Donnybrook Woodchip Project

WA Plantation Resources

Report and recommendations
of the Environmental Protection Authority

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Summary and recommendations

WA Plantation Resources propose to develop a 1.0 million tonnes per annum capacity woodchip mill approximately 6km south east of Donnybrook. This report provided the Environmental Protection Authority's (EPA's) advice and recommendations to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal.

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

Relevant environmental factors

The EPA decided that the following environmental factors relevant to the proposal required detailed evaluation in the report:

(a) Noise emissions from the mill site;

(b) Road transport; and

(c) Noise impacts from road transport.

There were a number of other factors that were very relevant to the proposal, but the EPA is of the view that the information set out in Appendix 3 provides sufficient evaluation.

Conclusions

The EPA has considered the proposal by WA Plantations to develop and operate the Donnybrook Woodchip Project.

The EPA recognises that the site selected is a rural setting and that some members of the community held the view that on this basis the proposal should be found environmentally unacceptable. However, matters of zoning and the activities permitted within that zone are matters for the Shire as a decision-making authority. The EPA has responsibility to provide advice to the Minister on the environmental factors relevant to the proposal placed before it and also on the conditions and procedures to which the implementation of that proposal should be subject.

The EPA has concluded that the proposal is capable of being managed in an environmentally acceptable manner such that it is most unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 4, including the proponent's commitments.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment and Heritage:

1. That the Minister notes that the proposal being assessed is the development and operation of a woodchip mill located at Preston AA Lot 262, about 6km south east of Donnybrook town.
2. That the Minister notes that the location of the woodchip mill being proposed is within a rural setting, and that there has been considerable debate within the community about the appropriateness of the mill within the zoning "General Farming Pastoral".
3. That the Minister considers the report on the relevant environmental factors as set out in Section 3;
4. That the Minister notes that the EPA has concluded that it is unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 4, and summarised in Section 4.2, including the proponent's commitments.
5. That the Minister imposes the conditions and procedures recommended in Appendix 4 of this report.
6. That the Minister notes that the conditions will require the preparation of a Traffic Management Plan, including road improvements relevant to the mitigation of impacts from the proposal (where deemed necessary), in consultation with the Main Roads WA so as to address the very real traffic concerns expressed by community members.

Conditions

Having considered the proponent's commitments and the information provided in this report, the EPA has developed a set of conditions that the EPA recommends be imposed if the proposal by WA Plantation Resources to construct and operate the Donnybrook Woodchip Project, is approved for implementation.

These conditions are presented in Appendix 4. Matters addressed in the conditions include the following:

(a) that the proponent be required to fulfill the commitments in the Consolidated Commitments statement set out as an attachment to the recommended conditions in Appendix 4;

(b) that the proponent prepare a Traffic Management Plan in consultation with and to the satisfaction of MRWA prior to implementing the project;

(c) that the proponent conducts further noise modelling to confirm compliance with the EPA's Criteria for noise from road transport;

(d) that the proponent develops a Traffic Noise Monitoring and Management Plan prior to implementation of the project. This plan should be developed in consultation with, and to the satisfaction of the DEWCP.

Contents

Tables

Figures

Appendices

1. List of submitters
2. References
3. Identification of relevant environmental factors
4. Recommended Environmental Conditions and Proponent's Consolidated Commitments
5. Summary of submissions and Proponent's response to submissions

1. Introduction and background

This report provides the advice and recommendations of the Environmental Protection Authority (EPA) to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal by WA Plantation Resources (WAPRES), to develop a 1.0 million tonnes per annum capacity woodchip mill approximately 6km south east of Donnybrook (Figure 1).

Logs for the woodchips will be sourced primarily from blue-gum (*Eucalyptus globulus*) plantations established on private land within a radius of about 150km from Donnybrook. Logs will be transported by truck to the mill site off the South Western Highway at Preston AA Lot 262, adjacent to the Manjimup-Bunbury Railway line (Figure 2).

Following chipping and sorting, woodchips will be railed to the existing woodchip export facility at the Bunbury Inner Harbour.

The woodchip product will be loaded into vessels using the existing fixed ship loader and woodchip storage/handling facility on the leased land adjacent to Berth 3 at the Bunbury Port.

Ten months prior to referral to the EPA, wide ranging consultation was undertaken with the community of the Donnybrook region, residents in the vicinity of the site, the Shire of Donnybrook-Balingup and various decision-making authorities. A social impact assessment was also undertaken. This resulted in the changes to the project with respect to location and operational characteristics that now form the subject of this proposal. The consultation program, together with meetings with the Department of Environment, Water and Catchment Protection (DEWCP) and project stakeholders, identified a number of relevant environmental factors that required consideration. These may be summarised as potential impacts arising from transport associated with the project, site selection, pollution impacts from the mill site and associated concerns with respect to social surrounds.

Further details of the proposal are presented in Section 2 of this report. Section 3 discusses the environmental factors relevant to the proposal. The Conditions and Commitments to which the proposal should be subject, if the Minister determines that it may be implemented, are set out in Section 4. Section 5 provides Other Advice by the EPA, Section 6 presents the EPA's conclusions and Section 7, the EPA's Recommendations.

Appendix 5 contains a summary of submissions and the proponent's response to submissions and is included as a matter of information only and does not form part of the EPA's report and recommendations. Issues arising from this process and which have been taken into account by the EPA appear in the report itself.

2. The proposal

Overview

WA Plantation Resources (WAPRES) propose to develop a woodchip mill with a production capacity of 1.0 million tonnes per annum (mtpa), 600m off the South Western Highway about 6km south-east of Donnybrook (Figure 1).

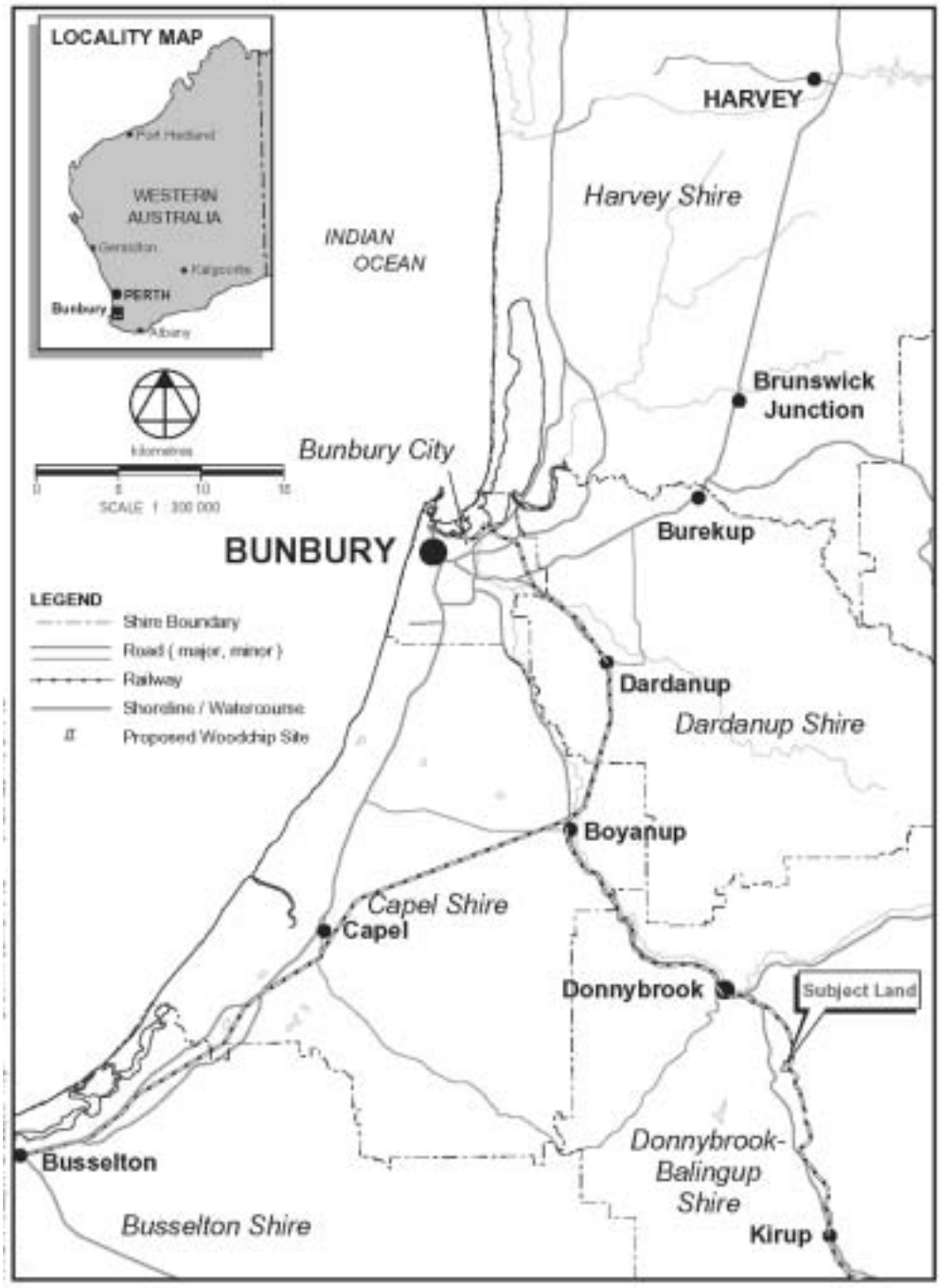

Figure 1: Regional Location – Donnybrook Woodchip Project

Logs for the woodchips will be sourced primarily from blue-gum (*Eucalyptus globulus*) plantations established on private lands located within a radius of about 150km from Donnybrook and will be transported by road to the proposed mill site which is located adjacent to the existing Manjimup-Bunbury Railway line (Figure 2).

The main components of the project are:

- the mill, associated log and chip handling facilities, administrative office and access road at the Donnybrook site;
- the transport of logs to the mill by truck and of the woodchips by rail to the existing woodchip export facility at the Bunbury Inner Harbour; and
- the expansion of the existing blue-gum export capacity at the Bunbury Inner Harbour.

The project is planned to commence export in the last quarter of 2003. Export tonnage will reach the equivalent of 0.75mtpa in the initial year of operation and based on current market projections, continue at 0.75mtpa. The project retains the capability to produce 1 million tpa should market demand require.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in Section 2 of the Donnybrook Woodchip Project PER (ATA, March 2002).

Table 1: Key Proposal Characteristics

Proposal Aspect	Description of Proposal when Fully Implemented
TRANSPORT TO CHIPMILL	
Plantation Timber Sources	▪ *E. globulus* plantations, total resource of about 75 000ha from plantations within an approx. 150km radius from Donnybrook, from amongst others, the Shires of Boyup Brook, Kojonup, West Arthur and Williams in the east, Rockingham, Murray, Jarrahdale and Serpentine in the north, Bridgetown-Greenbushes and Nannup in the south and Augusta-Margaret River and Busselton in the west.
Transport of logs to Chip mill	▪ Road transport using various truck configurations on private haul roads within plantations, local, public and state funded main roads. ▪ Truck movements - Initially (0.75 mtpa), 0.80 million tonnes of logs will be transported annually (based on 94% recovery). Equates to 35554 truck movements including return (17777 loaded truck movements), or about 9 truck movements per hour (or 4.5 loaded truck movements per hour) based on 230 days per year, 17 trucking hours per day. ▪ At full export capacity (1.0 mtpa), 1.06 million tonnes of logs will be transported annually. This equates to 47281 truck movements per annum, including return, requiring 12 trucks per hour, (or around 6 loaded truck movements per hour) based on 230 days per year, 17 trucking hours/day. ▪ Logs will be carried out on in excess of 1570 km of local and 820km of state (main) roads in South West region.

Proposal Aspect	Description of Proposal when Fully Implemented
DONNYBROOK CHIPMILL	
Site, location & area	▪ Preston AA Lot 262 is situated approx 600m off South Western Highway adjacent to the existing Manjimup-Bunbury Railway, about 6km SE of Donnybrook. ▪ Comprising 18.69ha freehold land zoned 'General Farming Pastoral' and requiring negligible clearing of native vegetation.
Site facilities	▪ Single chipper line, associated log handling and pollution abatement equipment, and mobile plant. ▪ Vibrating screens, associated conveyors and maintenance crane. ▪ Train hopper bins and stockpile. ▪ Stormwater recycle ponds. ▪ Administration office, maintenance and truck weighing facilities.
Associated facilities	▪ Rail siding of approximately 0.5 km may be required (to be referred separately by Westnet).
Log unloading and chipping	▪ Log trucks arrive via a new access road from the South Western Highway. Trucks on the SW Highway will approach from both the north (primarily via Boyup Brook Rd) and the south from Kirup. ▪ Rubber tyred loaders (up to 4) to remove and stacks logs initially. ▪ Log crane and grab loads logs into chipper, with chips being transported by conveyors. ▪ Chips are sized on vibrating screens and stockpiled into hoppers using conveyors. ▪ Train loading hopper bins load chips into rail carriages.
TRANSPORT TO BUNBURY PORT	
Transport of chips to port	▪ Locomotive hauling up to 19 bottom discharge rail wagons. Total train capacity approximately 800 tonnes. ▪ Number of loaded train movements from Donnybrook mill: initially (0.75 mtpa) 3-4 loaded train movements/day (approx. 250dpy), full production (1.0 mtpa) 4-5 train movements/day (280dpy).
BUNBURY PORT SHIP LOADING	
Site, location & area	▪ Existing land leased within the Bunbury Inner Harbour Port Facilities (about 9.6ha). ▪ Chips dropped into existing below ground hopper and transported via conveyor to existing stockpile area at the Bunbury Port. ▪ Stockpile storage area of approx 5.3ha (hardstand currently about 2.3ha). Hardstand drained to perimeter drains with stormwater retention ponds.
Site facilities	▪ Stacker, fixed ship loader and associated conveyors. ▪ Office buildings, workshop, bulldozer washing and refuelling bay. ▪ '966' rubber tyred loaders. ▪ 'D8' bulldozer (1 during normal operations, up to 3 during ship loading). ▪ 40 000tonne capacity ships. For bluegum chips only: at 0.75 mtpa, 19 ships/annum (average 2 days in port = 38 days in port), full production (1.00 mtpa) 25 ships/annum (50days in port). Port operations will proceed on a 24hr basis during ship loading.

Site Selection

WAPRES undertook a site selection study (ATA 2001) which presented a comparative environmental analysis of five potential sites within the South West Region for the woodchip plant in reasonable proximity of the Port of Bunbury. A comparative analysis of each site was undertaken. The initial site considered in the Donnybrook area was Reserve C7859 which lies approximately 2km SE of Donnybrook, and a second site within Donnybrook, Preston AA Lot 262, (the subject of this proposal) was identified about 4km south of the initial Donnybrook site and 6km south east of Donnybrook town. This site was considered to have the advantages of Reserve C7859 but without many of the disadvantages, in that Preston AA Lot 262:

- has sufficient cleared agricultural land for the development of the woodchip plant, and tracts of natural vegetation sufficient for amenity;
- has a lower neighbouring density, with adjoining population located further from the property boundaries;
- is not adjacent to surface water features;
- is off the South Western Highway and is further from the Donnybrook townsite; and
- is not subject to Native Title.

During the course of the project development, the Department for Planning and Infrastructure (DPI, 2001) subsequently considered seven locations in the South West as part of a strategic assessment for the selection of a woodchip site. These were Kirup, Greenbushes, Hester, Wilga, Picton Industrial Estate, Donnybrook and Bunbury Port. According to the DPI assessment (DPI, 2001), differences between the sites regarding transport costs there were not large, nor were environmental and social effects. However, there was a significant variation in the location and size of heavy vehicle concentrations through a number of communities such as Balingup, and in the cost of major road and infrastructure improvements, requiring the government to provide expedited access and financial support for road and power upgrades in a timeframe consistent with the maturation and harvesting of the blue-gum plantations. The EPA understands that this matter has not been progressed and that other sites would not be available in a timely manner.

Significant debate has ensued during the public consultation as to the location of the preferred site. Notwithstanding the arguments presented regarding alternative sites, the EPA is obliged to assess the proposal on its merits as presented, that being located at Preston AA Lot 262, about 6km south east of Donnybrook town.

Zoning of Subject Land

The subject land is zoned 'General Farming Pastoral' under the Shire of Donnybrook - Balingup Town Planning Scheme (TPS) No 4.

Within the General Farming Pastoral zone, discretionary land uses include 'Rural Industry'. Rural industry is defined in the TPS as meaning an industry handling, treating, processing or packing primary products, grown, reared or produced in the locality and a workshop servicing plant or equipment used for rural purposes in the locality.

Significant debate arose during the course of public consultation with respect to the suitability (or otherwise) of the site from a zoning perspective. The EPA has sought advice from the Department of Planning and Infrastructure. The advice was that while there remained questions regarding the intended use of the land zoned General Farming Pastoral, the final responsibility for the decision remained with the Shire of Donnybrook-Balingup. The EPA notes the responsibility of the Shire in this matter, and assessed the proposal on its merits as presented.

The project has been referred to the Shire of Donnybrook-Balingup for its consideration. Should the Shire of Donnybrook-Balingup Council determine that the proposed mill falls within the definition of 'Rural Industry' under TPS No 4, then the matter of development approval can be progressed without re-zoning.

If the Council does not classify the use as a Rural Industry, then the EPA understands that the use can be considered under the General Farming Pastoral zone as an 'Unspecified' Land Use which the Council still has the discretion to approve under the Town Planning Scheme.

Since release of the PER a number of modifications to the proposal have been made by the proponent. These include:

- construction of an acoustic enclosure around the chipper and insulation of the building;
- purchase and use (as far as practical) of the optimum (with respect to noise emissions) front end loaders;
- redefinition of location, orientation and management of log storage to reduce noise propagation;
- construction of earthen bunds; and
- placing time constraints on truck arrivals and train loading activities.

The potential impacts of the proposal initially predicted by the proponent are summarised and their proposed management (Table 18 in the PER document (ATA 2002). This is presented in Appendix 3.

3. Relevant environmental factors

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal and the conditions and procedures, if any, to which the proposal should be subject. In addition, the EPA may make recommendations as it sees fit.

The identification process for the relevant factors selected for detailed evaluation in this report is summarised in Appendix 3. The reader is referred to Appendix 3 for the evaluation of factors not discussed below. A number of these factors, such as greenhouse gases, are very relevant to the proposal, but the EPA is of the view that the information set out in Appendix 3 provides sufficient evaluation.

It is the EPA's opinion that the following environmental factors relevant to the proposal require detailed evaluation in this report:

(e) Noise emissions from the mill site;

(f) Road transport; and

(g) Noise impacts from road transport.

The above relevant factors were identified from the EPA's consideration and review of all environmental factors generated from the PER document and the submissions received, in conjunction with the proposal characteristics.

Details on the relevant environmental factors and their assessment are contained in Sections 3.1 - 3.3. The description of each factor shows why it is relevant to the proposal and how it will be affected by the proposal. The assessment of each factor is where the EPA decides whether or not a proposal meets the environmental objective set for that factor.

3.1 Noise Emissions from the Mill Site

Description

The chip mill will be located on the 18.69ha Preston AA Lot 262 about 600m from the South Western Highway and 6km south east of Donnybrook. The site is situated adjacent to the existing Manjimup-Bunbury railway. The chipper and de-barker will be installed in an attenuated enclosure. With the exception of maintenance downtime, two shift (20 hour) operation of the chipper will be required when capacity approaches 1 mtpa. Log delivery was proposed for 17 hours /day. Train movements were to be scheduled as required. The log trucks will arrive at the chip mill via a new access road from the South Western Highway across Preston AA Lots 351 and 296. The intersection of this road and the South West Highway will be designed to meet the Main Roads WA design criteria. During early (low) production, logs will be removed and stacked by a rubber tyred loader. However this function may eventually be done by crane. The log crane and grab will load logs into the chipper, with the

chips leaving the chipper via conveyors. The chips are sized on an oscillating screen and stockpiled using conveyors. Hoppers will discharge the chips into rail carriages.

Noise can be generated at the site by the operation of the fixed plant including the various saws, chippers, conveyors and de-barkers. Debarking is generally undertaken at the plantation. Mobile plant operations at the site will include rubber tyred loaders, log delivery trucks, mobile grab and train movements. At full development, a gantry stacker and loader may replace the mobile grab and rubber tyred loaders (except as a consequence of mechanical break down of the gantry).

The nearest noise sensitive premise is located approximately 160m E of the NE corner of the block. A second residence is located approximately 360m west of the SW corner. In Donnybrook, local wind regimes are highly seasonal, with summer morning winds dominated by easterlies with significant southerly components, followed by strong afternoon breezes from the south, east and west equally. Winter winds are dominated by NW winds in the morning, tending W in the afternoon.

The results of modelling show that noise emissions from the attenuated woodchip plant will comply with the night-time criteria in the *Environmental Protection (Noise) Regulations, 1997* of 35dB(A) at the nearest residences.

Submissions

Public submissions were concerned about how the proponent would address the propagation of noise from the mill site. Specifically, public submissions expressed the following concerns:

- The noise modelling does not take into account the noise of the trucks on site, of the movement of the logs during handling, chainsaws for jammed logs, reverse beepers, trains shunting, trains in general and of vehicles after hours.
- Site photos, wind roses and calculations of noise levels from different wind vectors are not included.
- All industrial noise is an imposition on a rural setting.
- An explanation of the noise contour map is required.
- The acoustic assessment (Appendix 10c/8.0 of the PER) states that 'noise exceeds the DEP criteria'.
- Noise criteria that are set as "as low as reasonably practicable" are unlikely to satisfy both the Proponent and nearby residents.

Assessment

The area considered for assessment of this factor is the agricultural properties including nearby residences surrounding Preston AA Lot 262.

The EPA's environmental objective for this factor is to ensure noise emissions from the plants operation are as low as reasonably practicable and comply with the Environmental Protection (Noise) Regulations 1997 of 35dB(A) at the boundary of the site, since future residences could be built in close proximity.

The EPA, upon review of the noise modelling conducted for the PER, and recognising the concerns raised by submissions from the public, considered that the Environmental Protection (Noise) Regulations 1997 could not be complied with at the boundary of the mill site. Subsequent to the PER and the Proponents response to

public submissions (ATA 2002 A), the EPA invited the proponent to revise its approach to plant design, operations and management with a view to reducing noise propagation to achieve compliance at the boundary.

The proponent provided a revised set of commitments, (WAPRES 2002) and commissioned Herring Storer Acoustics to model the noise emissions incorporating the commitments as "base case" for the Mill. The results of that modelling demonstrated the ability to comply with the Environmental Protection (Noise) Regulations 1997 at the boundary.

The EPA notes that WAPRES commits to manage compliance with the Noise Regulations through progressive implementation of additional noise abatement measures (if necessary), planning administrative procedures, maintenance of separation distances between the plant site and possible future residences or a combination thereof. Recognising the challenge faced by the proponent in meeting low noise levels at receiving locations in close proximity to the mill site, the EPA believes that it is desirable that a combined approach be adopted by the proponent in preference to reliance on noise abatement measures alone.

Summary

Having particular regard to the proponent committing to:

(a) the construction of an acoustic enclosure around the chipper and insulation of the building;

(b) the purchase (where practical) of optimum front end loaders with respect to noise;

(c) optimise the location, orientation and management of log storage to reduce noise propagation, especially at night;

(d) where possible construct earthen bunds to limit noise propagation;

(e) implement operational procedures to limit mobile plant movement during sensitive periods;

(f) limit hours of operation to avoid truck arrivals between 10.00pm and 7.00am (15 hours as opposed to the originally proposed 17 hours);

(g) as far as practicable, limit train loading to daylight hours; and

(h) progressive implementation of noise abatement measures, planning administrative procedures, maintenance of separation distances between the plant site and possible future residences or a combination thereof;

it is the EPA's opinion that the noise modelling demonstrated that the proposal can be managed to meet the EPA's environmental objective for this factor.

3.2 Road Transport

Description

Road transport using various truck configurations on private haul roads within plantations, local, public and state funded main roads will be utilised to transport logs to the mill. Initially 0.80 million tonnes of logs will be transported. This equates to 35554 truck movements (loaded and return empty)), or about 9 truck movements per hour based on 230 days per year, 17 trucking hours per day. At full export capacity (1.0 mtpa), 1.06 million tonnes of logs will be transported annually. This equates to 47281 truck movements per annum, including return, requiring 12 trucks per hour. Logs will be sourced from established plantations reaching maturity (Figure 2) and carried on in excess of 1570 km of local and 820km of state (main) roads in South West region.

Submissions

Community concerns raised in public meetings and in public submissions to the PER relate to:

- Conflict between local and tourist traffic and heavy haulage;
- Safety for current road users (especially school buses); and
- Increase in numbers of heavy haulage trucks in the region.

These issues are expanded in greater detail in the public submissions discussed in Appendix 5.

Assessment

The area considered for assessment of this factor are local and regional public roads between the plantations and Donnybrook Mill site.

The EPA's environmental objective for this factor is to ensure that safety on the existing road network due to heavy haulage traffic associated with the project meets acceptable standards.

In considering this factor, the EPA recognised the context of heavy haulage of timber and woodchips in the region, now and into the future.

Currently (and until December 2003) the active heavy haulage fleet engaged in log and woodchip transport by the proponent is approximately 35 vehicles. This relates to an export tonnage of 750 000tpa of woodchips being exported through Bunbury Port. This includes around 100 000 tpa chipped on plantation by the mobile chipper. Approximately 15 log trucks (loaded and empty) and 72 woodchip trucks (loaded and empty) per day pass through Donnybrook. This totals 87 movements per day (loaded and empty). Around 12 truck movements (loaded and empty) currently occur along the Preston Valley Rd.

Table 2: Current Truck Movements

750,000 tpa woodchips currently exported	Green-bushes	Moore Rd	Mobile chipper	Total
Total truck movements (logs and chips) per day (loaded and empty) through Donnybrook	43	15	29	87

If the project is implemented as proposed at Donnybrook, assuming a production of 1 million tpa woodchips, which would be 250,000 tpa additional to that currently being chipped and transported by the proponent, the truck fleet is estimated to be approximately 35-40, an increase of up to 5 vehicles to the current operating fleet. As a general rule the proponent indicates that no log or woodchip trucks will pass through Donnybrook, as woodchip haulage will be by rail. Approximately 86 loaded (with logs) and empty trucks (returning to the plantations) per day will use the Preston Valley Rd.

Table 3: Projected Truck Movements (Project Implemented)

1,000,000 tpa woodchips exported	Green-bushes	Moore Rd	Mobile chipper	Total
Total truck movements (logs and chips) per day (loaded and empty) through Donnybrook	0	0	0	0

If the proposal was not to proceed as proposed, woodchip production at Greenbushes, Moore Rd and the mobile chipper on plantation will be significantly increased to accommodate 1.0 million tpa woodchip production for export. This would result in 21 log trucks (empty and loaded) passing through Donnybrook from Moore Rd and 108 (empty and loaded) woodchip trucks passing through Donnybrook from Greenbushes and the mobile chipper.

Table 4: Projected Truck Movements (Project Not Implemented)

1,000, 000 tpa woodchips exported	Green-bushes	Moore Rd	Mobile chipper	Total
Total truck movements (logs and chips) per day (loaded and empty) through Donnybrook	54	21	54	129

The major public hazard associated with this project relates to the increase in movement of heavy vehicles along public roads in the vicinity of Donnybrook, as the vehicles concentrate for delivery to the mill. This is offset to some extent by the use of rail to transport woodchips to the Bunbury Port, the most efficient and safe bulk haulage strategy. However the dispersed location of the plantations makes the transport of logs on public roads the only viable option for raw material transport.

Hazards to the public range from direct (collision) to indirect (road damage from heavy vehicle use). These issues have been addressed in both the Department of Planning and Infrastructure Report (2001) and the BOND (2000) Study. The conclusions of the Department of Planning and Infrastructure study supports Donnybrook as an area that minimises transport related impacts.

The EPA considers that questions relating to the structural integrity of the roads to accommodate the anticipated mass and frequency of truck movements, engineering design of intersections, passing lanes and vehicle entry and set down areas and thus safe use of the roads by heavy vehicles is the responsibility of Main Roads Western Australia (MRWA) and transport planning rests with the Department of Planning and Infrastructure.

Notwithstanding those responsibilities, the EPA recognises the concern expressed by various sectors of the community and supports the following initiatives to improve road safety. The construction of one set of overtaking lanes, partial road realignment and the construction of three slipways is proposed for the Donnybrook – Boyup Brook Road, together with improvements to the South Western Highway intersection. Further opportunities to increase the scope of road improvement should be pursued in conjunction with the MRWA and Shire Council. Designated set down areas are proposed for school buses. It is recommended that further consultation with parents, schools and bus operators should occur in the determining the most appropriate location for these. Road safety and movement is also a potential impact for primary producers in transporting produce off their property. This impact is heightened for those operating on both sides of a road where their operation requires frequent crossing of the road in moving machinery, stock or in attending to irrigation pumps, plant and equipment. It is recommended that these issues should be identified and addressed in a Traffic Management Plan.

Summary

Being aware of the inevitable increase in truck movements in the immediate vicinity of the mill site, but having particular regard to the:

(a) limited increase in active heavy haulage fleet size;

(b) the continued road transport of logs and woodchips irrespective of the project proceeding;

(c) significant benefits from the reduction of log and woodchip transport through Donnybrook due to the mill location and proposed rail transport;

(d) limiting hours of operation to avoid truck arrivals at the mill between 10.00pm and 7.00am (15 hours as opposed to the originally proposed 17 hours);

(e) the proponent's commitment to provide passing lanes, safe crossing procedures and school bus set-down areas as and when required in consultation with the local operators and MRWA,

it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for this factor provided that proponent prepare a Traffic Management Plan in consultation with and to the satisfaction of MRWA prior to implementing the project, which, as far as practical (among other things):

- limits the coincidence of school buses and log truck movements on a time related basis;
- evenly distributes the timing of arrivals of trucks at the mill over the full proposed period of operation (7.00 am to 10.00 pm); and

- establishes agreed traffic management and emergency response procedures in consultation with the Shire Council and local communities through which the haulage routes pass.

3.3 Noise Emissions from Road Transport

Description

Truck transport routes from plantations will vary throughout the life of the project. Greatest potential impact will occur at major arterial nodes (including townsites) and intersections where traffic may come to a stop. A variety of legal truck configurations are proposed for log transport. Standard loads will be 45 tonnes average.

The plantations lie north, south, west and east of the Donnybrook site. Hence the transport of the logs will not follow a single route. Elements of the routes will vary depending upon which plantation is being harvested. Plantations are generally harvested every 10 years, so although a considerable number of short term truck movements may be required during harvesting, long periods will occur between harvesting. Certain critical feeder routes, such as the Boyup Brook Rd and the SW Highway can be anticipated to carry a disproportionate amount of heavy traffic associated with this project.

Noise will be generated by truck operations, with intrusive noise characteristics likely to result from braking, engine noise on acceleration and gearbox noise.

Donnybrook local wind regimes are highly seasonal, with summer morning winds dominated by easterlies with significant southerly components, followed by strong afternoon breezes from the south and west. Winter winds are dominated by NW winds in the morning, tending W in the afternoon. These variable winds will tend to mask truck noise to some extent.

Submissions

- Public submissions highlighted the belief that the noise from increased heavy haulage may impact residents close to the transport routes and site.

Assessment

The receptors of relevance considered for assessment of this factor are noise sensitive premises along the various transport routes.

The EPA's environmental objective for this factor is to protect the amenity of nearby residences from noise and vibration impacts resulting from activities associated with the transportation of raw materials and product by road. Specifically, to ensure that noise emissions from the transport of logs meet both the MRWA criteria and is in general accord with the Environmental Protection Authority draft guidance for Road and Rail Transportation Noise issued May 2000, section 5.3 *Criteria for proposed increase in road or rail traffic*.

The proponent, in considering this factor, extrapolated results from the Albany woodchip proposal, contending the project was of the same scale production (1mtpa), had similar transport logistics and traffic counts on the worst affected roads. For this project, likely noise impacts were calculated using the computer program T_{noise} for a location 30 metres from the worst affected roads (Albany Highway). T_{noise} is a computer program developed by the Main Roads Western Australia, based on the Welsh or CRTN Method. The $L_{A10(18hour)}$ noise levels were calculated for both the existing traffic movements and the increase in traffic movements associated for the initial and full production output of the Albany Woodchip Mill. In relation to the transport of logs by road to the Albany woodchip mill, the increase in noise levels at residences located along the worst affected stretches due to log trucks, comply with Main Roads Western Australia Criteria (recommended increase in noise to be less than 3 dB(A)). Noise levels at the residences 30m from the highway would also comply with Main Roads Western Australia base criteria of an $L_{A10(18hour)}$ of 63 dB(A).

It was argued that given the similarities in the predicted traffic for the worst affected stretches of road for the Albany and Donnybrook projects (and the topography, prevailing wind etc for those sections of road), the increase in noise levels along the sections of SW Highway south of the mill site and the Donnybrook-Boyup Brook Rd are likely to comply with Main Roads WA base criteria of an $L_{A10(18hour)}$ of 63 dB(A).

The EPA considered that, although providing a good indication of the likelihood of complying with the MRWA criteria, the assessment as presented did not provide the level of certainty they required to ensure the protection of impacted communities en route, and it did not present any assessment in relation to the Environmental Protection Authority draft Guidance for Road and Rail Transportation Noise section 5.3 *Criteria for proposed increase in road or rail traffic.*

Summary

Having particular regard to the:

(a) modelling and assessment of noise impacts from similar projects in the region;

(b) the proponent's intention to use road transport contractors with quieter equipment and acceptable maintenance practices; and

(c) the possible choice of alternate routes where practical,

it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for this factor. This is contingent upon the proponent conducting further noise modelling to confirm noise impacts are in general accord with the EPA's environmental objective, and undertakes to develop a Traffic Noise Monitoring and Management Plan prior to implementation of the project. This plan should be developed in consultation with, and to the satisfaction of the EPA on advice of DEWCP. The plan should address (but not be limited to):

- procedures for monitoring noise from transport at noise sensitive premises to confirm compliance with the modelling; and
- mitigation measures and management regimes (time of day, frequency of movements, alternate routing, etc) to reduce noise impacts as far as reasonably practicable.

4. Conditions and Commitments

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

In developing recommended conditions for each project, the EPA's preferred course of action is to have the proponent provide an array of commitments to ameliorate the impacts of the proposal on the environment. The commitments are considered by the EPA as part of its assessment of the proposal and, following discussion with the proponent, the EPA may seek additional commitments.

The EPA recognises that not all of the commitments are written in a form which makes them readily enforceable, but they do provide a clear statement of the action to be taken as part of the proponent's responsibility for, and commitment to, continuous improvement in environmental performance. The commitments, modified if necessary to ensure enforceability, then form part of the conditions to which the proposal should be subject, if it is to be implemented.

4.1 Proponent's commitments

The proponent's commitments as set in the PER and subsequently modified, as shown in Appendix 4, should be made enforceable.

4.2 Recommended conditions

Having considered the proponent's commitments and the information provided in this report, the EPA has developed a set of conditions that the EPA recommends be imposed if the proposal by WA Plantation Resources to construct and operate the Donnybrook Woodchip Project, is approved for implementation.

These conditions are presented in Appendix 4. Matters addressed in the conditions include the following:

(a) that the proponent be required to fulfill the commitments in the Consolidated Commitments statement set out as an attachment to the recommended conditions in Appendix 4;

(b) that the proponent prepare a Traffic Management Plan in consultation with and to the satisfaction of MRWA prior to implementing the project;

(c) that the proponent conducts further noise modelling to confirm noise impacts are in general accord with the EPA's Criteria for noise from road transport;

(d) that the proponent develops a Traffic Noise Monitoring and Management Plan prior to implementation of the project. This plan should be developed in consultation with, and to the satisfaction of the EPA on the advice of DEWCP.

5. Other Advice

The EPA recognises that significant debate arose during the course of public consultation with respect to the suitability (or otherwise) of the site from a zoning perspective. The EPA has sought advice from the Department of Planning and Infrastructure. The advice was that while there remained questions regarding the intended use of the land zoned General Farming Pastoral, the final responsibility for the decision remained with the Shire of Donnybrook-Balingup. The EPA notes the responsibility of the Shire in this matter, and assessed the proposal on its merits as presented. The EPA feels that issues of suitable zoning for proposals should have been resolved prior to their environmental consideration of the project.

The EPA is aware that a significant level of concern arose from within many sectors of the community with respect to site selection. While the blue-gum plantation industry has been in existence for some time, planning for access to suitable sites and infrastructure to support the processing of the plantation timber, including community consultation and decision making, does not appear to have been advanced to a level sought by the community. This appears to have limited the options open to the proponent on a short timeframe as the plantations move into the (foreseeable) cycle of maturation and harvesting. The EPA believes that the site selection for this project within a rural setting may be less than optimal, and more suitable sites may have been available to the proponent within the region had further planning and support been forthcoming sooner. Notwithstanding the arguments presented to the EPA regarding alternative sites, the EPA is obliged to assess the proposal on its merits as presented, located at Preston AA Lot 262, about 6km south east of Donnybrook town.

6. Conclusions

The EPA has considered the proposal by WA Plantations to develop and operate the Donnybrook Woodchip Project.

The EPA recognises that the site selected is a rural setting and that some members of the community held the view that on this basis the proposal should be found environmentally unacceptable. However, matters of zoning and the activities permitted within that zone are matters for the Shire as a decision-making authority. The EPA has responsibility to provide advice to the Minister on the environmental factors relevant to the proposal placed before it and also on the conditions and procedures to which the implementation of that proposal should be subject.

The EPA has concluded that the proposal is capable of being managed in an environmentally acceptable manner such that it is most unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Section 4, including the proponent's commitments.

7. Recommendations

The EPA submits the following recommendations to the Minister for the Environment and Heritage:

1. That the Minister notes that the proposal being assessed is the development and operation of a woodchip mill located at Preston AA Lot 262, about 6km south east of Donnybrook town.
2. That the Minister notes that the location of the woodchip mill being proposed is within a rural setting, and that there has been considerable debate within the community about the appropriateness of the mill within the zoning "General Farming Pastoral".
3. That the Minister considers the report on the relevant environmental factors as set out in Section 3;
4. That the Minister notes that the EPA has concluded that it is unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 4, and summarised in Section 4.2, including the proponent's commitments.
5. That the Minister imposes the conditions and procedures recommended in Appendix 4 of this report.
6. That the Minister notes that the conditions will required the preparation of a Traffic Management Plan, including road improvements relevant to the mitigation of impacts from the proposal (where deemed necessary), in consultation with the Main Roads WA so as to address the very real traffic concerns expressed by community members.

Appendix 1

List of submitters

Organisations:

Interest Groups

1. The Woodchip Mill Proposal Action Group
2. The Donnybrook Citizens Supporting the Donnybrook Woodchip Mill
3. The Preston Valley Road Safe Group put in a submission opposing the

Government Departments

1. Department of Environmental Protection and the Water and Rivers Commission (South-West Region);
2. South West Development Commission;
3. Department of Planning and Infrastructure;
4. Department of Minerals and Petroleum Resources;

Politicians

1. Dr Christine Sharpe, MLC for the South-west

Individuals (in no particular order):

1. C Hunt
2. H Reading
3. A Brooks
4. C Castledine
5. G Ammon
6. D Cooper
7. J Helsham
8. F Patane
9. J and R Robson
10. J Attwood
11. G and E James
12. K and P White
13. D and M Bredrow
14. A and T Campagnone
15. A Torrisi
16. H and C Sampson
17. T and P Barecca
18. C and H Salter
19. A.Castelli
20. S and S Collis
21. G Chapman
22. G Lyons
23. S Keene
24. G Fortesque
25. F Coucil
26. J Coucil
27. M and M Sampson
28. H Tuia
29. J Jons
30. A McCutcheon
31. V Toohey

32. S Barrat
33. C Guallano
34. B Celton
35. D Harfield
36. D Louis
37. C Ngan
38. D Buchanan
39. T Connell
40. A Johnson
41. G Buchanan
42. S and D Barrett
43. L Hutchinson
44. A Clarke
45. J Valastro
46. J Bishop
47. C and M Beeson
48. E Farley
49. A Kerk
50. J Green
51. A Swarbrick
52. D Dawson
53. B Dawson
54. R Neil
55. P Gardiner
56. M Neil
57. T Whittington
58. G Mc Brearty
59. C Parke
60. J Knox
61. A Simms
62. F Patane
63. K Day and L Burkett
64. R Atherton
65. J O Donnell

Appendix 2

References

ATA (2002) *Donnybrook Woodchip Project Public Environmental Review Report No. 2002/33*. ATA Environmental March 2002

ATA (2002 A) *Donnybrook Woodchip Project Public Environmental Review of PER Submissions EPA Assessment No. 1425 Report No. 2002/56*. ATA Environmental June 2002

ATA (2001) *Southwest Plantation Woodchip Project Report No. 2001/14*. ATA Environmental March 2001

Department for Planning and Infrastructure (2001) *South West Woodchip Mill Strategic Site Assessment Study*. Regional Policy and Planning Directorate October 2001.

WAPRES (2002) *Best Practice: Mill Operation with respect to Noise Management.* Letter from Ian Telfer to the Department of Environmental Protection, 18 July 2002

Bond, T (May 2000) *(Timber Industry Evaluation Strategy) Log Haul Road Transport Study Stage 2,* Report by WML Consultants to the South West Regional Road Group.

Appendix 3

Summary of identification of relevant environmental factors

ENVIRONMENTAL AND SOCIAL FACTORS RELATING TO THE ESTABLISHMENT AND OPERATION OF THE DONNYBROOK WOODCHIP MILL

Preston AA Lot 262 (18.69ha)

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
BIOPHYSICAL					
Vegetation communities	Proposal site (18.69ha), including access road	To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities.	Subject land comprises 18.69ha of farmland currently used for grazing sheep. Remnant native vegetation comprises two stands of jarrah-marri woodland with minimal understorey, of approximately 3.2ha (central stand) and 2.7ha (south eastern stand). A narrow stand of vegetation follows the railway line along the eastern boundary for approx 400m and lines the road reserve of Road No.2506. The land slopes down from the west, with the eastern boundary abutting a curved portion of the existing Manjimup to Bunbury narrow gauge railway line. A new siding of approx 500m may be required to adjoin the site and existing railway. The mill and stockpile will be sited on the cleared land south of the central marri-jarrah stand. Negligible remnant vegetation will be cleared for the administration office or access road. The access road will follow the existing Road No. 2506 and will be extended over cleared agricultural land to have a new intersection with the South Western Highway. A desktop review of CALM Rare and Priority Flora indicates that the subject land falls within an area that could include the presence of a number of plant species considered poorly known or rare. The site survey undertaken has not identified the presence of any CALM Rare and Priority Flora.	The central portion of the site will be modified with the implementation of this proposal. Less than 1ha of remnant vegetation will be cleared for the mill, associated facilities and access road. Principles in management will include: The design and layout of the mill, associated buildings and access roads will be such that the clearing of native vegetation is minimised. To develop and implement a Vegetation Management Plan that includes but is not limited to: Management of the remnant vegetation: Management of weeds and control of Dieback. If Specially Protected flora is identified in vegetation identified for removal, advise CALM and develop a management plan for the population's protection. Develop and implement a Fire Management Plan. Management of topsoil.	Given the effect of past agricultural activities in the area, the limited clearing of vegetation required, the results of the site survey, and the Proponent's commitments, this factor will meet the EPA criteria.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
Fauna (Specially protected (threatened) fauna)	Proposal site (18.69ha), including access road	Protect Specially Protected (Threatened) Fauna species and their habitats, consistent with the provisions of the *Wildlife Conservation Act 1950.*	The mill and transport corridor will be sited on cleared agricultural land and existing road reserves. Minimal remnant vegetation will be removed, resulting in negligible habitat loss. A desktop review of the CALM Specially Protected (Threatened) Fauna database indicates that the subject land is included in the known range of a number of rare or priority taxa. These included four Schedule 1 species (Long billed black Cockatoo, Short billed black Cockatoo, Western Ring Tailed Possum, Chuditch), one Priority 2 (Barking Owl), 1 Priority 3 (Brush-tailed Phascogale), seven Priority 4 (Quenda, Black or Black Gloved Wallaby, Rakali or Water Rat, Crested Shrike Tit, Masked Owl, Forest Red Tailed Black Cockatoo, Square tailed Kite) and two Schedule 4 (South West Carpet Python, Peregrine Falcon). The site faunal habitat survey has been undertaken. No evidence of Specially Protected (Threatened) Fauna was recorded.	The design and layout of the mill and associated buildings and access roads will be such that the clearing of native vegetation is minimised. Develop and implement a Vegetation Management Plant. If Specially Protected fauna are identified in vegetation outliers identified for removal, advise CALM and develop a management plan for the population's protection, including trapping and relocation to other areas.	Given the historical use of the land for agricultural activities, the limited size the remnant vegetation to be removed, and the lack of and highly mobile nature of Specially Protected or Priority Fauna recorded for the area, this factor will meet the EPA criteria.
Odour	Proposal site and surrounding area within a radius of 1km	Odours emanating from the proposed development should not adversely affect the welfare and amenity of nearby land users.	Tree resin odours can result from the chipping process. The nearest residence is approximately 160m east of the NE corner of the block.	Use of ATUs or amended septics with well maintained reticulation for treatment of sewage. If unreasonable odours should be emitted from the operation, develop and implement an Odour Management Plan. All putrescible wastes, litter and office waste collected and disposed of off-site.	Given the low potential for odours and the proposed management, this factor is unlikely to be relevant.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
POLLUTION MANAGEMENT					
Groundwater Quality	Groundwater below the site and down hydraulic head for a distance of 200m from the subject land	To ensure that the beneficial uses of groundwater can be maintained, consistent with the Australian and New Zealand Guidelines for fresh and marine water quality (Oct. 2000) and the NHMRC / ARMCANZ Australian Drinking Water Guidelines-National Water Quality Management Strategy 1996.	Depth to groundwater is anticipated to be approximately 20-30m at the proposed mill site, based on the surrounding landforms. There is at present no reticulated water supply on site. Operational water requirements are limited to log watering, drinking water and sanitary requirements. Log watering can contribute particulate materials and tannins to the groundwater. No soluble nutrients or pesticides will result from log watering. Sanitary requirements for an operational workforce of 14 (modified septic or ATU) will be required. An anticipated daily volume of about $20m^3$ summer make-up will be required (preliminary calculations), and will be supplied from combinations of dams, neighbouring bores, mains supply, and/or trucked supplies. The feasibility of a site bore will be assessed. Stormwater will be captured in a series of interception bunds and dams down gradient of the log stockpile and chipper. Collected water will be recycled for log watering. Release of uncontaminated water from holding basins may be required during periods of high rainfall.	To develop and implement a Water Management Plan that details potential impacts on groundwater quality, and how impacts will be addressed, including, but not limited to: Use of ATUs or modified septics for treatment of sewage, complying with the relevant statutory and LGA requirements. Recycle all water on-site wherever possible. Use of holding basins for stormwater. Management of bulk fuels in accordance with AS1940. Used oils will be disposed of off site by a licensed contractor. Routine monitoring of surface and groundwater. Any proposed abstraction of groundwater.	Given the minimal water requirements on site, depth to water table, the lack of large quantities of hazardous and/or hydrocarbon materials stored on site, and the commitment to develop and implement a Water Management Plan, this factor will meet the EPA criteria.
Liquid and Solid Waste Disposal	Proposal site (18.69ha)	Liquid and solid wastes should be contained and isolated from groundwater and surface surrounds. Waste disposal requirements are required to meet the *Environmental Protection Act, 1986*. Sanitation requirements will be designed to meet the *Health Act, 1911* and the *Occupational Health & Safety Act, 1984*.	There are minimal solid wastes generated on site that require disposal. Logs are predominantly de-barked at the plantation prior to transport. Accumulated fines and residual bark can be disposed of offsite as mulch or soil conditioning agents, returned to the plantations or disposed of at the municipal landfill if required. Kitchen and office wastes will be disposed of at the municipal landfill. Wastewater management for an anticipated operational workforce of 14 per shift will be required on site, with occasional additional contractor employees. Sewage and grey waters will be directed to an ATU or modified septic on an elevated portion of the subject land. Used oil will be collected and transport off site by a licensed contractor. The site will be kept clean and free of litter. Where feasible, wastes will be recycled.	See above. Disposal of accumulated fines and residual bark off site. No burning of rubbish or green waste. Rubbish will be segregated and stored in bins for appropriate disposal. All domestic waste will be disposed of at the municipal landfill. Concrete, reinforcing steel and other construction material waste produced on site shall be collected and disposed of at a local landfill facility. Any hazardous waste will be disposed of at an approved disposal site. To avoid damage or littering on trafficked roads, trucks hauling material over public roads will be loaded in a manner that minimises the possibility of spillages.	Given that all solid wastes will be transported offsite, and liquid waste will either be disposed onsite to the satisfaction of the LGA or transported offsite for recycling (oil), this factor will meet EPA objectives.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
Surface Water Quality	Seasonal surface water on the subject site	To ensure that surface water is managed to prevent discharge of contaminated water from site or to groundwater.	Soils on the site are generally well drained. It is anticipated that intermittent creeks will flow from the subject land eastwards toward the Thomson Brook which is across the railway reserve to the east (the nearest significant water feature that may be impacted). This creek feeds the Preston River. Water recycling on site will be a major focus, with bunds on lower slopes directing storm and wastewaters to holding basins. Water will be pumped from these holding basins to storage tanks for re-use on sites. Likely contamination of surface waters will be limited to suspended particulate materials and some tannins, with the potential for hydrocarbons from above ground diesel storage for on-site activities. Hydrocarbons will be kept to a reasonable minimum in a bunded, above ground storage tanks to DME requirements. In the event of oil or diesel contamination occurring, sufficient capacity will be provided to allow for isolation and treatment or recovery	See Groundwater quality and Solid and Liquid Waste Disposal above. Holding basins will be constructed for the retention of stormwater. Release of stormwater from the interception dams will only occur if water quality meets ANZECC *Guidelines for Protection of Aquatic Ecosystems.* To develop and implement a Water Management Plan that details potential impacts on surface water quality, and how impacts will be addressed, and monitored.	Given the proposal to intercept and re-use all surface water flows by a series of bunds and basins, the proposed monitoring program, the commitment to correct storage and handling of all environmentally hazardous materials, the limited volumes of bulk fuels stored on site, the commitment to release stormwater only if it meets ANZECC *Guidelines*, and to develop and implement a Water Management Plan, this factor will meet EPA requirements.
Dust	The subject area, access road, surrounding agricultural properties including nearby residences and surface waters	(i) Ensure that dust generated during construction and operation does not cause any environmental or human health problem or significantly impact on amenity; and (ii) Use all reasonable and practicable measures to minimise airborne dust.	Dust may be created during construction due to vehicle movement on unsealed roads and ground disturbing construction activities. Site operational activities that may contribute to dust generation include the movement of vehicles, the chipping activity itself, woodchip sorting and transfer to stockpile and train loading. The nearest dust sensitive premises are located about 160m east of the NE corner of the block. Further residences are located about 360m west of the SW corner. Wind rose data for Donnybrook indicates that local wind regime is highly seasonal, with summer morning winds dominated by easterlies with a southerly component, with a possible afternoon breeze coming equally from the west, east and south. Winter winds are dominated by NW winds tending W in the afternoons. A new tarred access road will be constructed from the SW Highway to the mill General dust prevention during construction will include using stabilising agents (such as mulches) on areas of cleared land as required to prevent dust lift off, the prompt removal of mud etc deposited on access roads and the washing down of truck wheels before leaving site	Blue gum logs and chips are less prone to dust lift-off than aged native forest products. Management commitments include: Apply EPA Policies, Guidelines and Criteria for EIA No 18, *Air Quality Impacts from Development Sites* during construction of the plant. Abide by the National Environmental Protection Measure (NEPM) for Ambient Air Quality (NEPC 1998) during operations. Develop and implement a Dust Management Plan for construction and operation that will specify dust actions in the case of unreasonable dust lift-off during windy dry conditions. This will include but is not limited to the following management practises: Using water sprays to control and prevent excessive dust from earthworks operations	Given the relatively remote location of the proposed site, the low dust generating potential of the activities when considered in relation to the rainfall, the commitment to comply with EPA guidelines and develop and implement a Dust Management Plan for the construction and operational phases, this factor is unlikely to be relevant.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
			to remove dust creating material.	and roads. Limiting soil stockpiles in extent and using water or stabilising agents to control dust. Minimising land clearing to avoid creating large areas of disturbed soil. Planning work to ensure construction or stabilisation proceeds immediately following clearing wherever possible. Regular maintenance of dust suppression equipment to ensure effective operation. Ensure all trucks used for hauling material over public roads are fitted with tight tailgates, not overloaded and are tarped where necessary.	
Hazardous Materials	The subject site	The handling of hazardous materials and dangerous goods is covered by: Explosives and Dangerous Goods Act, 1995; the Occupational Health and Safety Act, 1984 and the Environmental Protection Act, 1986.	Primary requirements for the project are to: minimise spillages from the storage and handling of hazardous materials and dangerous goods; and ensure storage of hazardous materials and dangerous goods is confined to specially designated areas away from drains and wetlands. Fuel; oils; lubricants; chemicals; paints; solvents; concrete curing compounds; sealants; and cleaning products are examples of hazardous substances commonly used on construction sites. Potential spillage risks include: oil spillage from vehicle servicing, accidental spillage due to equipment or tankage failure, malfunction or refuelling operations, accidental spillage during handling of hazardous materials; or accidental spillage during transport of containers. Hazardous substances shall be stored separately in a weatherproof and fire resistant building on an impervious base and bunded. Hazardous material stores shall be located well away from sensitive areas such as wetlands and other surface water bodies. External areas on site where significant quantities of hazardous substances are handled, loaded or unloaded will have an impervious base. All staff on site shall be trained in the hazards associated with the stored hazardous substances and procedures to follow in the event of an emergency. MSDS sheets will be kept on site for all hazardous substances stored on site. Trucks used to transport hazardous substances to site will be appropriately signed, identifying the substance in accordance with the Explosive and Dangerous Goods Act. A detailed spill response procedure should be prepared for use in the field. The procedure shall include: a list of spill response equipment including the type, quantity and	The following management practices shall be adopted to minimise spillages and environmental impacts from hazardous materials. *i) Refuelling* Refuelling shall be limited to mobile plant equipment only. Refuelling associated equipment shall to be maintained in good working order, without leaks and with appropriate level alarms, shutdown and dry break systems. All equipment shall be refuelled and lubricated within a bunded area and away from natural surface drainage features. Spill containment facilities such as earthen bunds, compacted pads or drip trays shall be provided at refuelling stations, oil and chemical storage sites and vehicle maintenance areas as per Australian Standard AS1940. Stormwater from refuelling and maintenance areas shall drain to a oil separation trap. *ii) Equipment Maintenance* Fuel and lubricating systems on mobile machinery shall be provided and maintained in good working order,	Given the lack of large quantities of hazardous materials and the proposed management thereof, this factor will meet the EPA criteria.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
			location of storage, containment and clean up equipment to be used on the construction site; and procedures and impact minimisation measures to be used in response to a spill, taking into account the characteristics of the affected terrain as well as the sources, types and amounts of material that could potentially be spilled.	without leaks. Drums containing oils shall be maintained in a sealed condition and stored on an impervious base such as sealed concrete. *iii) Fuel and/or Oil Spills* In the event of a fuel or oil spillage, the spill shall be recovered immediately using absorbent materials, which shall then be placed in disposable drums or containers for later removal to an approved waste disposal facility. Any contaminated soil resulting from a fuel or oil spillage shall be excavated and removed to an authorised waste disposal site or a site approved by the Local Government Authority. All significant spills shall be reported to the relevant government authority as soon as practicable and the contaminated soil removed within three hours of its reported existence.	
Noise	The subject area, surrounding agricultural properties including nearby residences	To ensure noise emissions from the plants operations are as low as reasonably practical and comply with the Environmental Protection (Noise) Regulations 1997.	The chipper and de-barker will be installed in an attenuated enclosure. With the exception of maintenance downtime, two shift (20 hour) operation of the chipper will be required when capacity approaches 1 mtpa. Log delivery is proposed for 17 hours /day. Train movements will be scheduled as required. Noise can be generated at the site by the operation of the fixed plant including the various saws, chippers, conveyors and de-barkers. Debarking is generally undertaken at the plantation. Mobile plant operations at the site will include rubber tyred loaders, log delivery trucks, mobile grab and train movements. At full development, a gantry stacker and loader may replace the mobile grab and rubber tyred loaders (except as a consequence of mechanical break down of the gantry). The nearest noise sensitive premise is located approximately 160m E of the NE corner of the block. A second residence is located approximately 360m west of the SW corner. In Donnybrook, local wind regimes are highly seasonal, with summer morning winds dominated by easterlies with significant southerly components, followed by strong afternoon breezes from the south, east and west equally. Winter winds are dominated by NW winds in the morning, tending W in the	From the results of the site specific noise assessment, the following commitments are proposed: Design and install sound shields around chipper, debarker and conveyor such that at all times, noise emissions comply with all requirements of the *Environmental Protection (Noise) Regulations 1997*. Ensure compliance with noise requirements during acceptance testing from equipment suppliers. Develop and implement the Noise Management Plan for Construction and Operation. Manage train loading operations and truck unloading activities through scheduling and engineering design such that noise emissions comply with all requirements of the *Environmental Protection (Noise) Regulations 1997* at the nearest residence all the time.	Given the operation of the chipper during the evening and night, issues relating to noise are likely to concern the EPA. Given the results of noise modelling to date, the relatively remote location of the proposed site with respect to housing, and the commitment to develop and implement a Noise Management Plan for construction and operation, this factor can be managed to

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
			afternoon. The results of modelling show that noise emissions from the attenuated woodchip plant will comply with the night time criteria in the *Regulations* of 30dB(A) Measures may need to be implemented to reduce the impacts of mobile plant movement during evening and night time activities. Noise control will be incorporated into the design and will include any or all of the following: Enclosing major plant items; Selection of lower emitting mobile equipment; Construction of earthen bunds or barriers; Selective location of major openings away from neighbouring residences; Insulation of plant enclosures; Maintenance and possibly extension of existing vegetated barriers.		ensure noise emissions at the nearest residences always comply with EPA criteria.
Light Overspill	The subject area, surrounding agricultural properties including views from nearby residences	Manage potential impacts from light overspill and comply with Standard AS 4282.	The proposed site is relatively isolated with low levels of background lighting. Adequate illumination of the mill and stockpile area is required for safe operation. Maintaining existing stands of marri-jarrah will assist in limiting impacts. The conservation of a vegetated buffer along the railway on the NE boundary, together with site lighting design and distance from the SW Highway, can limit any obtrusive effects of outdoor lighting. Key design points include directing lighting downwards rather than upwards wherever possible, using specifically designed lighting equipment to minimise the spread of near to or above the horizontal, prevention of over-lighting and ensuring the angle of the main beam of light and any observer is less than 70^0.	Management opportunities include: Planting of vegetation along the boundary, where practical, to screen the plant. Strategic use of light poles and directional lighting. Management of remnant vegetation and vegetation buffer along the NE boundary. Design of light overspill to comply with AS 4282.	Given the location of the site with respect to nearby residences, the commitment to limit light overspill by the use of directional lighting and the development and maintenance of vegetation, this factor is unlikely to be a concern.
Public Health & Safety	The subject site (18.69ha)	Ensure that risk is as low as reasonably achievable and complies with the requirements in EPA Policies, Guidelines and Criteria for EIA No 2, *Guidance for Risk Assessment and Management: Offsite Individual Risk from Hazardous Industrial Plant (July 2000).*	Major hazards at the site relate mainly to the movement of the mobile plant and trucks. Minimal hazardous flammable and/or materials will be held on site. Public access to the site will be limited by perimeter fencing and hazards indicated by signage using accepted practice.	Storage of bulk fuels to comply with AS1940. Fencing of the site in compliance with *Occupational Health and Safety Regulations* Develop and Implement an Emergency Management Plan to the acceptance of the DEWCP and Department of Minerals and Energy Resources prior to commencement of construction.	Given the intrinsic nature of the proposed operation, lack of large volumes of hazardous or highly flammable material stored on site, and commitment to excluding the public from general operations, this factor will meet EPA criteria.

Factor (Site Specific Factor)	Relevant Area	EPA Objective	Proposal Characteristics	Proposed Management	Predicted Outcome/Relevance of Factor
SOCIAL SURROUNDINGS					
Heritage	The subject area (18.69ha) and access road	To comply with statutory requirements, *Aboriginal Heritage Act 1972*, in relation to areas of cultural and historical significance.	The land is privately owned freehold. The siting of the woodchip mill and associated facilities on Preston AA Lot 262 will result in minimal clearing of native vegetation. A search of the Department of Aboriginal Affairs Register of Historical Sites has been undertaken. Although no sites were identified in the area assessed at the time, it is possible that sites that have not yet been entered on the Register, exist.	To develop and implement a site heritage protocol within the EMP. Construction work will be stopped in the event that a site of suspected Aboriginal significance is found and an archaeologist shall be notified to examine the site. If a site is positively identified to be of Aboriginal significance, the site will be fenced with "Keep Out" signage and the Aboriginal Sites Department of the WA Museum will be notified of the site within a timely manner.	Given much of the site has been cleared for agricultural activities, the findings of the desk top review and the commitment to protect any site discovered of ethnographic and archaeological significance, this factor is unlikely to be relevant.
Visual Amenity	The subject area, surrounding agricultural properties including the view from public roads and nearby residences	Visual amenity of the area adjacent to the project should not be unduly affected by the proposal	The proposed site is relatively isolated, has a low surrounding neighbourhood density and with limited visibility from the SW Highway. The location of the woodchip mill against a wooded landscape will assist in limiting visual impacts. Screen plantings are proposed for the site that will ensure the amenity of the views of the plant and stockpile. Visual amenity is affected by building design, choice of materials and landscaping. The buildings and plant will be designed to minimise impact on the landscape by using the site topography to advantage.	While some screening exists, consideration will be given to planting vegetation along boundaries and on adjoining properties, if required, to minimise the visual impact of the development on the adjoining properties. Retaining and developing existing vegetation buffer zones.	Given the site is not visible from major roads and the commitment to develop and maintain visual amenity, this factor will meet the EPA criteria.
Public Consultation	Residences of Donnybrook-Balingup including residents of properties adjacent to site	To provide the public with ample opportunity to fully understand the environmental aspects of the proposed facility	Extensive consultation is ongoing with the general community and particularly neighbouring residents. The main issues of public concern are the number and noise of the log trucks and potential noise from the mill. Advice from MRWA and Department of Planning and Infrastructure indicates that the South West Hwy could sustain the additional heavy road transport and the Donnybrook site minimises many of the transport impacts. The main reasons for supporting the project are the direct and indirect local benefits, reduced dependency on old growth forests and land improvement issues.	An extensive Public Consultation Program has been undertaken. Management proposes to maintain the Program and accommodate comments in the design and implementation of the project.	Given the extended period that this or similar projects have been broadly discussed in the Region, the limited area directly affected, and the implementation of an effective public consultation process, this factor is likely to meet the EPA criteria.

Appendix 4

Recommended Environmental Conditions and Proponent's Consolidated Commitments

Statement No.

RECOMMENDED CONDITIONS AND PROCEDURES

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

DONNYBROOK WOODCHIP PROJECT

Proposal: The construction and operation of a 1.0 million tonnes per annum capacity woodchip mill at Preston AA Lot 262, adjacent to the Manjimup-Bunbury railway line, approximately 6km south-east of Donnybrook, as documented in schedule 1 of this statement.
Logs will be sourced primarily from plantations on private land within approximately 150km of Donnybrook and transported to the mill site by truck.
Woodchips from the mill will be railed to the existing woodchip export facility at the Bunbury Inner Harbour.
The woodchip product will be loaded into vessels using the existing fixed ship loader and woodchip storage/handling facility on the leased land adjacent to Berth 3 at the Bunbury Port.

Proponent: WA Plantation Resources

Proponent Address: Level 5, BGC Centre,
28 The Esplanade, PERTH WA 6001

Assessment Number: 1425

Report of the Environmental Protection Authority: Bulletin 1061

The proposal referred to above may be implemented subject to the following conditions and procedures:

Published on

Procedural conditions

1 Implementation and Changes

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.

1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment

and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment and Heritage has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment and Heritage will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment and Heritage, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- the environmental factors of the proposal have not changed significantly;
- new, significant, environmental issues have not arisen; and
- all relevant government authorities have been consulted.

Note: The Minister for the Environment and Heritage may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

Environmental conditions

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environment, Water and Catchment Protection that address:

- the implementation of the proposal as defined in schedule 1 of this statement;
- evidence of compliance with the conditions and commitments; and
- the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the Environmental Protection Act 1986, the Director General of the Department of Environment, Water and Catchment Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement. Usually, the Department of Environment, Water and Catchment Protection prepares an audit table that can be utilised by the proponent, if required, to prepare an audit program to ensure the proposal is implemented as required. The Director General is responsible for the preparation of written advice to the proponent, which is signed off either by the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environment, Water and Catchment Protection that the requirements have been met.

5-2 The proponent shall submit a performance review report every 5 years after the start of the operations/development phase to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority, which addresses:

- the major environmental issues with the project, the objectives for those issues, the methodologies used to achieve these, and the key indicators of environmental performance measured against those objectives;
- the level of progress in the achievement of sound environmental performance, including industry benchmarking and use of best available technology where practicable;
- significant improvements gained in environmental management, including the use of external peer reviews;
- stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

the proposed environmental objectives over the next five years, including improvements in technology and management processes.

6 Traffic Management

6-1 Prior to commissioning, the proponent shall prepare a Traffic Management Plan, with respect to Preston Valley Road between the woodchip mill and the Collie turnoff; and the South-West Highway immediately north and south of the entry to the woodchip mill site, in consultation with Main Roads Western Australia (MRWA) which as far as practicable:

- minimises the risk from coincidence of school buses and log truck movements at times when school buses are operating;
- evenly distributes the timing of arrivals of trucks at the mill over the full proposed period of operation (7.00 am to 10.00 pm); and
- establishes traffic management and emergency response procedures in consultation with the relevant local authorities and local communities through which the haulage routes pass,

to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

6-2 The proponent shall implement the Traffic Management Plan required by condition 6-1.

6-3 The proponent shall make the Traffic Management Plan required by condition 6-1 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7 Noise Emissions from Road Transport

7-1 Prior to commissioning, the proponent shall conduct noise modelling to confirm the estimated noise impacts from road transport, with respect to Preston Valley Road between the woodchip mill and the Collie turnoff; and the South-West Highway immediately north and south of the entry to the woodchip mill site, are in general accord with the Environmental Protection Authority's environmental objective for this factor, namely;

- Main Roads Western Australia criteria; and
- EPA Preliminary Draft Guidance for Road and Rail Transportation (May 2000),

to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7-2 The proponent shall develop a Traffic Noise Monitoring and Management Plan prior to construction in consultation with Main Roads Western Australia , to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority. This Plan shall address:

- procedures for monitoring noise from transport at noise sensitive premises to confirm compliance with the modelling; and
- mitigation measures and management regimes (time of day, frequency of movements, alternate routing, etc) to reduce noise impacts as far as reasonably practicable.

7-3 Within six months following commencement of production, the proponent shall undertake the noise monitoring specified in condition 7.2, to confirm that actual noise impacts from road transport are in general accord with the Environmental Protection Authority's environmental objective for this factor, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

7-4 Where the noise monitoring undertaken as specified in condition 7.3 indicates noise impacts are not in general accord with the Environmental Protection Authority's environmental objective, the proponent shall identify mitigation measures and management regimes, and shall amend the Traffic Noise Monitoring and Management Plan to reflect and incorporate those measures and regimes, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Procedures

1 Where a condition states “to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.

2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

Notes

1 The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

Schedule 1

The Proposal (Assessment No. 1425)

The proposal is to construct and operate a woodchip mill with a production capacity of 1.0 million tonnes per annum, 600 metres off the South Western Highway, approximately 6 kilometres south-east of Donnybrook. Logs for the woodchips will be sourced primarily from blue-gum (*Eucalyptus globulus*) plantations established on private lands located within a radius of about 150 kilometres from Donnybrook, and will be transported by road to the mill site which is located adjacent to the existing Manjimup-Bunbury railway.

The main components of the project are:

- the mill, associated log and chip handling facilities, administrative office and access road at the Donnybrook site;
- the transport of logs to the mill by truck;
- the transport of the woodchips by rail to the existing woodchip export facility at the Bunbury Inner Harbour; and
- the expansion of the existing blue-gum export capacity at the Bunbury Inner Harbour.

The project is planned to commence export in the last quarter of 2003. Export tonnage will reach the equivalent of 0.75 million tonnes per annum in the initial year of operation, and based on current market projections, continue at 0.75 million tonnes per annum. The project retains the capability to produce 1 million tonnes per annum should market demand require.

The main characteristics of the proposal are summarised in Table 1 below.

Table 1: Key Proposal Characteristics

Proposal Aspect	Description of Proposal when Fully Implemented
TRANSPORT TO CHIPMILL	
Plantation Timber Sources	• *E. globulus* plantations, total resource of about 75 000ha from plantations within an approx. 150km radius of Donnybrook, from amongst others, the Shires of Boyup Brook, Kojonup, West Arthur and Williams in the east, Rockingham, Murray, Jarrahdale and Serpentine in the north, Bridgetown-Greenbushes and Nannup in the south and Augusta-Margaret River and Busselton in the west.
Transport of logs to Chip mill	• Road transport using various truck configurations on private haul roads within plantations, local, public and state funded main roads. • Truck movements - Initially (0.75 million tonnes per annum), 0.80 million tonnes of logs will be transported annually (based on 94% recovery). Equates to approximately 36 000 truck movements including return (approximately 18 000 loaded truck movements), or about 9 truck movements per hour (or 4.5 loaded truck movements per hour) based on 230 days per year, 17 trucking hours per day. • At full export capacity (1.0 million tonnes per annum), 1.06 million tonnes of logs will be transported annually. This equates to approximately 47 500 truck movements per annum, including return, requiring 12 trucks per hour, (or around 6 loaded truck movements per hour) based on 230 days per year, 17 trucking hours/day. • Logs will be transported on in excess of 1570 km of local and 820km of state (main) roads in South West region.

Proposal Aspect	Description of Proposal when Fully Implemented
TRANSPORT TO CHIPMILL	
Plantation Timber Sources	• *E. globulus* plantations, total resource of about 75 000ha from plantations within an approx. 150km radius of Donnybrook, from amongst others, the Shires of Boyup Brook, Kojonup, West Arthur and Williams in the east, Rockingham, Murray, Jarrahdale and Serpentine in the north, Bridgetown-Greenbushes and Nannup in the south and Augusta-Margaret River and Busselton in the west.
Transport of logs to Chip mill	• Road transport using various truck configurations on private haul roads within plantations, local, public and state funded main roads. • Truck movements - Initially (0.75 million tonnes per annum), 0.80 million tonnes of logs will be transported annually (based on 94% recovery). Equates to approximately 36 000 truck movements including return (approximately 18 000 loaded truck movements), or about 9 truck movements per hour (or 4.5 loaded truck movements per hour) based on 230 days per year, 17 trucking hours per day. • At full export capacity (1.0 million tonnes per annum), 1.06 million tonnes of logs will be transported annually. This equates to approximately 47 500 truck movements per annum, including return, requiring 12 trucks per hour, (or around 6 loaded truck movements per hour) based on 230 days per year, 17 trucking hours/day. • Logs will be transported on in excess of 1570 km of local and 820km of state (main) roads in South West region.
DONNYBROOK CHIPMILL	
Site, location & area	• Preston AA Lot 262 is situated approx 600m off South Western Highway adjacent to the existing Manjimup-Bunbury Railway, about 6km SE of Donnybrook. • Comprising 18.69ha freehold land zoned 'General Farming Pastoral' and requiring negligible clearing of native vegetation.
Site facilities	• Single chipper line, associated log handling and pollution abatement equipment, and mobile plant. • Vibrating screens, associated conveyors and maintenance crane. • Train hopper bins and stockpile. • Stormwater recycle ponds. • Administration office, maintenance and truck weighing facilities.
Associated facilities	• Rail siding of approximately 0.5 km may be required (to be referred to the EPA separately by Westnet).
Log unloading and chipping	• Log trucks arrive via a new access road from the South Western Highway. Trucks on the SW Highway will approach from both the north (primarily via Boyup Brook Rd) and the south from Kirup. • Rubber tyred loaders (up to 4) to remove and stacks logs initially. • Log crane and grab loads logs into chipper, with chips being transported by conveyors. • Chips are sized on vibrating screens and stockpiled into hoppers using conveyors. • Train loading hopper bins load chips into rail carriages.
TRANSPORT TO BUNBURY PORT	
Transport of chips to port	• Locomotive hauling up to 19 bottom discharge rail wagons. Total train capacity approximately 800 tonnes. • Number of loaded train movements from Donnybrook mill: initially (0.75 million tonnes per annum) 3-4 loaded train movements/day (approx. 250 days per year), full production (1.0 million tonnes per annum) 4-5 train movements/day (280 days per year).
BUNBURY PORT SHIP LOADING	
Site, location & area	• Existing land leased within the Bunbury Inner Harbour Port Facilities (about 9.6ha). • Chips dropped into existing below ground hopper and transported via conveyor to existing stockpile area at the Bunbury Port. • Stockpile storage area of approx 5.3ha (hardstand currently about 2.3ha). Hardstand drained to perimeter drains with stormwater retention ponds.

Proposal Aspect	Description of Proposal when Fully Implemented
Site facilities	• Stacker, fixed ship loader and associated conveyors. • Office buildings, workshop, bulldozer washing and refuelling bay. • '966' rubber tyred loaders. • 'D8' bulldozer (1 during normal operations, up to 3 during ship loading). • 40 000tonne capacity ships. For bluegum chips only: at 0.75 mtpa, 19 ships/annum (average 2 days in port = 38 days in port), full production (1.00 mtpa) 25 ships/annum (50days in port). Port operations will proceed on a 24hr basis during ship loading.

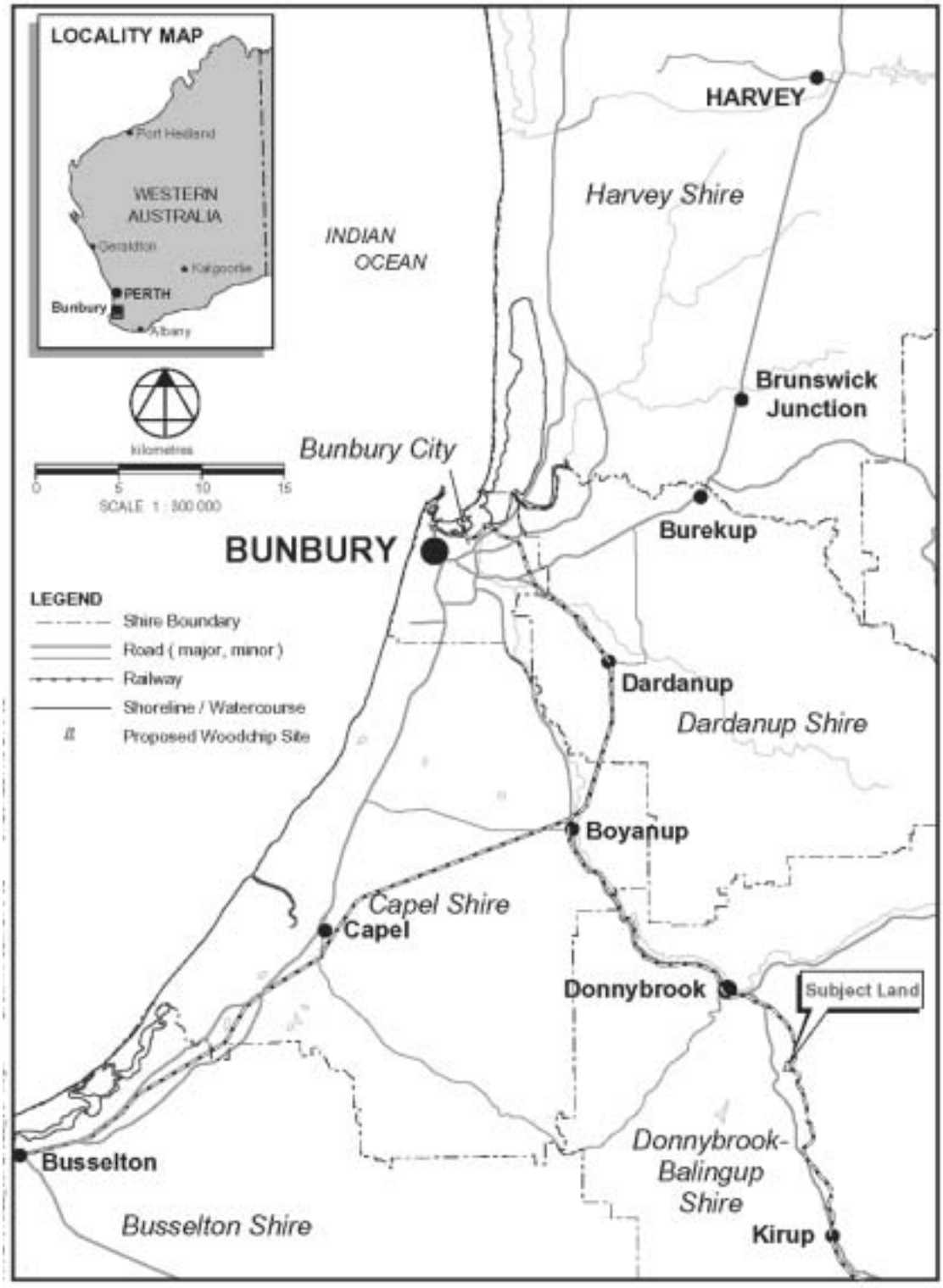

Figure 1: Project location

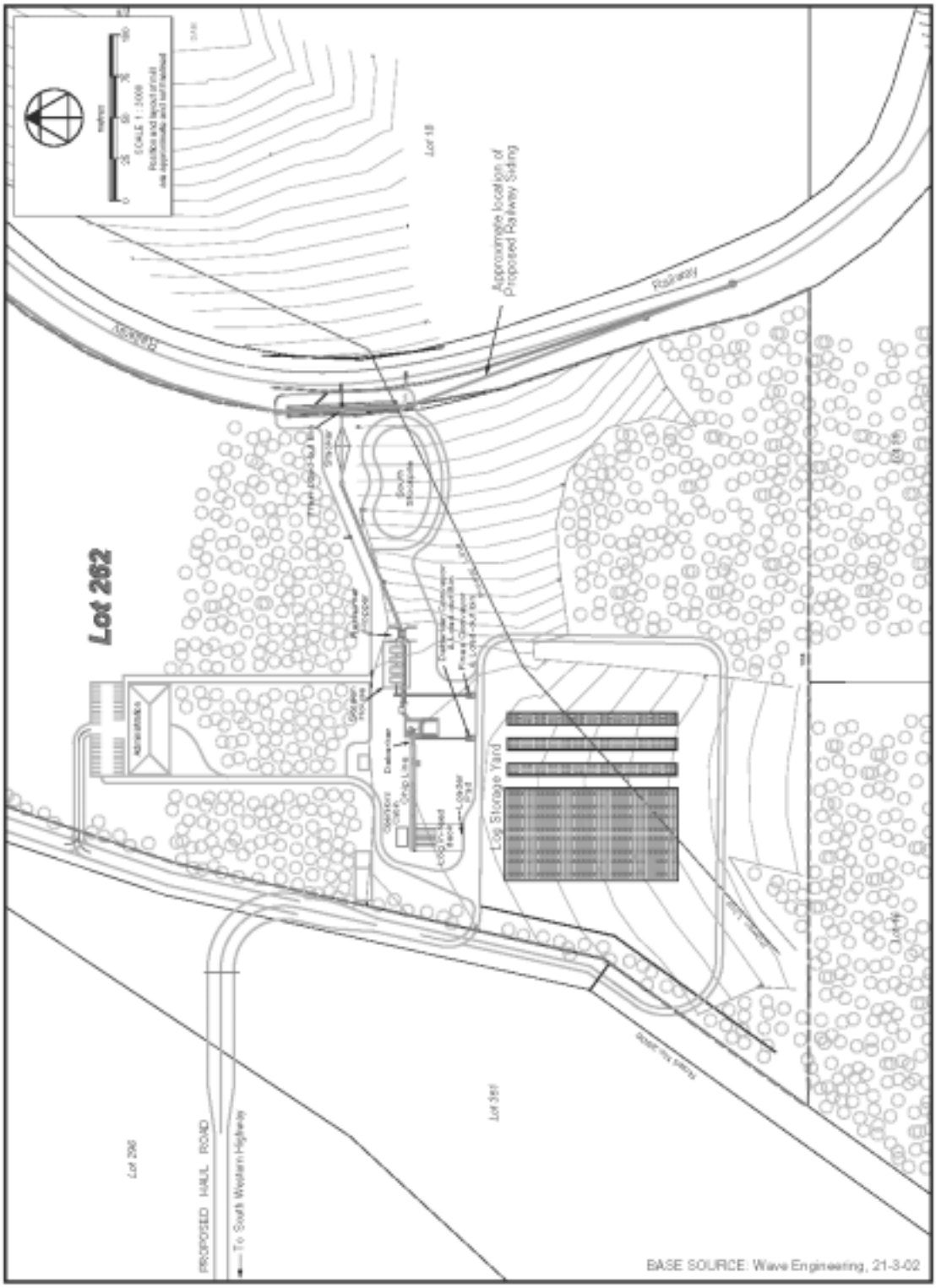

Figure 2 Plant layout

Schedule 2

Proponent's Environmental Management Commitments

13 August 2002

DONNYBROOK WOODCHIP PROJECT
(Assessment No. 1425)

WA PLANTATION RESOURCES

Proponent's Consolidated Environmental Management Commitments – WAPRES Wood Chip Mill (Assessment No. 1425)

No	Topic	Action	Objective	Timing	Advice
1.0	**Transport**				
1.1	Air Quality	**1) Prepare an Transport Air Quality Management Strategy** **including but not limited to:** a) Select low emission equipment for components under project control; b) Implement a preference for contractors that demonstrate regular vehicle maintenance schedules through accreditation under a recognised QA scheme or *Trucksafe* program; c) Selection of rail over road for transport of woodchips from Donnybrook to the Port of Bunbury ; 2) Implement the Transport Air Quality Management Strategy.	Ensure that gaseous emissions do not adversely affect the environment, health, welfare and amenity of nearby land users by meeting statutory requirements and acceptable standards.	Prior to construction commencing. Pre-construction and operation	
1.2	Transport Noise	1) Prepare an Transport Noise Management Strategy including but not limited to: a) implementing a preference for road transport contractors with quieter equipment and acceptable maintenance practices; b) employ only contractors that conform to the Industry Code of Practice such as *Trucksafe*. 2) Implement the Transport Air Quality Management Strategy.	Protect the amenity of residents along the transport route and in the vicinity of the mill site from noise impacts resulting from activities associated with the transportation of raw materials and product by road and rail respectively.	Pre-construction Pre-construction and operation	
1.3	Public Safety	1) Prepare a Transport Safety Strategy including but not limited to: a) manage public health and safety through selection of the safest route and travel time for vehicles under WAPRES control. b) Ensure that heavy vehicle drivers employed by WAPRES are experienced and competent. c) Implement a preference for contractors that demonstrate regular vehicle maintenance schedules through accreditation under a recognised QA scheme or *Trucksafe* program. d) Recommend to contractors to avoid heavy transport activities coinciding with school and school bus activities on logging truck routes. e) Employ only contractors that conform to the industry Code of Practice. f) Design of the access road intersection with SW Highway to meet	To ensure that road and rail traffic associated with the project do not result in unacceptable levels of safety on the existing road and rail network.	Pre-construction	

No	Topic	Action	Objective	Timing	Advice
		requirements of Ausroads Guide to traffic Engineering Practice Part 5, Intersection of Grade. g) Implementation of the WAPRES Code of Conduct for Log Haulage. 2) Implement the Transport Safety Strategy.		operation	
2.0	**Donnybrook Mill Site**				
2.1	EMP	**1) Prepare an Environmental Management Plan (EMP) framework for environmental factors relevant to the construction and operation of the wood chip mill** 2) Implement the EMP.	To manage environmental aspects of the development and minimise environmental impacts.	Prior to construction commencing. Pre-commissioning	
2.2	Vegetation Management	**1) Develop a Vegetation Management Plan that includes the management of the remnant vegetation.** **2) design the mill layout, and that of the associated buildings and access roads to minimise the need for clearing of remnant native vegetation** **3) Implement the Vegetation Management Plan**	To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities..	Pre-construction Pre-construction construction	CALM
2.3	Fauna Management	1) Advise CALM and develop a management plan for the protection of Specially Protected fauna, in the event that they are identified amongst remnant vegetation proposed for removal.	Protect Specially Protected (Threatened) Fauna species and their habitats, consistent with the provisions of the *Wildlife Conservation Act 1950*.	During construction	CALM
2.4	Groundwater	1) To develop and implement a Water Management Plan that will provide details of potential impacts on groundwater quality, and how they will be addressed, including, but not limited to: a) Use of ATUs or amended septics for treatment of sewage. b) Recycle all water on-site wherever possible. c) Use of holding basins for stormwater. d) Management of bulk fuels in accordance with AS 1940. e) Used oil disposed of off-site. f) Routine monitoring of surface and groundwater. g) Any proposed abstraction of borewater.	To ensure that the beneficial uses of groundwater can be maintained, consistent with the Australian and New Zealand Guidelines for fresh and marine water quality (Oct. 2000) and the NHMRC / ARMCANZ Australian Drinking Water Guidelines- National Water Quality Management Strategy 1996.	Pre-construction	W&RC

No	Topic	Action	Objective	Timing	Advice
		2) Implement the a Water Management Plan.		construction and operation	
2.5	Surface Water	1) To develop a Water Management Plan that will provide details of potential impacts on surface water quality, and how they will be addressed, including, but not limited to: a) Release of stormwater from the interception dams will only occur if water quality meets *ANZECC Guidelines for Protection of Aquatic Ecosystems*.. 2) Implement the Water Management Plan.	To ensure that surface water is managed to prevent discharge of contaminated water from site or to groundwater.	Pre-construction construction and operation	W&RC
2.6	Dust	1) Develop a Dust Management Plan that will specify dust actions in the case of unreasonable dust lift-off during windy dry conditions. 2) Apply EPA Policies, Guidelines and Criteria for EIA No 18, *Air Quality Impacts from Development Sites* during construction of the plant. 3) Meet the National Environmental Protection Measure (NEPM) for Ambient Air Quality (NEPC 1998) during operations.	*(i) Ensure that dust generated during construction and operation does not cause any environmental or human health problem or significantly impact on amenity; and* (ii) Use all reasonable and practicable measures to minimise airborne dust.	Pre-construction During construction Operation	
2.7	Noise	1) Develop a Noise Management Plan for Construction and Operation that will provide details of potential noise impacts will be addressed, including, but not limited to: a) Design and install sound shields around equipment as necessary so that at all times, noise emissions comply with all requirements of the *Environmental Protection (Noise) Regulations* 1997. b) Ensure compliance with noise requirements during acceptance testing from equipment suppliers. c) Manage train loading operations and truck unloading activities through scheduling and engineering design such that noise emissions comply with all requirements of the *Environmental Protection (Noise) Regulations* 1997 at the nearest residence all the time. d) Construct an acoustic enclosure around the chipper and insulation of the building. e) Purchase (where practical) of optimum front end loaders with respect to noise. f) Optimise the location, orientation and management of log	To ensure noise emissions from the plants operations are as low as reasonably practical and comply with the Environmental Protection (Noise) Regulations 1997.	Pre-construction	

No	Topic	Action	Objective	Timing	Advice
		storage to reduce noise propagation, especially at night. g) Where possible construct earthen bunds to limit noise propagation. h) Implement operational procedures to limit mobile plant movement during sensitive periods. i) Limit hours of operation to avoid truck arrivals between 10.00pm and 7.00am (15 hours as opposed to the originally proposed 17 hours). j) As far as practical, limit train loading to daylight hours. k) Progressively implement strategies including noise abatement measures, planning administrative procedures, maintenance of separation distances between the plant site and possible future residences or a combination thereof to ensure compliance with the *Environmental Protection (Noise) Regulations* 1997 at all times. 2) Implement the Noise Management Plan		construction and operation	
2.8	Ethnographic and archaeological	1) To develop a site heritage protocol within the EMP including, but not limited to: a) Construction work will be stopped in the event that a site of suspected Aboriginal significance is found and an archaeologist shall be notified to examine the site. b) If a site is positively identified to be of Aboriginal significance, the site will be fenced with "Keep Out" signage and the Aboriginal Sites Department of the WA Museum will be notified of the site within a timely manner. 2) Implement the site heritage protocol.	To comply with statutory requirements, *Aboriginal Heritage Act 1972*, in relation to areas of cultural and historical significance	Pre-construction construction	DIA
2.9	Odour	1) Use of ATUs or amended septics with well maintained reticulation for treatment of sewage. 2) All putrescible wastes, litter and office waste collected and disposed of off-site. 3) If unreasonable odours should be emitted from the operation, develop and implement an Odour Management Plan.	Odours emanating from the proposed development should not adversely affect the welfare and amenity of nearby land users.	construction	
2.10	Liquid and Solid Waste Disposal	1) Accumulated fines and residual bark will be disposed of off-site. 2) Other forms of solid waste will be disposed of to the municipal	Liquid and solid wastes to be contained and isolated from	Pre-commissioning	

No	Topic	Action	Objective	Timing	Advice
		landfill sites or where appropriate recycled.	groundwater and surface surrounds. Waste disposal requirements are to meet the *Environmental Protection Act, 1986*. Sanitation requirements will be designed to meet the *Health Act, 1911* and the *Occupational Health & Safety Act, 1984.*		
2.11	Light Overspill	1) Design of light overspill to comply with AS 4282. **2) Management of remnant vegetation and vegetation buffer along the NE boundary.** 3) Planting of vegetation along the boundary, where practical to screen the plant. 4) Strategic use of light poles and directional lighting.	Manage potential impacts from light overspill and comply with Standard AS 4282.	Pre construction Construction Operation	
2.12	Public Health and Safety	1) Develop and Implement an Emergency Management Plan **2) Storage of bulk fuels to comply with AS 1940.** 3) Fencing of the site in compliance with *Occupational Health & Safety Regulations*.	Ensure that risk is as low as reasonably achievable and complies with the requirements in EPA Policies, Guidelines and Criteria for EIA No 2, *Guidance for Risk Assessment and Management: Offsite Individual Risk from Hazardous Industrial Plant (July 2000)*.	Pre-construction Construction and operation	DMPR
3.0 Port Facilities					
3.1	Stormwater management	1) Sewage and grey water is directed to the existing septic tank system. **2) Any putrescible wastes, litter and office waste is collected and disposed of off-site at municipal landfills.** 3) Storage of bluegum woodchip product at Port facility is on a hardstand. 4) Drainage to harbour and surrounds is through series of perimeter drains and a retention sump with sufficient capacity to allow recovery of accidental hydrocarbon loss. 5) Industrial mesh grates cover all stormwater inlets/outlets. 6) Monitoring of stormwater and groundwater to ensure discharge meets criteria for ANZECC Water Quality Guidelines	To ensure that surface water is managed to prevent discharge of contaminated water from site or to groundwater. To ensure that the beneficial uses of groundwater can be maintained, consistent with the Australian and New Zealand Guidelines for fresh and marine water quality (Oct. 2000) and the NHMRC / ARMCANZ Australian Drinking Water Guidelines- National	Operation	W&RC LGA

No	Topic	Action	Objective	Timing	Advice
		meets criteria for ANZECC Water Quality Guidelines.	Water Quality Management Strategy 1996.		
3.2	Dust	1) Undertake abatement measures as necessary such that the proposal meets the requirements in EPA/DEWCP Policies, Guidelines and Criteria. **2) Continue to support the Bunbury Port Authority and Port Users Group initiatives with the high volume air sampling program, to monitor environmental dust levels.**	Use all reasonable and practicable measures to minimise airborne dust.	Operation	
3.3	Visual Amenity	1) Confirm lighting towers are strategically located and use directional lighting. **2) Maintain and promote the vegetation buffer along Koombana Drive.** 3) Limit the height of the bluegum stockpile to the height of the current marri/karri stockpile.	Visual amenity of the area adjacent to the project should not be unduly affected by the proposal	Operation	
3.4	Public Health & Safety	1) Continue to store bulk fuels in compliance with AS1940. 2) Maintain existing fence around the site. 3) Continue compliance with Occupational Health and Safety Regulations.	Ensure that risk is as low as reasonably achievable and complies with the requirements in EPA Policies, Guidelines and Criteria for EIA No 2, *Guidance for Risk Assessment and Management: Offsite Individual Risk from Hazardous Industrial Plant* (2000).	Operation	
3.5	Light Overspill	Confirm lighting towers are strategically located and use directional lighting. Maintain and promote the vegetation buffer along Koombana Drive	Manage potential impacts from light overspill and comply with AS 4289	Operation	

No	Topic	Action	Objective	Timing	Advice
3.6	Noise	1) Develop a Port Noise Management Plan to ensure compliance with the *Environmental Protection (Noise) Regulations* 1997 at any noise sensitive premises at all times. 2) Implement the Port Noise Management Plan	To ensure noise emissions from the plants operations are as low as reasonably practical and comply with the Environmental Protection (Noise) Regulations 1997.	Pre-operation Operation.	
4.0 Whole of Project					
4.1	Public Consultation	1) Continue the public consultation program which both informs and educates the wider community generally, and addresses the concerns of those likely to be directly affected. 2) Where possible, modify the project to take into account community concerns.	To minimise potential for groundwater and surface water contamination or risk to public health.	Construction and Operation	

ABBREVIATIONS:

CALM	Department of Conservation and Land Management
W&RC	Water and Rivers Commission
DIA	Department of Indigenous Affairs
DMPR	Department of Minerals and Petroleum Resources
LGA	Shire of Donnybrook

Appendix 5

Submissions and
Proponent's Response to Submissions

SUMMARY OF PUBLIC SUBMISSIONS AND RESPONSES

This document provides a summary of public submissions and the Proponent's responses regarding the Public Environmental Review (PER) for the new Donnybrook Woodchip Project. The Proponent is WA Plantation Resources (WAPRES). The PER comprises the document 'Donnybrook Woodchip Project Public Environmental Review' (ATA Environmental, March 2002, Report No: 2002/33).

Implementation of the proposal will have the effect of concentrating the heavy haulage of plantation grown blue-gum logs near the chip mill site. The potential for noise impacts either on individuals and communities occurring in the area surrounding the mill or along feeder roads is also recognised.

The public submission period for the proposal commenced on 25 March 2002 for a period of four weeks ending 22 April 2002. At the Department of Environmental Protection's discretion, submissions continued to be received up until 2 May 2002.

A total of 43 submissions were received:

1. Two submissions from special interest groups; namely
   1.1. The Donnybrook Citizens Supporting the Donnybrook Woodchip Mill in support of the proposal, and
   1.2. The Preston Valley Road Safe Group put in a submission opposing the proposal as described.

2. One submission from a member of Parliament opposing the proposal as described;

3. Four submissions from State Government Departments or agencies namely:

   3.1. Department of Environmental Protection and the Water and Rivers Commission (South-West Region);
   3.2. South West Development Commission;
   3.3. Department of Planning and Infrastructure;
   3.4. Department of Minerals and Petroleum Resources;

   Providing advice on aspects of the proposal;

4. Thirty six submissions from members of the community either in support or opposing the project.

Summary of Main Issues

Road Transport

The main issue of concern reflected in the submissions related to the increase in the number of trucks associated with the proposed Woodchip mill's activities, particularly on the SW Highway and along the Preston Valley Rd (Donnybrook-Boyup Bk Rd). Many submissions express concern that as these roads are already unsafe (especially for the school busses using some of these routes) and as funding for their improvement is not currently identified, the addition of the extra trucks related to mill activities poses a serious safety issue.

The SW Highway and the Preston Valley Rd are designated heavy haulage State roads which according to Main Roads Western Australia (MRWA) are capable of taking the predicted increase in traffic. The State government is responsible for their maintenance and improvement. WAPRES will be adding less than 5% to the total traffic on these roads in 2006 and will form about 24% of the heavy truck traffic along Preston Valley. Other heavy transport users include other log trucks and heavy transport associated with the haulage of farm produce and mineral sands.

(*In the PER*) WAPRES has proposed the commitments stated on Page 8, P9, P51, P61 and P97-98 to do all in its power and control to minimise and manage their addition to heavy traffic. This will be through haulage route selection, times of travel, maximising the use of existing rail infrastructure, checks and controls on the contractors employed and the design and maintenance of roads under their control. Close consultation with the community will reduce implementation delays for any further measures identified. For example, WAPRES has already undertaken a program of installing two way radios in school busses on routes subjected to substantial chip log related heavily vehicle traffic.

In addition, the WAPRES has expressed a willingness to work with:

- MRWA, local government (including the Shire of Donnybrook-Balingup);
- concerned groups (parents, schools, bus operators, general public commuters, the Preston Valley Road Safe Group etc); and
- other heavy vehicle operators.

on an ongoing basis to address road safety issues and to determine improvements necessary. WAPRES are of the view that many of these issues can be addressed through the proposed Community Consultation Group that will be established with a view to improving the project.

Notwithstanding opportunities to limit the impacts of the current proposal, current safety issues are a serious concern within the community and accordingly should be addressed through whole of Government initiatives, and funding for improvements sought. Based on the strength of submissions provided during both the community consultation preceding the preparation of the PER document; and the public submission period, issues such as overtaking lanes, improved width and road shoulder quality, and the designation and construction of safe bus stops need to be considered. It is clearly the community's view that road improvements are required irrespective of whether this project proceeds.

Pollution Impacts

Matters relating to noise resulting from operation of the plant, truck and mobile plant operation on nearby land owners and residents along transport routes have been identified, as have impacts resulting from dust, water pollution resulting from stormwater leaving the site, and air quality.

WAPRES will minimise the impact of the noise and air emissions of transport of woodchips to the port by utilising the existing Manjimup-Bunbury railway.

The environmental and social impacts of the Donnybrook Mill will be carefully designed and managed to take into account the closest residences, the rural lifestyle surrounding the proposed site and tourist potential of the area. Strict control measures for noise, dust and groundwater/surface water protection are proposed and commitments regarding the management are listed in the PER document.

Acoustic modelling of the woodchip mill predicts that noise levels can comply with the *Environmental Protection (Noise) Regulations* 1997 (as Amended) by virtue of the reasonable separation distances to noise sensitive land uses, enclosure of fixed plant, location and construction of noise bunds.

1. General Comments on the Proposal

1.1 General

Length of Submission Period: The PER has historically been eight weeks duration. However, this PER was only open for public submissions for four weeks.

Amendments to the administration procedures of the Environmental Protection Act pertaining to the levels of Formal environmental assessments, have reduced the number of Formal assessments classifications from three to two. Classification 'PER' now incorporates both the former classifications 'PER' and 'CER'. The administration procedures identified variable submission length of between four to eight weeks at the discretion of the EPA.

The Department for Planning and Infrastructure (DPI) report South West Woodchip Mill Strategic Site Assessment Study (October 2001) has statistics that differ to those in the Donnybrook Woodchip Mill Public Environmental Review (PER) (ATA Environmental, 2002).

Plantation bluegum resources in the South West region are approaching the end of the first rotation and require harvesting. This demand has to present, been met by mobile chip mills operating in various locations in the Region. Logs are being transported to the mobile mills by truck, and wood chip product is similarly being carried to the Port of Bunbury for export. Implementation of this proposal will result in the bulk of chipping activity being concentrated in a single location, and rail replacing road for the transport of chip product.

A number of submitters have identified discrepancies between the information provided by WAPRES in the PER document and the DPI report. The assumptions made in the DPI report are given in Appendix 2 of the PER. Table 1, P15 lists the Donnybrook Woodchip Mill PER assumptions.

The truck logistics in the PER differ from those used in the DPI report for the following reasons:

- The DPI report considers all the bluegum plantations in the SW catchment, even non-WAPRES owned or managed plantations and assumes all will be processed by WAPRES (requiring a capacity 1.5mtpa). The PER considers only WAPRES owned and managed resources and a maximum capacity at Donnybrook of 1.0 mtpa. Hence, the PER statistics can be up to 67% less than those quoted in the DPI report.

- The DPI report considers different operating and trucking hours.

- The DPI report assumes the Diamond Mill (Manjimup) capacity to be less than the WAPRES forecast.

- The log haul routes assumed in both reports have minor differences.

As for the DPI report, transportation of wood chip logs associated with this proposal will occur principally on major highways, haulage routes, and arterial roads. Truck transport routes from the plantations to the woodchip mill will vary throughout the life of the project as different plantations mature.

Donnybrook, being central to the plantation resources minimises many of the impacts associated with the project development. Use of rail to transport wood chip product reduces heavy vehicle kilometres in the Region and in particular limits heavy transport north of Donnybrook

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1.2 Mobile Chippers

- Return more (20%) to the farmer
- Do not have more environmental impacts than fixed chippers

Mobile chippers are currently in use at Moore Rd, Dardanup and intermittently in the Inner Harbour, Bunbury. Notwithstanding the implementation of this proposal, mobile chippers will continue to be used strategically (for example in plantations where log transport is not viable or rail transport may be accessible on site) with a

view to reducing unnecessary log transport. Current installed capacity of mobile chippers is about 250 000 tpa.

Mobile chippers are an uneconomical method of chipping compared to a fixed chipper as:

- the product quality (chip size uniformity) is inferior;
- greater wastage;
- fuel usage /ton chip is higher for mobile plants driven by diesel powered generators;
- air emissions are clearly higher, as are noise emissions; and
- issues relating to the management of solid and liquid wastes such as oils are more difficult to regulate.

Notwithstanding the use of mobile chip mills, and with the exception of the case where the plantation is on an existing rail route, trucks will still be required to transport the chips to other rail routes or to Bunbury Port. Economies of scale relating to rail transport will also be compromised.

Although the diffuse positioning of mobile mills may result in a reduction of heavy transport on certain feeder routes and main roads leading to the proposed site of the Donnybrook chip mill, traffic on alternative minor roads will increase as a consequence. For example, heavy vehicle transport related to log haulage through the town of Donnybrook, which would decrease (should the proposal be implemented on Lot PAA262), will increase above current levels should processing occur in mobile mills.

1.3 Issues Relating to the Use of Rail

Overhead rail hoppers will inhibit the use of normal height rolling stock or special freight.

Currently only the WAPRES owned Diamond Mill in Manjimup uses this section of railway. The design of the overhead hoppers can be such as to allow the use of normal height rolling stock or special freight as has been allowed elsewhere. Use of on-line overhead bins will reduce loading times and shunting noise.

What is the siding length and location?

P1, P11, P16, P24, P44 and P65 discuss the possibility of a railway siding.

The requirement for a siding has not been finalised. In the event that a rail siding to the Manjimup-Bunbury Railway line is determined as necessary to support this project, a separate referral to the EPA will be made with Westnet as the proponent. Depending upon configuration, the rail siding may be approximately 0.5km in length to accommodate trains of the length proposed, and located as shown on Figure 5a of the PER document.

As indicated above and with limited current use of the track, WAPRES has approached the rail regulator with a view to allowing wood chip loading to occur with the train located on the track. This would eliminate the need for a siding.

1.4 Pulp Mill

The SW needs an integrated and complete forestry industry that includes a paper and pulp mill. This would minimise the amount of profits and low priced primary products sent overseas when much higher value added paper is bought back.

The DPI report (P13 and P14) notes that present, there is no indication that WAPRES and the Albany Plantation Export Company or their Japanese parent companies (Marubeni, Itochu or Oji Paper) are interested in a pulp mill in Western Australia. Furthermore, there are no guarantees that Western Australia would be a more cost effective and more attractive destination for pulp mill investors in the future.

In broad terms, Lot PAA262 is too small for a significant industrial development of the scale of a paper and pulp mill. The site and surrounding area does not offer sufficient water reserves nor present opportunities for the disposal or re-use of significant quantities of treated effluent.

1.5 Tourism

The mill and operations are incompatible with tourists. The mill will not attract tourists to the area.

P34, P35 and P114 describe the Proponent's awareness of the mill's activities having both positive and negative impacts on tourism in the area. Commitments to support/implement a number of tourism initiatives are also presented. P105 discusses road safety issues as they may impact on tourist routes.

Tourism initiatives included mill guided tours, promotional material, tourist parking and display boards. The Proponent has indicated a willingness to work with MRWA, Council and concerned parties to address road safety issues through the Community Consultation Group.

Three other mills in the South West are surrounded by housing, recreation facilities, vineyards (within a kilometre), tourist precincts, shops, schools etc and are able to attract a substantial number of tourists. Pemberton Mill has over 9000 visitors pa, Dean Mill over 600 visitors pa and Diamond Mill over 500 visitors.

Table 5 in the Social Impact Assessment (Community Perspectives 2002) as presented in full in Appendix 8 of the PER, notes that 2.2% of the population (about 37 individuals) are employed in accommodation, cafes and restaurants within the Donnybrook area. There was no separate listing for Tourism.

2. Site Selection

The DPI report does not 'favour' Donnybrook.

The DPI 2001 report found Donnybrook to have the lowest overall annual total resource cost ie bottom line. The Hon Alannah Mac Tiernan (Minister for Planning and Infrastructure) stated the Strategic Site Assessment Study conducted by DPI found that Donnybrook was 'preferable' to a number of other South West sites. The Minister noted 'Donnybrook came out ahead of the pack' (Government of West Australia Media Statement, released 19 Sept 2001). Ms Mac Tiernan said "On the balance it would appear that Donnybrook is the most favoured option" (Donnybrook/Balingup Herald 2 Oct 2001, pg1).

Need a better justification on why Donnybrook was selected out of the 7 other options.

P16, P17 and P19 address the justification of the chosen site.

The south Donnybrook area has long been considered as having suitable sites for a South West woodchip mill. In 2000, the then Department for Resources Development released a report outlining a strategy and action plan to facilitate the development of a plantation based wood processing industry in WA. Titled '*Wood Processing Industry Development and Infrastructure Strategy Plan for Western Australia*', the report provided a possible framework in which government, industry, communities and other stakeholders could develop the region into a world class plantation growing and processing area. In addition, the report reinforced the concept of a 'three mill policy'. This envisages three major woodchip mills being established at Albany, Manjimup and Donnybrook to process bluegums in the region (DPI, 2001).

Considerable effort in terms of time, money and resources has been invested by WAPRES in the identification of an appropriate site for the woodchip mill. The company undertook a site selection study (ATA Environmental, March 2001) which presented a comparative environmental analysis of five potential sites within the South West Region for the woodchip plant in reasonable proximity of the Port of Bunbury. Table 2 in the PER summarises the comparative advantages of each site, and rates their significance.

In addition, the DPI (DPI, 2001) considered seven locations in the South West as part of a strategic assessment for the selection of a woodchip site. These were Kirup, Greenbushes, Hester, Wilga, Picton Industrial Estate, Donnybrook and Bunbury Port. Subsequently six potential sites in Kirup were likewise assessed (DPI, 2002).

In the event the project does not proceed in Donnybrook, the most likely outcomes will be that either:

- a chip mill facility be established in the Port of Bunbury; or
- regional resources be chipped using mobile plant and chip product be trucked or railed to the Port of Bunbury.

If Bunbury is the approved location, it is likely that around 80% of the logs will travel through Donnybrook (population about 2500) and all would enter Bunbury by rail or road transport.

The chips resulting from the mobile chippers would still require transport to Port and movements through Donnybrook would still be around 100 per day.

2.1 Kirup Option

Kirup has the following advantages over Donnybrook:

- Wilga – Grimwade Rd has only 2 houses
- Reduces road transport by 11%
- Traffic in Preston Valley drops
- School bus routes avoided
- Does not use the dangerous section of the SW Highway between Donnybrook-Kirup
- Kirup Progress Association is pro the mill
- Kirup was a timber town. The suggested site (east of the SW Highway, east of the Westcorp packing shed) is readily available and vested in CALM
- Has rail access
- Has trees surrounding the site
- Has a low population
- Has funding to upgrade the Wilga-Grimwade Road
- Has a network of forest roads which segregates the logs transport from the general road users
- Diamond Mill runs two locomotives and runs at a profit, thus sites south of Donnybrook likewise could run two locomotives
- Kirup has enough water to support a pulp mill

P20, P21 and P116 summarise the advantages of PAA262 in Donnybrook site over potential Kirup sites. P20 discusses the results of a DPI assessment of six potential sites in Kirup (DPI, 2002). Comments regarding a pulp mill in Point 1.4 are relevant.

In relation to the number of nearby houses, the EPA criteria for issues such as noise, visual amenity, air quality etc must be met at the nearest residence in order for a facility's activities to comply with the *Environmental Protection Act.* Given the proximity of the nearest houses to the site with the most potential, engineering and operational controls on noise would be extensive and expensive and yet not necessarily meet relevant EPA criteria for noise. There is also the potential for houses to be developed on adjacent undeveloped land making future management difficult to accommodate.

In relation to the identified reduction in road distance travelled, the quoted drop in road kilometres of 11% for the Kirup site only applies to a woodchip production rate double that expected by the Donnybrook mill (1.5mtpa compared to 0.75mtpa). Once reduced accordingly, the savings do not compensate for the increase in fuel usage, greenhouse gas emissions resulting from the increase in train kilometres and requirement for two locomotives.

In relation to use of the South West Highway between Donnybrook and Kirup, MRWA have provided advice that the South West Highway is suitable for the proposed level of heavy traffic. Notwithstanding the implementation of the proposal as described, some logs from the northern, north-eastern and north-western plantations will still be required to use portions of the Donnybrook-Kirup section of road, even if the Kirup site is developed. Accordingly a number of school bus routes would continue to be affected, and possibly on portions of road of a lower standard than the South West Highway and the Valley Road.

Support for the project by the Kirup Progress Association is noted. Selection of the preferred site is a combination of support by the business community, the ability to manage impacts arising with minimal environmental impacts and financial sustainability. The case against Kirup as the preferred site has been summarised in Section 2 above. The Donnybrook site has over 500 supporters for the proposal as described.

The process of obtaining land vested in CALM (3 of the potential Kirup sites) will require re-zoning, resolving native title issues, partial clearing of native forests, environmental assessments of conservation areas etc - which would prove costly in terms of money and time schedule implications.

Access to rail availability at the Kirup site is noted, however haulage to this site would require the use of two locomotives as opposed to a single locomotive for the Donnybrook site. This has added purchase/lease costs, operating costs, fuel usage, greenhouse gas, noise emission costs etc. Minimisation of capital infrastructure, operating costs and environmental impacts is critical in providing a reasonable return to growers to ensure the environmental and economic benefits of a second rotation bluegum crop can be realised.

While the proponent intends that the majority of employees would reside in Donnybrook, the low population in Kirup has resulted in insufficient accommodation and services in the immediate vicinity of the mill such as cleaning, provision of mobile telephone services, garages, etc. Having no mobile telephone services (no digital or CDMA signal) in Kirup can impede communications for all road users and local businesses servicing the mill. The Donnybrook site, AA262 has mobile coverage as well as fibre optic and copper cable accessibility.

According to the DPI report (2001, P32 and P33):

- The Kirup option would require chipping at the Port of around 0.1mtpa and the continued use of the Diamond Mill.

- The road between Kirup and Wilga would require a major upgrade. The Kirup-Grimwade (17km, sealed) portion will require widening to 7m road ($1million). The Grimwade-Wilga Rd portion (18km, gravel surface) would require a 7m seal ($3.6 million). The road linking Wilga to Donnybrook-Kojonup Rd would require widening to 7m ($250 000). Staged improvements of the Wilga–Kirup road would cost $5.4 million and only provided a low standard road. Construction of a more efficient haulage route would require further expenditure and possibly a new road alignment between Wilga and Grimwade.
- The option of not sealing the Wilga-Grimwade Rd (at a maintenance cost of $475 000 pa as opposed to $140 000pa for a sealed road) was not considered practical for a road with such traffic loads.

- Kirup, Wilga and Boyup Bk would experience substantial increases in truck movements.

- The cost of upgrading the train track between Kirup and Donnybrook to facilitate a single engine is $15million. This includes the construction of 12km of new rail alignment.

- A 38km 33kV power line from Bridgetown would cost around $1.9million and would follow the Bridgetown-Greenbushes line. It should be noted that the existing Bridgetown-Greenbushes line encountered significant community opposition with a large portion being forced underground at considerable expense. Currently a single 132 radial supplies power to the Bridgetown substation. Should this be out of service (planned or unplanned) the mill site would lose power supply. Western Power is not constructing a second radial until late 2005.

According to the DPI assessment of the six potential sites in Kirup (DPI 2002):

- Six sites were assessed against the criteria of land suitability, land availability, rail access, social impact and access to power. Three of the sites were state owned, requiring native forest clearing which has related conservation value, tenure, Aboriginal heritage, zoning and time schedule implications, thus making these sites unattractive.

- Of six potential sites, only one does not result in a moderate to high impact on the townsite or the adjacent landowners. This site had poor road access from the east and north, moderate from the south and was identified as having an access that has a low – moderate social impact/opposition potential. This site shared the most expensive road cost estimate of the sites considered. There is no indication that many of the other issues identified for the Donnybrook site will not be replicated to this site.

2.2 Site PAA262 versus C5768

The second site does not resolve the concerns generated from consideration of the first site. No concerns regarding C5768 were resolved or minimised in the selection of PAA262.

P17 and P19 list a number of advantages PAA262 has over C5768.

Preston AA Lot 262has the following advantages over C5768:

- has sufficient cleared agricultural land for the development of the woodchip plant, and tracts of natural vegetation sufficient for amenity. C5768 is a reserve zoned for conservation, recreation and gravel extraction, is subject to native title and would require the partial clearing of remnant forests. Resolving native title issues, partial clearing of native forests, environmental assessments of conservation areas etc would prove costly in terms of money and time schedule implications.

- has a lower neighbouring density (13 houses and 21 lots within a 1km radius from the outer edge of AA262 as opposed to 43 separate lots/locations within a 500m radius from the centre of C5768 (Shire of Donnybrook-Balingup, 2001).

- is not adjacent to surface water features whereas C5768 had the Minniup Creek running along the east boundary;

- is further off the South Western Highway (more than 1.1km) than C5768 which is adjacent to the SW Highway;

- is further from the SW Highway intersection with the Donnybrook-Boyup Bk - a section of road considered to be dangerous due to entering traffic, the proximity of the railway crossing and the winding, climbing nature of the SW Highway at this section. Hence the mill access road would be safer.

- and is further from the Donnybrook townsite, allowing Donnybrook to grow without mill impacts.

2.3 Hester and Collie

- *Why not develop two mills at Hester and Collie?*

The south Donnybrook area has long been considered as having suitable sites for a South West woodchip mill. In 2000, the then Department for Resources Development released a report outlining a strategy and action plan to facilitate the development of a plantation based wood processing industry in WA. Titled '*Wood Processing Industry Development and Infrastructure Strategy Plan for Western Australia*', the report provided a possible framework in which government, industry, communities and other stakeholders could develop the region into a world class plantation growing and processing area. In addition, the report reinforced the concept of a 'three mill policy'. This envisages three major woodchip mills being established at Albany, Manjimup and Donnybrook to process bluegums in the region (DPI, 2001).

Development of a wood chip mill at Hester, although attractive in terms of availability of abundant suitably zoned land, access to rail, power and road infrastructure is not central to the plantation timber resource. Additional operating and environmental impacts associated with the use of dual locomotives have been previously identified. Establishment of a mill at Hester, within reasonable proximity to the Diamond Chip Mill may put pressure for closure of the latter. Areas adjacent to rail near Collie would provide access to the eastern plantation resource, however the Collie rail line is currently at capacity and additional rail traffic could not be accommodated.

Further, two smaller mills (the total sustainable plantation resource in the catchment is about 1.5 mtpa) are economically sub-optimal.

2.4 Miscellaneous

The PER (P21) states the provision of power supply to Kirup will be more costly and the proponent would require significant Government support. This is misleading. Investigations by the DPI have revealed that that the cost supply to Kirup is similar to Donnybrook.

The DPI report cost the power supply (33kV, 43km dedicated cable from Picton) to the Donnybrook site at $2.15 million (P5 and P31). Subsequent advice from Western Power to WAPRES has indicated costs well in excess of the DPI estimate, of around $4.2 million (with the cost of a possible transformer upgrade requiring an additional $1.5 million input). This option would not be feasible. It would appear that the costing of power supply to both the Kirup and Donnybrook supply requires further definition.

WAPRES has expressed a willingness to work with Western Power to supply power that other business may benefit from, not necessarily by a dedicated line as assumed to date. Local businesses and groups supporting local businesses will support such a venture. The South West Development Commission is also seeking infrastructure development to upgrade the community power supply irrespective of the project which a dedicated supply will not provide.

Costs for the provision of power are only one consideration in the determination of the preferred location and mill configuration. Similar constants apply to both the Donnybrook and Kirup sites.

Collie resources must be processed in Collie and railed to Bunbury. Diamond Mill should be used to process logs south of the Blackwood Valley eg Scott Coastal Plain.

Section 4.2 addresses the issue of haul routes and traffic concentrations changing with the plantation cropping cycle. Figure 2 shows the majority of the proposed routes.

All options will be considered in an ongoing effort to optimise the log haul transport routes in terms of haulage distance, use of existing infrastructure, improved safety, minimising environmental and social impacts etc. By-passing certain towns, temporary mobile chipping operations and synergy with other chipping companies will all be constantly addressed in order to streamline the process and minimise social and environmental concerns.

The limitations of track access to the Picton-Collie line have previously been described in section 2.3 above. With the current demands of coal and alumina haulage, there is no excess capacity on this rail route that would allow the development of even a reduced throughput wood chip mill. An alternative would be to transport wood chips to the Port of Bunbury by heavy road transport.

Expanded plantation based wood chipping operations the Diamond Chip Mill would result in increased log road haulage distances from south eastern and western areas. Log haulage distances are minimised with the development of a central processing chip site, such as at Donnybrook. The haul routes are not fixed at this stage and WAPRES cannot commit to a log haul network until a site for the mill is selected and approved.

Explain why on Table 2, P19 Lot AA262 characteristics of air quality, light overspill, air safety and odour were assessed as non-applicable.

Table 2 is a table broadly summarising the findings of a detailed site assessments (ATA Environmental, 2001, South West plantation Woodchip report No.2001/155). The comparative site assessment was undertaken with a view to identifying constraints and opportunities of five potential sites within the South West Region for the woodchip plant in reasonable proximity of the Port of Bunbury. Table 2 broadly summarises the comparative advantages of each site, and rates their significance.

In relation to the summary of Lot AA262, the site is not near a local airport hence air safety is not compromised by high buildings, stack etc. For reasons listed in Point 5.2, light overspill can be managed to a similar degree for all the sites considered. Given the low potential for odour resulting from the chipping process, lack of wastewater production and accordingly need for treatment and as a consequence of the proposed management of solid and liquid waste, odour is not considered a significant impact. This is the same as for the other sites considered in the comparative site assessment. Given that the activities carried out at the mill are physical (there are no chemicals used nor any combustion processes required on the site) the potential for air impacts are limited. There will be no need for stacks, incinerators or cooling towers with potential impacts on air quality is limited to the activities of the trucks and dust control – issues which are the same for all the sites considered.

Wood chip mills are not prescribed under the *Environmental Protection Act* (1986). Activities carried out at Prescribed Premises are identified as having the potential to impact on the environment, and operators of the plant must apply for and be granted a Licence to Operate.

3. Planning and Zoning Issues

The subject land is zoned 'General Farming Pastoral' under the Shire of Donnybrook-Balingup Town Planning Scheme (TPS) No 4. Within the TPS No 4, the general objectives for the development of the 'General Farming Pastoral' zoned land are:

> *….To seek to protect the economic viability of the General Farming Pastoral areas, to seek to encourage developments which will improve the Shire's population base, and in recognition of the aesthetic and tourism importance of the scenic landscape, to realise the need to retain the rural scenic character of the site and of the district by ensuring through siting and landscaping provision that any development does not change the scenic rural character….*

Should the Shire of Donnybrook-Balingup Council determine that the proposed mill falls within the definition of 'General Farming Pastoral-Rural Industry' under TPS No 4, then the matter of development approval could be progressed without re-zoning. Should the Council determine that this land use does not fall within this definition, an amendment to the scheme will be required.

The Albany Woodchip Mill similarly falls under the category of the 'Rural Zone' where permitted land uses include 'rural industry'. In this instance, no re-zoning was required.

3.1 General

The following matters were raised in regarding the inappropriateness of the site in relation to planning issues:

- As Donnybrook Shire only contains 4.1% of the log resources, the mill is not a 'local' industry. It will be processing timber from as far afield as 150km. The mill catchment should be confined to the Shire boundaries.
-
- The mill is not compatible with the Draft Rural Strategy 2000 which supports lifestyle blocks and tourism development.
-
- The thorough and very time consuming process undertaken to finalise the Donnybrook Rural strategy should not be overturned by seeking a re-zoning of AA262 as this would set a precedent for the development of an industrial area and would conflict with tourism.

Zoning is discussed on P13. Comments in Point 6.6, which discuss impacts on lifestyles, are relevant.

Woodchipping fits the 'rural industry' category as it involves the processing of a primary product. Some logs are sourced locally, however, logs from further afield will also be required to ensure the economies of scale of the mill and to prevent the requirement for additional mills to service each of the 16 other shires where plantations are grown. For this type of industry, taken in a regional context, this should still be regarded as 'in the locality', given that the expansive area required for economically viable plantations generally stretches over single Shire's boundaries.

A similarly sized wood chip mill has been located on Down Rd in the Shire of Albany. The Albany Woodchip Mill receives chip logs from as far afield as Williams and falls under the category of the 'Rural zone' where permitted land uses include 'rural industry'. In this instance, no re-zoning was required.

The industry is not 'primary' as the trees have been stripped of bark at the plantation and hence the mill activities are secondary.

De-barking is part of the logging process and hence falls under the primary category.

Re-zoning will set a precedent and the result will be an expanded mill operation, the establishment of an industrial area or the establishment of a pulp mill. Require guarantees that there will not be any expansion in the future.

P11, P15, P108 and P109 address the Proponent's intentions regarding future capacity and their control over the establishment of an industrial area and/or pulp mill.

The Proponent recognises this concern and has publicly stated that there are no plans to develop the site other than those identified in this PER. The responsibility and authority for issuing further industrial approvals to the land immediately surrounding the proposed woodchip site lies within the discretionary powers of the Shire Council as conferred on them by legislation. The relevant head of power for the responsible authority to grant planning approval is Clause 6.1.1 of the Shire of Balingup Town Planning Scheme 4. This clause *provides "a person shall not commence or carry out development or develop or change the use of any land…reserved under this scheme (ie TPS) without first having applied for and obtained the consent of the Council"*.

Any developments that have the potential to impact on the environment (or the developments of a prescribed nature) must be referred to the EPA for consideration.

The DPI report (pg 13 and 14) notes that present, there is no indication that WAPRES and the Albany Plantation Export Company or their Japanese parent companies (Marubeni or APEC who are a joint venture between Oji Paper Company and Itochu Corporation) are interested in a pulp mill in Western Australia. Furthermore, there are no guarantees that Australia would be a more cost effective and attractive destination for pulp mill investors in the future. A pulp and paper mill requires provision for power, abundant water and treated waste water disposal or reuse opportunities, and extensive land holdings. The proposed site does not demonstrate any of these requirements and accordingly will not be considered as a prospective pulp and paper mill site.

What other rural industry makes this much noise and pollution?

Within the General Farming Pastoral zone, discretionary land uses include 'Rural Industry'. Rural industry is defined in the TPS as meaning an industry handling, treating, processing or packing primary products, grown, reared or produced in the locality and a workshop servicing plant or equipment used for rural purposes in the locality.

Allowable land uses identified under the Shire of Donnybrook-Balingup Town Planning Scheme (TPS) No 4 within the General Farming Pastoral zone include tavern, sports ground, service station, rural pursuits, public assembly, produce store, plantation, petrol filling station, milk depot, light industry and intensive cultivation.

Potential impacts arising from several of these allowable uses are summarised in Table 1.

TABLE 1
POTENTIAL IMPACTS ARISING FROM ALLOWABLE USES UNDER THE GENERAL FARMING PASTORAL ZONE

Allowable Uses	Pollutants	Comments
tavern	Noise, waste water treatments system leachate impacts on ground and surface waters, solid waste.	intermittent
sports ground	Noise, waste water treatments system leachate, impacts on ground and surface waters, solid waste.	intermittent
service station, petrol filling station	Hydrocarbons including fuel, grease and oil, waste water treatments system leachate impacts on ground and surface waters, metals and asbestos from maintenance areas	May persist well after activity has ceased
public assembly	Noise, waste water treatments system leachate impacts on ground and surface waters, solid waste	intermittent
produce store	waste water treatments system leachate impacts on ground and surface waters, solid waste.	Anticipated minor.
milk depot	potential for spillage, waste water treatments system leachate impacts on ground and surface waters, solid waste.	No milk processing.

light industry	noise, hydrocarbons including fuel, grease and oil, waste water treatments system leachate impacts on ground and surface waters, metals and asbestos from maintenance areas, solid and liquid wastes	dependant on specific industry involved
intensive cultivation.	noise (irrigation pumps and mobile machinery), stream and river pollution (suspended particles, nutrients, pesticides), solid wastes.	vary dependant on practices and location

Prescribed Premises as described under the *Environmental Protection Act* (1986) may also be permitted within the General Farming Pastoral zone, under discretionary (unspecified_ land uses within the zoning. For example, wineries processing in excess of 500 tpa (the grapes for which may be sources from within or outside the Shire) must apply for and be granted a Licence to operate under Part V of the Act. Construction must be undertaken under Works Approval.

Wineries can produce between 2 to 5 kL of wastewater for each tonne of grape crushed. Wastewaters must be treated and not allowed to enter waterways as they contain elevated levels of suspended solids, biological oxygen demand, dissolved solids and nutrients. Wineries store and use hazardous chemicals including alkalies and acids.

3.2 Residential Density

Figure 3 is dated 1975 and does not show more recent subdivisions in the Brookhampton area. This makes the density appear lower than in reality.

An up to date list of ratepayers obtained from the Shire and maps (CALM,1999) showing the most recent subdivisions along Wade Rd, were used to calculate the surrounding density and determine mailing lists and contacts.

Notwithstanding the date of the base mapping, the criteria for measuring compliance regarding environmental impacts such as noise, amenity, dust, air quality etc are measured from the closest sensitive residence affected. In this instance, the nearest residence is the residence about 160m east of the north east corner of the site. The other properties further afield have been demonstrated to also comply. There are 4 existing houses and 11 lots within 1km measured from the centre of Lot 262. Measured from the outer edge of Lot 262, there are 13 houses and 21 lots within 1km.

Figure 3 shows the location of the site with respect to the town, the previous site considered, the SW Highway, the railway line, nearby forest reserves and the land immediately adjacent where property boundaries are current.

4. Biophysical Factors and Issues

4.1 Remnant Vegetation

It is inappropriate to use the proposed road reserve for the access road to the SW Highway as the Vegetation and Flora Assessment (Appendix 9) has assessed this road reserve as having value as a local corridor and of conservation value. The remnant stands should be left undisturbed. Old Brookhampton Rd should be left for walking, riding, etc.

The Flora and Fauna Assessment (Appendix 9) is discussed in the context of the existing environment on P42 and P43 respectively, and in the context of its management and protection on P70 and P71. Commitments are listed on P4, P98 and P70-72.

The Flora and fauna survey did not reveal any threatened flora or flora listed on the CALM Declared Rare and Priority Flora database. The Old Brookhampton Rd is within a road reserve and is not a designated recreational area, although it is recognised that this does not diminish its value for activities like walking and riding.

If deemed necessary, the Flora and Fauna Assessment recommends that the local conservation values and linkage function of the corridor can be maintained by restricting clearing to one side of the road reserve. This would apply to less than 300m of the road (Fig 4).

The surrounding land has been extensively modified by a long history of agricultural activities. Large portions of the remnant stands will be maintained as a sound buffer and for general visual amenity. However, their conservation value has been compromised as grazing within the stands has resulted in the loss of many of the lower stratum understorey plant species. In addition, selective logging has resulted in the loss of the taller mature jarrah and dominance of the marri at the site.

WAPRES has yet to finalise the alignment of entry and exit roads to the proposed site.

4.2 Fauna (including Specially Protected Fauna)

The fauna assessment is only an opportunistic sampling and therefore not complete. Given that Baudin's cockatoo (Rare or likely to become extinct), the Brush tailed Phascogale and Forest Red Tailed Cockatoo (Fauna that is otherwise Specially Protected) are common in the area, a trapping program or more detailed survey should be completed.

The Flora and Fauna Assessment (Appendix 9) is discussed in the context of the existing environment on P42 and P43 and in the context of its management and protection on P70 and P71. Commitments are listed on P4, P65, P98 and P70-72.

The site is on cleared agricultural land with a long history of cultivation. The majority of the vegetation structure within the study area has been modified as a result of sheep and cattle grazing, weed invasion and past old logging. Implementation of the project will result in the removal of less than one hectare of degraded native remnants. The remaining vegetation on site will be maintained and additional trees planted along boundaries to protect against erosion and to enhance the visual amenity.

No evidence of Specially Protected or Priority fauna were noted during the site survey. Those Schedule and priority Taxa identified on the CALM register as having a possibility of occurring in the vicinity, are considered mobile are considered to occasionally visit the area. Large protected and managed reserves and plantations exist in close proximity to the site (Figure 3) providing habitats that will not be affected by the mill activities.

The Proponent has proposed if specially protected fauna be identified in vegetation remnants identified for removal, CALM will be advised and a management plan developed for the population protection which would include trapping and relocation.

4.3 Dieback

Truck wheel washing will spread dieback.

Regardless of the site chosen, the possibility of spreading Dieback will require careful and vigilant management. A Dieback Prevention Plan will be developed as part of the Vegetation Management Plan that will be implemented prior to construction.

5. POLLUTION MANAGEMENT

5.1 Noise

5.1.1 Chip Mill Noise

The following issues were raised by submitters:

- The noise modelling does not take into account the noise of the trucks on site, of the movement of the logs during handling, chainsaws for jammed logs, reverse beepers, trains shunting, trains in general and of vehicles after hours.

- Site photos, wind roses and calculations of noise levels from different wind vectors are not included.

- All industrial noise is an imposition on a rural setting.

- An explanation of the noise contour map is required.

- The acoustic assessment (Appendix 10c/8.0) states that ‘noise exceeds the DEP criteria’.

- Noise criteria that are set as 'as low as reasonably practical' are unlikely to satisfy both the Proponent and nearby residents.

Section 5.4.6 discusses the modelling undertaken to predict the mill noise levels and the management commitments proposed to ensure compliance with the *Environmental Protection (Noise) Regulations* 1997 (as Amended). Commitments to manage site noise impacts are given on P6, P68, P80 and P99.

The following assumptions (Appendix C of Appendix 10c) are made with regard to the modelling of the woodchip mill site:

- The accumulative noise of a truck moving, a de-barker (enclosed), a chipper (enclosed), a front end loader, a dozer, a train at idle, a conveyor, stacker and train loader.

- Provision is made for the tonality, modulation and impulsiveness of mill activity noise (Appendix 10c). The impulsive characteristics of loud noises of short duration such as beepers, log jams, brake screech etc will be governed by the assigned L_{Amax} (maximum noise level) and L_{A1} (noise exceeded for 1% of the time) noise levels.

- Dominant wind directions and speeds are considered. Weather conditions are as stipulated within the Environmental Protection Authority's "Draft Guidance for Assessment of Environmental Factors No. 8-Environmental Noise" for the day and night periods. Modelling of the noise emission propagation was carried out using 'SoundPlan'. Both single point and noise contour calculations were used to determine the noise level that would be received at a noise sensitive premises located around the facility. Noise contours show the overall noise level to be encountered at a location due to the various activities carried out. Single point calculations show the influence of individual items on the overall noise resulting at a specific location.

- SoundPlan uses the theoretical sound power levels determined from measured source pressure levels to calculate the noise received at a specific location.

The PER comments in Appendix C that the wind roses, site photos and tabular recorded noise data are not included. The additions comprise over 100 colour pages and add considerable bulk to the already cumbersome Appendices without being readily useful information to the general public. These are available on request and at printing cost. The model calculations are done on the basis of the 'worst' likely scenario and take into account the dominant wind speed and directions for the nearest residences. DEP assessing officers and noise specialists will be provided with the omitted appendices.

The noise levels can be designed and managed to comply with the *Environmental (Noise) Regulations* 1997 at the nearest residence all the time (as stated in Appendix 10c page 3) as long as all the noise controls listed in Appendix 10c and Section 5.4.6 of the PER are enforced. Noise levels at all other residents further from the mill likewise comply.

Monitoring at the Preston AA262 showed noise levels to average around L_0 of 50-70dB(A), L_1 around 45-55dB(A), L_{10} around 35-45dB(A) and L_{90} around 30-35dB(A).

- Noise modelling does not take into account the service, maintenance and waste removal trucks

Service and maintenance trucks can be scheduled to coincide with daytime deliveries during which higher levels apply to noise sensitive premises surrounding the site. These will not be B-doubles but will include smaller trucks and vehicles.

- What assumptions are made regarding truck size, capacity and activities in the modelling

The model looks at average noise levels – impulsive, tonal and modulated sounds are accounted for by applying an adjustment factor to the conditional assigned noise levels. The trucks are 45ton capacity road trains with typical sound power shown in Appendix 10c.

- Impulsive transport noises will be an intrusion and imposition on the rural character of the area.

Section 5.3.2 discusses transport noise and shows compliance with EPA criteria. Commitments to manage transport noise are given on P8, P50, P58 and 97. Comments in Point 2.2.2 above are also relevant.

Locomotive engine drivers are required to sound their horn upon approaching an unprotected level crossing or pedestrian crossing, or optionally to warn drivers or pedestrians of their approach at protected crossings. Such audible warning devices are understandably intrusive but are beyond the control of the Proponent as they relate to safety or efficient operating practice.

In relation to train and mobile plant audible warning devices, reversing beepers are both a safety requirements and necessarily intrusive. Similarly to use of external horns used in public address systems or ringers on telephones, the beepers provide a safety function in a workplace.

There are various methods that have been accepted in controlled situations as an alternative for such devices. External telephone horns, public address and ringers can be replaced by personal paging systems. With approval, flashing lights or personal vibrating beepers can be used in place of reversing alarms in cases where it can be proven that public access to the site is limited, together with limited operator access. These opportunities will be investigated with the Site Managers, and changes made if appropriate and safety is not compromised.

5.1.2 Transport Noise

The following issues were raised by submitters:

- The noise of the increased heavy duty haulage will impact residents close to the transport routes and site.

- Residential densities are not 'relatively low' along the transport routes

Section 5.3.2 (and P8, P50, P56, P57, P58, and P97) discusses the traffic noise objectives, applicable standards and guidelines, noise modelling and proposed commitments regarding truck noise.

Transport noise is specifically excluded from the Environmental Protection (Noise) Regulation 1997. The Environmental Protection Authority has produced a draft policy for Road and Rail Transportation Noise May 2000 Section 5.3 of the draft policy *Criteria for proposed increase in road or rail traffic* states: "The objectives are:

1. that the noise emissions of the vehicles associated with the proposal should comply with 'best practice'; and

2. that the noise levels inside noise-sensitive premises associated with the proposed traffic should meet acceptable levels."

Noise level criteria to be used in the assessment are the Noise Level Objectives specified in Table 15 below. Objectives are specified upper limits of traffic noise which it is intended shall not be exceeded.

TABLE 15
TRAFFIC NOISE LEVEL OBJECTIVES

Base Criteria	Objective
ambient	Ambient + 3 dB(A)

Noise levels stated above are $L_{10\ (18hour)}$ values. The $L_{10\ (18hours)}$ value is the arithmetic average of the hourly L_{10} percentile levels (the level exceeded for 10% of the time) between 0600 and 2400 hours.

Modelling using the program T_{noise} of the transport of logs by road to the Albany woodchip mill, shows the increase in noise levels at residences located along the worst affected stretches due to log trucks complies with the above criteria. Noise levels at the residences 30m from the highway would also comply with the EPA criteria.

Given the similarities in the predicted traffic for the worst affected stretches of road for the Albany and Donnybrook projects (and the topography, prevailing wind etc for those sections of road), the increase in noise levels along the sections of SW Highway south of the mill site and the Donnybrook-Boyup Brook Rd are likely to comply with Main Roads WA base criteria of an $L_{A10(18hour)}$ of 63 dB(A).

5.2 Light Overspill

Several submitters expressed concern in relation to the potential impacts of light overspill on the rural landscape.

A summary of issues relating to light overspill is presented in Table 18 of the PER document. Commitments in relation to 'other factors', including management of light overspill is presented in section 5.4.9.

The proposed site is relatively isolated with low levels of background lighting. Adequate illumination of the mill and stockpile area is required for safe operation.

Maintaining existing stands of marri-jarrah will assist in limiting impacts. The conservation of a vegetated buffer along the railway on the NE boundary, together with site lighting design to AS 4282, together with distance from the proposed site to the SW Highway, will limit any obtrusive effects of outdoor lighting.

5.3 Chipmill Impacts on Surface and Ground Waters

P4-10, P49-51, P65-69, P85-88 and P97-101 address the commitments the Proponent has undertaken to minimise the potential environmental impacts arising from the implementation of this proposal.

The *Environmental Protection Act* (1986) lists prescribed premises that cannot operate without licensing. Operations such as wood chip mills and sawmills are not prescribed under the Act as it is not considered that their potential environmental impacts are of such a magnitude as to require use of this instrument.

5.3.1 Chipmill Management of Stormwater

- Containment dams will fail to contain runoff (by being earthen and/or under-designed to cope with heavy downpours). Hydrocarbon contaminants and tannins will pollute the Lot 271 dam and downstream the Preston River.

- With one of the largest privately owned dams built in the (Capel River) catchment, supplying water to orchard users in the area, what will the cumulative effects be?

Surface water quality and commitment to protection are discussed on P41, P66 and P74-76.

There is no surface water on the site. The site has a gentle slope draining east towards unnamed seasonal tributaries that flow into Thomson Brook that later join the Preston River. The railway reserve lies between the site and the Thomson Brook. Two small dams lie about 200m across the railway reserve to the east on Preston AA Lot 18. The seasonal Breakneck Creek lies about 800m to the south of the site and is unlikely to be affected by the site drainage due to its distance from the site. The subject land does not lie in the catchment of the Capel River.

Drainage basin overflow shall be designed for a Minimum Average Reoccurrence Interval of 20 years and a one in 10 year event of 72 hour duration. Rainfall in excess of this design would result in dilution of any possible contaminant, join and be further diluted by the flood conditions that will occur as a direct consequence of the rainfall event. Management of overflow from ponds will be in accordance with Water Sensitive Design principles.

P75 discusses the management of bulk fuels or chemicals to prevent surface water contamination and the monitoring of discharge and surface waters.

All bulk fuel storage tanks will be designed and constructed (including bunding) in accordance with Australian Standard AS 1940 (Standards Australia, 1993 "The Storage and Handling of Flammable and Combustible Liquids") and requirements of the Department of Minerals and Energy's Dangerous Goods Division and the *Explosives and Dangerous Goods Act*, 1961. Used oil will be collected and transported off-site by a licensed contractor as required.

Any scheduled release of water from the site will only occur following monitoring of the water and determination of compliance with ANZECC Standards for the Protection of Aquatic Ecosystems. Monitoring of water quality upstream and downstream of the plant (in the Thomson Brook or Preston River, depending on flows) will initially be undertaken quarterly, with the monitoring frequency reviewed after one year of operation, followed by review. This monitoring may be done in conjunction with DEWCP.

Note that AA262 is not situated within proclaimed groundwater area as defined under *Rights in Water and Irrigation Act* 1914. There are no proclaimed tributaries of the Preston River System within the lot boundaries. The Thompson Brook is a proclaimed tributary under the RIWA Act and any proposal to interfere with the banks or to take water will require approval from DEWCP

Given the proposal to intercept and re-use all surface water flows by a series of adequately sized bunds and basins, the proposed monitoring program, the commitment to correct storage and handling of all environmentally hazardous materials, the limited volumes of bulk fuels stored on site, the commitment to release stormwater only if it meets ANZECC *Guidelines* develop and to implement a Water Management Plan, the chance of stormwater significantly and negatively contaminating dams and rivers across the railway reserve or over 800m to the south is considered managed to reasonable expectations.

5.3.2 Chipmill Impacts on Groundwater Quality

- Tannins, oils and chemicals from the pesticides sprayed onto the trees will leech into the groundwater supply. We understand that tannins are toxins.

- Monitoring does not prevent the pollution

PP72-73 discusses groundwater quality and commitments to protection. Point 5.3.1 above is also relevant regarding the management of bulk fuels or chemicals to prevent surface water and groundwater contamination and the monitoring of discharge and surface waters.

Due to the water absorbing characteristics of woodchips, experience at the woodchip stockpile at the Port has shown that water runoff from the stockpiles, even in the heaviest rainfall event is minimal.

Bluegum plantations can be aerial sprayed for both insects (pesticides) and weeds (herbicides). However, the frequency of spraying is considerably less than traditional broad acre cropping). The forest industry and other broad acre cropping industries address the over-spray issue through management of contractors and use of chemicals that are formulated specifically for targeted species, and have developed and implemented the *Protocol for the Aerial Application of Insecticides*.

Any drinking water currently drawn from the seasonal unnamed creek about 300m to the north east of the site is likely to have tannins naturally present as do most teas, coffee, red wine etc. Around 5-10 NTU (measure of turbidity) is regarded by the Health Department as acceptable in drinking water. The guidelines (Western Australian Water Quality Guidelines for Fresh and Marine Waters) list turbidity as 'site specific' for raw drinking water.

The workshop areas will be sealed as will the chip pile. A compact earthen base will be built below the log pile. Stormwater will be directed to a filter, oil separator and storage facilities.

A Water Management Plan will be developed and implemented that will provide details of potential impacts on groundwater quality, and how they will be addressed, including, but not limited to:

- Use of ATUs or modified septics for treatment of sewage.
- Recycle all water on-site wherever possible.
- Use of holding basins for stormwater.
- Management of bulk fuels in accordance with AS1940.
- Used oil disposed of off-site by a licensed contractor.
- Routine monitoring of surface and groundwater.
- Any proposed abstraction of borewater.

Given the minimal water requirements on site, depth to water table, the lack of large quantities of hazardous and/or hydrocarbon materials stored on site, and the commitment to develop and implement the Water Management Plan, measures to protect groundwater can be considered practical and reasonable.

5.4 Dust

- There is insufficient local supply of water to suppress and control dust.
- Dust will affect surrounding crops.

P 76, 77 and P99 describe the management proposed in order to prevent dust and ensure compliance with EPA guidelines.

Practically, such commitments include:

1. Apply EPA Policies, Guidelines and Criteria for EIA No 18, *Air Quality Impacts from Development Sites* during construction of the plant.

2. Abide by the National Environmental Protection Measure (NEPM) for Ambient Air Quality (NEPC 1998) during operations.

3. Develop and implement a Dust Management Plan will be developed and implemented that will specify dust actions in the case of unreasonable dust lift-off during windy, dry conditions.

Experience with the operation of the Albany Woodchip Plant indicates that blue gum chip logs do not generate excessive dust during the chipping process. This is principally due to the high moisture content. All trafficable areas, including entrance roads, internal roads and unloading areas within the wood chip mill will be sealed.

The nearest commercial vines are about 1km north of the site. The use of water carts and stockpile wetting has shown to be effective at the Albany mill and at the Port facilities during construction and operation. Given the relatively remote location of the site with respect to Donnybrook town, adjacent neighbours and higher residential density areas, the low dust generating potential of the activities when considered in relation to the rainfall, the commitments made to comply with EPA guidelines, and develop and implement a Dust Management Plan for the construction and operational phases, measures to minimise and manage dust can be considered reasonable and practical.

5.5 Air Pollution

Air pollution of the trucks entering, leaving and unloading at the site has not been modelled.

Section 5.3.1 considers the impacts on air quality resulting from the trucks along the main roads.

Air modelling was undertaken for the Albany Woodchip Mill (same woodchip capacity – 1.0 mtpa maximum, similar number of trucks, similar total traffic flows). Modelling showed the resulting air quality to be well within the DEWCP guidelines and NEPM criteria. Hence it can be reasonably expected that the Donnybrook mill's impact on the main roads and at the site will likewise fall within the DEWCP criteria.

5.6 Fines and Bark Waste Disposal

64000 tonnes of barks and fines need to be transported offsite. How and where will it be disposed? Will the fines be burnt as at (undecipherable) mill?

The bulk of debarking will occur offsite at the plantations during harvesting and redistributed as a mulch to cover plantation soils. Residual bark, fines and off specification wood chips will be transported by road to either the Westfi Particle Board Facility in Dardanup or sold as mulch to commercial nurserymen. There will be no incinerator on the site to burn fines. Disposal by grinding to produce biomass will be considered as both on site and off site options.

The trucks doing this will add to the congestion of traffic around the site and onto the SW Highway.

Experience at the Albany Woodchip Mill indicates that at full capacity (1.0 mtpa) up to four additional loaded trucks (eight truck journeys) per day of various possible configurations may be required to transport accumulated bark and other wood wastes. Given the likely short trip distances, these truck movements can be flexible with respect to log delivery or school bus schedules.

5.7 Ballast water

What measures have been taken to prevent ballast water introducing marine contaminants in into the Bunbury harbour?

The license for the Port operations stipulates "the licensee shall ensure that bulk cargo ships proposing to discharge ballast waters in waters under control of the Bunbury Port Authority comply with the requirements o the Australian Quarantine Inspection Service."

This aspect is irrespective of the location of the chip mill.

6. Social Factors and Issues

6.1 Heavy Haulage of Logs

6.1.1 Increase in Number of Trucks

The proposed increase in heavy vehicle numbers is unacceptable and the impacts have been understated.

A number of bluegum plantations are approaching the first rotation period and are due for harvest in the south western Region. The tonnage of logs proposed for harvest from WAPRES resources in the Region are presented in Table 4 of the PER document. Notwithstanding the implementation of the Donnybrook project, these logs will be harvested, transported to a chip mill site and the product transported to the Port of Bunbury. Current and predicted traffic flow rates by class of vehicle with and without the implementation of this proposal are provided in the PER tables 7 and 14.

Operation of a centralised chip mill facility adjacent to the Bunbury Manjimup railway will enable chip product to be transported to the Port of Bunbury by rail. This will greatly reduce the number of truck journeys on local and state controlled roads in the Region for the given material transported.

The plantations supplying logs to the proposed Donnybrook mill are primarily located to the north east, east and south east of Donnybrook (refer to Figure 2 in the PER). Most are located in the Bridgetown (19%) and Manjimup Shires (19%), and somewhat less in the Boyup (15%) and Nannup Shires (11%).

Transport routes from the plantation to the mill are described in section 4.2. Truck transport routes from plantations to the mill will vary throughout the life of the project. The South West TIRES Report (Bond, 2000) note that this traffic will be distributed over approximately 1577km of local roads in addition to over 825km of State funded Main Roads as shown in Table 6 of the PER. Impacts on roads and adjacent residents will depend on the location of plantations being harvested at the time. On an eight to ten year rotation, heavy road utilisation can be anticipated during intensive campaigns coinciding with harvesting, followed by minimal utilisation periods during the establishment and growth phases for each individual plantation.

Transport of logs will not follow a single route. Certain critical feeder routes, such as the Boyup Brook Rd and the South Western Highway can be anticipated to carry a disproportionate amount of heavy traffic associated with this project. WAPRES recognise however the concentration of heavy transport carrying logs near the chip mill regardless of the site chosen.

Based on WAPRES forecasts for log flows in 2006, around 800 000tonnes of logs will arrive at the mill, 60% along the Donnybrook-Boyup Brook Rd, 30% from the south along the SW Highway and up to 10% from the north along the SW Highway. Table 14 assumes trucks haul 5 days per week, 48 weeks per year, up to 230 actual days per year and 17hr/days.

In 2006, the daily number of bluegum trucks on the Boyup Brook Rd (including return trucks) will be 93, increasing the number of heavy vehicles from 294 to 387 (ie 32% increase in heavy vehicles and 4% increase in total traffic). On the SW Highway north of the site, the daily number of heavy vehicles increases by 15 from 545 to 560 (ie 3% increase in heavy vehicles and 0.3% increase in total traffic). On the SW Highway south of the site, the daily number of heavy vehicles increases by 47 from 355 to 402 (ie 13% increase in heavy vehicles and 1.7% increase in total daily traffic).

Sections 5.3.1 and 5.3.2 in the PER discusses the air quality and noise implications of this increase in heavy vehicle traffic respectively and identifies a number of strategies to minimise these impacts. A number of funding opportunities are identified. Commitments are made in relation to selection of equipment, contractors and the implementation of operating practices to minimise these impacts. The greatest single element in reducing truck numbers on the road and accordingly these impacts is the use of rail for the outward journey of wood chip product to the Port.

Section 5.3.3 discusses the issue of public safety arising from the additional heavy road transport associated with the transport of wood chip logs.

6.1.2 Safety Matters arising from Increased Trucks

Submissions note that in relation to school buses and routes:

Currently there are 3 school buses on the Boyup Bk Rd, 3 on the SW Highway south of Donnybrook and an unknown number operating north of Donnybrook. SW Coach Lines and Westrail also operate around Donnybrook carrying school children and passengers.

Road safety in the Preston Valley will be significantly impacted by the increase in truck associated with the mill's activities.

School bus hours will overlap with trucking hours. Avoiding bus hours will lead to earlier trucking hours and to an increased concentration of trucks in the remaining hours.

The Preston Valley road (Donnybrook-Boyup Brook Rd) is already dangerous. In many places, school buses are currently unable to pull of the road completely. The winding road seriously reduces visibility. The road has an east-west orientation, the sun in the morning and afternoon limits visibility. Winter fogs can remain till 9 or 10am.Overtaking is difficult (about18km of the 30km stretch are double white lines)

Having to designate pick up/drop off points will lead to increased traffic congestion.

WAPRES cannot guarantee contractors will avoid trucking on bus routes during bus hours nor drive safely. Commitments in this regard are not enforceable by WAPRES nor auditable by the DEP. Vague and soft language is used (eg '…implement a preference for contractors…' and 'recommend to trucking contractors…'). The WAPRES Code of Conduct for Log haulage provides little confidence that practices will improve.

WAPRES will set a precedent for other chipping companies to add their trucking activities to the already congested roads. Live sheep transport is also proposed for the road.

P8, P56, P58, P61, P64, P97, P98, P115, P116 and Section 5.3 discuss the commitments the Proponent has made regarding safety issues within their control. Table 14 and P54 put the number of log trucks associated with WAPRES activities into the context of the total number of trucks and vehicles on the roads around the mill site.

The Proponent has expressed a willingness to work with MRWA, local government (including the Shire of Donnybrook-Balingup representatives), concerned groups (parents, schools, bus operators, general public commuters, the Preston Valley Road Safe Group, etc) and other heavy vehicle operators on an ongoing basis to address road safety issues and determine what road improvements are required. Many of these issues can be addressed through the Community Consultation Group. For example, WAPRES has installed already undertaken a program of installation of two way radios in school busses on routes subject to substantial chip log related heavily vehicle traffic.

Table 14 from the PER showing the expected traffic for 2006 is reproduced below. The traffic counts are based on MRWA road counts for the South West (MRWA,2001 and DPI, 2001) and have been increased at 5%pa as per the regional statistics for the south west (http : // www. regional. wa. gov. au / stats / sthwest. asp).

TABLE 14 (abbreviated)
PREDICTED INCREASE IN DAILY TRAFFIC MOVEMENTS

Location	**2006- road utilisation excluding mill traffic[2]**			**2006 – including mill traffic[3] (incl return trucks)**		
	Heavy Classes 6-12	Total Vehicles	Heavy Vehicles at % of Total	Heavy Classes 6-12	Total Vehicles	Heavy Vehicles as % of Total
Donnybrook-Boyup Bk Rd	294	2294	12.8	387	2387	16.2
SW Hwy north of Mill [4]	545	4863	11.2	560	4878	11.5
SW Hwy south of Mill	355	2709	13.1	402	2756	14.6

Notes:

1. The predicted daily log truck numbers have been averaged over a year and do not reflect campaign cartage which may occur for a short duration.
2. Total vehicle counts excl. Donnybrook woodchip traffic are based on current Main Roads Western Australia road counts (Table 7) escalated at 5% pa from when they were recorded.
3. The predicted heavy vehicle increase due to woodchip trucks are based on WAPRES forecasts and differ from the DPI report (2001) which takes into account all woodchip based activities anticipated in the Region over the period modelled.
4. As the mill's contribution to any increase in traffic on this section of road is small, this case falls away in spite of it carrying the largest number of heavy vehicles.

Without the mill activities, the Preston Valley Road (Donnybrook–Boyup Bk Rd) will be carrying around 300 trucks and around 2300 total vehicles in 2006. With the mill activities, the Preston Valley Rd experiences the largest increase in total traffic. This is an increase of less than 5% in total traffic, but will form 24% of the heavy traffic.

North and south of the mill, the increases in total traffic are less than 2%.

The number of trucks on the Preston Valley Rd and the SW Highway is still significant with or without the mill traffic. This is a concern as these roads are regarded by many as unsafe at present for all road users, and especially school buses. This requires immediate attention at both local and federal government level. The TIRES South West group (Bond, 2001) with support from the then Department of Transport and Main Roads Western Australia initiated an assessment of the impact of the transportation of the bluegum timber resource on the local and main road network.

These studies have encompassed probable haul routes (such as Figure 2) and have assumed some minimum geometric standards for log haul roads in order to ascertain the order of magnitude of road improvements required to the local network. The outcome of these studies has been to identify a number of deficiencies in the local road network with a view to identifying opportunities to gain funding for maintenance and improvement in support of long-term sustainability of the plantation timber industry. WAPRES will support funding efforts to bring about road improvements to a standard that affords an appropriate level of safety to all road users. Further commitments are specified in section 5.3.3.

The following points relate to specific issues raised by submitters:

a) Specific sections and intersections:

- 4.6km section of road south of the Donnybrook-Boyup Brook Rd intersection has had 4 fatalities in the past 7 yrs. An increase in traffic will increase the chances of further fatalities.
- The Donnybrook to Kirup road is more dangerous than the Donnybrook to Bunbury section. Unsure of the main road's current capacity.
- The intersection of the mill road and the SW Highway will handle 100% of the mill traffic and is already a dangerous section of road. The mill access road referred to in the PER is obsolete as it has been moved 200m north for safety reasons.

P61, P62 addresses specific roads of concern. Comments in a) above are also relevant. Issues raised in Point 2.3.1 regarding funding for maintenance and improvement are also relevant.

As noted above, the traffic on these roads is already increasing at around 5%pa and the mill traffic will be adding less than 5% to the total. As these roads are currently regarded by many as already dangerous, these issues should be addressed now and funding sought.

MRWA (MRWA, 2 July 2001) has planned an upgrade of the SW Highway between Donnybrook and Bridgetown over the next eight years. This is a state road designated as a heavy haulage route with maintenance and improvements funded by the State Government. This work will include re-constructing the surface, installing seven overtaking lanes, raised and widened in places and the sealing of shoulders. The work is planned to go ahead regardless of the implementation of the proposal as described in the PER. During discussions with MRWA (Appendix 3b), it was indicated that the SW Highway was considered to have enough capacity to handle an extra 170 trucks per day. Slip ways of specified length to at least Ausroads standards, and acceleration lanes would be required for the junction of the mill access road and SW Highway. The impact on local Authority roads (arterial roads and minor roads) will be addressed through the TIRES process.

MRWA advise an improvement of the Donnybrook-Boyup Rd and the SW Highway intersection will cost approximately $0.4 million (DPI, 2001). Upgrades should include an acceleration/overtaking lane on the first rise heading south of the intersection.

Design of the access road and intersection with SW Highway will meet requirements of Ausroads Guide to Traffic Engineering Practice Part 5, Intersection of Grade. It is important in the design of the intersection that the Safe Intersection Distance of 290m and Entering Site Distance of 500m be achieved. Good visibility and sufficient length and width of slipways for trucks turning onto and off the SW Highway shall provide safe access to the site. The mill access road as shown in Figure 4 and referred to in the PER is the current location considered by the Proponent and MRWA. This location may be adjusted in consultation with MRWA with a view to optimising safety.

b) Railway crossing

- The existing Manjimup-Bunbury railway crossing of the SW Highway north of the proposed site is dangerous with 2 incidents in the past 8 yrs of semi trailers hitting trains.

- The current layout of the railway crossing is regarded by many as unsafe. This issue should be addressed now and funding sought, not wait for four years time when the traffic has already increased. A rail bridge, boom gates and/or extra signage may be required.

Implementation of this proposal will result in up to an additional 4 to 5 loaded train movements per day (8 to 10 journeys) at full production (1.0 mtpa), 280 days per year (see section 2.6). Given the travel and loading times to the Port of Bunbury from the proposed site, the majority of these rail movements will be able to be carried out during daylight hours.

The Proponent has expressed a willingness to work with MRWA, local government, concerned groups (parents, schools, bus operators, general public commuters, etc) and other heavy vehicle operators on an ongoing basis to address road safety issues including rail intersections.

6.2 Road Degradation and Funding

- While MRWA is committed to upgrading the roads, there is no timeframe for definite improvement and funding.

- WAPRES is not offering to fund the roads' upgrades. They should pay the full infrastructure costs for its operations.

- The trucking and timber industry will not pay the $28million identified for local road funding. These funds have not been found.

- How much of MRWA's $85million road improvement costs will be in sponsorship of WAPRES operations?

- The DPI found the vast majority of these identified road needs are unfunded and are unlikely to remain so unless Federal funding is sourced.

Community concern in relation to the source for road funding is acknowledged. Discussion of the outcomes of the TIRES study (Bond 2000) relating principally to local road funding and MRWA funding for upgrading main roads is presented in sections 4.2 and 5.3.3.

WAPRES will be adding less than 5% to the total traffic on the main roads and will comprise about 24% of the total heavy traffic on selected heavy vehicle routes in 2006.

The SW Highway and Donnybrook-Boyup Bk Roads are State roads designated as heavy haulage routes with the responsibility for maintenance and improvement resting with State government. Truck movement issues are not new on these sections. The timber industry has been working through various regional plantation communities and the Timber industry Road evaluation Study to obtain funding for roads and plan the log haulage network for the next few years.

According to The Hon Alannah Mc Tiernan (Minister for Planning and Infrastructure, 20/6/01):

> *"…..Main Roads and the Transport Department in consultation with the Timber industry generally and Local Government, intend to spend up to $67 million upgrading significant local roads in the Great Southern and South Western Regions to service the entire plantation industry……"*

Fuel levees on diesel fuel are used in part to fund State road construction and maintenance programs and road safety initiatives. These taxes and levees are paid by transport subcontractors to WAPRES and form an element of business activity costs.

6.3 Visual Amenity

The light overspill will impact the nearby residents and rural lifestyle.

P7, P69, P84 and P100 list the proposed management and commitments regarding lighting overspill. See also the response to submissions Point 5.2 above.

The proposed site is relatively isolated in a landscape of gently rolling wooded hills, has a low surrounding neighbourhood density and has limited visibility from the SW Highway. Adequate lighting is required to allow a safe operation.

Screen plantings are proposed for the site to ensure the amenity of the views of the plant and stockpile. Maintaining existing stands of marri-jarrah will assist in limiting impacts. The conservation of a vegetated buffer along the railway on the NE boundary, together with site lighting design and distance from the SW Highway, can limit any obtrusive effects of outdoor lighting.

Key design points include directing lighting downwards rather than upwards wherever possible, using specifically designed lighting equipment to minimise the spread of near to or above the horizontal, prevention of over-lighting and ensuring the angle of the main beam of light and any observer is less than 70^0. Design of light overspill will comply with AS 4282 and will include the strategic use of light poles and directional lighting

Electricity pylons and overhead railway hoppers are an eyesore

The power line corridor location is at the sole discretion of Western Power. The notional route follows existing power line easements, road and rail reserves to the terminus on the proposed site. Options to underground sections are possible. If standard posts are used, these will be similar to the existing lines.

If overhead railway hoppers are required, these would be along the existing railway track which is not visible from the SW Highway and depending how far south they were located, would not be visible from Thomson Brook Rd. While some screening exists which will be maintained and encouraged, consideration will be given to planting vegetation along boundaries and on adjoining properties, if required, to minimise the visual impact of the development on the adjoining properties.

A large industrial complex with its extensive roadwork and heavy truck traffic, operating 24hrs/day is out of context in a rural setting.

Comments in the points above are also relevant.

The location of the woodchip mill against a wooded landscape with gentle hills will assist in limiting visual impacts. Screen plantings and remnant vegetation maintenance are proposed for the site that will ensure the amenity of the views of the plant and stockpile.

The development is not large, with all buildings and infrastructure being accommodated on a 2 Ha area. The maximum height of the conveyor and screen house is 22m. By utilising the natural slope of the proposed site, conveyors will be largely horizontal. Visual amenity is affected by building design, choice of materials and landscaping. The buildings and plant will be designed to minimise impact on the landscape by using the site topography to advantage. Lighting overspill will be managed as described in Point 5.2.

6.4 Operating Hours

24hr operation is more fitting in an industrial zone. 8.30-5.30 or daylight hours would be more appropriate. Cottage industries have to comply with 7am-7pm. Home wood working operations must comply with 7am-7pm hours.

A complaints register will not stop the noise

If mill gates open at 6am, trucks will have been on the road for two hours prior.

P27 and P110 describe the operating hours. Comments made in Point 5.1 regarding the compliance of the predicted noise levels with the *Environmental Protection (Noise) Regulations* 1997 are relevant.

The site noise levels will comply with the *Environmental Protection (Noise) Regulations* 1997 with the noise controls and commitments listed on P80 implemented. Plant capacity is predicated on chipping operations for up to 20 hours per day at full capacity (1.0 mtpa). No logs will be received after 10pm or before 7 am. Opportunities to reduce noise impacts from fixed and mobile plant equipment at the mill have been identified and will be implemented to meet all statutory requirements.

In the first instance, the purchase of attenuated mobile plant and enclosure of fixed equipment including chipper, screening plant and conveyor dives will reduce the potential for impact, as will consideration of work practices that will minimise night time mobile plant operation. The receipt of logs, chipping operations and administration activities are not 24hr/day activities, although some maintenance activities may occur during mill shutdowns.

Site options south of Donnybrook relieve heavy transport congestion through the town sites of Donnybrook, Boyanup and the outskirts of Bunbury. The location of the mill in reasonable proximity to the Port of Bunbury will allow most, if not all, rail loading and transport activities to occur during daylight hours or in the early evening, considerate of the logistics of transporting the chips to the port. Implementation of the proposal at Donnybrook (or any location adjacent to the railway line) replaces a major proposition of road transport of wood chip product by road to the Port of Bunbury.

A Complaints Register will provide mill operators with information in relation to the unacceptable operating conditions. Factors such as the time of complaint and ambient weather conditions prevailing at the time will provide mill management with data that will enable particular operating practices or pieces of plant contributing to noise to be identified and ameliorated.

Aggrieved members of the public also have an avenue to express their concern by notifying the DEP of unreasonable activities.

The Proponent has committed to an ongoing Public Community Consultation program. This will include establishing a Group that meet regularly with the public to discuss and resolve community issues. The results of environmental monitoring will be presented to this group if they so wish. Environmental performance will be measured against accepted criteria as identified in the site EMP and implemented prior to commissioning.

There are at present about 400 trucks operating on the SW Highway north of the mill, 250 on the SW Highway south of the mill and around 180 trucks on the Preston Valley Rd, throughout all hours of the day and night. These figures are expected to increase at around 5% pa. Truck loading and transport is anticipated to commence in the morning with a view to being at the wood chip mill at about 0700. All unloading will cease prior to 10.00 pm.

6.5 Devaluation of Land

Industrial land use will de-value the surrounding properties.

Wade Rd subdivision blocks have already dropped, without corresponding drops for other 5 acre residential properties in Donnybrook.

P111 addresses this concern.

WAPRES will implement a range of controls (Point 5.0) with a view to fully complying with all statutory requirements, including the requirements of the Environmental Protection Act. It is considered that maintenance of these standards will limit pressures to depress land prices. The practical application of assessing land values and the impacts of single developments on them is difficult. WAPRES will however look at mechanisms by which this can be achieved and applicability to the Donnybrook situation.

6.6 Impact on Lifestyle

The mill operations will impact the rural lifestyle through trucks beeping as they reverse, the overspill of lights at night, 24hr operation, dust, heavy vehicle movements, etc.

Section 5 and P108 addresses the proposed management and minimisation of these impacts. Commitments to manage the impacts to ensure compliance with the Environmental Protection Act and according to best practices are given on P4-9 and P98-100. Comments in Points 6, 8, 9, 10 and 11 are also relevant.

The activities that may have potential significant environmental impacts will be designed and managed to comply with the relevant EPA/DEP criteria and all environmental regulations. Implementation of these measures will be elements of an Environmental Management Plan (EMP) following the requirements of ISO 14001 and according to best practise. ISO 14001 is an international standard defined in a series of documents that specifies requirements for an environmental management system and applies to environmental aspects the organisation can control.

With the precedent set by the proposed mill, the approval of similar or related industries in the area could not be ruled out with any certainty.

This is discussed in Point 3.0 above.

The Proponent recognise the concern and have publicly stated that there are no plans nor intention to develop the site other than those laid out in this PER. The responsibility and authority for issuing further industrial approvals to the land immediately surrounding the proposed woodchip site lies with the Shire Council, and any developments that have the potential to impacts on the environment (or of a prescribed nature) must be referred to the EPA for consideration.

6.7 Benefits to Community

Benefits to the community and employment figures are overstated.

Section 1.1 presents a brief overview of the potential project benefits associated with the implementation of this proposal in the Donnybrook area, with tourist potential discussed in Section 3.3. P113-115 identifies the proponent's intention to involve the local population.

Implications to tourism have previously been discussed in point 1.5 above.

The Proponent has already shown an ongoing support for current community events such as the Donnybrook Marathon Relay, the Donnybrook Apple Festival Horse Extravaganza, and the ongoing support of the Donnybrook Recreation Centre. Protocols for the identification of community based programs to be supported and a registry of events are an appropriate method for integration of community benefits.

To maximise the potential benefits to the local economy the mill needs to operate as an integral part. The Proponent agrees that opportunities for maximising the employment of local people at the mill be considered, together with ways of ensuring local businesses can achieve a high share in providing for the repairs and maintenance, service and equipment needs associated with the mill. The Proponent will work toward achieving sustainability within the Donnybrook area in local content and is willing to implement a local supply policy to support local contractors and equipment needs where possible. It is also the Proponent's intention to have most mill workers and their families residing in the Donnybrook region. In relation to the best mechanism by which information may be received and disseminated, WAPRES offer the view that the Community Monitoring and Advisory Committee form a subset of the Community Consultation Group that meet regularly with the public to discuss and resolve community issues.

In addition, the Proponent believe that in a period of declining primary produce prices and consolidation of holdings into larger management units, the establishment and operation of a robust woodchip industry provides an opportunity to redress the movement of people away from the country areas and provide a diversified income. The Proponent would expect the Donnybrook Mill to generate a similar amount of local business as the Proponent's Diamond Mill in Manjimup, where over $1.5 million is currently spent on local contractors and suppliers who are responsible for maintenance and servicing of the mill, in addition to the local economic input of mill workers and log truck drivers, harvesting operators and supervisors who live in and spend most of their disposable income in Manjimup.

6.8 Community Consultation

6.8.1 Data Relevant to Initial Site Considered

The following inclusions in the PER are only relevant to the initial site considered - Reserve C7859 and not PAA 282.

- Signatures supporting and opposing the Chipmill.
- A document containing more signatures than the list contained in Appendix 7 opposing the mill has not been included.
- Public consultation and discussions prior to June 2001.
- The matrix of issues of concerns raised by the public at the first information day.
- The first mailout.
- Stakeholder meetings and consultation
- Newspaper releases and radio interviews.
- Public information Day and display.
- Response to Public comments.

Many of the above inclusions were drawn up in response to the initial site considered. However:

1. Many of the concerns raised about Reserve C7859 were subsequently taken into account in the location selection and design of the second site by the Proponents and hence many of the concerns largely mitigated. Thus these actions formed an important part of the initial community consultation process. Examples of changes brought about by the first community information day (which referred to C7859 and the proposal as a whole) include the change to proposed operating hours, selection of a site further from the Donnybrook town with a lower surrounding density and well away from any creek or vineyard. P17 lists a number of advantages the later site, PAA262 has over C7859. In addition, many of the concerns raised at the initial consultation have been addressed and developed to be managed appropriately (eg light overspill and flora and fauna issues) not longer resulting in a significant environmental impact.

2. The major issues of concern, namely increased heavy road transport and noise from the plant have remained the same for each site.

3. Other issues raised at the first information day were not site specific yet still relevant to the proposal, hence should be noted (eg uncertainty regarding future expansion and benefits to the town and region)

4. P32, P33 and P116 lists a number of subsequent meetings with stakeholders and surrounding residents that referred specifically to PAA262. These include the meeting with the Brookhampton Progress Association (11 Dec 2001), Yabberup Public Meeting (4 Dec 2001) - about 70 people, Kirup Public Meeting (4 Dec 2001)– about 50 people and Donnybrook Public Meeting (13 Dec 2001)– about 120 people). Likewise, there have been subsequent mailouts (November 2001, to all nearby residences and attendees of Public Meetings at Yabberup and Kirup). Due to these public meetings, a fourth public information day specific to the new site was not deemed necessary.

5. The PER notes that once PAA262 was selected, additional comments were sought from MRWA, DEWCP and WRC (Appendix 3b) and any correspondence or advice received subsequently has been included in Appendix 3a). Newspaper articles relating to PAA262 have been included in Appendix 5a. No further radio interviews were undertaken.

5. The responses to Public comments listed on P102-107 are relevant to C7859, PAA262, the Inner Harbour site and the project as a whole.

6.8.2 Ineffective Community Consultation

The following specific points were raised in relation to stated ineffective community consultation:

- The community consultation has not resulted in improvements to the project that will reduce and limit many of the environmental and social problems.

- Individuals had not been contacted and consulted, even those adjacent to the site, those in Wade Rd and those up to 2km away. No attempt to contact the Preston Valley or Brookhampton groups to find out and resolve concerns.

- Consultation appears to focus on the population in the vicinity of Donnybrook – most of whom will not be seriously affected by the operation of the mill or trucks.
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- Balingup has been ignored.
-
- The one public meeting had narrow terms of reference (only zoning) and should not be considered as part of the consultation process. Other meetings were unsatisfactory (unable to attend, too far away, heckled etc).
-
- Consultation process too rushed. The ’10 month process’ was not 10 months as initial consultation referred only to the first site.

- The SIA was not done in the development stage and only happened in response to community pressure.

As a result of the initial community consultation days and subsequent discussions with affected landowners and residents, a number of improvements have resulted in the reduction and limitation of many of the environmental and social concerns including:

- A change in mill site location (for the reasons outlined in Point 6.8.1 above). This meant flora and fauna concerns raised regarding a mill site within a Reserve could be alleviated. In addition, Native Title issues would no longer be a concern. Operating hours for the trucking operations, railway operations and chipping operations have been reduced.

- Noise modelling has incorporated more stringent operating hours and additional control measures. Additional background monitoring studies were performed, resulting in more complete baseline data.

- Being further from vineyards, any surface water and the higher density residential areas will ease concerns regarding potential for dust and pollution of waterways or storage dams.

- The change in site has resulted in significantly fewer residents falling within 1km of the proposed plant site (see point 3.2).

- Further public meetings were arranged and site visits to the Moore Rd chipper and Port facilities were scheduled.
-

P 29 and P116 list the public meetings and opportunities for the public to contribute to the consultation process. P9, P51, P67, P97 and P109-P116 discuss the Proponent's commitments regarding ongoing consultation.

Public meetings held outside of Donnybrook include the meeting with the Brookhampton Progress Association (11 Dec 2001), Yabberup Public Meeting (4 Dec 2001) - about 70 people, Kirup Public Meeting (4 Dec 2001)– about 50 people. Likewise, there have been subsequent mailouts (Nov 2001, to all nearby residents and attendees of the Public Meetings at Yabberup and Kirup). The Donnybrook-Bridgetown Mail, The South West Times, The Manjimup-Bridgetown Times and the West Australian are all available in the area of Donnybrook, Balingup and Brookhampton.

The Proponent has committed to an ongoing Public Community Consultation program. This will include establishing a Group that meet regularly with the public to discuss and resolve community issues. The results of environmental monitoring will be presented to this group if they so wish. Environmental performance will be measured against accepted criteria as identified in the site EMP and implemented prior to commissioning. A Community Monitoring and Advisory sub-committee to promote support of local contractors will form a sub-set and a Community Register will be developed.

6.8.3 Lobby Groups For and Against the Mill

The signed (approximately 270) list of people opposing the mill that was presented to the Shire has been omitted from the PER.

The Proponent is not privy to information given to the Shire. This submission may have been in response to the planning application made in relation to this proposal. All information regarding support or opposition given to the Proponent or ATA Environmental has been included.

The list of supporters provided in the PER were supporting the proposal of a mill, not the location.

P3, P11, P12, P34 and P35 list the potential benefits to the area and region, not specifically the Donnybrook towns people. Trucks are required to transport much of the logs from the widespread plantations to the mill, and rail is required to transport the chips to the Port. The increase in heavy transport is inevitable as a result of the location of the already established plantations with respect to the port and the existing infrastructure.

The list included supporters from within Donnybrook Shire and from further afield. The project will have benefits of a local and regional nature.

7. REFERENCES

ATA Environmental Report (Dec 2001) Donnybrook Woodchip Mill Environmental Appraisal and Management Plan Report No. 2001/144

ATA Environmental Report (Nov 2001) Donnybrook Woodchip Mill Project Planning Application Referral Document Report No. 2001/155

ATA Environmental Report (March 2001) Southwest Plantation Woodchip Project Report No. 2001/14

ATA Environmental Report (Nov 1999) Albany Woodchip Mill Environmental Appraisal and Management Plan Report No. 99/114

Bond, T (May 2000) (Timber Industry Evaluation Strategy) Log Haul Road Transport Study Stage 2, Report by WML Consultants to the South West Regional Road Group.

Bond, T (March 2001) 2nd Stage Bluegum Plantation Industry: Regional Transport Infrastructure

Department for Planning and Infrastructure (October 2001) South West Woodchip Mill Strategic Site Assessment Study. Regional Policy and Planning Directorate.

Department for Planning and Infrastructure (January 2002) South West Woodchip Mill, Kirup Site Options Discussion Paper

Main Roads WA (6 June 2001) Peter Bromley, Asset Manager, pers con

Main Roads WA (6 June 2001) D Lee, Regional Manager, Donnybrook Mail

Main Roads WA (3 July 2001) Peter Bromley, Asset Manager, letter

Shire of Donnybrook-Balingup, fax from Rates Officer, 9 May 2001

WA Department of Local Government and Regional Development: Regional Trends and Indicators : http:// www. regional. wa.gov.au / stats / sthwest .asp and http: // big.wa.gov.au. Last accessed November 2001.