

1.2

AUSTRALIAN ETHANOL LIMITED

Australian Ethanol Limited is a publicly listed company on the Australian Stock Exchange and in April 2004 acquired the company Australian Biofuels Pty Ltd.

Australian Ethanol Limited's business model is to develop ethanol plants in conjunction with local organisations such as cooperatives, local agricultural service groups and grain aggregators. This model enables local rural communities to invest in a value adding industry, while also increasing the security of supply of key feedstock for the company's planned ethanol plants.

The intent of Australian Ethanol Limited is to project finance, construct, and operate three ethanol production facilities at Condobolin, Coleambally and Coleambally, New South Wales. These three separate applications follow the development approval for Australian Ethanol Limited's first ethanol production facility at Woorinen South near Swan Hill in the north-west of the State of Victoria. The Swan Hill facility was approved for the annual production of 100 ML per year on 28 September 2004 and construction is planned to commence on 21 August 2006. Australian Ethanol Limited is in discussions with all of the major fuel companies in regard to ethanol off-take, in addition to pursuing regional and export market sales for the three projects.

The demand for ethanol blended fuel in the Australian fuel or motor spirit market is driven by global vehicle compliance with international emissions and vehicle efficiency legislation, cleaner fuel policy and energy security issues faced by consumer countries including Australia. More recently the increase in international fuel prices has triggered the fuel ethanol debate in Australia and internationally.

The fuel ethanol industry in Australia forecasts substantial demand and growth from 2008 onwards. Australian Ethanol Limited intends to be an established producer and distributor of ethanol at that time and be positioned to participate in the anticipated growth of market demand.

1.3

ETHANOL FUEL PRODUCTION OVERVIEW

Ethanol is a liquid fuel, produced principally from natural products, which is non-toxic, water soluble and highly combustible. Ethanol has traditionally been used as a fuel and solvent for hundreds of years and has also been used as drinking alcohol. When blended with petrol, ethanol can displace benzene and other octane enhancers which are known toxic gasoline components and carcinogens. Ethanol fuel blend improves combustion efficiency, lowers tail pipe emission in vehicles and reduces pollutants. Ethanol is renewable and a sustainable option for use in conjunction with petrol, particularly to meet more stringent Australian fuel standards post 2006.

The production of ethanol involves the receipt and storage of grain, milling of the grain to flour followed by a cooking, fermentation and distillation process.

The ethanol production process converts starch which comprises up to 75 per cent of the grain seed to sugar and subsequently to ethanol. The ethanol to be produced on the site will be suitable for use as:

- a fuel blend stock, which is dehydrated (water removed), stored and at the time of dispatch to market mixed with a small percentage of petrol ('denatured'). The majority of ethanol produced by the plant will be for this purpose;
- lesser amounts of export grade industrial ethanol, which requires further processing than fuel blend stock to remove the low traces of impurities; and
- extra neutral (potable) ethanol – a smaller proportion requiring further processing to remove impurities.

The co-product of the ethanol production process is wet distiller's grain and solubles (WDGS), which is sold as stockfeed and is in high demand in feedlots, dairies and piggeries. The distiller's grain contains up to 70 per cent water and for commercial reasons is sold within 200km of the production facility. WDGS has a useful shelf life of less than a week.

Australian Ethanol Limited has an off-take arrangement with James & Sons for the off-take or payment of wet distiller's grain from the Coleambally site. James & Sons is an international feed marketing firm which will remove and on sell the WDGS to the Murrumbidgee Regions intensive agriculture industry.

1.4

CONSULTATION

Australian Ethanol Limited sent correspondence to Murrumbidgee Local Council on 24 April 2006, to advise them of the decision to proceed with the approvals process for the development of an ethanol production facility at Coleambally. A letter was received from the General Manager Mr Paul Goodsall, dated 31 May 2006, expressing support for the project with regards to the economic benefit to the region (refer to Annex A).

A meeting was held at the Council offices between Australian Ethanol Limited, ERM and Council on 17 July 2006 to discuss the proposed project. No specific areas of concern relating to the project were identified by Council at this initial stage.

Following lodgement of the preliminary assessment, Australian Ethanol Limited will hold a planning focus meeting with Department of Planning (DOP), Council and relevant government agencies to discuss the project, so that Council, the departments and agencies are able to provide informed input into the Director-General's requirements for the preparation of the EAR.

1.5 *STRUCTURE OF PRELIMINARY ASSESSMENT*

The structure of the preliminary assessment is as follows:

- Chapter 1* provides an introduction to Australian Ethanol Limited and the proposed project and sets out the purpose of the report.
- Chapter 2* provides a description of the site and surrounding area.
- Chapter 3* provides a description of the proposed project.
- Chapter 4* outlines the statutory context in which the proposal is to be assessed.
- Chapter 5* provides a preliminary assessment of the project issues such as water, noise, air quality, traffic and ecological impacts, provision of services and potential social impacts.
- Chapter 6* provides a summary of the key environmental issues of the project and a conclusion.

2.1 LOCATION

The site is located off Ercildoune Road, Coleambally approximately 645 km south-west of Sydney via the Hume and Sturt Highways.

Coleambally is a small country town in the Murrumbidgee Region of NSW. The Murrumbidgee region is traversed by the Murrumbidgee River and contains the Murrumbidgee and Coleambally irrigation areas. Wagga Wagga is the major urban centre in the region and is located approximately 130 km south-east of Coleambally. The site is situated approximately 19 km south of the Murrumbidgee River, and seven kilometres to the north of the Coleambally township.

The town of Coleambally is one of the newest rural towns in New South Wales, being established in 1968 to serve as the administrative, commercial and social centre of the Coleambally Irrigation Area (CIA) scheme, which began in 1959. The scheme now covers approximately 87,600 ha and includes crop growing of mainly rice and to a lesser extent grain, sorghum, and safflower and soy beans.

Within a 150 km catchment, Coleambally produced an average of 3.4 million tonnes of grain in the production years of 1998/99 and 2002/03 (Clark and Associates, 2006). The estimated average feed grain demand over the period was 1.4 million tonnes, leaving an average grain surplus of just below 2 million tonnes for that time period. Yearly surpluses would be available for use in the ethanol production process.

An aerial photograph of the site and surrounding area is shown in *Figure 2*.

2.2 SITE DESCRIPTION

The site is comprised of a number of lots as follows:

- Lot 33, 34, 53 and 54 on Deposited Plan (DP) 750896.

The site is located in the Parish of Mycotha and Waddi, County of Boyd, NSW.

The site is located on Ercildoune Road, accessed from Kidman Way, the main highway through Coleambally. The site is roughly triangular in shape and has an approximate area of 205 hectares. The property is bounded by Ercildoune Road a community farm and rice sheds to the north, Tubbo drainage channel to the east and south, agricultural land, a channel and Kidman Way to the east and Bretts State forest to the west. The closest rural dwelling is approximately 800m south of the site. The site and surrounding area are generally flat.

Currently the site comprises:

- agricultural cropping land;
- isolated stands of trees throughout the property;
- Tubbo drainage channel (part of the CIA system), flowing from the northeast corner and along the southern boundary of the site; and
- two power lines are located on site adjacent to the west of Tubbo drainage channel; one is 132KV and the other is 33KV.

Immediate surrounding areas include:

- the Coleambally (Murrumbidgee Shire Community Experimental Demonstration) Farm with the NSW Rice industries Coleambally Depot and a dense patch of forest north of Ercildoune Road on the northern boundary of the site;
- Tubbo Channel forms the southern boundary of the site immediately beyond which is agricultural cropping land;
- agricultural cropping land on the eastern boundary of the site; and
- scattered trees becoming Bretts State Forest on the western boundary of the site.

Surrounding areas further out from the boundaries of the site include:

- Coleambally township is located approximately 8 km south of the site;
- a forested area north of the Coleambally Farm and Depot;
- Kidman Way Road located approximately 700m east and Boona State Forest located approximately 2.5 km to the east;
- agricultural cropping land and to the south; and
- Bretts State Forest and agricultural cropping land extending further west.

Spillers Creek is located approximately 1.5km southeast of the site.

The main road network surrounding the site includes:

- Kidman Way is located approximately 700 m east of the site from Ercildoune Road, and is the main road out of Coleambally leading north to Darlington Point and Griffith;
- Kidman Way continues north and leads to the Sturt Highway which leads in a westerly direction to Hay and an easterly direction to Narrandera; and
- Kidman Way also continues south to Jerilderie before meeting up with the Newell Highway.

The nearest residential area to the site is the Coleambally township, approximately five kilometres to the south-west, while the nearest rural residence is located approximately 800m to the south of the site.

Photographs 1 to 6 show the site and immediate surrounding area.