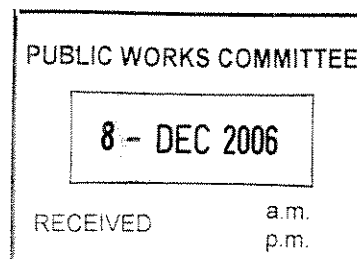


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8 December 2006

The Secretary  
Joint Committee on Public Works  
Parliament House  
CANBERRA ACT 2600

Dear Sir/Madam

## REDEVELOPMENT OF THE PROPELLANT MANUFACTURING FACILITY AT MULWALA

### INTRODUCTION

1. Thales Australia fully supports the Commonwealth's proposed redevelopment of the propellant manufacturing facility at Mulwala, as it will deliver a safe and environmentally responsible facility that maintains Australia's strategic capability for the manufacture of rifle and cannon propellants into the future. This project also delivers a number of other significant benefits to the Australian community and the Department of Defence.
2. This submission provides a plant operator's perspective on the redevelopment of this important strategic capability.

### BACKGROUND

#### The Facility at Mulwala

3. The Commonwealth owns the facility at Mulwala, which Thales Australia operates under lease until 30 June 2015. The Explosives and Propellant Facility at Mulwala is a strategic defence capability comprising two separate plants: one to manufacture propellants (gun powders) and the other to manufacture a diverse range of high explosives for the Australian Defence Force (ADF). Thales Australia incorporates these high explosives and propellants into the munitions it produces at its Benalla plant.
4. Combined, the facilities at Mulwala and the Benalla are the Defence strategic capability which produces about 70% of the ADF's non-guided munitions requirements. Thales Australia manufactures a wide range of products at Mulwala for Defence use. These include: propellants for ammunition; rocket motors; high explosive for artillery shells, bombs and demolition charges; and hexamine solid fuel tables for Army ration packs.
5. Thales Australia has also established domestic and international commercial markets for related chemicals, propellants and explosives produced at Mulwala. These products maximise the utilisation of the facility and generate profits from these sales for the Commonwealth.

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6. The current Mulwala propellants manufacturing facility was constructed in 1943. It is approaching the end of its economic working life.

7. Emerging environmental and safety issues, as well as the age of the manufacturing plant, require the redevelopment to commence shortly. The continuity of the supply of ammunition to the ADF will be jeopardised if the Mulwala propellant facility becomes inoperable.

### **The Operator - Thales Australia**

8. Since 1999 Thales SA (pronounced tal-lis), a European based global defence and electronics company, has owned a 50% share in ADI Limited (ADI), Australia's leading defence, systems and engineering company. On 13 October 2006, the Commonwealth Government granted Thales regulatory approval to become the sole owner of ADI.

9. Following the acquisition of 100% of ADI, Thales consolidated its holdings in Australia to operate all its Australian companies under the trading name of 'Thales Australia'. With effect from 16 October 2006, ADI Limited and the three other Thales entities are known as 'Thales Australia'.

10. Thales Australia employs about 3,500 people and operates more than 30 sites around the country, including the Commonwealth's Mulwala facility. Thales Australia generates annual revenues of A\$1billion.

11. Thales Australia is committed to research and development in Australia and has strong affiliations with the Defence Science and Technology Organisation (DSTO), the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and leading tertiary institutions.

12. Since the original announcement of the potential to upgrade the facility, Thales Australia has kept its employees and, where appropriate, the local community informed about the project and its future impact.

### **Australian Self Reliance**

13. An indigenous ammunition manufacturing capability is an essential element of maintaining a credible, self-reliant war-fighting capability and preserves Australia's strategic options. This has become increasingly important as the world's munitions production capabilities are dwindling and the transportation of munitions is becoming more problematic in the highly regulated Post 9-11 strategic environment.

14. The Commonwealth has reaffirmed its commitment to maintaining an Australian self-reliant munitions production capability when it gave its final approval to the Mulwala Redevelopment Program on 13 Oct 2006.

### **THE OPERATOR'S PERSPECTIVE**

15. As the operator of the facility at Mulwala, Thales Australia is seeking a safer, more environmentally friendly, more reliable and cost-efficient propellant plant that is capable of meeting the future propellant needs of the ADF. It is also keen to optimise the utilisation of the facility while maintaining its ability to surge these capabilities in support of the ADF, when required, by continuing to exercise the knowledge and skills of its Mulwala workforce through commercial work. The new plant must also enable Thales Australia to maintain its enviable quality standards to serve the future needs of the ADF.

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### Safety

16. The current 1943 generation propellant plant requires a very high level of manhandling to lift and move raw materials and products, albeit with the assistance of some recently installed assistive technologies. The manual labour-intensive nature of the plant continues to be a potential threat as a source of work related injuries despite Thales Australia's ongoing OH&S training programs and tight management practices.

17. The current plant also exposes workers to large quantities of propellant, flammable liquids and highly corrosive substances. This is becoming unacceptable in the modern working environment.

18. The proposed manufacturing process offered by the Commonwealth's selected contractor, Bovis Lend Lease with ATK Thiokol (BLL/ATK), will provide a number of safety improvements over the existing processes in the Mulwala facility such as:

- a) new processes that significantly reduce manual handling through the use of conveyors and other automation equipment;
- b) remote operations capabilities which reduce the exposure of workers to hazardous chemical and processes; and
- c) new, more efficient technologies more efficient and easier to maintain plant.

### The Environment

19. The current plant was built with little regard to its environmental impact. Thales Australia works closely with the Commonwealth to reduce the environmental impact, especially the flow of effluent into the Murray River. However, this is becoming increasingly more difficult to comply with ever tightening environmental requirements. The non-discharge of certain gases and solvents to the atmosphere was not a requirement in the 1940s and, as such the plant was not designed to contain those products. Redesign is not an option. Replacement is the only way to achieve compliance.

20. The proposed new plant will have less impact on the environment particularly in the following areas:

- a) New cellulose cutting technology reduces cellulose dust emissions and nitrocellulose fines.
- b) Nitrogen oxide (NOx) emissions from nitrocellulose nitration will be reduced by the use of selective catalytic reduction.
- c) Emissions of ethanol and ether will be captured in activated carbon absorbers, recovered and returned to the process. (The odour due to ether emissions into the atmosphere is causing complaints from the local community.)
- d) Emissions from the burning of waste explosives will be significantly improved.

### Reliability

21. Much of the installed technology and equipment in the propellant plant is up to 60 years old and is becoming increasingly less reliable, hampering efficient production operations. This equipment is no longer supported by the original equipment manufacturers, which means Thales Australia has to maintain specialist skills and equipment in-house to maintain the capability. This is costly and is not in keeping with industry best practices.

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22. One of the key challenges in the utilisation of the current plant is achieving consistency in processes. Currently the non-reliability of the equipment results in the need to re-process some propellants to achieve the required performance standards. The requirement to re-work cause a disruption to planned production schedules and adds costs.

23. The new plant will provide a higher degree of reliability and enhance product consistency and overall quality performance.

### **Quality**

24. The propellants Thales Australia manufacture at Mulwala are recognised around the world as being of the highest quality resulting in very accurate, reliable and safe ammunition for the ADF and our commercial customers globally. Through the continued maintenance of our quality system and our accredited design expertise, Thales Australia will ensure that the ADF continues to receive ammunition meeting, if not exceeding, the ADF performance standards.

### **Cost**

25. The reduction in manual handling, remote operation, the introduction of new technologies and combining processes into fewer buildings, will result in lower labour costs. The extensive use of modern process control systems and closed circuit TVs will enable more efficient operation of the plant, and when linked with more efficient management systems, will lead to reduced per unit costs.

### **Retention of the Australian Skills Base**

26. The implementation of the Mulwala Redevelopment Project will maintain the intellectual expertise required to develop and manufacture propellants in Australia. Over the last 15 years, the rationalisation of Defence production facilities in Australia has resulted in the majority of Australia's technology base in manufacturing military ammunition, propellants and explosives being concentrated within Thales Australia.

27. Thales Australia continues to invest in the knowledge and skills of its people at Mulwala, including placing students on overseas courses to development their research and development skills. Increasingly, Defence seeks Thales Australia's expertise to assist with investigating new weapons systems and technologies for future application in Australia.

### **Utilisation**

28. Maximising the utilisation of the facilities at Mulwala is a key driver of cost, professional knowledge and skills retention as well as increasing the overall performance of the facility. Thales Australia achieves increased levels of utilisation over and above that required by the ADF by producing propellant related chemicals for the commercial market as well as propellants for domestic and overseas use. This enables the facility to be in a state of readiness to respond quickly to ongoing and surge requirements for the ADF.

## **ECONOMIC IMPACT ON THE LOCAL COMMUNITY**

29. The redeveloped Mulwala Facility will employ more than 300 people and together with Thales Australia's Benalla facility that currently employs 340 people, makes Thales Australia the single largest direct employer in this rural region. Currently, Thales Australia injects approximately \$46m into the Murray Valley region through the wages and salaries it pays to its employees at both Mulwala and Benalla. The combined population in the

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Mulwala and Yarrowonga area is over 6,000 and the Mulwala Facility is one of the largest employers within this area.

30. In addition, Thales Australia's Mulwala and Benalla production facilities spend in excess of \$8m annually with over 60 local suppliers in NE Victoria and Southern NSW. These suppliers provide products and services ranging from packaging refurbishment to general engineering fabrication services, stationery, cleaning, gardening, & maintenance services, plumbing and electrical services and supplies, small tools, hardware items & consumables. Some of the more significant spend is associated with packaging refurbishment operations conducted at a Wangaratta based company that supports the employment of disabled people where Thales Australia's expenditure exceeds \$1m annually. Furthermore, Thales Australia's consolidated spend in the region for engineering and fabrication works also exceeds \$1m.

31. The redevelopment construction and commissioning program, spanning over four years, will generate significant direct local employment and sub-contractor opportunities. During the construction phase, the Australian Industry Involvement (AII) level is expected to be up to 75%.

32. During the operational phase, the Australian Industry Involvement (AII) level is expected to be up to 90%. For a 20-year operational period this would contribute directly about \$1 billion to the Australian economy and to the regional community.

### CONCLUSION

33. The redevelopment of the propellant facility at Mulwala will complete the last remaining step in the restructuring of Australia's munitions industry, replacing the military propellant manufacturing capabilities established at Mulwala over 60 years ago.

34. The redevelopment will contribute to the strategic integrity of the Benalla ammunition manufacturing plant, enabling the continuing and reliable Australian supply to the ADF of high quality, high use munitions to meet its operational requirements. It will be a significant, long-term contributor to Australia's strategic defence capability.

35. Thales Australia fully supports the redevelopment of the propellant manufacturing facility at Mulwala and looks forward to continuing to assist the Commonwealth, and the Commonwealth's contractors, to redevelop the Mulwala facility.

Yours sincerely



**Norman Gray**  
**Chief Executive Officer**  
**Thales Australia**