



Australian Government
**Department of Industry, Science,
Energy and Resources**

Submission to Senate Inquiry into the National Radioactive Waste Management Amendment (Site Specification, Community Fund and Other Measures) Bill 2020

April 2020

Contents

Introduction	2
Policy framework	2
Legislative framework.....	3
Rationale for the Bill	4
Bill amendments	4
Acquisition of site and additional land	4
Establishment of Community Fund.....	5
Site nomination process	6
Community engagement	6
Technical assessment.....	7
Site assessment criteria	8
Site Assessment Report	8
Community Sentiment Report	9
Aboriginal community engagement	9
Safety context	11
Attachments.....	14
Attachment A: Indicative map showing the specified site within the approved nominated site at Napandee.....	15
Attachment B: Land acquisition diagrams	16
Attachment C: Site nomination and selection process.....	17
Attachment D: Summary of community consultation	19
Attachment E: Record of Minister’s assessment of preferred site.....	20
Attachment F: Site Assessment	24
Attachment G: Community Sentiment	25
Attachment H: Engagement with the Barngarla People.....	26
Attachment I: Common misconceptions with explanations.....	27
Attachment J: Published factsheets and reports.....	37

Introduction

The Department of Industry, Science, Energy and Resources (the department¹) welcomes the opportunity to provide a submission to the Economics Legislation Committee Inquiry into the National Radioactive Waste Management Amendment (Site Specification, Community Fund and Other Measures) Bill 2020 (the Bill).

A National Radioactive Waste Management Facility (facility) is essential to secure Australia's nuclear medicine industry, which two in three Australians will need in their lifetime. This critical piece of national infrastructure will bring together Australia's radioactive waste streams in a safe, purpose-built facility, consistent with international obligations and domestic regulatory requirements.

Importantly, a facility will not be established unless it meets relevant environmental and regulatory approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act), the *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANS Act) and the *Nuclear Non-Proliferation (Safeguards) Act 1987* (the Safeguards Act).

The introduction of the Bill follows extensive engagement with local communities and technical assessment processes spanning more than four years.

The Bill revises the current approach of acquiring a site for the facility from a Ministerial declaration to a decision of the Parliament. These amendments will specify in legislation the location of the site for the facility at Napandee, Kimba, South Australia and provide clarity and certainty to the Australian community of the location of the facility and the type of radioactive waste that can be stored in the facility. The amendments also provide for the establishment of a \$20 million Community Fund to deliver benefits to the host community setting out clearly the level and nature of the funding commitment.

This submission sets out the key policy and legislative principles and framework underpinning the Bill and the rationale for the Bill and proposed amendments. It also sets out the site nomination, assessment and selection processes including the supporting community engagement and technical assessment processes and the stringent safety and regulatory processes required to establish a facility.

Policy framework

Australia is committed to providing for the safe and sustainable management of radioactive waste to maintain intergenerational equity, so that the benefits received by one generation do not create obligations and unfair burden on succeeding generations. This objective is supported by the Australian Radioactive Waste Management Framework (the framework) which sets out the institutional arrangements for the full life cycle management of Australia's radioactive waste.

The policy framework:

- ensures consistency in how waste is managed across Australian Government agencies (as the largest waste holders and generators);

¹ Where 'department' is referred to in this submission, it also refers to the former Department of Industry, Innovation and Science, which was predecessor of the Department of Industry, Science, Energy and Resources under machinery of government changes on 1 February 2020.

- identifies appropriate accountability for Australia's radioactive waste management practices;
- provides explicit and mutually agreed principles and long term goals to form the basis for Australia's national approach to radioactive waste policy making;
- provides greater certainty to Commonwealth, State and Territory regulators in facility licensing decisions; and
- ensures that Australia's domestic arrangements align with its international obligations.

The framework draws on radioactive waste management policies from leading nuclear countries with established regulatory frameworks, tailored to meet the Australian radioactive waste management context. By international standards, Australia has only a relatively small amount of radioactive waste to manage which arises from important uses of nuclear medicine and research. Australia has no nuclear power reactors.

The framework has five elements:

- **Overarching policy objectives** such as safety, security, safeguards compliance and waste minimisation.
- **Roles and responsibilities** including the responsibilities of waste producers/holders, regulators and policy makers.
- **Institutional arrangements** underpinning the full life cycle management of radioactive waste in Australia – from planning new waste producing activities to implementing, decommissioning and waste disposal activities.
- **Strategic planning of radioactive waste management** which identifies the main source of radioactive waste in Australia, including the decommissioning of facilities and assists in the establishment of a common national inventory of radioactive waste.
- **Sustainable long term funding arrangements**, including full life cycle waste management costs being factored into consideration of new waste producing activities.

Legislative framework

Radioactive waste management is one of the most regulated industrial activities in the world. The *National Radioactive Waste Management Act 2012* (the Act) sets out the legislative framework for the selection of a site for the establishment of a facility. This legislative framework, in combination with other domestic legislation, such as the ARPANS Act and the Safeguards Act, ensures Australia upholds the highest safety standards for radioactive waste management and also meets its international obligations and ensures that relevant environmental and nuclear regulatory approvals must be obtained.

The legislative framework is based on volunteerism. That is, no site can be considered as a potential location for a facility without the voluntary nomination of that site.

The objective of the Act is to ensure that the Commonwealth's radioactive waste is safely and securely managed at the voluntarily nominated and selected site. The main elements of the Act are:

- a voluntary site nomination process;
- ministerial determination to select a preferred site;
- natural justice process, which invites those with rights and interests in the site to provide comments;
- the acquisition or extinguishment of rights and interests in the site by the Commonwealth;

- arrangements for community engagement in the establishment and operation of the facility; and
- the establishment of a National Repository Capital Contribution Fund.

Rationale for the Bill

The identification of a site for the facility is the culmination of extensive technical work and in depth community consultation undertaken over a four year period. While the identification of the preferred site for the facility has been undertaken in line with the Act, rather than proceeding with the processes for site acquisition under the existing Act the amendments will specify the preferred site in legislation. Specifying the site in legislation provides certainty to the Australian community on the location and the geographical scope of the facility. Importantly, the acquisition of a site for a facility will now be a decision of the Parliament rather than being at the discretion of one Minister.

Introducing a Parliamentary process ensures additional appropriate scrutiny at a national level on the decision to site this important piece of national infrastructure. Additionally, the Bill will enshrine in legislation a commitment to the host community to provide economic support in the form of a \$20 million grant. The Bill principally amends the Act to:

- specify the site for the facility at Napandee, near Kimba, South Australia (new section 5);
- provide for the establishment of a \$20 million Community Fund to deliver benefits for the community and support long-term infrastructure and development priorities (schedule 2);
- enable additional land to be acquired to expand the specified site for the facility or provide all-weather road access (new sections 19A and 19B); and
- make clear and objective links between the operation of the Act and the relevant constitutional heads of power, which includes amending the definition of *controlled material* (new section 4A).

Bill amendments

Acquisition of site and additional land

Native title on the specified land for the facility, as well as on additional land that may be acquired for the expansion of the site, has been extinguished, and it is not the government's intention to extinguish native title on any land acquired for the purpose of establishing the facility.

The Bill provides for the site for the facility to be acquired through an Act of Parliament. The size of the parcel of land specified in the Bill for the establishment of the facility is approximately 160 hectares (an indicative map showing the boundaries of the specified site and the potential additional land is at [Attachment A](#)). This is sufficient to allow for the footprint of the facility and associated security requirements, enabling infrastructure such as power and water for potential community activities (such as agricultural research and development, as was recommended in Senate Economic Committee's 2018 inquiry into the site selection process).

The land specified in the Bill has been voluntarily nominated by the landowner and those interested in the project have had the opportunity to have their say as part of the extensive consultation and community engagement process undertaken by the department and responsible Minister.

Additional land may be required following further site specific technical or cultural heritage investigations in order to adhere to regulatory requirements, including those governing the safety and security of the facility.

The Bill enables up to a further 50 hectares of the Napandee site that was voluntarily nominated by its owners to be acquired for these purposes. This additional land adjoins the northern boundary of the site proposed for the site of the facility. The area of land that may be acquired is set out in the Bill. The Bill also carries over the power under the Act for the Minister to acquire additional land for the purposes of providing all-weather road access to the site.

The Bill requires that any acquisition of additional land, either to extend the site for the facility or for all-weather road access, include a consultation period to allow any person having a right or interest in the land to comment. People with a right or interest in additional land being considered for acquisition will be invited to provide comment in accordance with the procedural fairness provision in the Bill. These comments must then be taken into account before the acquisition is made. This consultation process is similar to that under the current Act, which was introduced in 2012 and passed with bipartisan support.

See [Attachment B](#) for a diagram on the site acquisition process under the current Act and Bill.

Establishment of Community Fund

The Community Fund replaces provisions for the National Repository Capital Contribution Fund (NRCC Fund) that was envisaged when the government was negotiating a potential site with the Northern Territory. The NRCC Fund was intended to support the delivery of enhanced public services and infrastructure to the host State or Territory.

The Bill will replace the NRCC Fund with a community focused and community controlled fund, which will be increased and restructured to more directly support the host community in the long term.

The Bill provides clarity and certainty on the level of funding, now set at \$20 million (from a previous minimum of \$10 million). It retains the provisions for establishment of the Regional Consultative Committee (RCC) and introduces the Community Fund entity to administer the Community Fund for the benefit of the local community and to support the establishment of the facility and its operation.

The RCC's primary function is to facilitate clear communication between the Commonwealth, the facility operator and the community. It will also ensure continued transparency of process, information and reporting between the government and community.

The Community Fund entity will be mandated to ensure the \$20 million payment is used *'for purposes associated with the economic and social sustainability of the host community'*. The entity will consult with the RCC, the District of Kimba Council and the South Australian Government, to ensure its operations and governance arrangements accurately reflect the needs of the local community, while giving consideration to how those needs fit within the broader South Australian community, including Aboriginal community needs.

The establishment of the \$20 million Community Fund will help deliver these benefits for the community and support long-term infrastructure and development priorities, including sustainable health services, agricultural research and development, enhancements to local critical infrastructure and the further development of the local Aboriginal community economy.

The Community Fund is one component of the \$31 million Community Development Package announced in July 2018 to go to the host community chosen as the site for the facility. The package also includes:

- the Community Skills and Development Program, which will provide \$8 million in grants for four years to assist local workers and businesses to maximise opportunities from the construction and operation of the facility; and
- up to \$3 million from the government's Indigenous Advancement Strategy to strengthen Indigenous skills training and cultural heritage protection in the successful community.

The government recognises maintaining a constructive relationship, along with appropriate support for the community around the nominated site, is integral to ensuring the successful establishment and operation of the facility. This is reflected in the approach it has taken to funding. During the site selection process the department worked closely with the communities around the nominated sites to deliver a package of community projects aimed at building local capacity and economic resilience, which in turn will safeguard the community's ability to provide support services necessary to the ongoing operation of the facility. Significant goodwill has been generated, which provides a platform for the government to continue working with the host community to deliver the facility.

Site nomination process

In December 2014, the department commenced a voluntary site nomination process (refer [Attachment C](#)). 28 nominations were received from across Australia. A preliminary technical assessment of the suitability of these sites as well as community consultation was undertaken in respect of 25 sites (three did not meet requirements for nomination). The department engaged an Independent Advisory Panel (IAP) to provide advice on technical and community engagement considerations. The IAP was made up of independent representatives, selected for their experience and subject matter expertise in areas such as: radiation safety, environmental advocacy, social science, engineering and development, and nuclear medicine. The IAP assisted the department with an initial assessment of 25 nominations, the development of a multi-criteria analysis and site selection framework and assessment of feedback from communities during and after the 120 day consultation period.

Following preliminary assessments, the responsible Ministers approved the nomination of Wallerberdina Station site in April 2016 and Lyndhurst and Napandee within the Kimba community in June 2017 for further consideration.

In the case of the three approved sites, significant community engagement activities, including with Traditional Owners, was undertaken between 2016 and 2019 to inform communities of the proposal and to determine levels of support for the facility being located within the respective communities. Further site assessment work was also carried out. Technical assessment and community engagement work since 2014 represents an investment of around \$60 million.

Community engagement

Following approval of the three sites, the department engaged with the local communities, Traditional Owners and the wider public to ensure all interested parties had avenues to receive accurate and timely information as well as express their views on the proposal (refer [Attachment D](#) for a Summary of Community Consultation). This ensured that interested community members were fully equipped to make informed decisions.

Information and engagement activities included:

- the provision of information about the various aspects of the facility proposal including community visits by technical specialists, social media posts, webinars, workshops, information sessions, and distribution of newsletters, fact sheets² and independent reports;
- staffing local offices with locally employed community engagement officers in each community;
- establishing and facilitating engagement through the communities' Consultative Committees, Economic Working Groups and Heritage Working Group;
- public education visits to ANSTO for community members to learn about nuclear waste management (57 visits, involving more than 230 people); and
- direct consultation with the Minister and department and community stakeholder groups including neighbours, businesses and Traditional Owner groups.

Technical assessment

In 2016 the department commenced an assessment of the technical suitability of the three sites shortlisted to host the facility. This included assessment of geotechnical criteria, the environment, and transport and infrastructure requirements for each nominated site. The criteria were assessed in the context of suitability against a generic non-site specific design concept produced for the department by Australian Nuclear Science and Technology Organisation (ANSTO). Examples of the broad technical considerations undertaken for the three sites nominated to host the facility included:

- vegetation and ecological communities (native and invasive), and fauna and habitats (including habitat corridors);
- landscapes and landforms;
- archaeology and cultural heritage;
- geology, geotechnical and geochemical characteristics;
- seismic activity and geological faults;
- soil type and structure and other substrates;
- water (surface and ground);
- hydro-geochemistry (affects chemical mobility in the ground/groundwater);
- conservation and special use areas;
- capacity to deal with facility wastes and emissions;
- risks from the surrounding environment e.g. bushfire;
- climatic conditions, wind, rainfall, evaporation;
- climate change and long-term environmental scenarios;
- radiation, background and risks;
- site characteristics which have the potential to impact on safety of the site (including distance to properties and towns);
- risks from the potential impacts of human activities on site suitability;
- renewable or non-renewable natural resources, and the site potential to use renewable resources;

² The department has released a range of factsheets on its website and provided them to local communities, which explain the safety and security aspects of the facility. They can be accessed at: <https://www.industry.gov.au/data-and-publications/national-radioactive-waste-management-facility-taskforce-information-pack>

- transport considerations (including investigation of potential transport routes to the facility); and
- utilities, energy and infrastructure.

Site assessment criteria

To assist the Minister's consideration of a suitable site, site assessment was conducted against four criteria:

1. the extent to which it is reasonably likely that, at the site, radioactive waste can be safely and securely managed by the establishment and operation of the NRW facility that meets the necessary regulatory or other approvals, licences and permits;
2. the costs to acquire the site and realise the facility at the site;
3. other matters relevant to the suitability of the site for the establishment and operation of the facility; and
4. the extent to which there is broad community support for the facility to be hosted at the site.

This work culminated in the preparation of two key reports using an evidence based approach which the Minister drew from in identifying Napandee in Kimba, South Australia, as the preferred site.

- **Site Assessment Report** covering criteria 1, 2 and 3 (safety, security, regulatory approvals, costs and other aspects of site suitability) – based on more than three years of technical studies undertaken by ANSTO and AECOM, with technical methodology peer reviewed by relevant regulators; and
- **Community Sentiment Report** covering criterion 4 (broad community support) drawing from community views about hosting the facility including; community ballots, submissions and surveys.

Following consideration of these reports, on 1 February 2020 the Minister identified Napandee as the preferred site and the *Record of Minister's assessment of preferred site*, which outlined his rationale and the evidence he relied on for identifying Napandee, was published on 3 March 2020 ([Attachment E](#)).

The March 2020 reports attached to this submission (Site Assessment at [Attachment F](#) and Community Sentiment at [Attachment G](#)) include information contained in the Site Assessment Report and Community Sentiment Report, save for information that is exempt from disclosure. The attachments to these reports will be published on the department's website and available at: <https://www.industry.gov.au/strategies-for-the-future/managing-radioactive-waste>.

Site Assessment Report

The technical information presented in the Site Assessment Report is based on independent specialist technical reports by AECOM and ANSTO commissioned by the Australian Government. A group of technically qualified and experienced persons assessed the three sites, producing assessment reports which were peer reviewed by Geoscience Australia and Commonwealth Scientific and Industrial Research Organisation (CSIRO).

A broad range of factors (41) were examined relevant to the criteria including, seismology, hydrology, geology, ecology, capital cost of the facility, Aboriginal cultural heritage, and social and

economic impacts. For each of these factors the approved sites were given evidence-based risk ratings. The Site Assessment Report describes the factors considered, methods for assessing them, findings and risk matrices used showing the risk ratings assigned to each factor.

Overall, from the technical assessment, all three sites were confirmed as feasible sites for a facility. However, Napandee (Kimba) had the best risk profile and lowest cost, and Wallerberdina had the highest risk profile and highest cost.

Community Sentiment Report

While the views of each group and individual is important to the process, the government maintained that no one group or individual has the right to veto the facility. The *Record of Minister's Assessment of Preferred Site* (at [Attachment E](#)) explains the basis upon which the Minister considered there was broad community support.

A specific focus was given to the local community as defined geographically by the District Council of Kimba for Lyndhurst and Napandee, and the Flinders Ranges Council and the area within a 50 kilometre radius of the site within the Outback Communities Authority area for Wallerberdina. These boundaries capture the appropriate socio-economic links for the sites and were agreed by the community consultative committees to apply to the council-run ballot conducted by the Australian Electoral Commission (AEC).

In recognition of the variety of interest groups and to ensure that all views available to the department were considered, a range of government-led and privately conducted community sentiment indicators were used to inform the report, including:

- council-run community ballots (conducted by the AEC);
- stakeholder-run ballots;
- public submissions;
- parliamentary submissions;
- neighbour surveys
- business survey;
- petitions; and
- ministerial correspondence.

Aboriginal community engagement

The relevant native title representative groups, and other Traditional Owner representative groups, have been provided with the opportunity to present their views through direct consultation and offers of assistance to conduct member ballots, as well as through public submissions.

- For the Kimba sites, the relevant registered native title body corporate is the Barngarla Determination Aboriginal Corporation (BDAC).
- For Wallerberdina Station, the relevant registered native title body corporate is the Adnyamathanha Traditional Land Association (ATLA).

(Box 1 lists the different Aboriginal groups relevant to the proposal).

Native title holders were eligible to participate in the AEC-run community ballots, if they were registered on the relevant electoral roll (based on residency and other guidelines in the relevant local government authority area). In addition, it was recognised that other mechanisms were needed

to accurately capture the sentiment of native title holders, many of whom reside outside the relevant electoral boundaries.

Relevant native title representative bodies were approached by the department to be consulted on matters of heritage at the sites. The Site Assessment ([Attachment F](#)) includes a preliminary assessment of Aboriginal cultural heritage values and discusses how these should be managed in relation to the approved nominated sites. Further detailed site-specific anthropological and archaeological work is required at Napandee to identify any Aboriginal cultural heritage that may be present and to prepare a cultural heritage management plan.

While native title has been extinguished on the site at Napandee and no registered heritage identified, the department, through its preliminary desktop study and engagement with BDAC and their legal representatives, is aware of the potential for Aboriginal cultural heritage to exist at the site. The government has made a commitment to consult with the Traditional Owners of the area and undertake a detailed cultural heritage assessment at the Napandee site and to manage any Aboriginal cultural heritage that may be present. This will also be a requirement in order to ensure that relevant obligations under the EPBC Act are met as part of the regulatory approval process. The Bill does not alter the protections set out in the current Act for archaeological and cultural heritage, including sites or objects of significance to Aboriginal people.

BDAC has been approached on numerous occasions, since their incorporation in early 2017, seeking their participation. This included offering to form and support a heritage working group that would provide the Barngarla People the opportunity to identify cultural heritage at the site and inform and guide its management and several offers of financial assistance to support them polling their members. The department met with the BDAC board in 2018, and former Minister Canavan met with the board in August 2019 to hear their views about the facility and to address any concerns and issues. Details of the former Minister's and department's engagement with the Barngarla People and their legal representatives is summarised in further detail in [Attachment H](#).

There have been concerted efforts to consult with the relevant Traditional Owners to better understand Aboriginal cultural heritage values at the nominated sites, so that any impacts can be averted or minimised. This included over 60 recorded interactions with BDAC and their legal representatives, and approximately 105 with ATLA, their legal representatives and their members (including the Viliwarinha Yura Aboriginal Corporation).

The government values the views and the cultural knowledge of the Barngarla People and are committed to minimising and mitigating any impact from facility activities on cultural heritage. The government's objective is to work closely with the Barngarla People on how its concerns can be addressed. The government has sought, and will continue to seek the involvement of BDAC to discuss how we can collaborate more effectively to ensure positive outcomes, including on conducting a cultural heritage assessment, the establishment of the Aboriginal Cultural Heritage Management Plan to manage heritage values around the site, as well as an Aboriginal Economic and Heritage Participation Plan.

Box 1: Native Title and Traditional Owner Groups

Native Title and Traditional Owner Groups

The Barngarla and Gawler Ranges Peoples are the native title holders in the region of Lyndhurst and Napandee (near Kimba) and the Adnyamathanha People are the native title holders of the region around Wallerberdina.

Lyndhurst ³ and Napandee <u>Barngarla People</u>	Wallerberdina Station <u>Adnyamathanha People</u>
<ul style="list-style-type: none"> Barngarla Determination Aboriginal Corporation (BDAC) Gawler Ranges Aboriginal Corporation (GRAC)³ 	<ul style="list-style-type: none"> Adnyamathanha Traditional Lands Association (ATLA) Viliwarinha Yura Aboriginal Corporation (VYAC)⁴

ATLA, BDAC and GRAC are Registered Native Title Body Corporates (RNTBC) (also known as prescribed body corporates) that represent native title holders in their respective native title determination areas, as determined by the Federal Court.

GRAC³ hold native title interests adjacent to the Lyndhurst site, they have notified the department that they consider Barngarla as the traditional custodians of the Kimba sites and as such wish not to be contacted further regarding the facility.

Traditional Owners also have an ongoing cultural heritage connection with the land more generally. The RNTBCs are also the peak bodies for matters relating to land, culture, heritage, language and native title.

Safety context

The government recognises local community, as well as broader community, concerns of storing radioactive waste at a designated facility. However, a range of international agreements, national regulations and governmental processes will ensure that the management of radioactive waste at the facility will be safe and secure for people, will not have a significant impact on the environment, and will provide economic benefits to the local community.

The facility will be subject to Australia's stringent radiation protection and environmental regulatory approvals and legal and regulatory frameworks that are applicable throughout the entire lifecycle of the facility. This includes Commonwealth, state and territory laws, common law, as well as international law obligations. Each function of the program is subject to detailed regulatory requirements.

³ Note, the Gawler Ranges People hold native title near Lyndhurst, however the Gawler Ranges Aboriginal Corporation (GRAC) advised the government to consult with BDAC as the relevant Traditional Owners in relation to the Lyndhurst and Napandee sites.

⁴ VYAC holds perpetual leases in Yappala pastoral station (neighbouring the approved site at Wallerberdina). Its members are Adnyamathanha People and its membership overlaps with ATLA.

Section 25 of the Act, which is not amended by the Bill, ensures that important protection measures for the community and the environment will continue to apply in relation to the facility. The key Commonwealth laws relevant to the facility and associated approvals are:

- the EPBC Act;
- the ARPANS Act and its regulations; and
- the Safeguards Act and the Nuclear Non-Proliferation (Safeguards) Regulations 1987.

The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places. It is focused on the protection of matters of national environmental significance from significant effects from proposed actions, which include nuclear actions. A nuclear action will require approval if it has, will have, or is likely to have a significant impact on the environment. Nuclear actions should be referred to the Minister for the Environment and undergo an environmental assessment and approval process.

The ARPANS Act governs how radioactive waste is managed by the Commonwealth or a Commonwealth responsible entity with an emphasis on the protection of health and safety of people, and the protection of the environment, from the harmful effects of radiation. The Safeguards Act applies to all nuclear material in Australia as defined by the Act (some radioactive waste also constitutes nuclear material). The EPBC Act and Safeguards Act are designed to give effect to Australia's obligations under relevant international agreements and domestic legislation. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) licensing and the Australian Safeguards and Non-Proliferation Office (ASNO) permitting also require the facility licensee to demonstrate its capability and capacity to comply with the regulations, with licences and conditions, with its own commitments and to ensure funding requirements are in place.

The facility will receive low level waste (LLW) for disposal and temporarily store intermediate level waste (ILW). No high level waste (HLW) will be received at the facility. The exclusion of high level waste is mandated by the prescription in the Act that the facility is to be used only for the management of 'controlled material', which is defined so as to exclude high level radioactive material or spent nuclear fuel. Waste disposed of or temporarily stored at the site will be required to meet strict Waste Acceptance Criteria, and licence conditions set by the independent regulators; ASNO and ARPANSA. The Waste Acceptance Criteria will ensure that the waste contents are suitable and fully understood and that packaging is appropriate, to ensure the safety of people and the environment at all times. The facility security structures and arrangements will be designed to meet national regulatory requirements and international security obligations and implemented by suitably qualified and experienced staff.

The Australian Government and its relevant agencies will be responsible for the safe and secure management of the radioactive waste intended for the facility by taking necessary steps towards achieving this aim, including:

- suitable design, operation and decommissioning of its waste producers facilities to keep the generation of both the activity and volume of radioactive waste to a practicable minimum;
- ensuring that radioactive waste is appropriately managed through classification, separation, treatment, conditioning, storage, disposal, and maintaining records of these activities including an inventory of radioactive waste;
- complying with their facility licence conditions;
- ensuring that disposal of radioactive waste is not unnecessarily delayed; and

- reporting to the relevant regulatory authorities with required information as specified in their licence.

The Commonwealth's broader accountability framework also applies to the development of the facility, including:

- the *Public Governance, Performance and Accountability Act 2013*;
- a range of Resource Management Guides for example the Commonwealth's Property Management Framework;
- the committee processes under the *Public Works Committee Act 1969*, and;
- the Commonwealth Procurement Rules.

The international nuclear treaties regime promotes an effective nuclear safety, security and safeguards culture. Australia is obliged to implement a range of national measures to provide for the effective protection of individuals, society and the environment and to avoid imposing undue burdens on future generations. They include the:

- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Joint Convention);
- Treaty on the Non-Proliferation of Nuclear Weapons;
- Convention on the Physical Protection of Nuclear Material and its Amendment; and
- Australia's Nuclear Cooperation Agreements.

According to its obligations under the Joint Convention, Australia must adopt a number of specific principles regarding radioactive waste management. These cover:

- sound waste management practices focused on minimisation, volume reduction, and compaction;
- plans for managing the complete life cycle of a disposal facility, including financial guarantees to support the safety of the facility during the required period of post-closure institutional control; and
- defence-in-depth measures in facility design and operating procedures.

Australia is also obliged to report on radioactive waste management issues, including by providing an inventory of radioactive waste subject to the Joint Convention.

Attachment I provides a summary of some common concerns based on misunderstandings about radioactive waste management and provides factual explanations that address those concerns.

Attachment J provides a list of published factsheets and reports available on the department's website.

Attachments

Attachment A: Indicative map showing the specified site within the approved nominated site at Napandee

Attachment B: Land acquisition diagrams

Attachment C: Site nomination and selection process

Attachment D: Summary of Community Consultation

Attachment E: Record of Minister's assessment of preferred site

Attachment F: Site Assessment

Attachment G: Community Sentiment

Attachment H: Engagement with the Barngarla People

Attachment I: Common misconceptions with explanations

Attachment J: Published factsheets and reports

Attachment A: Indicative map showing the specified site within the approved nominated site at Napandee

Preliminary site characterisation works at Napandee and other volunteered sites have determined approximately 160 hectares in total would need to be acquired to accommodate a buffer zone, community uses and supporting infrastructure. This map is an extract from the Site Assessment Report, which shows the specified site in the Bill as 'potential site for acquisition' within the approved site at Napandee.

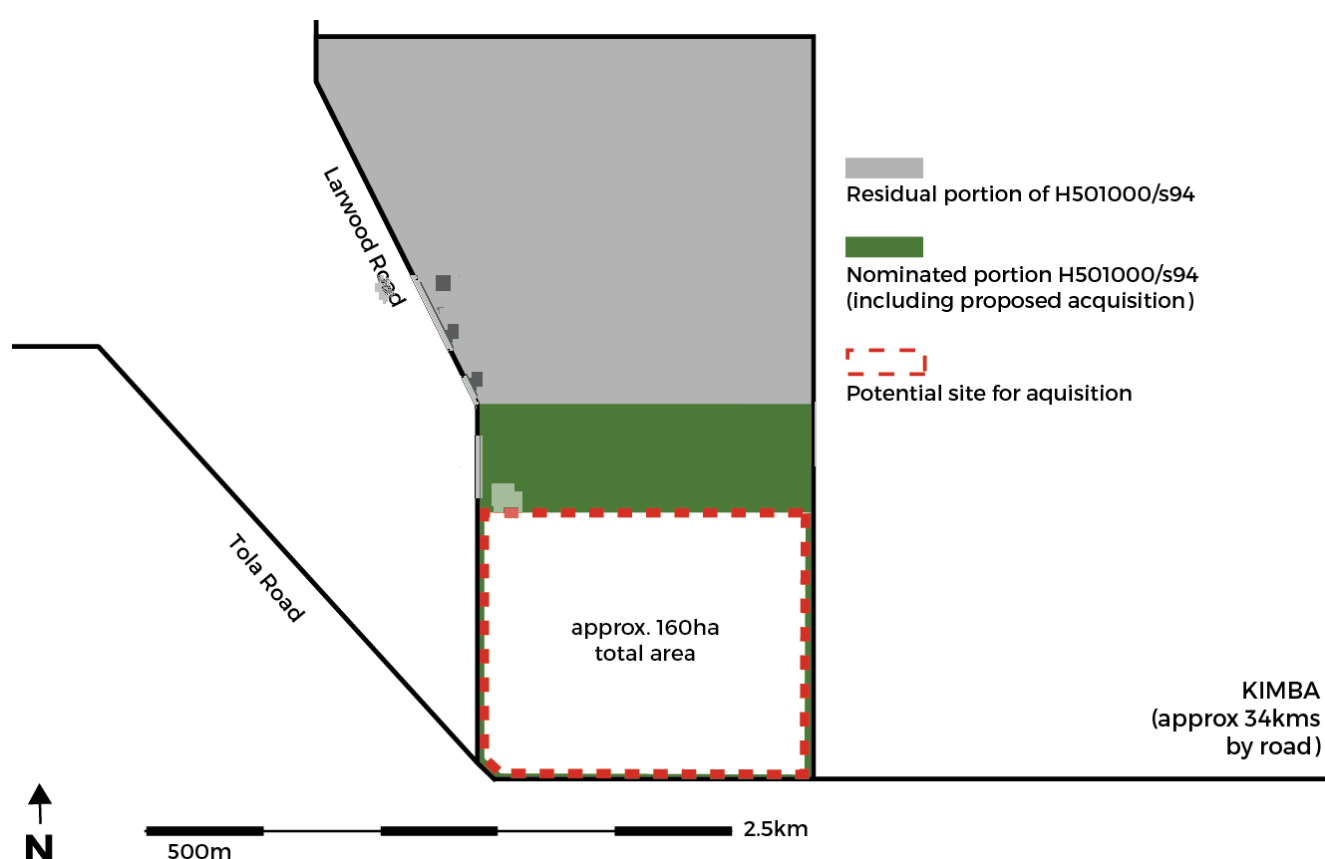
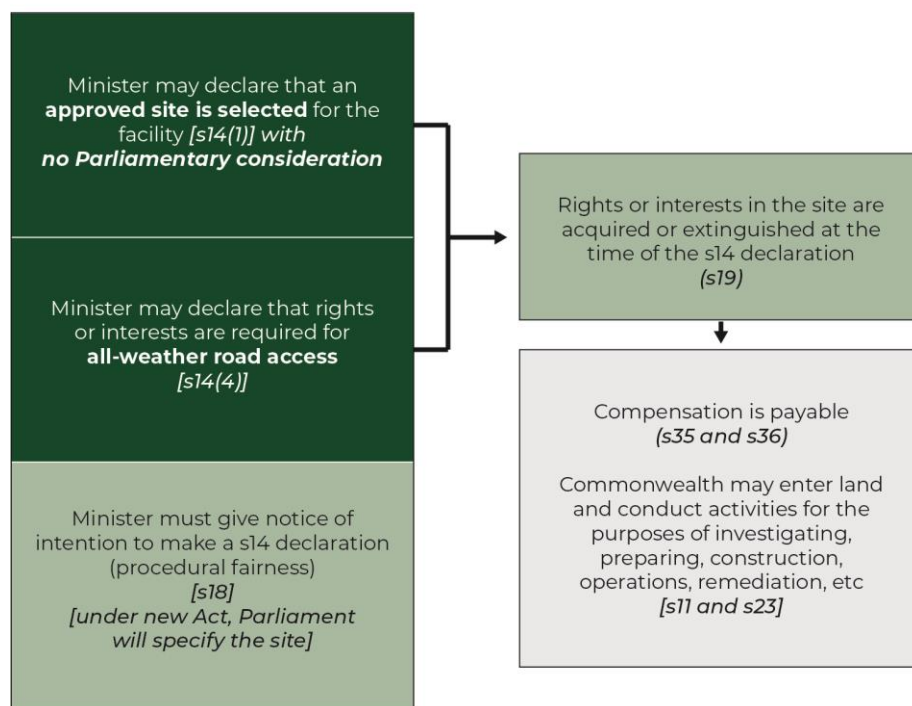


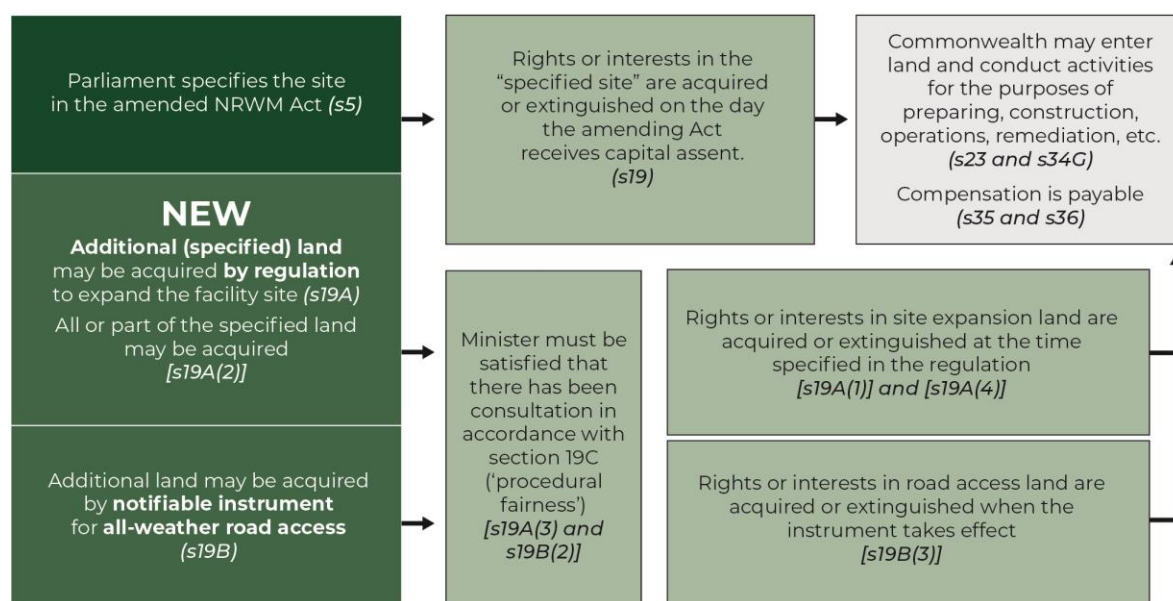
Figure 5: Map of proposed acquisition parcel within the approved site at Napandee
(extract of figure 5 from the Site Assessment Report)

Attachment B: Land acquisition diagrams

CURRENT ACT: SITE SELECTION BY MINISTERIAL DECLARATION WITH NO PARLIAMENTARY CONSIDERATION



BILL AMENDMENTS: SITE SELECTION BY AN ACT OF PARLIAMENT



Attachment C: Site nomination and selection process

Site nomination process

Legislative framework – voluntary nominations – AND must have broad community support

- Site nomination activities conducted in accordance with:
 - the *National Radioactive Waste Management Act 2012* (the Act)
- Australian Government commitment to the site for the facility having broad community support



Nationwide voluntary nomination process December 2014 – May 2015

- Minister calls for nominations
- Nomination Guidelines published online to inform nominees of the process
- 28 applications received, 25 met nomination requirements



Preliminary assessment of nominated sites May – November 2015

- Multi-criteria site analysis desktop assessment with an Independent Advisory Panel
- six sites (in NSW, NT, Qld and SA) announced by the responsible Minister as suitable for further assessment and public consultation to determine community support



Community consultation process to assess 6 shortlisted sites November 2015 – March 2016

- 120 day community consultation period announced by the responsible Minister
- Orima Research survey of community support for the shortlisted sites



Wallerberdina nomination approved by the Minister – April 2016

- Responsible Minister announces only one site from the shortlisted sites is considered suitable for further consideration



Further site nominations at Kimba – late 2016

- Kimba's Future group proposes three new sites for nomination late 2016
- Initial technical and social assessment conducted on the three sites Nov – Dec 2016
 - Lyndhurst and Napandee formally nominated



Assessment and consultation on Lyndhurst and Napandee site nominations is undertaken March – June 2017

- Community consultation to assess the level of community support for the sites continuing in site selection
 - AEC conducts ballot at request of District Council of Kimba 1-21 June 2017
- Responsible Minister approves Lyndhurst and Napandee site nominations June 2017

Site selection process

Site assessment work at the three approved nominated sites, Lyndhurst, Napandee and Wallerberdina ongoing 2017-2019

- Ongoing community engagement work, with significant on-the-ground presence and community support programs (including funding)
- Work by specialists and department covering technical, EPBC Act, other regulatory and cost assessments
- Community sentiment work including community ballots, engagement with Traditional Owners, public submissions, neighbour and business surveys



Local government authority community ballots October – December 2019

- District Council of Kimba AEC-run ballot 3 Oct – 7 Nov 2019 for Lyndhurst and Napandee
- Flinders Ranges Council & Outback Communities AEC-run ballot 11 Nov – 12 Dec 2019 for Wallerberdina



The responsible Minister announced that the Wallerberdina community ballot result demonstrated that there was insufficient community support to continue considering the site – 13 December 2019



Site Assessment Report and Community Sentiment Report late 2019 – early 2020

- The department prepared two reports to assist in identifying the preferred site.
- The reports presented information and analysis in relation to four site suitability criteria designed to identify a suitable site for the safe and secure management of radioactive waste, which has broad community support



Consideration of relevant information about the three approved nominated sites by the responsible Minister late 2019 – January 2020



Identification of site by the responsible Minister announced 1 February 2020

- Former Minister for Resources and Northern Australia, Senator the Hon Matthew Canavan announced Napandee as the preferred site for the facility.
 - *Record of Minister's assessment of preferred site* published 3 March 2020



Introduction of the National Radioactive Waste Management Amendment (Site Specification, Community Fund and Other Measures) Bill 2020 (the Bill) 13 February 2020

- The Minister for Resources, Water and Northern Australia, The Hon Keith Pitt MP, introduced the Bill into the House of Representatives on 13 February 2020.
- On 28 February 2020, the Senate referred the provisions of the Bill to the Economics Legislation Committee for inquiry and report by 12 June 2020

Attachment D: Summary of community consultation

	General Public	Landowners	Community Members	Traditional Owners	Neighbours	Key Stakeholders
Permanent offices	✓	✓	✓	✓	✓	✓
Submissions	✓	✓	✓	✓	✓	✓
Hotline	✓	✓	✓	✓	✓	✓
radioactivewaste@industry.gov.au	✓	✓	✓	✓	✓	✓
Facebook	✓	✓	✓	✓	✓	✓
e-newsletters	✓	✓	✓	✓	✓	✓
Newsletters (sent to mailboxes)		✓	✓	✓	✓	
Collateral / Info packs	✓	✓	✓	✓	✓	✓
Info sessions with subject matter experts	✓	✓	✓	✓	✓	✓
Educational activities		✓	✓	✓	✓	✓
ANSTO Tours		✓	✓	✓	✓	✓
Community meetings		✓	✓	✓	✓	
F2F DISER representatives	✓	✓	✓	✓	✓	✓
Community Liaison Officers		✓	✓	✓	✓	
Barndioota Consultative Committee / Kimba Consultative Committee		✓	✓	✓	✓	
Economic Working Groups (Wallerberdina and Kimba)		✓	✓	✓	✓	
Heritage Working Group (Wallerberdina)		•	•	✓	•	
AEC Community ballots (Flinders Ranges Council & District Council of Kimba)		✓	✓	✓	✓	
Neighbour Sentiment Survey		✓			✓	
Business Sentiment Survey			✓		✓	
	General Public	Landowners	Community Members	Traditional Owners	Neighbours	Key Stakeholders

Attachment E: Record of Minister's assessment of preferred site

(published 3 March 2020)

This document sets out the factors considered in making an assessment of the preferred site for a facility for the safe and secure management of radioactive waste, in line with the objective of the *National Radioactive Waste Management Act 2012*.

Determination

Radioactive waste can be safely and securely managed by the establishment and operation of the facility at **Napandee**.

Findings

Site selection criterion 1

The extent to which it is reasonably likely that, at the site, radioactive waste can be safely and securely managed by the establishment and operation of the NRWM facility that meets the necessary regulatory or other approvals, licences and permits.

- All sites could safely and securely store radioactive waste with appropriate mitigations, however the complexity and cost to achieve this varies significantly between sites.
- The geology, seismology, and hydrology reports of the Wallerberdina site demonstrated a level of complexity and cost significantly greater than either Lyndhurst or Napandee.
- In contrast to the site at Lyndhurst, the Napandee site requires less mitigation works and no additional land acquisition to manage natural hazards.

Site selection criterion 2

The costs to acquire the site and realise the NRWM facility at the site.

There are costs differences between sites because of the complex natural hazard mitigations required (see criterion 1).

- Wallerberdina has a significant cost disadvantage relating to hydrology risks and the construction of roads.
- Lyndhurst has a cost disadvantage relating primarily to hydrology issues and the associated mitigation costs including additional acquisition of land and building design mitigations.
- Napandee has a cost advantage because the increased costs of road works (compared with Lyndhurst) or power (compared with Wallerberdina) is offset by the cost savings associated with the lower hydrology risks at the site.

Site selection criterion 3

Other matters relevant to the suitability of the site for the establishment and operation of the NRWM facility.

- The supply of water to Lyndhurst and Napandee will require engagement with the South Australian Government. Given the level of community support that exists for the project, there are good prospects for this matter to be resolved satisfactorily.
- While Native Title has been extinguished at all of the sites, this does not minimise the need to preserve and protect Aboriginal cultural heritage. It will be vital for the Government and the department to work with the Barngarla Determination Aboriginal Corporation (BDAC) to ensure the preservation and protection of Aboriginal cultural heritage.

Site selection criterion 4

The extent to which there is broad community support for the NRWM facility to be hosted at the site.

The evidence demonstrates there is broad community support for the facility at Napandee and Lyndhurst. There is more support for the facility at Napandee than Lyndhurst.

Wallerberdina

- The Wallerberdina site has not met the threshold for broad community support, on the basis that:
 - there was no simple majority in the formal community ballot process (47.33 per cent support) where 71.08 per cent of the community voted
 - reviewing the public submissions, it was clear that the majority of local submissions indicated no support for the facility (86.6 per cent)
 - Traditional Owners and their representative organisations indicated mixed support for the facility – while the Adnyamathanha Traditional Lands Association (ATLA) oppose the facility, it is acknowledged that Viliwarinha Yura Aboriginal Corporation (VYAC) members voted in favour of the facility
 - this site was more contested by the broader community than was the case with respect to the Kimba sites (Lyndhurst and Napandee).
- Neighbour and business surveys were not conducted for Wallerberdina given the outcome of the community ballot and the subsequent decision not to proceed with the site.

Lyndhurst and Napandee

- There is broad community support at the Kimba sites as indicated by:
 - the significant majority (61.58 per cent) of ballot respondents that support the facility at Kimba
 - the high participation rate (90.41 per cent) which reflects strong community engagement on site selection and makes the ballot a reliable indicator of sentiment
 - the support for the facility expressed in the majority of local public submissions (59.8 per cent overall, and 63.0 per cent of bespoke submissions)

- approximately one third of the local community (254 individuals) made public submissions, which reflects strong community engagement on site selection
 - a large number of submissions, particularly from younger members of the local community, expressed enthusiasm for the jobs and opportunities the facility would provide for those living in the area
 - there were a number of submissions from members of the public expressing enthusiasm to return to Kimba, if there were more of these opportunities available
- the majority of businesses surveyed (59.3 per cent) supported the facility.
- The high participation rate for these measures (90.41 per cent for the ballot; 254 local submissions, and 135 local businesses) reflects strong community engagement on site selection and makes these reliable indicators of sentiment.
- The neighbour survey is a distinguishing sentiment indicator between the sites at Napandee and Lyndhurst:
 - all direct neighbours of Napandee that participated in the survey supported the facility
 - there is less support from direct neighbours of Lyndhurst
 - while there are different ways to view the results of the neighbours survey (by parcels owned, by participants as residents or owners, or by total responses) the majority of neighbours within five kilometres of the Napandee site supported the facility (60.0 per cent by participants, 72.7 per cent by responses and 75.0 per cent by parcels owned).

It is important to acknowledge that there remains some opposition and division within the Kimba communities.

- The agricultural industry has a lower level of support (47.7 per cent) than neighbours, businesses and the broader community. The Government is committed to promoting research and development benefits for the agricultural sector in Kimba.
- Safety concerns remain for those opposed to the site. When safety was raised as a concern, it was mostly in relation to the movement of TN81 canisters (containers of Intermediate Level Waste).
- The Barngarla Determination Aboriginal Corporation, which represents the Barngarla Native Title holders in the region surrounding the sites, is opposed to the facility and has made a number of submissions expressing dissatisfaction with how they have been consulted, particularly with respect to the assessment of Aboriginal cultural heritage values.
 - Of the 39.71 per cent (83 members) of BDAC members who voted in its survey, all participants expressed opposition.
 - While members of BDAC do not generally reside in the local area, their position as Traditional Owners is recognised, and serious consideration has been given to BDAC's views and opposition to the facility.
 - While Native Title has been extinguished at the approved nominated sites, it is a priority for the Government to manage Aboriginal cultural heritage and engage meaningfully with the Traditional Owners.

The project should only proceed in a way that recognises and respects the views of those who oppose the facility, including BDAC and those with agricultural interests. The Government has consistently stated that one group or individual would not have a right to veto the facility and that everyone's views would be taken into account.

Support will continue to be provided to help provide a level of comfort for the communities, and ensure that future planning and development for the facility proceeds in a respectful way.

- Significant weight was not given to:
 - ministerial correspondence, which was not promoted as a process to gather sentiment,
 - petitions, where the location of petitioners is unclear, and
 - surveys undertaken by community members, where the efficacy of the survey process is unclear.

Summary of assessment of preferred site

A facility at Napandee will safely and securely manage radioactive waste, and within Kimba, there is broad community support for the project and the economic benefits it will bring. For these reasons Napandee has been identified as the preferred site for the facility.

Attachment F: Site Assessment

[separate document]

Attachment G: Community Sentiment

[Separate document]

Attachment H: Engagement with the Barngarla People

(as at 6 March 2020)

The advent of the world-wide COVID-19 pandemic, and the necessary restrictions on travel and face-to-face meetings, will impact engagement with Aboriginal communities. BDAC have provided COVID-19 engagement guidelines to their stakeholders, which the department respect and acknowledge. The department will liaise with BDAC's legal representative to discuss how we can continue to engage during this period.

Understanding the views and sentiment of Traditional Owners has always been a priority. The Taskforce has been and continues to be willing to engage with the Barngarla People. A number of mechanisms to understand the sentiment of the Barngarla people have been used and offers of engagement have been made which include:

- sharing information and offers of meetings to share information;
- offers to conduct a cultural heritage assessment in collaboration with a working group of Barngarla knowledge holders;
- offers to fund BDAC to gather the sentiment of their members towards the facility; and
- offers of a funded trip for its board and interested members to visit the Australian Nuclear Science and Technology Organisation's (ANSTO's) Lucas Heights facility to see how radioactive waste is currently managed;
- information sessions for Traditional Owners which were held in the regional cities of Whyalla and Port Lincoln, both location which have significant Barngarla populations.

The Taskforce recognises that Aboriginal heritage protection and preservation is an important part of broader site selection considerations. BDAC has been invited on multiple occasions to form a working group of Barngarla knowledge holders to collaborate on a heritage survey, but have not taken up the offer to date. Preliminary cultural heritage studies were undertaken with independent heritage experts from RPS, who found that whilst no heritage is registered with the State Government central archives within a 10 kilometre radius of either site, there is the possibility for the facility to impact on unknown tangible and intangible heritage. The department is commitment to undertaking a comprehensive archaeological survey and assessment on the host site.

In addition to the Australian Government's heritage assessment, BDAC as Traditional Owners of the region, have conducted and recently shared their own preliminary heritage assessment of the area of the sites. This has been included in the Minister's assessment of the Kimba sites, and will be used to inform any future heritage assessments.

Attachment I: Common misconceptions with explanations

Agriculture

What are the ARPANSA regulations with respect to the facility being put on agricultural land?

ARPANSA's Code for Disposal Facilities for Solid Radioactive Waste (2018) sets out the criteria that must be considered in site selection.

This includes considering the impact on agricultural land. The Code states that a potential site is not required to comply with all of the criteria, but that well-founded arguments must be provided in association with the safety case to address any criteria that is not fully met.

Additionally a facility will not be established unless it meets relevant environmental and regulatory approvals under the EPBC Act, the ARPANS Act and the Safeguards Act.

Noting that only 4 per cent of South Australia is viable broad-acre cropping land, why are we putting the facility in one such area?

Australia's facility will be a world-class, purpose-built, state-of-the-art facility operated in an open and transparent way, in line with international best practice.

The facility will be subject to strict regulation and meet a high bar in terms of licencing and environmental approvals. It will only proceed if the site meets all technical and safety criteria.

Internationally, radioactive waste facilities and farms have succeeded side-by-side for decades, without any reputational or market impact on surrounding agriculture or tourism.

The common experience of such facilities located in the farming regions of France, Belgium, the United Kingdom, Spain, the United States and Germany is that the new industry plays an important role in the life of local communities by providing jobs and investment, and diversifying local economic and social development.

It has also been agreed, in line with a Senate Inquiry recommendation, that the facility will support community-led agricultural research and development on the site.

The nuclear industry is one of the most regulated in Australia, and the proposed facility will be subject to strict standards ensuring safety at all times.

Couldn't the presence of the facility cause concern amongst foreign markets, as the Australian export market relies heavily on its reputation for producing 'clean, green' food?

The advice from the experts in the Australian Department of Agriculture, based on both international and domestic experience, is that there is no reason why there would be any issues for Australia obtaining export licences or accreditation.

Notably radioactive waste facilities in the Champagne region of France have not affected the production or export of wheat, canola, grape or dairy.

But if there was an accident, wouldn't there be a risk to farmers in the surrounding?

The facility will only be able to accept waste that is been conditioned in accordance with a strict and internationally acceptable. Waste Acceptance Criteria will be fundamental to the safety and operations of the facility, and will guide what can and cannot be accepted at the facility and how the waste will be managed onsite.

In order to meet these criteria, waste packages will need to have contents that are fully immobilised, solid and non-dispersible.

Strict regulatory and safety measures are designed to ensure that radioactive materials do not enter the environment or pose a risk to the community or surrounding agriculture land.

Low Level Waste

It's not just caps and gowns.

The department has been very clear over four years of consultation that the facility at Napandee near Kimba will permanently dispose of Australia's low-level waste and temporarily store intermediate level waste.

More than 80 per cent of Australia's radioactive waste stream is associated with the production of nuclear medicine which, on average, two in three Australians will need during their lifetime.

Nuclear medicine production in Australia is predominately carried out at ANSTO, in the OPAL multi-purpose research reactor. OPAL is used to produce the world's most commonly used nuclear diagnostic agent, molybdenum-99 which is used for diagnostic imaging of heart and lung disease, and bone scans.

The amounts of waste to come from Woomera and Fisherman's Bend is unknown.

Radioactive waste is currently kept in more than 100 locations including at science facilities like ANSTO and CSIRO, at the Department of Defence as well as at hospitals and universities.

The waste currently stored at the Woomera Test Range came from the clean-up of a former research site in Melbourne in the early 1990s and comprises mainly soil and building materials. Latest testing shows that the material in storage does not present risks to worker safety or the environment. Measurements taken in May 2018 show that radiation levels adjacent to the storage are typical background levels found in the natural environment in Australia, such as rocks and soil. CSIRO now estimates that the amount of low-level radioactive waste (LLW) is less than 200 drums (in the store of almost 10,000 drums). There is no current indication that there is any intermediate level waste, but were this to be identified, it could not be sent to the facility unless it met strict Waste Acceptance Criteria.

What infrastructure is in place to manage the risks?

The regulatory requirements for the facility will be ongoing from siting, construction, operation and through to the decommissioning phase. The regulatory framework will ensure that the facility continues to operate in a safe manner.

The low level waste disposal facility will be operational for 100 years, and then will be monitored for a further 200-300 years.

To be disposed of in the disposal cells, waste will need to be conditioned and packaged to meet appropriate Waste Acceptance Criteria.

The disposal cells themselves will be rows of above-ground reinforced concrete vaults, which meet the specifications of the site and the operating licence. The concept design internal vault dimensions are 12.5 metres square by 6.8 metres high.

Each vault will have a temporary roof over it while it is being filled, to protect the materials as well as overhead cranes and equipment from the weather.

As waste is accepted, each vault will be progressively filled. Once filled, each vault will be capped and sealed, its temporary roof will be removed and the long-term engineered cover of earthworks will be placed over the top. Once the facility has entered the post-closure phase, there will be ongoing environmental monitoring, to provide ongoing assurances of safety.

How can we guarantee the facility will not be a Trojan horse for high level waste, should Australia decide in the future to import it, or start a nuclear power program?

The Act only allows the facility to manage waste that is of domestic origin; that is, waste that is used in Australia, generated by activities in Australia or sent to Australia under contractual arrangements relating to the reprocessing of spent nuclear fuel.

The facility will not be designed or licensed to accept high level waste.

The facility will only be designated for – and large enough to – store Australian waste for approximately 100 years. It will then be monitored for 200-300 years afterwards.

The importation of radioactive material is prevented by various pieces of legislation, which includes the *Customs Act 1901* and the EPBC Act.

How much of the waste destined for the facility is low level, and how much is intermediate level?

As at the beginning of 2018, the volume of existing low level waste to be disposed of at the facility is 4,975m³ and the volume of existing intermediate level waste is 1,771m³. These volumes include waste packaging.

The volume of future waste is 4,843m³ for low level waste and 1,963m³ for intermediate level waste.

Is it true that some of the intermediate level waste coming to the facility is classified as high level waste in France?

ARPANSA and the IAEA nuclear bodies have both determined that the waste that returned from France is ILW. Any reports to the contrary are wrong.

There will be no high-level waste stored at this facility. The reprocessed waste that returned to Australia from France is intermediate-level, using classifications from the Australia's nuclear regulator, ARPANSA, as well as those from the IAEA (and is in fact, multiple times under the threshold for high level waste).

Australia's radioactive waste definitions are set by legislation and by the independent regulator, ARPANSA, which align with the standards established by the International Atomic Energy Agency (IAEA). ARPANSA determined that the waste that recently returned from France meets the Australian criteria for ILW.

Some people have said that intermediate level waste is the most dangerous waste in Australia. Is that correct?

Properly conditioned and packaged intermediate level waste can be managed safely for very long periods of time above ground, but will eventually need to be moved to a final disposal site. While the material inside the containers will be more radioactive for far longer than low level waste, storage of the intermediate level waste packages will pose no risk to people or the environment.

Over several years, several shipments of spent fuel from the research reactors at ANSTO were sent to France for reprocessing. This essentially involves the recycling of useful material that can still be used as fuel, and the treatment of the remaining material, in a process called vitrification, so that it is solidified and safe for transport and storage.

First, the waste material (after reprocessing) is mixed with molten glass to produce a durable waste form. The molten glass is then poured into stainless steel canisters, each of which weighs around 500 kilograms when full.

Those containers are sealed and inserted into a TN-81 transportation and storage cask which is made from forged steel.

The TN-81 cask is 6.5 metres long and 3 metres in diameter, with walls more than 20 centimetres thick. It weighs 95 tonnes when empty and can hold up to 28 containers of vitrified waste.

Shouldn't we avoid double-handling the radioactive waste bringing it from places like Lucas Heights to Kimba, noting that it eventually will have to be moved again?

International best practice is to consolidate radioactive waste to the extent possible, in purpose-built facilities, and that is exactly our plan – to consolidate low level radioactive waste for disposal, and temporary store intermediate level waste until a permanent disposal solution for that waste is realised.

Intermediate level waste disposal will require a different permanent disposal solution – likely a deep geological repository that will take several decades to site and develop.

Will the facility store high level radioactive waste from overseas?

No. The importation of radioactive material is prevented by various pieces of legislation, which includes the *Customs Act 1901* and the EPBC Act.

The Act only allows the facility to manage waste that is of domestic origin; that is, waste that is used in Australia, generated by activities in Australia or sent to Australia under contractual arrangements relating to the reprocessing of spent nuclear fuel.

Consistent with the objectives of the Joint Convention, the importation of radioactive material to Australia is prohibited unless permission is granted by the Commonwealth

Minister for Health. Permits generally pertain to the importation of nuclear medicines or industrial products that are not manufactured in Australia.

Australia, in common with several other countries, has exported spent fuel to France for reprocessing. This involves the recycling of useful material that can still be used as nuclear fuel, and the treatment of the remaining waste material, in a process called vitrification, so that it is solidified and safe for transport and storage. Australia then receives the equivalent quantity of radioactivity in the form of vitrified waste (which is selected to be ILW) from France for storage. A similar contract arrangement is in place for a quantity of spent fuel exported to the UK for reprocessing. The equivalent quantity of radioactivity in the form of vitrified waste (ILW) will be returned to Australia. The importation of other 'spent nuclear fuel' will not be permitted, as it is excluded from the definition of 'controlled material'.

Transport

How do you ensure safety when transporting radioactive waste?

Australia complies with the Code of Practice for the Safe Transport of Radioactive Material as set out by ARPANSA. The code of practice adopts the International Atomic Energy Agency's Regulations of the Safe Transport of Radioactive Material, 2005 edition.

In Australia, some 10,000 doses of nuclear medicine are distributed to 250 hospitals and medical centres in country and region each week on public roads and commercial flights, without incident.

Radioactive material has been safely transported for about the past 60 years and there has never been an accident resulting in a significant impact on the health and safety of people or the environment. The in-built safety features of the packages, regulatory controls, and emergency response procedures have always worked to ensure safety.

There have been more than 7,000 international shipments of spent fuel (more than 80,000 tonnes) since 1971. There has been no breach of containment or release of radiation as a consequence of any of these shipments. By any measure, this is an outstanding safety record.

Around the world, 20 million packages of radioactive material are safely transported each year on public roads, railways and ships.

The in-built safety features of the packages, regulatory controls, and response procedures have always worked to ensure safety.

This strong safety record will continue to be the case with waste that is moving to Australia's National Radioactive Waste Management Facility.

What about the truck crash in 1980 at Herons Creek? Weren't people involved in the accident harmed?

The truck involved in the crash at Herons Creek on 4 December 1980 was carrying two of the most common types of isotope used in industry – Cs-137 and Am-241 which is used, amongst other things, in smoke detectors.

There was “no evidence to suggest that radioactive material spilled from the containers which fell from the overturning Semi-trailer,” as found in 2013 in an independent Roads and Maritime Services review of the accident.

The material was not coming from, nor going to, ANSTO's Lucas Heights campus.

It is standard practice at the end of the working life of these materials that they are repatriated to their manufacturer or another appropriately licensed facility. Every week ANSTO transports radioactive materials, including nuclear medicine, around the country and region, and we have an outstanding safety record in this respect.

Community division and mental health

Some have said that this process has divided communities. How do you respond to that?

It is understandable that there are differing views in the community. That is why it is essential that all parties have access to accurate information and that all interested parties had avenues to receive timely information as well as express their views on the proposal.

To facilitate this the government undertook such extensive consultation with the communities including through:

- the provision of information about the various aspects of the facility proposal including community visits by technical specialists, social media posts, webinars, workshops, information sessions, and distribution of newsletters, fact sheets⁵ and independent reports;
- staffing local offices with locally employed community engagement officers in each community;
- establishing and facilitating engagement through the communities' Consultative Committees, Economic Working Groups and Heritage Working Group;
- public education visits to ANSTO for community members to learn about nuclear waste management (57 visits, involving more than 230 people); and
- direct consultation with the Minister and department and community stakeholder groups including neighbours, businesses and Traditional Owner groups.

⁵ The department has released a range of factsheets on its website and provided them to local communities, which explain the safety and security aspects of the facility. They can be accessed at: <https://www.industry.gov.au/data-and-publications/national-radioactive-waste-management-facility-taskforce-information-pack>

Some people have claimed that the process has damaged the mental health of people within the communities. What are you doing to help?

The department acknowledges that some people in the community are concerned about the proposal and hopes to continue to work with all members of the community on addressing these concerns.

The department has sought to work with all members of the community throughout this process – whether they are for, against or undecided.

Under the Community Benefit Program, the government has provided \$30,773 to support Kimba's Healthy Mind healthy Community project, to improve participant resilience, mental health and wellbeing.

In addition, the Community Benefit Program has supported a wide range of initiatives that contribute to overall health and wellbeing and social cohesion in the communities, including:

- \$696,424 to support health and aging in Barndioota (Hawker and Quorn)
- \$230,000 for hospital upgrade in Kimba, and
- Approximately \$1.3 million in each community to upgrade community facilities, including sporting facilities.

In addition, the department has raised these issues with the local doctors and counsellors.

Barngarla engagement

There are concerns that the engagement with the Barngarla People has not been sufficient.

The department has been seeking formal engagement with BDAC since it was formed in early 2017. Engagement with the Barngarla community has occurred predominantly through the lawyers for BDAC.

There has been extensive correspondence between the department and BDAC's legal representatives since early 2017. In 2017, BDAC's lawyers requested that all correspondence to BDAC be directed through them. Consequently, engagement with the Barngarla community has occurred predominantly through these lawyers.

The department has received approximately 25 emails and calls from BDAC and their lawyers. The department has called or emailed BDAC and their lawyers approximately 40 times.

There has been regular correspondence between the department and BDAC's legal representatives since early 2017, including by letter, email and telephone contact. In addition, the department has sent fact sheets to NWL for distribution to BDAC members.

The department has sought face to face engagement with the BDAC and its representatives, NWL. One face to face meeting has occurred between department

representatives and the BDAC board. This meeting occurred on the 12th of August 2018, prior to BDAC seeking the injunction.

The minister met with members of the BDAC board during a community visit on 22 August 2019. This meeting allowed both parties the opportunity to discuss the project and the minister reiterated the offer to financially support BDAC conduct a poll of its members on their support of the facility.

The department will continue to work to ensure the Barngarla are consulted and heard with respect to the facility.

The department has actively sought the views of Traditional Owners and will continue to engage with them on matters of heritage and to provide opportunity for employment and economic benefit.

Some have claimed that the Desktop Heritage Survey was inadequate. Is that the case?

The Australian Government is committed to effectively understand, manage, and mitigate potential impact to Aboriginal cultural heritage at the site, and provide the Barngarla People the opportunity to participate in decision-making in matters on heritage.

The department wants to work with the Barngarla People at all stages in the project to identify positive outcomes including the identification, management and promotion of cultural heritage in the area, as well as economic development plans for the Barngarla community.

\$3 million has been dedicated to promote economic opportunities for the local Aboriginal community, including a focus on strengthening skills training and employment opportunities in all stage of the facility including heritage protection.

\$8 million in grants to be delivered through the Community Skills and Development Program (CSDP) to maximise opportunities from the construction and operation of the facility. This will include:

- job training;
- funding programs that upskill local people and businesses and attract labour supply and other commercial operations to the region; and
- the protection and promotion of local Indigenous cultural, heritage and business development.

Should the Barngarla People have been included in the community ballot?

The community ballots were only one mechanism that the former Minister drew on in determining community support.

The former Minister considered the results of the Barngarla's own ballot alongside the ballot of people who live in Kimba, submissions received, neighbour and business surveys, and direct feedback including at the drop-in offices over several years.

The department offered financial support for the Barngarla People to conduct their own survey so that their sentiment could be included with the other surveys and submissions undertaken.

The department has actively sought the views of Traditional Owners and will continue to engage with them on matters of heritage and to provide opportunity for employment and economic benefit.

Furthermore, future regulatory processes and the current Senate inquiry submission process provide further opportunities for people to have their say.

BDAC has made its position clear, and this opposition should have negated the site identification of Napandee.

The former Minister for Resources and Northern Australia, Senator Matthew Canavan, consistently said he would not reduce 'broad community support' to a single number and that no one group or individual has a right to veto the facility.

A number of different indicators have informed whether there is broad support in the local communities that were in the process.

This included formal submissions, results from community ballots, business surveys, neighbour surveys and views directly obtained from Traditional Owners.

The department has actively sought the views of Traditional Owners and will continue to engage with them on matters of heritage and to provide opportunity for employment and economic benefit.

Isn't the matter subject to an Australian Human Right Commission ATLA complaint?

On 19 February 2019, the department received written confirmation of a complaint alleging racial discrimination against ATLA in the Australian Human Rights Commission (AHRC).

The ATLA complaint is currently being reviewed by the AHRC. The department will continue to engage with the AHRC's complaint processes.

Attachment J: Published factsheets and reports

The following factsheets are available on the department at <https://www.industry.gov.au/data-and-publications/national-radioactive-waste-management-facility-taskforce-information-pack>

- Aboriginal Economic and Heritage Participation Plan
- Agricultural research and nuclear science
- Agriculture at the facility
- Australian Radioactive Waste Management Framework Summary
- Community development
- Comparison of everyday radiation sources and doses
- CSIRO's Radioactive Waste at Woomera Test Range
- Facility concept design
- Heritage at Napandee and Lyndhurst
- Heritage at Wallerberdina
- Jobs at the facility
- Land requirement proposal Lyndhurst
- Land requirement proposal Napandee
- Land requirement proposal Wallerberdina
- Regional consultative committee
- Regulatory frameworks
- Safely managing radioactive waste
- Safety and security
- Selecting a site for the facility
- Site characterisation studies
- Site study Lyndhurst
- Site study Napandee
- Site study Wallerberdina
- Transportation of radioactive materials
- Why we need a facility

Other reports also available on the website at <https://www.industry.gov.au/topic/data-and-publications/radioactive-waste-management>

- Minister's assessment of preferred site for the National Radioactive Waste Management Facility
- Economic Impact Assessment: Kimba region
- Economic Impact Assessment Report: Hawker
- Preliminary Safety and Waste Acceptance Report
- Video: National Radioactive Waste Management Facility concept design
- Social Baseline Report: Kimba
- Social Baseline Report: Hawker/Quorn
- Aboriginal Cultural Heritage Report: Wallerberdina
- Aboriginal Heritage Desktop Assessment Report: Kimba
- Site Characterisation Technical Report: Wallerberdina
- Site Characterisation Technical Report: Napandee
- Site Characterisation Technical Report: Lyndhurst
- Australian Radioactive Waste Management Framework