



Our reference: SF13/5645 DOC13/87638
Contact: Chris Burton 02 6022 0609

The Manager
Major Projects Assessment – Industry Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: David Mooney

Dear Mr Ritchie

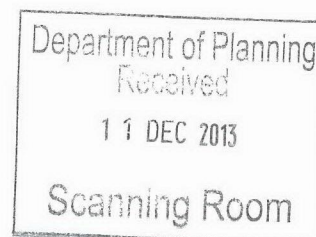
Re Proposed Ethanol Plant at Deniliquin

I refer to your electronic mail dated 27 November 2013 to the Environment Protection Authority (EPA) seeking our requirements for the preparation of an Environmental Impact Statement (EIS) for the proposed ethanol plant at Deniliquin.

The EPA has considered the details of the project as outlined in the preliminary assessment report and provided at the planning focus meeting on 2 December 2013. The EPA's key information requirements for the project relate to the assessment of air, noise, water, waste and chemicals. The specific issues that we consider to be critical to an assessment of the proposed development include:

- Potential air quality and odour impacts from the ethanol production facility;
- Noise impacts from both the ethanol plant and the projected increase in traffic movements;
- Demonstration that the waste water reuse is sustainable in relation to hydraulic, nutrient, salt and organic loadings;
- Protection of ground waters through adequate design and construction of waste water storage and re-use systems; and
- Details on the off-site sales of wet distillers grain and solubles and contingencies for storage and management if the production of this product exceeds demand.

In addition to the key issues outlined above, Attachment A outlines supplementary information required by the EPA in order to adequately assess the project. In carrying out the assessment the applicant should refer to the relevant guidelines identified in Attachment B.



It is strongly recommended that the applicant consult with the EPA during the assessment period.

If you have any further enquiries about this matter please contact Chris Burton by telephoning 02 6022 0609.

Yours sincerely



BRIAN WILD
Head Albury Unit
Environment Protection Authority

6 December 2013

ATTACHMENT A

Environmental impacts of the project

The following environmental impacts of the project need to be assessed, quantified and reported on.

- (a) Air;
- (b) Noise;
- (c) Water;
- (d) Waste; and
- (e) Chemicals.

The EIS should address how the required environmental outcomes and goals will be met for each impact. The EIS should also describe mitigation and management options that will be used to prevent, control, or abate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment.

Impacts on air quality

The goal of the project in relation to air quality should be to ensure sensitive receptors are protected from any adverse impacts from dust and odour.

Odour is the primary concern from the ethanol plant production process and the management of ethanol plant wastes such as the treatment, storage and disposal of waste waters, and the storage and handling of wet distillers grain and solubles (WDGS).

Dust is also a concern with potential emissions including but not necessarily limited to construction, traffic movements, open exposed areas, and material processing and handling. Details would need to be provided on the proposed measures to manage dust from all sources.

Emissions from plant should meet the design criteria detailed in the *Protection of the Environment Operations (Clean Air) Regulation 2010*. Details need to be provided on the proposed air pollution control techniques, including proposed measures to manage and monitor efficiency and performance.

The EPA expects that an assessment for odour and dust be undertaken in accordance with our guidelines (as listed in Attachment B) and in conjunction with analyses of local meteorologic and terrain data in order to inform decisions about design and management options for the proposed development. This assessment should also identify all sensitive receptors within a minimum 5 kilometre radius of the proposed development.

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 EPA 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 Industrial Noise Policy (DEC, 2000). High noise generating activities should be limited to normal day time operating hours where possible.

The proposed development would see a significant increase in traffic movements along the Riverina Highway and other arterial and access roads to the proposed site. The potential noise impacts associated with these traffic increases needs to be assessed in accordance with the 'NSW Road Noise Policy (DECCW, 2011).

Impacts on water quantity and quality

The goal 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 EIS should document the measures that will achieve the above outcomes.

The EPA recommends that a water balance be prepared to model water management through the entire life cycle of the ethanol production facility. This water balance should also quantify all waste water streams and characterise the quality of these waste waters. Proposed water pollution controls should be identified.

Details should be provided in regards to access to a suitable water supply and the storage of this supply in periods where access is limited. Design of the proposed storage dams needs to consider reducing evaporative losses and the prevention of seepage losses to groundwater.

The EIS needs to include a hydro-geological assessment of potential groundwater impacts from the storage of waste waters and proposed irrigation of the waste water. This should include details of the design and location of all water storages.

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; and
- No waste disposal occurs on site except in accordance with an Environment Protection Licence.

The EIS should describe the management strategies for the treatment and disposal/utilisation of all liquid and solid wastes generated by the proposed activities.

In relation to the proposed irrigation of waste waters, the EIS 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.

The EIS must provide details of the proposed management of the WDGS co-product from the ethanol production process including estimated quantities produced and proposed treatment, storage, and handling methods. If the product is to be sold off site the EIS needs to demonstrate that sufficient demand exists in the local market and outline contingencies should other disposal methods be required.

Chemicals

The goal of the project should ensure that environmental risks from hazardous chemicals and chemical waste are minimised. The EIS needs to identify the proposed type, quantity and location of chemicals to be stored on site. Spill management measures, including items such as bunding, and emergency procedures should be clearly outlined.

ATTACHMENT B

Guidance Material

Assessing Environmental Impacts

Air quality

- *Protection of the Environment Operations (Clean Air) Regulation 2010*
- Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DECC, 2005). Available online <http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf>
- Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DECC, 2005). Available online <http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf>
- Technical framework: Assessment and Management of Odour from Stationery Sources in NSW (DECC, 2006). Available online <http://www.epa.nsw.gov.au/resources/air/20060440framework.pdf>
- Technical notes Assessment and management of odour from stationary sources in NSW (DECC, November 2006). Available online <http://www.epa.nsw.gov.au/resources/air/20060441notes.pdf>
- Generic Guidance and Optimum Model Settings for the CALPUFF Modeling System for Inclusion into the 'Approved Methods for the Modeling and Assessments of Air Pollutants in NSW, Australia', March 2011. Available online <http://www.epa.nsw.gov.au/resources/air/CALPUFFModelGuidance.pdf>

Greenhouse gases

- Draft Guidelines: Energy and Greenhouse in EIA (DoP, 2002)
- Factors and Methods Workbook (AGO, 2006)

Noise and vibration

- NSW Industrial Noise Policy (DECC, 2000). Available online http://www.epa.nsw.gov.au/resources/noise/ind_noise.pdf
 - Appendices - NSW Industrial Noise Policy. Available online http://www.epa.nsw.gov.au/resources/noise/ind_noise_app.pdf
 - NSW Road Noise Policy (DECCW, 2011) Available online <http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf>
 - Assessing Vibration: a technical guideline (DECC, 2006) Available online <http://www.epa.nsw.gov.au/resources/noise/vibrationguide0643.pdf>
- Interim Noise Construction Guideline (DECCW, 2009). Available online <http://www.epa.nsw.gov.au/resources/noise/09265cng.pdf>

Water quality

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000)
- National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ, 2000)
- Using the ANZECC Guidelines and Water Quality Objectives in NSW (DECC, 2006)

Groundwater

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

Stormwater

- Managing Urban Stormwater: Soils and Construction (Landcom, 2004)
- Managing Urban Stormwater: Treatment Techniques (Draft) (DECC, 1997)

Wastewater

- Environmental Guidelines: Use of Effluent by Irrigation (DECC, 2004). Available online <http://www.environment.nsw.gov.au/resources/water/effguide.pdf>
- Effluent Management Guidelines for Intensive Piggeries in Australia (ANZECC, 1999). Available online <http://www.environment.gov.au/water/publications/quality/pubs/intensive-piggeries-australia-paper17.pdf>
- National Water Quality Management Strategy - Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) - November 2006. Available online <http://www.environment.gov.au/water/publications/quality/pubs/water-recycling-guidelines-health-environmental-21.pdf>

Waste

- Environmental Guidelines: Composting and Related Organics Processing Facilities (DECC, 2004). Available online http://www.epa.nsw.gov.au/resources/waste/envguidlns/composting_guidelines.pdf
- Technical guidelines: Bunding and Spill Management (DECC, 1997). Available online <http://www.epa.nsw.gov.au/mao/bundingspill.htm>
- Waste Classification Guidelines, Part 1: Classifying Waste, December 2009. Available online <http://www.epa.nsw.gov.au/resources/waste/091216classifywaste.pdf>