

THE HON DR JUDY EDWARDS (MLA)  
MINISTER FOR THE ENVIRONMENT

BULLETIN 1145

Dear Minister

## **PLANS FOR BAUXITE MINING AND HAUL ROAD STREAM CROSSING IN SOME CAR INFORMAL RESERVES, ML 1SA: ALCOA OF AUSTRALIA**

The purpose of this letter is to provide you with the Environmental Protection Authority's (EPA) advice on the above plans under Section 16(e) of the *Environmental Protection Act 1986*. This advice will also be made publicly available as per normal protocol.

### **1. Introduction and background**

The Commonwealth of Australia and the State of Western Australia signed the Regional Forest Agreement (RFA) on 4 May 1999. The RFA established a system of Formal and Informal Comprehensive, Adequate and Representative (CAR) Reserves. Such reserves are located throughout the area defined as the RFA boundary, and some are within Alcoa of Australia's Mining Lease (ML) 1SA.

In consultation with the then Department of Resources Development (DRD), Alcoa and the Department of Conservation and Land Management (CALM), the EPA and the former Department of Environmental Protection developed a process to review any plans by Alcoa to disturb CAR informal reserves in ML 1SA. This process is consistent with the requirements of the RFA and the *Environmental Protection Act 1986*. A copy of the process is attached for your information (Attachment 1).

In April 2004, Alcoa submitted plans ("the Plans") to the Mining and Management Programme Liaison Group<sup>1</sup> (MMPLG) to disturb a total of 5.2 hectares of vegetation within five CAR informal reserves, for haul roads as part of proposed bauxite mining operations at its Huntly Mine, and one area at its Willowdale Mine. The Plans included a biological assessment of each CAR informal reserve to be disturbed.

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<sup>1</sup> The MMPLG, which was established by the State in 1979, oversees environmental aspects of Alcoa's mining operations in ML 1SA. The Group is represented by Alcoa, the Department of Environmental Protection, Water and Rivers Commission, Water Corporation, Department of Minerals and Energy, DRD and CALM.

The 'CAR Informal Reserves Evaluation Committee'<sup>2</sup> was formed to consider the Plans in the first instance. Following the Committee's detailed review of the Plans, and site visit of the relevant areas in May 2004, the Committee recommended to the MMPLG that Alcoa be granted approval to clear four of the five CAR informal reserves at the Huntly mine and the area at the Willowdale Mine. No decision was made for Coolibah Road, the fifth site at the Huntly Mine, as data necessary to enable an assessment was not available at the time of the field visit of the CAR Informal Reserves Evaluation Committee. The MMPLG endorsed this advice in a letter to the EPA (see Attachment 2).

## 2. Environmental acceptability of the Plans

The EPA notes that:

- five of the CAR informal reserves affected by the Plans are linear stream reserves; the sixth is a portion of the Copperhead Orebody at the Willowdale Mine;
- Alcoa commissioned consultants to carry out conservation/biodiversity, vegetation, rare flora and fauna, heritage and dieback studies for each of the six CAR informal reserves affected by the Plans, and modified the Plans in accordance with recommendations made by its consultants so as to reduce the environmental impacts;
- 0.34% of the total area of CAR informal reserves in the McCoy mining envelope will be impacted by the Plans;
- the Plans will not affect any rare or priority vegetation species. The vegetation types encountered are well represented;
- the impacts of the proposed stream crossings on fauna are considered to be minimal;
- no heritage sites occur in the affected areas;
- any occurrences of dieback within or adjacent to the affected areas (Willowdale mine area) can be appropriately managed by Alcoa;
- the vegetation affected by the bauxite mining is considered to be well represented in the conservation estate;
- Alcoa will aim to rehabilitate the mining areas to a jarrah forest ecosystem as per the rehabilitation prescriptions established in the *Alcoa/CALM Working Arrangements*<sup>3</sup>, and compatible with their pre-mining vegetation composition, where feasible and practical; and
- relevant representatives from CALM, Water Corporation, Department of Industry and Resources and the Conservation Council of WA reviewed the Plans, conducted a site inspection and subsequently recommended that the Plans be approved.

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<sup>2</sup> This is a sub-committee of the MMPLG represented by members of the Mining Operations Group (which is itself a sub-committee of the MMPLG, and represented by Alcoa, the Department of Minerals and Energy, CALM, DRD and Water Corporation) and the Conservation Council of WA. The MMPLG uses the CAR Informal Reserves Evaluation Committee to review any plans by Alcoa to disturb CAR Informal Reserves in ML 1SA, and to report its findings to the MMPLG.

<sup>3</sup> The Working Arrangements, which are prepared by Alcoa and CALM, contain processes and procedures on how Alcoa and CALM operate within State Forest, and are reviewed bi-annually. The Arrangements cover issues such as forest hygiene, logging protocols, dieback identification protocols and reporting of any rare or endangered flora and fauna species.

Given the above, the EPA considers that the Plans do not impose an unacceptable impact on the environment.

### 3. Recommendations

The EPA recommends to the Minister for Environment that:

1. The Minister notes Attachment 1, ie. "Process to manage disturbance to CAR informal reserves by ALCOA within Mining Lease 1SA" and Attachment 2, the MMPLG's advice to the EPA.
2. The Minister notes the EPA's conclusion that the Plans by Alcoa to disturb 5.2 ha of vegetation within five CAR informal reserves in ML 1SA do not impose an unacceptable impact on the environment.
3. The Minister accepts the EPA advice that the disturbance of five CAR informal reserves in Alcoa's ML 1SA does not impose an unacceptable impact on the environment and advises the Minister for State Development accordingly.
4. The Minister notes that one other CAR informal reserve (known as Coolibah Road) has yet to be assessed, pending a site visit or when information is provided to the MMPLG.

If you approve the above recommendations, you may care to approve the attached draft letter to the Minister for State Development.

Yours sincerely



**Walter Cox**  
CHAIRMAN

27 August 2004

Att

**ATTACHMENT 1**

**PROCESS TO MANAGE DISTURBANCE TO CAR  
INFORMAL RESERVES WITHIN MINING LEASE 1SA  
BY ALCOA**

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# PROCESS TO MANAGE DISTURBANCE TO CAR INFORMAL RESERVES BY ALCOA WITHIN MINING LEASE 1SA

(Note: This proposal deals only with *disturbance* to CAR informal reserves. Proposed review/amendment of CAR informal reserves is handled independently by CALM.)

- **Context**

The Commonwealth of Australia and the State of Western Australia signed the Regional Forest Agreement ("RFA") on 4 May 1999. The RFA established both formal and informal Comprehensive, Adequate and Representative ("CAR") reserves.

Under Clause 85 of the RFA, the parties "*acknowledge that under State arrangements Mineral and Petroleum Exploration, Mining Operations, Petroleum Operations and the establishment of related infrastructure (including access and transport) is permitted in the CAR Reserve System subject to relevant State approval processes.*" This might include referral for environmental impact assessment under the *Environmental Protection Act 1986*, in appropriate circumstances.

RFA Clause 17 notes that the RFA does not impose on either party or a third party any obligation which is inconsistent with a law of the Commonwealth or of Western Australia *or any Government Agreement existing at the time the RFA was signed.*

Under Government ('State') Agreements ratified by Parliament in 1961, 1969 and 1978, Alcoa of Australia Limited ("Alcoa") is authorised to explore for and mine bauxite in Mining Lease 1SA, in State Forest areas of the Darling Range. The 1978 Wagerup Agreement requires Alcoa to submit annually plans for its proposed mining operations on a rolling 10 year basis. By subsequent agreement with the State, Alcoa submits five year rolling mine plans, within agreed 25 year mining 'envelopes'.

In 1979 the State established the Mining and Management Program Liaison Group ("MMPLG") to oversee this process and to provide whole-of-Government advice to both Alcoa and the Minister for Resources Development in relation to Alcoa's forward mining plans. The MMPLG comprises representatives of the Department of Resources Development (Chair); the Department of Environmental Protection; the Department of Conservation and Land Management; the Department of Minerals and Energy; the Water and Rivers Commission and the Water Corporation.

The role of the MMPLG was formally endorsed in conditions issued by the Minister for the Environment in 1995 for an expansion to the Wagerup alumina refinery. The Group was given delegated authority to review and make recommendations in relation to environmental aspects of Alcoa's mining plans and to manage environmental issues relating to mining operations, community impacts of Alcoa's operations, the development of best practice environmental principles and rehabilitation completion criteria (copies of Ministerial conditions and commitments attached).

This process has worked successfully for many years and it is an efficient and practical means of vetting Alcoa's on-going mining operations, while minimising adverse environmental and social impacts.

- **Environmental Protection Act Requirements**

The MMPLG process does not purport to override the requirements of the Environmental Protection Act ("the EP Act"). Rather, the MMPLG operates with delegated authority under conditions established by the Minister for the Environment for Alcoa's mining operations.

Alcoa has also given undertakings to comply with the MMPLG process for operations at Jarrahdale and Huntly mines (mining ceased at Jarrahdale in December 1998), which were established under State Agreements that predate the Environmental Protection Act.

The MMPLG recognises and accepts that it is obliged to comply with the requirements of the Environmental Protection Act. Section 38 of Part IV requires referral to the EPA where a proposal is likely to have a significant effect on the environment. The MMPLG recognises its obligations and undertakes to fulfil them, as necessary. However, because of the ample forward notice of Alcoa's mining plans and the very nature of the MMPLG's role and composition, environmental aspects of Alcoa's mining proposals will normally be dealt with under the usual MMPLG process and not warrant referral to the EPA.

- **Proposal to Deal With Disturbance to CAR Informal Reserves**

Given the range of experience and technical expertise available to it through its agency membership (see attached), the MMPLG considers it is best placed and qualified to advise Government on proposed disturbance to CAR informal reserves in Alcoa's Mining Lease 1SA. *The MMPLG seeks the formal endorsement of the EPA to manage this process, as set out below, in satisfaction of the requirements of the RFA and pursuant to the 1990 and 1995 delegations of the Minister for the Environment.* Note that any planned future disturbance to a CAR formal reserve will be formally referred to the EPA for advice.

- **Consultation and Transparency Aspects**

Alcoa's mining and management plans are not generally available for public scrutiny because of their commercial sensitivity and complexity. However, the Company always consults on its forward mining plans with near neighbours who may be potentially impacted by operations (e.g. noise or dust). The plans are also presented in advance to the relevant local government authority (e.g. Shire of Waroona or Shire of Murray) in order to discuss road access and broad management issues of relevance, as well as to keep them generally informed.

The MMPLG is mindful of the high level of public interest in RFA matters and of the advisability of providing a means by which the public and/or specific interest groups can be informed of the intention to disturb CAR informal reserves for mining related purposes. Alcoa has undertaken to report on the actual extent of disturbance to CAR informal reserves in its public annual environmental report. Additionally, *the MMPLG intends to formally invite the Conservation Council of Western Australia to nominate a representative who will participate in site inspections of those areas of CAR informal reserves which the Company plans to disturb during the life of its rolling five year mine plans.*

The Conservation Council representative will be invited to attend site visits by the Mining Operations Group ("MOG"), which is a sub-committee of the MMPLG. MOG carries out on-ground inspections of areas proposed for mining and recommends changes and adjustments to mining boundaries based on environmental and other relevant considerations. The representative will have an opportunity to learn of the plans in advance and to have input into MOG's advisory role to the MMPLG. By this means, the Conservation Council (and its member organisations) can learn of all planned CAR informal reserve disturbances in MLISA and will be able to influence outcomes.

- MMPLG Process

1. Alcoa notifies the MMPLG annually of its forward mining plans for the next five years, with specific attention drawn to proposed mining of, or disturbance to, CAR informal reserves in MLISA. This notification will form part of the annual submission of Mining and Management Programs (MMPs). (Note: Prior to notification by Alcoa, CAR informal reserves will be subject to field inspection by Alcoa and their status and extent clarified, where necessary, by CALM.)
2. Alcoa will take all reasonable steps, with advice from relevant Government agencies (e.g. CALM, Water and Rivers Commission, Minerals and Energy), to avoid or minimise impacts on CAR informal reserves. All feasible alternatives to disturbance will be thoroughly evaluated and summarised in the submission of the draft MMPs to the MMPLG.
3. All CAR informal reserves which are planned to be disturbed in the next year of the forward five year mining program will be subject to detailed field examination by a suitably qualified biologist as part of the MOG process (for details of MOG role see attachment). A conservation Council representative will be invited to participate in the MOG inspections and considerations whenever it is planned to disturb CAR informal reserves. Areas of planned disturbance will be accurately surveyed and appropriately marked in the field.
4. The biologist will prepare a report on the conservation/biodiversity values of the CAR informal reserve area(s) to be disturbed, specifically in relation to RFA principles.
5. The MOG report (including the biologist's report) will be submitted to the MMPLG as an appendix of the draft MMPs.
6. The MMPLG will review the draft MMPs and meet with Alcoa to provide advice to the Company on the issues raised, including CAR informal reserve issues.
7. The relevant Local Authority will be briefed by Alcoa on the draft MMPs. Areas of planned disturbance to CAR informal reserves will be brought to the attention of the Local Authority. The Local Authority may make broad details of proposed disturbance to CAR informal reserve areas available for the information of the local community and interested parties.
8. Any CAR informal reserve queries will be directed to either Alcoa or the MMPLG for additional information/explanation direct to interested parties. Alcoa will keep a register of comments/submissions from members of the public in respect of the CAR informal reserve areas. Alcoa will modify its draft MMPs, where appropriate.
9. The MMPLG will meet on site with Alcoa to discuss any variations and outstanding issues and to finalise the draft MMPs.
10. Final MMPs will be submitted to DRD as Chair of the MMPLG, which recommends approval. The Minister for Resources Development will notify the Minister for the Environment of his intention to approve the MMPs. Once the Minister for the Environment notes the proposed action, the Minister for Resources Development will approve (sign) them and send a copy to Alcoa and one to DRD.

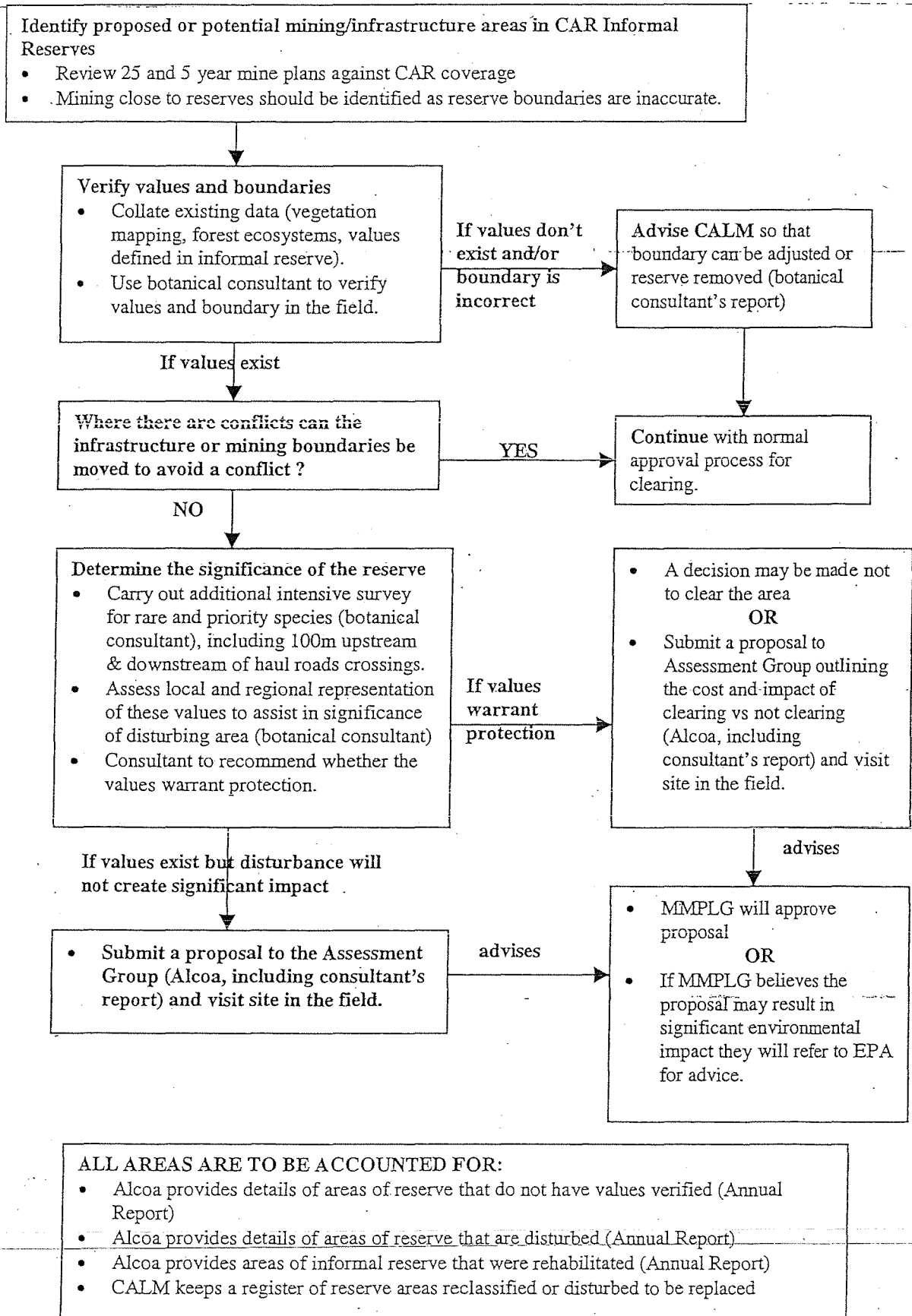
11. The Chair of the MMPLG will formally notify the relevant CALM Director of the specific location and the area (hectares) of the CAR informal reserves in MLISA which Alcoa plans to disturb in the approved five year mining plans. These figures will be reconciled annually (i.e. actual disturbance vs estimated) in line with modifications to the rolling five year mining plans.

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12. CALM will keep a register of CAR informal reserve areas disturbed and the particular values they represent in the context of the RFA.
13. At or near the end of the five year RFA audit period, CALM will propose replacement areas of equivalent value(s) for reservation to maintain the State's RFA commitments (Clause 37). Alcoa will be consulted prior to any decision on proposed CAR informal replacement areas within MLISA.
14. Alcoa will rehabilitate disturbed CAR informal reserve areas to a prescription which is compatible with their pre-mining vegetation composition, where feasible and practicable.
15. Alcoa will provide details of disturbed CAR informal reserves in its annual report, which is publicly available. Details of rehabilitated CAR informal reserves will also be included in the annual report.



# DISTURBANCE OF CAR INFORMAL RESERVES IN ML 1SA ALCOA FLOW CHART



**ATTACHMENT 2**

**LETTER TO EPA FROM MMPLG AND RESERVES COMMITTEE**

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Department of  
**Industry and Resources**

ENVIRONMENTAL  
PROTECTION AUTHORITY  
DATE RECEIVED 25/6/04  
EPA FILE NO. EPA 528  
CORRESPONDENCE  
REF NO. EPIN 115

Our Ref: R0213/93 V13  
Enquiries: L.Bursztyn  
Email: louis.bursztyn@doir.wa.gov.au

<b>DEPARTMENT OF ENVIRONMENTAL PROTECTION RECORDS SECTION</b>	
- 3 AUG 2004	
FILE NO	_____
NAME	<u>ALCOA LETS</u>
FILE NO	_____
NAME	_____

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CHAIRMAN  
ENVIRONMENTAL PROTECTION AUTHORITY

*CA 208226*

**MANAGEMENT OF DISTURBANCES TO CAR INFORMAL RESERVES BY  
ALCOA WITHIN MINING LEASE 1SA**

I refer to the process to deal with planned mining incursions into CAR informal reserves that has been developed in discussions between the Mining and Management Program Liaison Group ("MMPLG"), Alcoa and the Environmental Protection Authority.

Attached for your information is a copy of the agreed process to deal with planned mining incursions into CAR informal reserves, details of the areas planned to be disturbed and the Minutes of the CAR Informal Reserves Evaluation Committee's meeting of 4 May 2004.

The agreed process meets the intent of the Regional Forest Agreement, which requires environmental assessment and transparency of process through public scrutiny. The assessment process, which includes a representative from the Conservation Council of Western Australia, was used for the first time in 2001 and subsequently in 2002 and 2003 to assess areas at Alcoa's Huntly and Willowdale mines. As part of this on-going process, the assessment group met on 4 May 2004 to assess five areas at the Huntly Mine and one at the Willowdale Mine.

On advice from the CAR Informal Reserves Evaluation Committee (a sub-committee of the MMPLG); the MMPLG recommends that approval be granted to disturb four of the five areas of CAR informal reserves at the Huntly mine, and the one area at the Willowdale Mine, as presented on the plans and inspected on 4 May 2004. (See summary & recommendations of the MOG/CAR Informal Reserves Committee meeting attached).

The MMPLG endorsed the location of the following crossings:

- Jarrah Road;
- Sheoak Road;
- Snotty Gobble Road;
- Wandoo Road;
- the clearing of the Copperhead Ore Body.

*R. Sippel*

*Tim Junter*  
*2/6*

**SCANNED**

The crossing site at Coolibah Road was inspected, but as detailed planning of the crossing construction was not available at the time, the Committee reserved its decision until Alcoa could provide further information.

*unreadable signature*

for Mike James  
CHAIRMAN  
MINING AND MANAGEMENT PROGRAM LIAISON GROUP

22 June 2004

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**MOG CAR Informal Reserves Committee Meeting**  
**Huntly**  
**4<sup>th</sup> May 2004**

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**Attendees:**

Department Conservation and Land Management (DCLM): Alan Sands (Chairperson), Steve Raper,  
Conservation Council (CC): Jeff Anderton,  
Dept of Mineral and Petroleum Resources (DoIR): Lou Bursztyn, Xuan Nygun  
Water Corporation (WC): Roger Partington  
ALCOA: Alison White, Ken Phillips, Larry Hantler, Glen Ainsworth, Kylie Walmsly.

**Introduction:** A brief overview was given by Ken Phillips, (ALCOA Mine Planning Supervisor) of each site to be visited. Each site to be discussed in more detail in the field.

**Field Trip:** Areas are described in more detail within the report provided by ALCOA. The sites are listed in order of inspections in the field. At each site the crossing was inspected and comments documented. Following the inspection and review of the final site comments were sought on the overall process and sites that were inspected on the day. Site 1: Jarrah Road

**Site 1: Jarrah Road**

Position influenced by presence of Aboriginal Heritage sites. New map provided on day of inspection.

Discussion was held on pushing sump out of CAR Reserve and doing a comparison on the costs environmentally and economically. (See attachment 2)

Also discussed minimising slope of batters to reduce footprint in CAR Reserve. Review WUKA crossing after winter and provide feedback to group. (See attachment 3)

**Site 2: Sheoak Road**

Discussion was held regarding the provision of information covering the planning process ALCOA uses leading up to choosing a site. In future it was recommended that the rationale for choosing the site to be provided along with a brief outline in the key location and design influence's that arose providing an explanation of why various options had been discounted. (See attachment 4)

**Site 3: Snotty Gobble Road**

Placement of crossing influenced by bore field, group requested justification for buffer put in place. (See following attachment 1)

**Site 4: Wandoo Road**

Large habitat tree on edge of alignment proposed to be removed. A request to save the tree was given, subject to no increase in environmental damage. ALCOA gave the undertaking to save the tree if possible. If the tree still requires removing material to be used as ground habitat. This was not conditional for the approval.

Site 5: Coolibah Road

Engineering not provided on day of meeting. Approval subject to engineering being provided and site visit by members if individuals feel it is required. Members to notify Steve Raper of decisions regarding Coolibah Road on completion of site visit or assessment of information provided. Note: This area will not be approved until all assessments have been made.

Site 6: Copperhead Ore

No comments received from members. ALCOA raised the issue of CAR Reserves in this area being high impact dieback sites and whether or not the status of CAR Reserve is appropriate. Information has been provided by ALCOA to CALM for review.

**Summary and Recommendation:** The committee endorsed the location and designs for crossings at Jarrah Road, Sheoak Road, Snotty Gobble Road, Wandoo Road the clearing at the Copperhead Ore body as presented by ALCOA. Coolibah Road crossing approval subject to further information being provided and /or a site visits by committee members. Committee members re-inspecting Coolibah Rd were requested to pass on their recommendation as soon as practicable after their assessments and/or site visits.

It is recommended that the proposal for the four endorsed crossings and the endorsed ore body be forwarded to the MMPLG. The decision on the final crossing (Coolibah) will be forwarded after confirmation/recommendation from the members has been received.

**General Business:**

It was reiterated that it would be a useful exercise to visit previously approved areas and such a site visit will be incorporated into the next meeting. (Some sites were driven by but were not inspected during the field trip). Including Stream crossings.

The issue of transplanting mature Balga's was discussed. Generally this proposal was supported. Action: Some trials had already been done, however ALCOA agreed to further investigate opportunities for a trial mentioning that there are a number of issues that need to be considered, soil types, dieback, etc. (Note: Jeff Anderton mentioned numerous successful transplants have occurred via community groups for the Freeway)

As mentioned at the Sheoak site, members agreed in future it would greatly assist the review and approval process if information was provided on the justifications and design process ALCOA uses in the selection of areas i.e. the environmental, social, engineering and economic constraints/considerations. (See attachment 4)



Steve Raper Executive Officer

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MOG CAR Informal reserves Committee

For Chair, Alan Sands