TRIAL MINING BAUXITE - CAMERON BLOCK

(Drilling phase Only)

1. INTRODUCTION

Cameron Block is the last of four selected catchments for consideration for trial mining of bauxite in the intermediate zone.

Cameron Block is within quarantine and entry for evaluation requires special consideration.

Initially access for hydrological and ore grade drilling only is required.

Pending the results of a series of drill holes a decision can be made as to the suitability of Cameron Block to a full scale trial mining.

Further sampling requirements will require a separate prescription.

2. LAND USE PRIORITY

2.1 The Land Use Priority designated in G.W.P. No. 87 for this area is Catchment Protection. The area lies within the Serpentine Catchment.

2.2 Incompatible Uses: Any activity which introduces disease, removes native cover without provision for successful regeneration or increases erosion and pollution.

3. OBJECTIVE

To evaluate the site for determination of its suitability as a trial mining area.

4. HYGIENE SPECIFICATIONS

4.1 Planning

4.1.1 Operations to be undertaken in the summer only during dry soil conditions.

4.1.2 Dieback free forest to be entered only during surveying and ore grade drilling.

4.1.3 Access roads to be low in the profile.

4.1.4 Minimise road upgrading and construction. Minimising access will necessitate longer cross country runs for rigs and tender vehicles on a split phase basis.

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4.1.5 Work units to be based on self-draining sub-catchments and micro-catchments.

4.1.6 Drilling will be on a split phase basis in order to avoid contact between service vehicles and drilling rigs and tenders.

4.1.7 Each work unit to be entered by the minimum possible number of vehicles on the least possible number of occasions.

4.1.8 Control will be achieved through a high degree of Forest Officer supervision and the use of a Quarantine Entry Permit.

4.2 Operations - Dieback Hygiene Prescription - See Appendix I

5. TRAINING

5.1 All F.D. personnel involved to have a training session involving the operations plan, permit and access conditions, and hygiene prescription.

5.2 All personnel/staff from Alcoa to be trained in basic biology of P. cinnamomi, permit and access conditions and the hygiene prescription.

6. PHYTOPHTHORA CINNAMOMI MONITORING

6.1 A P. cinnamomi monitoring programme will be undertaken involving soil and tissue sampling at specified times following the completion of the drilling phase. Base Data will be the Dieback Free Forest Map (1982).

6.2 Area to be rephotographed and remapped 3 years after date completion of prescribed burning.

6.3 Prescribed burning is planned for spring 1983 following completion of the drilling phase.

6.4 Feral Pig activity is high in the trial area within both P.c. infected and P.c. free areas.

Ineffective quarantine may be a result and therefore pig control measures should be undertaken to minimise potential uncontrolled spread of P. cinnamomi.

7. OPERATIONS PROGRAMME

7.1 Jobs to be undertaken in Sequence are:

-- P. cinnamomi mapping - completed.

-- P. cinnamomi field demarcation - completed.

-- Road selection - completed.

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-- Establish rainfall gauge.
-- Management boundary and sub-catchment demarcation (F.D.)
-- Surveying drill sites (Alcoa).
-- Ore grade and auger hole drilling (Alcoa).
-- Monitoring.
   P. cinnamomi -(F.D.)
   Hydrological measurements - (F.D., P.W.D., Alcoa).

TRIAL MINING - CAMERON BLOCK
(Drilling Phase Only)

DIEBACK HYGIENE PRESCRIPTION

1. GENERAL

Cameron Block is within the forest quarantine area. All persons involved will require a permit to operate and will need to follow the conditions laid down in the permit by the Forests Department.

Permits will be issued to:-

1. Specific F.D. staff for supervision.
2. Specific Alcoa staff and employees for supervision and works.
3. Selected officers from approved Govt. Departments.

2. PERMIT CONDITIONS

2.1 Access will be restricted to defined roads and at specific times. Access routes will be defined on a map attached to the permit.

2.2 All vehicles, machines and trucks associated with every phase of the operation will be required to be in a clean condition free from mud, dirt and dust build up.

2.3 Vehicles entering quarantine areas must be cleaned down before using N.E. road. Additional clean down is required at specified clean down points within trial area. Clean down points will be designed to allow clean down of all vehicles, machines and trucks at any time entry is required.

2.4 Drill rigs and tender vehicles are to be cleaned down prior to entry or departure from each sub-catchment and upon departure from each drill site. Clean down to be achieved by using rigs' vacuum hose. Debris to be bagged and deposited in an area directed by O.I.C. Dwellingup.

2.5 "Cleandown" is defined as either - dry cleandown or
- wet washdown.

Dry Cleandown is to take place when soil conditions are dry and can be achieved by:

- blowing down with compressed air using portable compressor
- vacuum hose and bagging debris.
- brush down with stiff broom.

Vacuum method is the most preferred option.

Wet Washdown is to take place when soil conditions are moist and dry cleandown is ineffective.

Use high pressure, low volume pump with water sterilized by a suitable fungicide such as sodium hypochlorite ~~or sodium metabisulphite.~~

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Note that this drilling operation is planned only for dry soil conditions.

2.6 All operations are to cease in the event of rainfall on the site. The Officer in charge at Dwellingup will approve recommencement of all operations.

2.7 Forests Department to be notified on each day of entry for recording in the quarantine log book.

3. ROAD UPGRADING

3.1 A rubber tyred tractor/loader is to be used for any necessary road upgrading. Logs are to be removed by lifting and scrub by pushing using an elevated blade (ie. blade not to contact or shift any soil). See Plan 2.

3.2 A new low profile track 800 metres in length is proposed - see Plan 2. This will enable the closure of the section of existing track which is partially within a good quality dieback free jarrah regrowth stand.

3.3 Road closure will involve the ripping and planting of approx. 20metres of the old track at either end, together with strategic log placement.

3.4 New road works will be within a P. cinnamomi infected area. Machine cleandown will be required before it leaves the site.

3.5 A metal gate is to be installed with keys issued by the Forests Department to restrict unauthorised entry into the trial area. A high level of security will be provided.

4. SURVEYING OPERATIONS

4.1 Demarcation of sub-catchments

An Alcoa supervisor under F.D. direction and assistance will demarcate, using red tape on trees, sub-catchments within the 3 major catchments of the trial area. Each sub-catchment will be self-draining where possible.

4.2 Survey peg distribution

Survey pegs will be distributed within each sub-catchment by a means of a single 4 x 4 vehicle which will be cleaned down before entry or departure from each sub-catchment - see Plan 3. Only approved access to be used outside sub-catchments.

This operation will be supervised by a Forest Officer.

4.3 Drill Site Surveying

Surveyors will use only approved access designated on plan 1. Vehicles are to be cleaned down at nominated clean down

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points and are not to leave the approved access roads.

5. ORE GRADE DRILLING

5.1 Rigs and tender vehicles are to be worked as one unit.

5.2 Each sub-catchment will only be entered once by one drilling rig and its tender vehicle.

5.3 All vehicles and machines are to be cleaned down prior to entry or departure from each sub-catchment and upon completion of each drill hole as indicated by the Forest Officer.

5.4 A service vehicle which has its movements restricted to the approved access tracks will deliver crews, fuels etc to the nearest point to the work site each morning and pick up crews and their samples each evening. Rig tender vehicles are not to cross approved access roads unless travelling between sub-catchments at the completion of all drill holes in which case a clean down will be required before entry into the next sub-catchment.

6. AUGER DRILLING - ENVIRONMENTAL MONITORING

6.1 Each sub-catchment will be entered only once by the drilling rig and its tender vehicle.

6.2 All vehicles and machines will be cleaned down prior to entry or departure from each sub-catchment and upon completion of each drill hole as indicated by the Forest Officer.

6.3 Rig to be inspected by Forest Officer prior to its movement from drill site to drill site.

6.4 A service vehicle which has its movements restricted to the approved access tracks will deliver crews, fuels etc to a point nearest the work site each morning and pick up crews and samples each evening. Rig tender vehicles are not to cross approved access roads when delivering samples to the service vehicle.

7. DRILLING LAYOUT

7.1 Drilling will be entirely within the catchment management boundary which will be field demarcated using blue tape. This boundary will confine all activity to slopes within the trial catchment.

7.2 Ore grade Drilling rigs are not to enter P. cinnamomi infected areas which have been demarcated using a blaze and yellow paint.

7.3 Several auger drill sites are within the P. cinnamomi infected creeks. These sites will be drilled last.

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7.4 Officer in charge at Dwellingup is to sight and sign the approved drill layout sheet which is to show:

(a) Ore grade drill sites
(b) Auger hole drill sites
(c) Areas not to be traversed by rigs
(d) Approved access
(e) Sub-catchment boundaries
(f) Cleandown points.