



WESTERN AUSTRALIA
MINISTER FOR THE ENVIRONMENT

Ass #	501
Bull #	612
State #	282

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT
TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT
1986)**

EWINGTON OPEN CUT COAL MINE, COLLIE (501)

THE GRIFFIN COAL MINING COMPANY PTY LTD

This proposal may be implemented subject to the following 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, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Consultative Environmental Review and in response to issues raised in the assessment of this proposal and published as Appendix 1 in Environmental Protection Authority Bulletin 612. (A copy of the consolidated list of commitments is attached).

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. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines is not substantial, on the advice of the Environmental Protection Authority, those changes may be effected.

3 Environmental Management Programme

In order to plan for such a large earthmoving operation with large-scale environmental impacts, an Environmental Management Programme is required. This Programme could be progressively developed to address the environmental issues associated with the various stages or activities of the project. The programme should be submitted and approved prior to the commencement of those activities.

- 3-1 Prior to the commencement of each stage or activity of the project, the proponent shall prepare an Environmental Management Programme to plan for and monitor the effects of that stage of the project and to provide appropriate management strategies based on the monitoring results. The Environmental Management Programme shall be consistent with the provisions of Clause 7 of the Collie Coal (Griffin) Agreement Act.

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This Programme shall address, but not necessarily be limited to, the management, monitoring, auditing and reporting requirements of the following issues:

1. rare fauna management;
2. noise, dust and risk impacts on surrounding residents;
3. impacts from the mine dewatering operation;
4. impact on the conservation values and area of the State Forest;
5. dieback disease management; and
6. rehabilitation to an acceptable final land use.

3-2 The proponent shall implement the Environmental Management Programme required by condition 3-1.

4 Noise Limits

The noise generated by the coal mining operation should be kept within environmentally acceptable levels.

4-1 The proponent shall ensure that the noise emissions from the Ewington project do not cause or contribute to noise levels in excess of:

- 40 dB(A) between 10.00 pm and 7.00 am;
- 45 dB(A) between 7.00 pm and 10.00 pm on any day, and between 7.00 am and 7.00 pm on Saturday, Sunday and any gazetted public holiday; and
- 50 dB(A) between 7.00 am and 7.00 pm Monday to Friday inclusive, but excluding gazetted public holidays;

as measured at the nearest affected noise-sensitive premises.

Where the combined level of the noise emissions from this proposal and the normal ambient noise exceeds the levels specified above, this condition will be considered to be contravened only when the noise emissions from the proposal are determined to be dominant and significantly influencing the measured noise levels.

4-2 The proponent shall ensure that noise emissions from the proposal do not include tonal or impulsive components or other characteristics which make the noise more annoying than it would be in their absence.

4-3 The proponent shall conduct noise surveys and assessments in consultation with the Environmental Protection Authority.

5 Dust Limit

The dust generated by the proposal should be kept within environmentally acceptable limits. Long term dust levels will be determined under Part V of the Environmental Protection Act.

5-1 The proponent shall not cause short term dust levels at residential premises surrounding the mine to exceed 1000 microgrammes per cubic metre ($\mu\text{g}/\text{m}^3$), measured continuously over 15 minutes.

6 Mine Dewatering Operation

The proponent is responsible for maintaining private groundwater users' water supplies affected by mine dewatering operations.

- 6-1 The proponent shall prepare a water supply plan, as part of the Environmental Management Plan (required by condition 3), which describes measures to ensure adequate domestic and stock water supplies for any existing private users of the groundwater resource affected by the dewatering operation, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Water Authority of Western Australia.
- 6-2 The proponent shall implement the plan required by condition 6-1 to the requirements of the Environmental Protection Authority on advice of the Water Authority of Western Australia.
- 7 Mine Dewatering Water Disposal**
The proponent is responsible for managing the disposal of the water from mine dewatering activities.
- 7-1 The proponent shall utilise and/or dispose of any water occurring in or collecting on the Mining Lease (including water pumped or drawn from mines) in accordance with a water management plan which will deal with the supply of water to power stations and other utilities and the disposal of water in an acceptable manner. The development of this plan, which will be consistent with the provisions of relevant State Agreement Acts, is the responsibility of the Water Authority of Western Australia.
- 8 Decommissioning**
The satisfactory decommissioning of the project and removal of the plant and installations is the responsibility of the proponent.
- 8-1 At least six months prior to decommissioning, the proponent shall prepare a decommissioning plan.
- 8-2 The proponent shall implement the plan required by condition 8-1.
- 9 Proponent**
The ministerial conditions legally apply to the nominated proponent.
- 9-1 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.
- 10 Time Limit on Approval**
The environmental approval for the proposal is limited.
- 10-1 If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority).

11 Compliance Auditing

In order to ensure that environmental conditions and commitments are met, an audit system is required.

- 11-1 The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.

Procedure

The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

Bob Pearce, MLA
MINISTER FOR THE ENVIRONMENT

3 SEP 1992

NOTE:

The reporting requirements for these conditions may be effected through the reporting requirements of the State Agreement Act, subject to meeting the timing requirements of the conditions.

Griffin undertakes to fulfil the following commitments in accordance with the applicable State laws and regulations and with standards and procedures agreed with the State.

1. VEGETATION CLEARING

Site clearing during construction and minesite operation will only be undertaken in accordance with prior approvals obtained from WAWA.

The prime management objective will be to minimise vegetation removal. There will be no disturbance of vegetation outside those areas designated for clearing. Designated areas for clearing will be restricted to those required for efficient cost-effective operation of the minesite.

Clearing for infrastructure will be kept to an absolute minimum and will follow existing easements where practicable. Wherever it is practical and feasible, Griffin will endeavour to nest utilities sited in State Forest.

Vegetation clearing ahead of mining will be restricted to the minimum required for safe working practices.

Cemented laterite will be sourced from the area to be mined. If there is a shortfall in suitable material, Griffin will import suitable roadmaking material. Griffin gives assurance that this shortfall will not be sourced from State Forest excepting that from existing gravel pits located in State Forest.

2. RARE FLORA

Griffin will conduct a flora study for the location and mapping of rare and vulnerable plant populations. The timing of this study will be determined through discussion with CALM. Research into the propagation characteristics of these species will be undertaken with a view to their incorporation into the rehabilitation programme.

Any rare plants within proposed mining areas will only be removed after Ministerial approval.

Where feasible, rare plants to be removed as part of the mining operations will be transplanted into rehabilitated areas, used as a source of seed for rehabilitation purposes or used as nursery stock.

3. **DIEBACK**

A detailed dieback hazard map of the minesite will be produced and regularly updated.

Access to the mine construction site will be strictly controlled, and all vehicles will be subject to strict dieback hygiene control. A construction phase dieback management plan will be prepared, in consultation with CALM, prior to the commencement of construction.

An operational phase dieback management plan will be developed in consultation with CALM prior to the commencement of mining.

Griffin will identify dieback infected areas before topsoil stripping and stockpile the infected soil separately. It will be replaced low in the reconstructed landscape.

As part of the management plan the following control measures will be taken:

- a washdown area for dieback hygiene purposes will be established before commencement of works. Its location and design will be determined in consultation with CALM;
- all heavy machinery to be introduced for site work will be washed down,
- the work areas will be monitored for dieback disease, and if it is found, assistance and advice on the most appropriate procedures will be obtained from CALM;
- regular surveys will be undertaken to assess the effectiveness of the control measures.

4. **WEEDS**

The introduction of weed seeds will be minimised by the rigorous dieback disease hygiene procedures.

Weeds that become established will be controlled by regular site inspection and, where necessary, eradication programmes.

5. FIRE

Fire control will be implemented by:

- education of all personnel in fire prevention requirements;
- provision of trained firefighting crews at all times;
- maintenance of firebreaks around and within the minesite area.

A fire management plan will be developed in conjunction with CALM, the Bush Fires Board and the local Bushfire Brigades.

Following construction of the roading network, if fire risk is significantly greater than the existing situation, Griffin will discuss implementation of appropriate fire control measures with CALM.

Griffin undertakes to ensure that no waste coal will be left uncovered. All material with the potential to ignite will be buried deeply in the overburden dumps. At the completion of mining, the exposed coal face will be covered with overburden.

6. REHABILITATION

A rehabilitation management plan will be prepared prior to the commencement of mining to the satisfaction of the EPA. Whether services are located on Griffin's land, private property or State Forest, Griffin is obliged to undertake progressive rehabilitation to the satisfaction of the EPA.

Griffin will strip topsoil in two parts from cleared areas to be mined. The details of this procedure will be outlined in the rehabilitation management plan.

Rehabilitation trials will be undertaken.

Rehabilitation to local native species will be undertaken progressively throughout the life of the mine.

Species selected for rehabilitation will meet the following criteria:

- species which occur naturally in the development area;
- species known to be able to readily establish themselves will be favoured;
- species which have proved suitable for rehabilitation purposes in the Collie Basin will be favoured.

Seedlings will be obtained from a certified disease-free nursery which will raise native seedlings from locally collected seed. Introduced seed will be obtained from commercial seed suppliers.

Rehabilitation monitoring will be undertaken in accordance with the management plan.

Griffin will liaise with the appropriate authorities to develop completion criteria.

7. NATIVE FAUNA

Griffin will undertake discussions with CALM with regard to further survey and monitoring for rare and endangered fauna in the Ewington area.

Griffin recognises the status of *I. obesulus* and will undertake discussions with CALM to determine further measures to protect it from local extinction.

Griffin will undertake further consultation and/or survey to ascertain the presence of *M. eugenii*.

If *D. geoffroii*, *P. calura* or *M. fasciatus* are found to be present in the Ewington area during further surveys, Griffin will undertake discussion with CALM to determine suitable management for these species.

Native fauna will be protected by the following actions:

- minimisation of vegetation disturbance;
- prohibition of firearms and pets on the minesite.

Griffin currently incorporates habitat reconstruction criteria into ongoing rehabilitation at its existing mining operations in the Collie Basin. This practice will be continued and further refined for rehabilitation following mining at Ewington.

8. FERAL ANIMALS

The introduction of potential feral species will be prevented by the banning of all pets from the project area.

Feral fauna will be monitored on a regular basis and appropriate control programmes implemented where necessary, in consultation with the Agriculture Protection Board Pest Control Division and CALM.

9. SURFACE WATER

A surface water management plan will be developed, prior to the commencement of mining, in consultation with the appropriate authorities.

Prior to the commencement of mining activities in any area, drainage structures will be constructed to control water movement and divert runoff from undisturbed areas around the proposed mining area.

Mine water will be managed to meet effluent discharge quality criteria consistent with achieving the water quality objectives defined in the Draft Water Resources Management Strategy for the Collie Coal Basin and the EPA Pollution Control Licence.

If the EPA and WAWA recommend that SECWA takes additional groundwater from Griffin's Ewington minesite, then Griffin will undertake negotiations with SECWA with regard to making dewatering waters available to Muja Power Station via the existing pipeline.

Monitoring of the various effluent streams will be undertaken in accordance with the programme developed in the management plan and results reported to the appropriate authorities.

Runoff management and drainage will be undertaken so that uncontaminated runoff from outside mining areas does not impinge on the operations. Contaminated water will be retained within the operational area and only discharged to the natural environment after treatment to a suitable quality.

All waste oil and lubricants from workshops and servicing facilities will be collected and either recycled or taken off-site for disposal or resale.

Griffin will monitor the surface water supplies of riparian users to the north-west of the mine which would possibly be at risk of reduced surface water flows.

In the event of surface water supply to riparian users being adversely affected, investigation will be conducted to determine the appropriate action to ameliorate the problem. If there is no feasible alternative, Griffin will arrange with affected individuals to supplement their surface water supply to fulfil required needs.

Griffin would only consider itself liable to supplement surface water supplies of users if water usage from the affected source does not increase over the lifetime of the mine and the reduced supply cannot be attributable to seasonal effects.

10. GROUNDWATER

Griffin will commission a bore survey of all bores within the calculated 0.5m drawdown contour for the shallow aquifer and selected private bores within the 0.1m drawdown contour prior to the commencement of dewatering. Griffin will then undertake to monitor selected bores as part of the overall mine dewatering monitoring programme.

If the groundwater monitoring programme indicates that dewatering is adversely affecting the supply of water from private bores, Griffin will investigate options to ameliorate the drawdown by modification to the dewatering programme. If this is not feasible, Griffin will arrange with private bore owners to supplement their groundwater supply to fulfil required needs, providing usage has not significantly increased.

Griffin will undertake discussions with CALM to determine the need for monitoring for groundwater drawdown effects on the forest ecosystem and appropriate monitoring and management programmes.

11. NOISE

Further noise modelling studies will be conducted during detailed mine planning to confirm the potential degree of impact, particularly with regard to potential adverse noise impacts under certain atmospheric conditions.

General mine noise will be managed by specifying noise emission limits on all mining equipment purchased.

A noise monitoring programme will be implemented under a range of operational and meteorological conditions. If monitoring identifies any significant adverse impact on nearby residents, remedial action will be taken to reduce noise emissions. Such action will involve application of engineering expertise to specific problem areas such as providing acoustic enclosures, and use of noise suppressors and silencers.

12. VIBRATION

Blasting noise and vibration will comply with the appropriate licence standards issued by the EPA and will be controlled by:

- ensuring that explosion gases are essentially devoid of energy by the time they emerge into the atmosphere;
- firing blasts when there is a low probability of an atmospheric inversion being present;
- firing blasts during daylight hours at regular times and wherever possible between the hours of 10.30am and 3.30pm;
- using fire delays and detailed blast hole loading design.

Regular monitoring will be undertaken to develop a blast prediction model.

Griffin will undertake discussion with CALM and other users of the Collie airstrip to develop an internal management plan for operation of the Collie airstrip with respect to blasting on the Ewington minesite.

If damage to property does occur due to blasting on the Ewington minesite, applications for compensation will be considered on a case-by-case basis.

13. DUST

Dust will be managed to the satisfaction of the EPA by:

- the use of water sprays on stockpiles;
- the watering of haul roads in dry conditions;
- the early and progressive implementation of rehabilitation.

A comprehensive dust monitoring programme will be implemented, so that any problems may be readily identified and rectified.

The dust monitoring programme will include rotation of a static dust sampler (dust deposit gauge) between two locations, one on the downwind boundary of the minesite, the second a few kilometres upwind of the minesite. A second dust sampler will be rotated between selected residences nearest to and downwind of the minesite. Samples will be collected quarterly from all locations. If dust levels become significantly elevated above baseline levels, action will be taken to control the source.

14. LANDFORM

Final pit design will ensure that the highwall is left at a stable angle, as determined in conjunction with the Department of Mines.

In contouring the final void, Griffin will take into consideration guidelines prescribed by the Department of Mines publication "Guidelines on Safety Bund Walls Around Abandoned Open Pits, January 1991".

Overburden dumping will be conducted in accordance with the overburden management programme developed prior to the commencement of mining. Overburden will be selectively dumped so that overburden materials likely to inhibit successful rehabilitation are buried at depth.

The visual impact of mining will be minimised by:

- designing overburden dumps so that wherever possible they are no higher than the natural topographic high points;
- progressive rehabilitation;
- screening from view where appropriate and practical.

15. PUBLIC CONSULTATION

Griffin's staff will be available to respond to queries and problems raised by the local community. Every effort will be made to resolve any issues which may arise and records will be kept of all enquiries and complaints to facilitate this.

16. REPORTING

Griffin will report to the appropriate Government authorities regarding environmental management matters in accordance with the requirements of the Collie Coal (Griffin) Agreement Act, 1979.

Griffin will submit an annual report to the Water Authority on the performance of the groundwater systems and the impact on other users.

17. ADDITIONAL PROPOSALS

Additional proposals under Clause 10 of the Collie Coal (Griffin) Agreement Act will be submitted as necessary.