Referral of proposed action

Project title: **Australian Nuclear Science and Technology Organisation (ANSTO) - Waste Management Facilities' Extension and Upgrade**

1 Summary of proposed action

NOTE: You must also attach a map/plan(s) and associated geographic information system (GIS) vector (shapefile) dataset showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

1.1 **Short description**

Building 27 at ANSTO is an existing solid radioactive Intermediate Level Waste (ILW) storage facility. This building will be extended in an easterly direction by approximately 13 metres to construct an additional 8 main underground pits (each main pit will have 8 sub-pits, i.e., a total of 64 sub-pits), which are required for the storage of waste from the production of nuclear medicines and the operation of the OPAL Research Reactor.
Building 20B will also be extended and connected to the existing Building 57 and used to store metallic drums containing Low Level radioactive Wastes (LLW).

1.2 **Latitude and longitude**

	Latitude			Longitude		
location point	degrees	minutes	seconds	degrees	minutes	seconds
ANSTO	34	03	06.85	150	59	15.02

1.3 **Locality and property description**

ANSTO is located on New Illawarra Road at Lucas Heights, approximately 35 kilometres south west of the Sydney CBD. ANSTO is a secure campus style Commonwealth government site, which incorporates approximately 80 buildings. ANSTO's site is surrounded by a 1.6km radius buffer zone, within which there is no residential development. . Building 27 and Building 20B are two existing facilities located within ANSTO's site that store ILW and LLWs respectively. These two existing buildings will be extended to store and/or condition additional low and intermediate level wastes that will be generated in other facilities in ANSTO.

1.4	**Size of the development footprint or work area (hectares)**	The proposed area for the Building 27 extension is approximately 13m x 8m. The estimated area of the Building 20B extension is 35m x 67m.
1.5	**Street address of the site**	Lucas Heights Science and Technology Centre (LHSTC) New Illawarra Road Lucas Heights NSW

1.6 **Lot description**
N/A.

1.7 **Local Government Area and Council contact (if known)**

Sutherland Shire Council. This project is not subject to local government planning approval.

1.8 **Time frame**

B27 Preliminary Design	Nov 2015
B27 Detail design	March 2016
B27 Construction	August 2016
B27 Commissioning and Operation	February 2017
B20B Preliminary Design	May 2016
B20B Detail design	Oct 2016
B20B Construction	Jan 2017
B20B Commissioning and Operation	Jan 2018

1.9	**Alternatives to proposed action**	✓	No
			Yes, you must also complete section 2.2
1.10	**Alternative time frames etc**	✓	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	**State assessment**	✓	No
			Yes, you must also complete Section 2.5
1.12	**Component of larger action**	✓	No
			Yes, you must also complete Section 2.7
1.13	**Related actions/proposals**	✓	No
			Yes, provide details:
1.14	**Australian Government funding** Has the person proposing to take the action received any Australian Government grant funding to undertake this project?		No
		✓	Yes, provide details: The funding for the project was provided in the 2015/16 Federal budget
1.15	**Great Barrier Reef Marine Park**	✓	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

2.1 Description of proposed action

Building 27 Extension

The existing facility has 64 (8x8) retrievable underground pits (Retrievable Pit 'B') to store ILWs that are generated at various facilities in ANSTO. Under the current proposal, Building 27 will be extended by approximately 13m eastward and there will be additional 64 pits (Retrievable Pit 'C') to store Synroc and other ILWs. The existing pits (Retrievable Pit 'B') are 7m deep, while the proposed pits (Retrievable Pit 'C') have been designed to be 11m deep. The building crane rails will be extended to cover the operational area over the Retrievable Pit 'C'. The waste items (i.e., Synroc and other ILWs, mostly from ANSTO's radiopharmaceutical production facility) will be stored in these pits using a newly designed and approved Retrievable Bin Flask.

Building 20B Extension

The proposed extension will connect two buildings – i.e., Building 20B and Building 57. The 200L metallic drums containing LLWs will be temporarily stored in the proposed extended part of the building prior to the conditioning process of the wastes in Building 20B (i.e., characterisation, compaction and cement grouting).The conditioned waste drums will also be stored in the extended part of the building on an interim basis awaiting final disposition to a National Radioactive Waste Management Facility. The proposed extension will be equipped with an Automatic Storage and Retrieval System (ASRS) for storage and handling of the waste drums.

ANSTO will need to obtain approval from the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) under Regulation 51 of the *Australian Radiation Protection and Nuclear Safety Regulations* prior to the construction works.

2.2 Alternatives to taking the proposed action

Without additional interim waste storage capacity, ANSTO's ability to operate within its regulatory framework will be compromised when its current waste storage capacity is exhausted in the first half of 2017. At this time, it would have to cease critical business operations, including the production of life-saving nuclear medicines, impacting Australia's health system and patients.

2.3 Alternative locations, time frames or activities that form part of the referred action

N/A

2.4 Context, planning framework and state/local government requirements

Under the Facility Licence F0260 issued by ARPANSA, Building 27 and Building 20B are Nuclear Installations as defined in the *Australian Radiation Protection and Nuclear Safety Act 1998* (ARPANS Act). Therefore, the proposed modification works will require a prior approval from ARPANSA under Regulation 51 because they have been determined under ANSTO's safety assessment processes to have 'significant implications for safety'.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

N/A.

2.6 Public consultation (including with Indigenous stakeholders)

In accordance with legislative requirements, given the budget for the project is over $15 million the project was referred to the Federal Parliamentary Standing Committee on Public Works for approval. After a virtual site tour, public call for submissions and a public hearing, the Public Works Committee recommended approval of the works; this was endorsed by Parliament.

2.7 A staged development or component of a larger project
N/A.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

3.1 (a) World Heritage Properties

Description
N/A.
Nature and extent of likely impact
N/A.

3.1 (b) National Heritage Places

Description
N/A.
Nature and extent of likely impact
N/A.

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description
N/A.
Nature and extent of likely impact
N/A.

3.1 (d) Listed threatened species and ecological communities

Description
N/A.
Nature and extent of likely impact
N/A.

3.1 (e) Listed migratory species

Description
N/A.
Nature and extent of likely impact
N/A.

3.1 (f) Commonwealth marine area
(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)
Description
N/A.
Nature and extent of likely impact
N/A

3.1 (g) Commonwealth land
(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

Description

The ANSTO site is Commonwealth land.

Nature and extent of likely impact

The action will be taken on Commonwealth land, but will not have a significant impact upon it - see 3.2(a) below.

3.1 (h) The Great Barrier Reef Marine Park

Description
N/A.
Nature and extent of likely impact

N/A.

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description
N/A.
Nature and extent of likely impact

N/A.

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	**Is the proposed action a nuclear action?**		No
		√	Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

The action will not have any significant impact on the environment, because:

- The construction is occurring within the existing footprint of the ANSTO site. Measures to be taken during the construction phase (see section 5) will minimise impacts on the natural environment.
- The waste items to be stored in the Building 27 retrievable pits (Retrievable Pit 'C') will be in solid form and mostly treated wastes (i.e. Synroc). The concrete underground pits will provide appropriate shielding minimising external radiation to well below safe levels. Also, the massive construction of the concrete pits will provide safe containment to the waste items and will prevent radioactive material from being released to the environment. Therefore, no environmental consequence is envisaged from the storage of ILWs in the proposed Retrievable Pit 'C'. Moreover, the concrete pits will be fitted with moisture sensors and alarm system to alert operators of any water ingress in the pits. The operational activities in the proposed pits will be the same as the current operations in Building 27; over the last 40 years, there have been no incidents of environmental consequence. The safety assessment report for Building 27 shows that the radiological risk from various hazardous scenarios are 'low' or 'very low'. Report is available on request .
- In Building 20B extension, the low level solid wastes drums (200L and conditioned wastes in 400 L drum overpacks) will be stored in racks on an interim basis, which will be accessible for routine monitoring in accordance with international best practice. The facility will have an ASRS for storage and handling of the waste drums. The radioactive wastes are contained in 200L metallic drums or grouted within 400L metal drum over-packs and there are no potential

pathways by which the radionuclides could be released to the environment that could have significant impact on it. Currently, ANSTO's low level solid waste (LLSW) store (Building B59A) has about 6000 drums containing low level radioactive solid waste; in the past 30 years, there have been no incident/accidents that caused a release of radioactive materials to the environment. The radiological risk of a fire and dropping of drums scenarios were assessed as 'very low' for Building 59A, and the assessment is expected to be the same for the proposed Building 20B extension because the facility will store the same type of LLSW drums.

- The entire operation will be subject to regulation by ARPANSA, a competent and experienced regulator with responsibility for ensuring that ANSTO's operations have no significant impact on the environment.

3.2 (b)	**Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?**		No
		√	Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

There is little/ or no effect on the environmental as a result of undertaking the proposed extensions. See Section 3.2 (a)

3.2 (c)	**Is the proposed action to be taken in a Commonwealth marine area?**	√	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))

3.2 (d)	**Is the proposed action to be taken on Commonwealth land?**		No
		√	Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))

There is little/ or no effect on the environmental as a result of undertaking the proposed extensions. See Section 3.2 (a)

3.2 (e)	**Is the proposed action to be taken in the Great Barrier Reef Marine Park?**	√	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

3.3 Other important features of the environment

3.3 (a) Flora and fauna

The ANSTO site is surrounded by existing bushland with flora and fauna which are not affected by the proposed action. The proposed extension of Building 27 and Building 20B will take place on developed lands.

3.3 (b) Hydrology, including water flows

The surface and groundwater hydrology for the site have been described below:

(i) ***Surface Hydrology***

The surface hydrology is relevant to safety because radioactive material deposited in or above the ground may find its way into drainage channels, creeks or rivers through surface runoff. There are no dams in the vicinity of ANSTO site that could be fed by runoff from the site. The principal surface stream immediately adjacent to the site is the Woronora River. This river is incised deeply into the sandstone basin and is fed by surface runoff and groundwater. The Woronora river flows generally north-east from the Woronora Dam and passes within 2 km

east of the site to an eventual outflow in the Georges River estuary. On the north side of the LHSTC there is a ridge that is drained by the Mill and Barden creeks. These also empty into the Georges River estuary. The Barden and Mill creek water courses have generally been actively eroded in recent times exposing moderately unweathered rock. It is envisaged that no radioactive materials from the proposed extension of Building 27 and Building 20B would be deposited on the surface and eventually be drained into the water systems described here.

(ii) ***Groundwater hydrology***

The groundwater hydrology is complicated by weathering and features of the Hawkesbury sandstone. The unweathered sandstone has a very low primary or intergranular permeability while the weathered sandstone has a considerably higher primary permeability. The proposed extension of Building 20B is an aboveground facility and its routine operation does not have any impact on the groundwater. Building 27 extension will have underground pits where ILWs will be stored. The safety assessment report assessed the water ingress scenario and concluded that the risk of groundwater contamination was 'low' because the pits have been designed with adequate level of safeguards to prevent any spread of contamination.

3.3 (c) Soil and Vegetation characteristics

The locations where the proposed extension works will take place are predominantly developed sites adjacent to Building 27 and Building 20B.

3.3 (d) Outstanding natural features

There are no outstanding natural features on this site.

3.3 (e) Remnant native vegetation

The LHSTC was developed in the 1950s.

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

Gradients shown on the design drawings attached

3.3 (g) Current state of the environment

This is a developed site since the 1950s. The area where the Building 27 extension will take place is a brownfield site adjacent to the building. The B20B extension work will take place between the area of Building 20B and Building 57, which includes part of the existing access roadwork

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

N/A.

3.3 (i) Indigenous heritage values

N/A.

3.3 (j) Other important or unique values of the environment

N/A.

3.3 (k) Tenure of the action area (e.g. freehold, leasehold)

Freehold - Commonwealth land.

3.3 (l) Existing land/marine uses of area

No marine uses. The Building 27 extension will take place on a brownfield site adjacent to the building. The Building 20B extension work will take place between the area of Building 20B and Building 57 which includes part of the existing access roadwork.

3.3 (m) Any proposed land/marine uses of area

No marine uses. The areas will be the location where the proposed building extensions will be built.

4 Environmental outcomes

The proposed extension of Building 27 and Building 20B will provide ANSTO additional capacity to temporarily store low and intermediate level wastes until they are sent to the National Radioactive Waste Management Facility (NRWMF) for storage. The NRWMF is expected to be operational by 2020; meanwhile, the proposed action will help ANSTO achieve environmental outcomes as described below:

(a) The underground retrievable pits in Building 27 will isolate the wastes from the environment. The underground pits will provide the appropriate level of shielding and containment of the waste items, such as Synroc and wastes resulting from the production of nuclear medicine, which will minimise the risk of any harmful effects of radiation on the environment;

(b) The storage of additional LLW drums in Building 20B will allow ANSTO handle and store the drums in a safe and efficient way. This will minimise the risk of any radiological exposure to the environment.

(c) The process operations in Building 20B waste conditioning and treatment (*i.e., waste characterisation, compaction and grouting*) will result in waste immobilisation which will significantly minimise the potential environmental impact.

5 Measures to avoid or reduce impacts

The construction works to extend Building 27 and Building 20B will be undertaken by a Principal Contractor who will be managed by ANSTO's Major Project Delivery Office (MPDO). Before commencing the construction work, the Contractor will prepare and submit an Environmental Management Plan (EMP) to ANSTO MPDO for review and approval. The EMP, which will be reviewed and updated periodically during the construction phase, will include a series of measures to mitigate/eliminate any impact of the construction activities on the environment. The main items of the EMP are as follows:

- Dust management which includes water-mist to suppress dust, if necessary.
- Covering of trucks loaded with soil, sand, gravel etc.
- Protection of trees.
- De-watering in controlled manner.
- Sediment controls i.e. silt fences, gravel bags, etc.
- Stormwater control i.e., side entry pit and kerb drains are kept free of pollutants and not blocked by sediments.
- Installation of dust fences/shades.
- Noise suppression.
- Disposal of construction wastes in accordance with ANSTO Waste Operation (WO) procedures (recycled where applicable).
- Availability of spill kits – on site.
- Fuel and chemicals stored in bunded areas.

The operation of the Building 27 and Building 20B facility will be managed by ANSTO' s Waste Operations section, who conduct operations under the existing ARPANSA Licence and are experienced in these operations.

Radiation safety and contamination control at the facility will be achieved through various features and controls to be implemented as part of the ongoing management of both facilities and these are as follows:

- **Personnel and materials access**: Routine personnel access and vehicular access to the building will be under the existing security arrangements. Materials moved into and out of the building will be subject to clearance through a dose and surface contamination monitoring system where appropriate.

- **No airborne contaminants**: Since the waste items are stored underground or in drums, there will be very minimal airborne release from the wastes. The air extracted from the pits will be drawn through a manifold and filtered through a HEPA and carbon filter bank to trap any particulates and volatile gases such as I-131 (although none are expected). The filters and fan will be outside the building close to the site boundary. Stack monitoring will monitor discharges following filtration. The extended Building 20B/Building 57 facility will be naturally ventilated and no release of radioactive gas and/or particulates from the facility is expected.

- **No liquid (aqueous) borne contaminants**: There will be no ongoing process operation involving contaminated materials. Therefore, no liquid (or aqueous) borne contaminants will be generated in the proposed extensions. However, as a precaution, Building 20B is designed with an epoxy-coated floor and an active drainage system which will be connected to the site-wide active trade waste line. In Building 27, the underground pits are designed to have moisture probes and an alarm system which will raise an alarm in the event of any unexpected water ingress into pits.

- **Radiation safety**: This will be controlled by ANSTO's procedures for handling and storage of radioactive materials. In particular, all staff working in the area will wear TLD radiation badges and carry personal digital radiation monitors. Appropriate radiation monitors will be installed in selected locations or be portable within the building to provide operational staff with additional warning in the unlikely event of high radiation readings.

- **Fire protection:** A fire detection system within the building compliant with the Building Code of Australia is currently in place in both facilities. The same detection/alarm system will be extended to the newly constructed areas. That system will provide an alarm output to the ANSTO site alarm system.

Detailed operating procedures will be prepared and approved by the ANSTO's internal safety committee (the Safety Assurance Committee) and ARPANSA before the formal commencement of operations.

6 Conclusion on the likelihood of significant impacts

6.1 Do you THINK your proposed action is a controlled action?

√	No, complete section 6.2
	Yes, complete section 6.3

6.2 Proposed action IS NOT a controlled action.

Many of the waste items stored in Building 27 underground pits will be immobilised in Synroc form. Other ILWs to be stored in the pits (e.g., wastes from the soon to be complete ANSTO Nuclear Medicine facility and other radiopharmaceutical production facilities in Building 23 and Building 54) will be placed in partially-sealed 72L stainless steel bins. These wastes will remain underground and inside heavily constructed concrete pits (11m deep) which will provide isolation from the environment. The facility will be fitted with monitoring and alarms system such as fire detection, moisture sensors and stack monitoring etc.

In the Building 20B extension, the low level waste drums will be stored awaiting conditioning and treatment in the main bay area of the building, and the conditioned/immobilised waste placed in storage on an interim basis in the extended building (grouted within 400 L drum over-packs). The low level wastes will be placed in 200L drums with a tightly-closed lid (not air-tight) or immobilised (grouted) within 400 L drum over-packs. The wastes are of low radioactivity. The building will be fitted with all the necessary monitoring and alarm systems including radiation and contamination monitors. There are no potential pathways identified by which the radioactive materials could be released to the environment. Currently, ANSTO's low level waste store (i.e., Building 59) holds about 6,000 drums and there have been no incidents/accidents with environmental consequences over the past 40 years. See further detail of the fire and dropping of drums hazards discussed in Section 3.2(a) above.

Therefore, the proposed action has no or a negligible effect on the health of members of the public and to the surrounding environment. The safety assessment report for the proposed action (i.e., ILWs in Building 27) did not find any credible pathway by which radioactivity could be released to the environment. Similarly for Building 20B, no incident/accident scenarios were anticipated which could have a significant impact on the environment.

6.3 Proposed action IS a controlled action

	Matters likely to be impacted
	World Heritage values (sections 12 and 15A)
	National Heritage places (sections 15B and 15C)
	Wetlands of international importance (sections 16 and 17B)
	Listed threatened species and communities (sections 18 and 18A)
	Listed migratory species (sections 20 and 20A)
	Protection of the environment from nuclear actions (sections 21 and 22A)
	Commonwealth marine environment (sections 23 and 24A)
	Great Barrier Reef Marine Park (sections 24B and 24C)
	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

7 Environmental record of the responsible party

		Yes	No
7.1	**Does the party taking the action have a satisfactory record of responsible environmental management?** **Provide details** ANSTO is subject to strict ongoing environmental regulation by ARPANSA. In compliance with the ARPANS Act, ANSTO is required to obtain approval from ARPANSA of Plans and Arrangements including the Environmental Protection Plan for controlled facilities. Such plans are periodically reviewed and updated by ANSTO. ANSTO's commitment to the environment is demonstrated through its certification to the international environmental management standard, ISO 14001. In approving the construction of the OPAL reactor, the then Minister for the Environment and Heritage imposed 29 conditions. All conditions were fully complied with.	√	
7.2	**Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?** **If yes, provide details** In 1992, ANSTO was subject to action under the NSW Environmental Planning and Assessment Act in the NSW Land and the Environment Court. The action related to a breach of NSW planning law; no adverse environmental impacts were alleged or found.	√	
7.3	**If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?** **If yes, provide details of environmental policy and planning framework** Environmental management at ANSTO is a part of the ANSTO Business Management System (ABMS) and is the mechanism to ensure that ANSTO's environmental footprint is minimised. Overarching Policy and Strategy: ANSTO's environmental philosophy is defined within our Health, Safety & Environment Policy, which is implemented via a hierarchy of plans originating from the ANSTO Strategic Directions. ANSTO's commitment to protecting the environment is demonstrated through its certification to the international environmental management standard, ISO 14001. ANSTO's Environmental Management System: Environmental management at ANSTO is structured in approach. The specific elements of environmental management, as well as those requirements that are common to Environmental, Quality and Safety Management systems and the implementation of controls that limit our environmental impacts, are all	√	

	part of the ABMS. The processes of environmental management, from the initial identification and evaluation of environmental aspects and the identification of legal and other environmental requirements through to the programs for achieving our environmental objectives and targets culminate in a series of Environmental Management Plans which are devised, documented and implemented in accordance with the requirements of the IS014001 certification.		
7.4	**Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?** **Provide name of proposal and EPBC reference number (if known)** Construction of Building 20B (Radioactive Waste Processing Facility), 2001 Extension to Building 23 (Radiopharmaceuticals production facility), 2003 Construction of Nuclear Materials Store, 2008 Decommissioning of the MOATA Reactor in 2009. Decommissioning of NMC and Camperdown Facility (EPBC Ref 2010/5645) Interim Waste Store at Lucas Heights in Oct 2012 (EPBC Ref 2012/6564) Synroc Waste Treatment Facility (EPBC Ref 2012/6697) ANM Mo-99 Facility at Lucas Heights in Dec 2012 (EPBC ref 2012/6598) Transport of Intermediate Level Wastes to Lucas Heights in Oct 2015 (EPBC ref 2015/7437).	√	

8 Information sources and attachments

(For the information provided above)

8.1 References

1. ANSTO B27 BUILDING EXTENSION- Architectural drawings by GHD- Job No. 21-25141-A0200, February 2016
2. Building B27 Extension (Retrievable Pit'-C') safety assessment - ANSTO/T/TN/2015-22, Rev 0 Feb 2016.
3. ANSTO LLSW Safety Assessment ANSTO/T/TN/2011-14 rev 2, August 2015.
4. B20B Concept Layout - Assembly Option 3
5. Lucas Heights Science and Technology Centre - Site Description, ANSTO/T/TN/2012-11 rev 0, Nov 2012.
6. Report 4/2016: Parliamentary Standing Committee on Public Works - Referrals made February and March 2016 Chapter 5: Australian Nuclear Science and Technology Organisation Waste Management Facilities' Extension and Upgrade

8.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

8.3 Attachments

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Attachment 1_EPBC Referral Aerial View ANSTO site
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)		
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)		
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

9 Contacts, signatures and declarations

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action[1].

Project title:

9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action[2].

1. Name and Title:	Mr Hefin Griffiths, Head Nuclear Services & Chief Nuclear Officer
2. Organisation (if applicable):	Australian Nuclear Science and Technology Organisation
3. EPBC Referral Number (if known):	
4: ACN / ABN (if applicable):	47 956 969 590
5. Postal address	Locked Bag 2001, Kirrawee DC, NSW, 2232
6. Telephone:	(02) 9717 3295
7. Email:	hefin.griffiths@ansto.gov.au
8. Name of proposed proponent (if not the same person at item 1 above and if applicable):	
9. ACN/ABN of proposed proponent (if not the same person named at item 1 above):	

I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

□ an individual; OR

□ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR

[1] *If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.*

	☐	not applicable.
If you are small business entity you must provide the Date/Income Year that you became a small business entity:		
I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations. Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:	☐	not applicable.
Declaration	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence. I agree to be the proponent for this action. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.	
Signature	DKerp for H Griffith	Date 27/6/2016

9.2 Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name	Alamgir Kabir
Title	Mr
Organisation	Australian Nuclear Science and Technology Organisation
ACN / ABN (if applicable)	47 956 969 590
Postal address	Locked Bag 2001, Kirrawee DC, NSW, 2232
Telephone	(02) 9717 3655
Email	alamgir.kabir@ansto.gov.au
Declaration	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature Date 27/06/16