The amended proposal will avoid the need to destroy about 25 *Eucalyptus victrix* and all of the *Terminalia canescens* trees in the gully of the previously proposed access route to the pit of Mining Leases M47/331 and M47/353.

The previously outlined operations required the clearing of four *Brachychiton acuminatus* trees. The amended proposal will still necessitate the clearing of these four Priority 4 listed species, plus the clearing of about 12 *Terminalia supranitifolia* trees/shrubs, which is also a Priority 4 listed species. The proposal is to establish a substantial number, in excess of 50, of *Brachychiton acuminatus* and *Terminalia supranitifolia*, respectively, on areas adjoining the proposed operations. These plants will be established from locally collected seed and they will be planted progressively during 1997 and 1998.

Both species are common and widespread on the Burrup Peninsula and the proposed replanting will ensure that each destroyed plant will be replaced by several seedlings.

The clearing of the *Brachychiton acuminatus* trees was approved by CALM as outlined in a letter of 28 July 1994 (Appendix 3). The clearing of the *Terminalia supranitifolia* was subsequently approved by CALM on 27 March 1996 (Appendix 3).

8.7 Habitats and fauna

The impact, as outlined in the CER, of the amended quarrying on the habitats and fauna of the Project Area and of the Burrup Peninsula will be reduced by the proposed amendments by having removed the entry gullies from the quarrying pathway.

Consequently, the impact of the amended quarry will now be confined exclusively to the habitat of the terraces. This habitat is common and widespread on the Burrup Peninsula and elsewhere in the Pilbara. Consequently, it is suggested that locally and regionally this loss of habitat will not have any significant impact on the fauna of the region, and relative to the original proposal the potential impacts will be reduced.

8.8 Conservation

The impact of the amended quarrying proposal remains as outlined in the CER.

8.9 Noise

Unlike the impact described in the CER, the amended proposal will have no impact on prevailing noise levels because it will result in the continuation of the existing quarrying operations which are approved and comply with noise regulations. In contrast, the original proposal would have resulted in noise emanating from initially two additional and ultimately three pits (when The Readymix Group would commence quarrying Mining Lease M47/309 as a stand-alone quarry), plus that from the existing pit. Consequently the amended proposal will result in a reduction of noise.

Importantly, once the operations have progressed sufficiently to permit the relocation of crushing, screening and stockpiling to within the pit, the overall impact will be a reduction in noise because all operational noise will be located within the pit which, except for the entrance to the pit, will have pit faces of at least 45 height on all remaining sides.

8.10 Dust

The amendment will result in a reduction of dust levels because the two additional crushing and screening operations have been removed. Importantly, the amended operations will ultimately permit the relocation of the crushing, screening and stockpiling to entirely within the pit, thereby confining the potential future dust problem to within the quarry pit.

8.11 Fuel

The amended proposal will avoid the need for additional fuel storage and fuel storage areas because it will rely on the existing operations for fuel supply.

8.12 Pets

The current policy of not permitting cats as pets on the Nickol Bay Quarry Project Area and not to permit domestic dogs to roam freely within the Nickol Bay Quarry Project Area will apply to the proposed extension of these operations.

8.13 Firearms

The workforce will not be permitted to bring firearms to the Project Area.

8.14 Aboriginal heritage

Consultations with representatives of the Nanga-Ngoona Moora-Joorga Aboriginal Land Council of Roebourne are ongoing.

Map 1 shows the proposed outline of the quarry pit. Also shown is the Aboriginal stone quarry/reduction site. The proposed pit outline is based on the assumption that approval for the destruction of the various archaeological sites can be obtained from the traditional landowners and the Minister for Aboriginal Affairs. None of these sites will be destroyed in the absence of securing such approval. The pit outline will then be suitably amended.

In the event of an Aboriginal cultural site being discovered during quarrying, the Company will abide by the Aboriginal Heritage Act. The proponent will immediately inform the Department of Minerals and Energy and the Department of Aboriginal Affairs.

8.15 Social impact

The amended quarrying proposal will provide The Readymix Group with the opportunity to expand its existing operations in a rational manner, thereby expanding the operational life this quarry. The workforce of the Nickol Bay Quarry numbers about 18. The amended proposal will provide greater security of ongoing employment, but it will not necessarily result in an increase in the size of the workforce.

8.16 Rehabilitation

The amended proposal will not affect the rehabilitation outlined in the CER. This rehabilitation is currently being practiced by The Readymix Group within the Nickol Bay Quarry.

APPENDIX 1:

LETTER FROM DEPARTMENT OF MINERALS AND ENERGY

Your Ref : Our Ref : Enquries to : Telephone :

Γ

CM:kh Ms Melia 222 3358

W G Martinick & Associates Pty] 4/114 Churchill Avenue SUBIACO WA 6008



MINERAL TITLES DIVISION

MINERAL HOUSE 100 PLAIN STREET (CNR ADELAIDE TCE) EAST PERTH WESTERN AUSTRALIA 6004

TELEPHONE (09) 222 3333 FACSIMILE (09) 222 3790

Dear Sir

MINING LEASE NO'S. 47/255, 47/306, 47/309, 47/331, 47/333 AND 47/353

I wish to advise that on 20 November 1995 Conditions 8, 9, 9, 8, 8, and 7 respectively were deleted from the above tenements.

Yours faithfully

C. Melia

DIRECTOR MINERAL TITLES

23 November 1995



The Readymix Group (Aust) Ltd cc: PO Box 555 VICTORIA PARK WA 6100

G Rocca & P/M Rocca PO Box 237 KARRATHA WA 6714

G Rocca, P M/Rocca & S J Rocca 103 Caporn Street WANNEROO WA 6065

APPENDIX 2:

LETTER FROM ABORIGINAL AFFAIRS DEPARTMENT

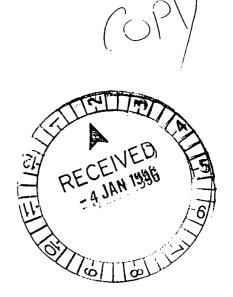
ABORIGINAL AFFAIRS DEPARTMENT

ENQUIRIES: Irene Stainton 235 8086

OUR REF: 95/1402 envp2912.doc

YOUR REF:

Mr Rob Sippe Director Evaluation Division Department Of Environmental Protection 8th Floor Westralia Square 141 St George's Terrace PERTH WA 6000



Dear Mr Sippe

READYMIX GROUP - NICHOL BAY QUARRY: PROPOSED EXTENSION

Dr Martinick of W G Martinick and Associates wrote to this Department on 1 December 1995 regarding the above matter (a copy of his letter is attached).

He is seeking the approval of this Department to allow Department of Environmental Protection evaluation of the Consultative Environmental Report prior to and independently of Aboriginal heritage issues.

It is Dr Martinick's understanding that the environmental approval would be subject to addressing Aboriginal heritage issues. We have no particular objection to this, provided adequate Aboriginal heritage studies are undertaken that are conducted by appropriately qualified anthropologists and archaeologists which involve satisfactory consultation with members of the Aboriginal community. A condition clearly stating these specific qualifications to any approval would therefore be supported.

Yours sincerely

S. Sonooille

CRAIG SOMERVILLE DIRECTOR HERITAGE & CULTURE

cc Dr Martinick

29 December 1995

APPENDIX 3:

CORRESPONDENCE FROM DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

HEAD OFFICE

HACKETT DRIVE CRAWLEY WESTERN AUSTRALIA Phone (09) 442 0300 Facsimile (09) 386 1578 STATE OPERATIONS HEADQUARTERS

50 HAYMAN ROAD COMO WESTERN AUSTRALIA Phone (09) 334 0333 Facsimile (09) 334 0466 Teletype (09) 344 0546



Please address all correspondence to Executive Director, PCLBBAK KOL,CONKX WAXANSX

Your Ref:
New postal address
Locked Bag 104, BENTLEY DELIVERY CENTRE
WA
6983

Our Ref:
Dr K Atkins
Phone:
334 0425
Image: Control of the second second

Dear Wolf

PRIORITY FLORA - TERMINALIA SUPRANITIFOLIA

I refer to your letter of 8 March 1996 regarding your proposal to clear 12 plants of the above species of priority flora.

The Department of Conservation and Land Management does not have detailed population data on this species, but my regional office at Karratha inform me that this species is found in number on the Burrup Peninsular.

The loss of 12 plants is thus not considered to be significant to the conservation of this species in this area, and is not objected to by this department.

I appreciate your advice that this species will be used in the revegetation program following quarrying, and this will also help to reduce the environmental impact of the quarrying operation.

As there is little data available for this species, I would appreciate any information that you might have on the population status and ecology of *Terminalia supranitifolia* in the Pilbara. Such data may assist in the assessment of any future proposals to take this species.

For your information, I enclose a copy of the database printout for specimens held in the Western Australian Herbarium.

Yours sincerely

for Syd Shea EXECUTIVE DIRECTOR

27 March, 1996

КЈА



W.G. MARTINICK & ASSOCIATES Pty Ltd

Environmental Consultants, Planners and Landscape Architects A.C.N. 009 079 305 4/114 Churchill Avenue Subia∞ WA 6008 Australia

Telephone (09) 388 2123 Facsimile (09) 381 7061

8 March 1996

FAXE

Attention: Dr K Atkins Department of Conservation and Land Management PO Box 104 COMO WA 6152

Fax: 386 1578

Dear Dr Atkins

RE: Termindia supranitfloia ON BURRUP PENINSULAR - PRIORITY 4 LISTED SPECIES

I refer to my correspondence of 25 July 1994 and your subsequent reply of 28 July 1994, in which we requested, and you subsequently approved, the clearing of four *Brachychiton acuminatus* trees for a proposed quarry. For your convenience copies of the relevant correspondence are enclosed.

The proposal is now to extend Nickol Bay Quarry further, and this will require clearing of about 12 *Termindia supranitifolia* shrubs/trees. Your consent to destroy these plants is herewith requested. In return, the client, The Readymix Group, is committed to replanting *Termindia supranitifolia* seedlings on rehabilitated areas and other areas. Only seedlings from locally collected seeds will be planted, and it is envisaged that in excess of 50 plants will be planted.

I look forward to you approval.

Yours sincerely

-82 mante

Dr WOLF MARTINICK W G Martinick and Associates

Copy: Readymix: Attn: Peter Sanders (Karratha)

FAXED

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

HEAD OFFICE HACKETT DRIVE CRAIVLEY WESTERN AUSTRALIA Phone (09) 386 8811 Telex AA94585 Focsimile (09) 386 15.78 STATE OPERATIONS HEADQUARTERS 50 HAYMAN ROAD COMO WESTERN AUSTRALIA Phone (09) 334 0333 Facsimile (09) 334 0466



Piease address all correspondence to Executive Director, P.O. Box 104, COMO W.A. 6152

Your Ref:

Our Ref: Enquiries: Phone: Dr K Atkins 334 0425 Dr Wolf Martinick Chairman W.G. Martinick & Associates Pty Ltd 4/114 Churchill Avenue

SUBIACO WA 6008

DEPARTMENT OF CONSERVATION and land mattagement 29 JUL 1994

Dear Dr Martinick

Brachychiton acuminatus on Burrup Peninsula

That you for your letter dried 25 July 1994, regarding the above issue.

The destruction of the four *Erachychiton* trees under the circumstances described in your letter is not opposed by this Department.

This advice is, however, in reference to the plants alone, and does not take into account issues relating to land tenure, or other land management considerations. Comment on these issues will need to await the detail as provided in the Notice of Intent document that you are preparing.

The proposed amelioration of the impact through the planting of *Brachychiton* is noted, however, to retain the genetic integrity of the *Brachychiton* population on the Burrup Peninsular. I would request that the stock used for this purpose is sourced from local seed.

Should your clients require any advice about this issue, please direct them to the CALM Regional office at Karratha (phone 091 868 288).

Yours sincerely

for Syd Shea EXECUTIVE DIRECTOR

28 July, 1994

Copy to:

CALM Regional Manager, Karratha

KA:CT IKA042



W.G. MARTINICK & ASSOCIATES Pty Ltd

Environmental Consultants, Planners and Landscape Architects A.C.N. 009 079 305

4/114 Churchill Avenue Subiaco WA 6008 Australia

Telephone (09) 388 2123 Facsimile (09) 381 7061

25 July 1994

Attn: Dr Ken Atkins Dept of Conservation & Land Management PO Box 104 COMO WA 6152

Fax: 386 1578

Dear Sir

RE: BURRUP PENINSULA - BRACHYCHITON ACUMINATUS AND TERMINALIA SUPRANITIFOLIA: PRIORITY 4 LISTED SPECIES

On behalf of our clients we are preparing a Notice of Intent for the design and management of a proposed hard-rock quarry on the southern end of Burrup Peninsula. The study area contains one *Terminalia supranitifolia* and a number of *Brachychiton acuminatus* trees; the proposed operations will not affect the *Terminalia supranitifolia* but it will require the destruction of four *Brachychiton acuminatus* trees. Unfortunately, the destruction of these four trees is unavoidable despite careful planning to minimise visual, environmental and social impacts.

As you are aware, *Brachychiton acuminatus* is widespread on the Burrup Peninsula and over extensive parts of the Pilbara. Consequently, the loss of four trees is a relatively small impact. In addition, our client has agreed to plant at least 12 *Brachychiton acuminatus* trees into the infrastructure area for landscaping and screening purposes.

I herewith request your permission for the removal of these trees.

I look forward to your reply, and please do not hesitate to contact me if you have any concerns.

Yours faithfully

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Dr WOLF MARTINICK Chairman

Copy: Dept of Minerals and Energy; Karratha - Attn: Mr Charles Newland Proponent - G and P Rocca, Karratha

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