2

The Proposed Works

Need

- 2.1 The production of radiopharmaceuticals is carried out at Building 23 at the LHSTC. Building 23 was constructed in 1959 and has been since "been subject to an almost continuous process of modification and addition". The facility in its current state is not capable of meeting projected needs for radiopharmaceutical production.¹
- 2.2 Specific requirements include:
 - streamlining of production flow and materials handling;
 - increased production capacity to meet expected demand;
 - rectification of OH&S problems incurred by continued ad hoc development, aging infrastructure, inefficient work flow, lack of space and inadequate materials handling practices.²

Scope

2.3 The ANSTO works proposal comprises a three-storey extension to the north and east of the existing Building 23, including plant and control

¹ Appendix C, Submission No. 1, paragraph 17

² ib id, paragraphs 17 - 19

rooms. The completed development will have a useable floor area of 3636 square metres (4220 square metres including plant room areas).³

- 2.4 The proposed works will consist of:
 - modern chemistry laboratories;
 - service and instrumentation rooms;
 - production clean room facilities;
 - packaging and dispatch facilities;
 - stores and component wash bays;
 - modifications to existing microbiological and clean rooms, intermediates solutions preparation clean rooms and sterilisation room;
 - amenities and support facilities, including male and female locker rooms, bulk consumable and secure storage areas, air locks, maintenance areas, and building services plant room; and
 - associated road works, additional parking bays, landscaping, engineering and communication services.⁴

Purpose and Suitability

- 2.5 A Strategic Masterplan study identified a number of objectives for the facility's redevelopment. These include:
 - optimisation of existing production facility;
 - resolution of OH&S issues;
 - providing segregation of industrials isotopes and radiopharmaceuticals products;
 - improvement of production processes and output to meet projected future demand for radiopharmaceuticals and radioisotopes;
 - compliance with requirements of all relevant regulatory authorities, including ARPANSA, the TGA and the US Food and Drug Administration (FDA); and

³ Appendix C, Submission No. 1, paragraph 59

⁴ ib id, paragraphs 29 - 32

- provision of appropriate security measures for the control of radioactive materials.⁵
- 2.6 In planning the upgrade of its radioisotope production facility, ANSTO considered eight options in terms of value for money and ability to fulfil ANSTO's master plan objectives.⁶

Preferred Option

- 2.7 Having considered all alternatives, ANSTO's preferred option is an extension of Building 23 to the north and east.⁷
- 2.8 ANSTO identifies the following advantages related to this proposal:
 - minimal impact on current site operations;
 - simplified process flows (materials and personnel);
 - best practice in pharmaceutical facility design;
 - capacity for expansion in all areas;
 - easy links to existing facility; and
 - potential for flexible implementation.
- 2.9 Disadvantages include:
 - the need to demolish and relocate existing delay waste tanks; and
 - the requirement to reconfigure current production to maximise efficiencies.⁸

Cost

2.10 The estimated cost of the proposal is \$17.9 million (excluding GST), plus or minus 15 per cent, at March 2003 prices. Funds for the project will be sourced from ANSTO's own resources.⁹

⁵ Appendix C, Submission No. 1, paragraph 20

⁶ ib id, paragraphs 22 – 23 and Appendix 2

⁷ ib id, paragraphs 24 - 29

⁸ ib id, paragraph 25

⁹ ib id, paragraph 26