



WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)****STRAW PULP AND PAPER MILL, MOORA(567)****MOORA PULP AND PAPER COMPANY PTY LTD**

This proposal may be implemented subject to the following conditions:

1. PROPONENT COMMITMENTS

In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in Appendix 1 of Environmental Protection Authority Bulletin 550. (A copy of the commitments is attached).

2. DETAILED IMPLEMENTATION

Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

3. HARVESTING PRACTICE

Prior to the commencement of operations, the proponent shall prepare straw harvesting guidelines and subsequently implement procedures, in conjunction with the Commissioner for Soil Conservation, to ensure that soil conservation concerns arising as a consequence of the operation of this proposal are minimised. Those guidelines and procedures, which shall be amended when necessary, shall include, but not necessarily be restricted to, provisions for the following:

1. prevention of straw harvesting on unsuitable soil types;
2. avoidance of continual removal of stubble from the same area, where that may lead to detriment to the soil;
3. retention of a minimum length and/ or volume of stubble;
4. prevention of spread of crop diseases;
5. determination of the appropriate time of harvesting;
6. determination of suitable straw condition;

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7. specification of acceptable methods of harvesting consistent with the protection of soil types sensitive to erosion, including the minimisation of the use of raking; and
8. management of harvesting to avoid soil erosion when the availability of straw is below normal mill requirements.

These guidelines shall initially be to the satisfaction of the Minister for the Environment and shall be implemented and amended (when necessary), to the satisfaction of the Environmental Protection Authority

In each of the first three years of operation the proponent shall obtain and publish a report from the Commissioner for Soil Conservation regarding the implementation of the straw harvesting guidelines, to the satisfaction of the Environmental Protection Authority.

Note: The Commissioner for Soil Conservation will monitor the guidelines and report on their effectiveness in the annual report required under the Soil and Land Conservation Act, for a period to be determined by the Minister for the Environment, on the advice of the Environmental Protection Authority

4. EFFLUENT DISPOSAL AND MANAGEMENT

The proponent shall prepare and subsequently implement, to the satisfaction of the Environmental Protection Authority on the advice of the Water Authority of Western Australia and the Department of Agriculture, effluent disposal design (prior to construction), and management and contingency strategies (prior to operation) to ensure that potential on-site and off-site impacts arising from the operation of the mill, including

1. waterlogging and/ or soil salinity,
 2. loss of productivity of affected neighbouring properties,
 3. contamination of domestic and stock water supplies,
 4. failure in part or whole of the tree plantation as an integral part of effluent disposal,
 5. dieback disease spread, and
 6. contamination of the Coonderoo River,
- do not arise or are mitigated.

5. SOCIAL IMPACTS

Prior to the commencement of construction, the proponent shall prepare and subsequently implement a social monitoring programme in consultation with the Social Impact Unit and the Shire of Moora.

6. RIVER FLOW

The proponent shall ensure that the design and construction of the access road crossing over the Coonderoo River takes into account reasonable river flow conditions, to the satisfaction of the Environmental Protection Authority on the advice of the Water Authority of Western Australia and the Shire of Moora.

7. DECOMMISSIONING

The proponent shall be responsible for decommissioning and removal of the plant and installations and rehabilitating the site and its environs, to the satisfaction of the Environmental Protection Authority. At least six months prior to decommissioning, the proponent shall prepare and subsequently implement a decommissioning and rehabilitation plan, to the satisfaction of the Environmental Protection Authority.

8. PROPONENT

No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

9. TIME LIMIT ON APPROVAL

If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority).


Bob Pearce, MLA
MINISTER FOR THE ENVIRONMENT

31 OCT 1991

SUMMARY OF COMMITMENTS BY THE PROPONENT

The proponent undertakes to fulfil the following Commitments, in accordance with applicable State laws and regulations and with standards and procedures set out herein or as otherwise agreed .

1. The proponent will, as part of the project design phase, apply for and obtain a Groundwater Extraction Licence from the Water Authority of WA to extract water from the Leederville Formation. A separate licence will be obtained for each and every bore to be constructed. The proponent will also design and implement a groundwater monitoring system to the WAWA's satisfaction, with the following principal elements:

- . metering of all water extracted with cumulative annual extractions given.
- . chemical analysis of major ions in the water initially at three monthly intervals.
- . monthly standing water levels will be taken.
- . monthly salinity (T D S) levels will be measured by conductivity.
- . construction details of the bore will be submitted to the Water Authority of WA for approval before construction commences.
- . the annual report will also provide details of water levels and drawdowns in other bores in the aquifer, the only known bores at this time being those that supply Moora.

Monitoring reports will be prepared on an annual basis and presented to the Water Authority of WA by the proponent accordingly for review and approval.

2. The proponent will, as part of the detailed mill design, undertake a detailed site investigation program to confirm the existing characteristics of the shallow aquifer and particularly the quality of water drawn by neighbouring properties.

The proponent will undertake detailed hydrological studies in relation to washwater disposal. The studies will identify:

- . the detailed shape and direction of flow of the current superficial aquifer;
- . the potential rise in groundwater levels due to washwater application;
- . changes to flow directions of groundwater due to the mounding effect of washwater application;
- . the expected shape and movement of the saline and coloured water plume away from the site;
- . any potential areas where the altered water table may intersect ground surface leading to seeps and salt scalds.

These theoretical analyses and predictions will be checked during operations by the proposed monitoring programme. If it is found that seeps and scalds develop action will be taken to install shallow drains, slotted agricultural pipes or even dewatering spears to alleviate the problem.

The proponent will also install permanent monitoring bores at strategic locations on the site and on adjoining properties prior to mill commissioning. A comprehensive shallow aquifer monitoring system will also be designed and implemented by the proponent as follows:

A network of bores will be installed around and within the mill site at least 12 months before mill operation begins. The depth and location of these bores will be determined in consultation with the Water Authority of WA.

A baseline monitoring program will be implemented based on these bores with measurements taken at 1 monthly intervals of:

- . standing water levels
- . salinity (TDS) levels
- . colour
- . pH
- . nitrogen
- . phosphorus

Bores will be installed to allow measurements at selected locations to be taken in the upper, mid and lower levels of the aquifer.

- . Major ions analyses will be taken at three monthly intervals.
- . After start-up of the mill all measurements will continue to be taken at 3 monthly intervals over the first twelve months. Subject to a satisfactory review with the Water Authority of WA, monitoring will then continue at six monthly intervals.
- . Monitoring stations will be set up on the Coonderoo River (one immediately downstream of the site and one in the nearest salt lake downstream of the site) and one on the Moore River close to and downstream of its junction with the Coonderoo River. Similar water quality parameters and test intervals to those outlined above for the superficial aquifer will be implemented.
- . The above mentioned data will be included in an integrated report submitted to the Water Authority of WA and EPA on a twelve monthly basis for review and approval.

In addition to the monitoring system related to the effluent disposal system there will be additional groundwater monitoring bores installed to permit monitoring of groundwater qualities in close proximity to the anaerobic and aerobic lagoons. It is anticipated that these bores will be located such that monitoring for signs of leakage from the caustic soda and crude oil tanks can also be undertaken.

These bores will be installed as part of the mill construction effort and monitored before commissioning to give baseline water quality data and then at six monthly intervals. Results will be collated and if signs of contamination are found results will be reported to the EPA immediately. The investigation and monitoring programmes will be to the satisfaction of EPA and WAWA.

3. The proponent will formulate a contingency plan to the satisfaction of EPA and WAWA designed to ameliorate any adverse impacts on shallow groundwater resources used by neighbouring farmers. The results of detailed site investigations and monitoring of groundwater behaviour will be used to formulate such a contingency plan should this be considered necessary.

The Proponent will:

- liaise with WAWA and EPA to develop criteria for acceptable changes of water level in monitoring bores around the perimeter of the site and on neighbouring properties
- install a drainage system around the perimeter of the site if water levels in monitoring bores increase beyond the agreed maximum as a result of effluent disposal from the plant;
- undertake actions to lower groundwater levels in off-site areas if monitoring bores show that the water levels have increased above the agreed maximum as a result of effluent disposal from the plant;
- provide an alternative domestic supply if monitoring shows that the water quality at a neighbouring farm falls below guidelines established by the NHMRC as a result of effluent disposal from the plant

4. The proponent will, as part of the detailed mill design, formulate and implement an effluent disposal and tree plantation management program including a detailed site investigation and soil analysis program as follows:

- a full site investigation including detailed soil analysis and local groundwater levels,
- evaluation of likely chemical interactions between the soil and the effluent,
- choice of salt tolerant species,
- detailed water balance studies,
- development of detailed watering schedules and consequent design of the irrigation system,
- formulation and implementation of a detailed tree growth and health monitoring program.

The Moora Pulp and Paper Company Pty Ltd will implement this program as part of the mill design, construction and operation phases as appropriate, to the satisfaction of EPA & WAWA.

5. The proponent will, as part of the detailed mill design, undertake a detailed site identification study to determine the most suitable landfill disposal site for solid wastes generated by the mill. The study results will be presented to the EPA and the Shire of Moora for review and approval prior to commissioning of the plant.
6. The proponent will undertake detailed design of the mill to ensure compliance with noise level restrictions in accordance with the EPA Act, 1986. Mill performance in this regard will be to the satisfaction of the EPA.
7. The proponent will undertake detailed design to ensure compliance with acceptance criteria for atmospheric emissions generated by the mill and particularly with respect to sulphur dioxide, dust and sodium carbonate emissions in accordance with criteria dictated by the EPA. The proponent will formulate and implement an emission monitoring programme to the satisfaction of EPA that will measure sulphur dioxide, dust and sodium carbonate emission levels on a monthly basis until and unless longer monitoring periods are agreed with the EPA.

Reports on the results of the emission monitoring programme will be presented to the EPA on a six monthly basis for review and approval unless adverse results are recorded in which case the incidence will be immediately reported to the EPA.
8. The proponent will formulate and implement a detailed decommissioning, facility demolition, site cleanup and rehabilitation of tree plantation maintenance programme at least 5 years prior to mill operations ceasing. All procedures and measures will be submitted for review and approval by the EPA before implementation.
9. The proponent will continue a public liaison programme within the local community and particularly with the immediate neighbours to the mill site and the Shire of Moora. This liaison programme will be undertaken in an ongoing manner to ensure relevant details of the project are explained to the local community and that the public is aware of progress on the project through the design, commissioning and operating phases.
10. The proponent will endeavour to maximise employment from within the local community with respect to this project. Results of these efforts will be reported to the Shire of Moora upon commissioning of the mill.
11. The proponent will endeavour to maximise the use of services from within the local community with respect to this project. Results of these efforts will be reported to the Shire of Moora on an annual basis or as otherwise agreed.
12. The proponent will liaise with the EPA and the Shire of Moora during the preliminary site construction phase to define a suitable construction camp site if provision of such a facility is deemed to be necessary. Agreement of both parties will be obtained before a camp is established for the project.
13. All transport operations will be carried out in accordance with well established procedures and government regulations. The proponent will discuss and agree Straw transport routes with the appropriate Shire Council and other relevant authorities.

14. The proponent will formulate and implement a vermin control program.
 15. The proponent will incorporate into the mill design:
 - sealed road sites for straw delivery;
 - straw delivery area to be drained to sump, and runoff added to process stream;
 - design and management of plant to prevent contamination of wastewater stream by any Phytophthora from straw delivery area;
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