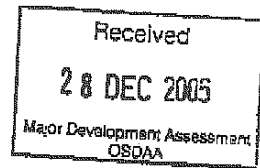




Department of
Environment and Conservation (NSW)



Our reference : 235602A1/GFF5482

The Senior Environmental Planning Officer
Major Development Assessment
Department of Planning
GPO Box 39
SYDNEY NSW 2001

FAXED
16.12.2005

Dear Mr Ritchie

Re Proposed ethanol plant and intensive dairy at Coleambally

We refer to your electronic mail dated 6 December 2005 seeking the Department of Environment and Conservation (DEC) requirements for the environmental assessment (EA) for the above proposal.

The DEC has considered the details of the project as provided at the planning focus meeting on 2 December 2005 and has identified the information it requires to assess the project in Attachment 'A'. In summary, the DEC's key information requirements for the project are as follows.

1. The environmental impacts of the project;
2. The impacts of the project on threatened species and their habitat;
3. The impacts on Aboriginal cultural heritage; and
4. The action that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts identified in 1, 2 and 3 above.

Based upon the information provided to the DEC, the applicant will require an environment protection licence to -

- carry out scheduled development work; and
- carry out scheduled activities.

The applicant will need to make a separate application to the DEC to obtain this licence once planning consent has been granted.

In carrying out the assessment the applicant should refer to the relevant guidelines identified at Attachment 'B'.

We support comments made at the planning focus meeting that the applicant needs to clearly identify the nature and scope of the complete project including any ancillary development occurring on alternate sites to ensure these matters are adequately assessed as part of the overall project.

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Staff of the Department perform the functions of the
National Parks and Wildlife Service and the Environment Protection Authority

Due to the complexity of this proposal it is strongly recommended that the applicant consult with the DEC during the assessment period.

We request that four copies of the EA are provided for assessment. These documents should be lodged at Suite 7 Level 1, 130-140 Banna Avenue Griffith.

If you have any further enquiries about this matter please contact me by telephoning 02 6969 0700.

Yours sincerely



16.12.2005

Craig Bretherton
Head, Griffith Unit
Environment Protection and Regulation Division
Department of Environment and Conservation

ATTACHMENT 'A'

Environmental impacts of the project.

1. The following environmental impacts of the project need to be assessed, quantified and reported on.
 - Air;
 - Noise;
 - Water; and
 - Waste and chemicals.

The Environmental Assessment (EA) should address how the required environmental outcomes and goals will be met for each impact.

2. Describe the management strategies for the treatment and disposal/utilisation of all liquid and solid wastes generated by the proposed activities.
3. Describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment.

This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Impacts on air quality

The environmental outcome for the project in relation to air quality is to ensure sensitive receptors are protected from any adverse impacts from dust and odour. Odour is the primary concern particularly from the ethanol plant production process, and the storage, treatment and disposal of ethanol plant and intensive dairy wastes. Any biogas flare should meet the design emission criteria detailed in the *Protection of the Environment Operations (Clean Air) Regulation 2002*. Details would need to be provided on the proposed measures to manage odour, and their performance.

Dust is also a concern with potential emissions including but not necessarily limited to construction, traffic movements, open exposed areas, material processing and handling, transfer points, loading facilities, and feedlot activities. Details would need to be provided on the proposed measures to manage dust from these activities and their performance.

The Department of Environment and Conservation (DEC) expects that an assessment for odour and dust as detailed in the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales* in conjunction with analysis of local meteorologic and terrain data would be sufficient to inform decisions about design and management options for each of the proposed developments. Assessment and commentary on the predicted cumulative impact of the whole development would also need to be provided.

Impacts of noise

The goal of the project should be to ensure the facility is designed, constructed, operated and maintained so that there are no adverse impacts from noise. The DEC expects that potential noise sources will be enclosed and that appropriate equipment is chosen to minimise noise levels.

The development should be assessed and designed in accordance with the NSW Government's Industrial Noise Policy (INP).

Impacts on water quantity and quality

The environmental outcome of the project should ensure:

- There is no pollution of waters (including surface and groundwater);
- Polluted water (including process waters, wash down waters, polluted stormwater or sewage) is captured on the site and collected, treated and beneficially reused, where this is safe and practicable to do so; and
- It is acceptable in terms of the achievement or protection of the River Flow Objectives and Water Quality Objectives.

The EA should document the measures that will achieve the above outcomes.

The DEC recommends that a water balance be prepared to model water management through the life cycle of the proposal.

A hydro-geological assessment should be undertaken to assess potential groundwater impacts to surrounding waterways and water dependent ecosystems from the land based utilisation of wastes. An assessment should also be undertaken on any potential impacts on down stream flows and environments and how environmental flows will be maintained.

A characterisation of potential water pollutants at the site should also be undertaken including the identification of any proposed water pollution controls and their performance. This should include details of the design and location of any wastewater treatment ponds and any tailwater ponds.

Waste

The goal of the development should ensure:

- It is in accordance with the principles of the waste hierarchy and cleaner production;
- The handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts;
- The beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so;
- No waste disposal occurs on site except in accordance with an Environment Protection Authority licence.

Where it is proposed to beneficially re-use liquid or solid waste by land application the EA must describe the proposed management regime as well as demonstrate that the land available can sustainably assimilate the organic, nutrient, hydraulic and salt loads from the waste.

Impacts of the project on threatened species and their habitat

It is noted that large sections of the site have been cleared however there is still a need to consider direct and indirect impacts on threatened species and their habitat. There would appear to be some remnant woodland patches on the property and larger remnants on the adjacent State Forest. As a Part 3A development it is required to satisfy the requirements for flora and fauna impact assessment in accordance with the "Draft Guidelines for Threatened Species Assessment" under s75 (F) of the *Environmental Planning and Assessment Act 1979*.

Threatened species known to occur in the general area are Superb Parrot, Painted Honeyeater, Grey Crown Babbler, Southern Bell Frog and Endangered Ecological Community Myall (Boree) Woodland. Other declining woodland birds would be expected to be in the area.

Small patches of vegetation in the area play an integral part of the corridor that links the Superb Parrot foraging habitat to the breeding area to the north. Rare plants may be associated with any remnant sandhill formations remaining.

There is a diverse range of different vegetation types in the general area of the site including the Boona and Bretts State Forest This includes Callitris woodland, Black box and Boree woodland and some small fragmented grassland patches. If any clearing is to take place compensatory measures should be also considered to maintain and improve habitat on the property.

The EA needs to address the following.

1. A field survey of the site should be conducted in accordance with the draft document "Guideline for threatened species assessment".
2. Likely impacts on threatened species and their habitat need to be assessed, evaluated and reported on. The assessment should specifically report on the considerations listed in Step 3 of the draft guideline.
3. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on threatened species and their habitat. This should include an assessment of the effectiveness and any residual impacts after these measures are implemented.
4. The EA needs to clearly state whether it meets each of the key thresholds set on Step 5 of the draft guideline.

Impacts of the project on Aboriginal cultural heritage values

1. The EA should address and document the information requirements set out in the draft "Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation" involving surveys and consultation with the Aboriginal community.
2. Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.
3. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
4. The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

ATTACHMENT 'B'

Guidance Material

1. Assessing Environmental Impacts

Air quality

- *Protection of the Environment Operations (Clean Air) Regulation 2002*
- *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*
- *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales*
- *(Draft) Assessment and Management of Odour from Stationery Sources in NSW*

Noise and vibration

- *NSW Industrial Noise Policy (EPA, 1999)*
- *NSW Environmental Criteria for Road Traffic Noise (EPA, 1999)*
- *Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)*
- *Chapter 171 Noise Control Guideline, Construction Site Noise Control Manual, 1994*

Water quality

- *National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)*
- *NWQMS Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000)*
- *EPA technical guidelines 'Bundling and Spill Management'*

Wastewater

- *National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC 1997)*
- *National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC 2000)*
- *Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)*

Stormwater

(Note: some of these documents will be revised in 2006)

- *Managing Urban stormwater: Soils and Construction (NSW Landcom, 2004)*
- *Managing Urban Stormwater; Source Control (EPA 1998)*
- *Managing Urban Stormwater; Treatment Techniques (EPA 1998)*

Groundwater

- *State Groundwater Policy Framework Document (DLWC 1997)*
- *The NSW State Groundwater Quality Protection Policy (DLWC 1998)*
- *(Draft) NSW State Groundwater Quantity Management Policy*
- *NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)*
- *National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ & ANZECC, 1995)*

Waste

- Guideline for the Use and Disposal of Biosolids Products (NSW EPA 1997)
- Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes

2. Assessing Threatened Species Impacts

Draft Guidelines For Threatened Species Assessment – Available from Dept of Planning

3. Assessing Aboriginal Cultural Heritage Impacts

Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation
– Available from Dept of Planning

Interim Community Consultation Requirements for Applicants

<http://www.environment.nsw.gov.au/npws.nsf/Content/Protecting+Aboriginal+objects+and+places>

Aboriginal Cultural Heritage Standards and Guidelines Kit – Available shortly on-line through DEC's webpage.