



- ▶ Car park – paving and appropriate markings;
- ▶ Emergency access – perimeter road and appropriate surface material;
- ▶ Stormwater system – replaced where appropriate due to excavation works, bunded (contaminated) areas to drain to wastewater treatment system, general hardstand areas to drain to existing stormwater system; and
- ▶ Bunded areas to comply with relevant Australian and industry code Standards.

## **1.5 Justification and alternatives**

### **1.5.1 Project Justification**

The importation of refined oil products is due to grow substantially in the future given that no new local refining capacity is being added to meet the needs of local consumption. This consumption market will continue to grow at slightly more than 2% per annum on a current figure in excess of 13 billion litres of product per year (Dept. of Industry Tourism & Resources). Of this figure, approximately 25% relates to automotive, industrial and marine diesel oil. The net result is a disparity between refining capacity and market need within the diesel market. This disparity is likely to exceed 750 million litres (2005 statistics) and grow to in excess of 1 billion litres within the next decade.

The effect of this importation of significant refined oil quantities becomes more pronounced should the cost of a barrel of oil increases. If the long-term expectation of barrel pricing continues in the above \$US 65/ barrel oil (bbl) range, a detrimental impact on the country's current account deficits (import billing) and thereby on the rate of economic growth would be experienced.

Biodiesel can help offset this supply and demand shortfall by substitution of imported refined products with locally produced renewable products to be blended with existing petroleum diesel. However the introduction of biodiesel to the market is currently experiencing start-up barriers.

To offset this high dependence on fuel imports as well as to spur local market growth and allow establishment of alternative fuels, the Australian Government has provided incentives to establish renewable energy sources by way of a "Cleaner Fuels Grant Scheme". This scheme allows the development of a biodiesel industry setup within a stipulated time. The proposal aims to take advantage of this scheme and establish an alternative fuel energy supply capability.

Therefore, the proposal is a key part of this drive for cleaner, renewable sources of fuel that will reduce the heavy burden on imports of refined fossil fuels as well as allow reductions in automotive emissions, and hence also achieve an environmental benefit, through its use.

### **1.5.2 Project Alternatives**

The key considerations on the location of a biodiesel facility relate to:

- ▶ Scale of production;
- ▶ Proximity to import facilities;
- ▶ Proximity to sizable local market;
- ▶ Proximity to good transport networks;
- ▶ Proximity to export facilities; and



- ▶ Ability to blend with mineral diesel markets.

The New South Wales market is the second largest Australian market for diesel oil. Due to government regulated blend standards, the use of biodiesel is predominantly through blending with mineral diesel to various percentages (B10 = 10% added biodiesel). The largest multi-user and independent import facility for diesel oil is located at the Vopak Site B facility in Port Botany. Importation of certain feedstock for worldscale biodiesel plants also requires the facility to be on a regular shipping route for vegetable oil and petroleum product carriers.

By locating the proposal in Port Botany, the proposal benefits from a source of mineral diesel to blend B100 into B20 or B10 and import the critical feedstock. Hence the location is strategically sited to take advantage of required infrastructure within the same locality.

A fundamental barrier to the start-up of a biodiesel industry in the country is access to the diesel market at a cost effective entry point. By locating the proposal within the specialised petroleum handling and distribution centre of Port Botany, the proposal would benefit from easy market access in the highly competitive petroleum environment.

In addition, by locating the proposal at Port Botany, the proposal would introduce new technology and competition among the more traditional fossil fuel based petroleum based companies. This would foster additional competition, innovation and knowledge sharing of the benefits of biodiesel.

Therefore by a process of elimination along with an established tank storage location along the NSW Coast and the benefits of locating the proposal within a specialised petroleum handling and distribution centre, the preferred location is Port Botany.

## 1.6 Statutory framework

### 1.6.1 State Environmental Planning Policy (Major Projects) 2005

On 25 May, the former Minister for Infrastructure, Planning and Natural Resources gazetted a new State environmental planning policy (SEPP): *State Environmental Planning Policy (Major Projects) 2005*.

The new SEPP outlines in a single instrument the types of developments for which Ministerial consent is required. If a development requires consent under an environmental planning instrument (such as a LEP), and is considered to be State significant in accordance with this SEPP, the Minister for Planning is the consent authority.

According to Clause 6 of the SEPP, a project assessed under Part 3A of the EP&A Act is development that, in the opinion of the Minister, is of a kind:

- (a) described in Schedule 1 or 2, or
- (b) described in Schedule 3.

The proposal is considered to meet the definitions included within Schedule 1 (clause 10(2)) and Schedule 2 (clause 7(1)).

Schedule 1 ('Part 3A projects – classes of development') includes under Group 3 ('Chemical, manufacturing and related industries'):

- 10(2) Development with a capital investment value of more than \$20 million for the purpose of:
  - (a) bulk liquid storage facilities, or



- (b) gas storage facilities, or
- (C) chemical storage facilities.

Schedule 2 ('Part 3A projects - specified sites') includes:

7 Port and Related Employment Lands

(1) Botany

*Development within the area identified on Map 5 to this Schedule for the purpose of:*

- (a) a shipping berth, shipping terminal or associated building, structure or work, or*
- (b) a facility that manufactures, stores or uses significant quantities of dangerous goods and meets the criteria in State Environmental Planning Policy No 33—Hazardous and Offensive Development of being potentially hazardous, or*
- (c) a waste facility that meets the criteria in State Environmental Planning Policy No 33—Hazardous and Offensive Development of being potentially hazardous.*

The proposal has a capital investment value of \$30 million and as a result, the proposal is a project to which Part 3A applies and the Minister would be the consent authority.

In addition, the proposal is within Map 5 and is consistent with definitions of (a) and (b) of Schedule 2 specified sites – port and employment related land. As such, the proposal is a project to which Part 3A applies and the Minister would be the consent authority.

### 1.6.2 Statutory consultation

To date statutory consultation has been limited to discussions with Sydney Ports Corporation regarding lease arrangements for the proposed site and preliminary discussions with the Department of Planning.

### 1.6.3 Approvals and licenses

The Vopak Site A Terminal is approved for storage of industrial chemicals and does not cover the storage of additional fuels, chemicals or a biodiesel processing plant. Therefore, approval for this facility (for both biodiesel plant trains and associated facilities) is to be obtained based on the proposed capacity.

## 1.7 Preliminary environmental assessment and summary of issues

The preliminary investigations identified a number of benefits that the proposal would produce to both the facility and broader environmental region. These benefits include:

- ▶ Substitution of fossil based fuels;
- ▶ Surety and supply of bulk liquids to the NSW market;
- ▶ Productivity gains and economic stability to the NSW economy;
- ▶ Increased distribution of flammable products via pipeline; and
- ▶ Increased efficiency at the Vopak Site A facility thereby reducing traffic congestion because of reduced chemical storage.



The key environmental impacts identified include:

- ▶ Hazards & risks,
- ▶ Traffic & transport;
- ▶ Air quality; and
- ▶ Noise.

These key issues are discussed below.

Other environmental issues arising from the operational and construction impacts associated with the proposed development include water quality and surface water management, visual quality, soils and socio-economics.

### 1.7.1 Hazards and risks

Under State Environmental Planning Policy No. 33 - Hazardous and Offensive Development a hazardous industry is a *“development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed... would pose a significant risk in relation to the locality: (a) to human health, life or property; or (b) to the biophysical environment.”*

An offensive industry is defined as a *“development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed... would emit a polluting discharge... in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.”*

Pinnacle Risk Management has been engaged and is undertaking a quantitative risk analysis for the proposed biodiesel expansion tank arrangement. The study indicates that the risks are expected to comply with the Department of Planning's guidelines for individual fatality risk, heat radiation injury risk and property damage risk. Societal risk does not require calculation due to the distances to the nearest residences and risk to the biophysical environment is considered low. The projected risks from the proposed expansion and the associated increase in berth operations are expected to fall within the revised cumulative risk contours published by the Department of Urban Affairs and Planning in 1996.

All work will be completed in accordance with specified guidelines and the latest version of Australian Standards. The proponent has extensive fire safety and protection controls. They include the following features:

- ▶ Foam systems;
- ▶ Storage tank cooling;
- ▶ Hydrant/hosereel systems;
- ▶ Fire water supplies;
- ▶ Fire extinguishes;
- ▶ Road tanker loading fire protection;
- ▶ Tank nitrogen blanketing systems; and
- ▶ Fire alarms.