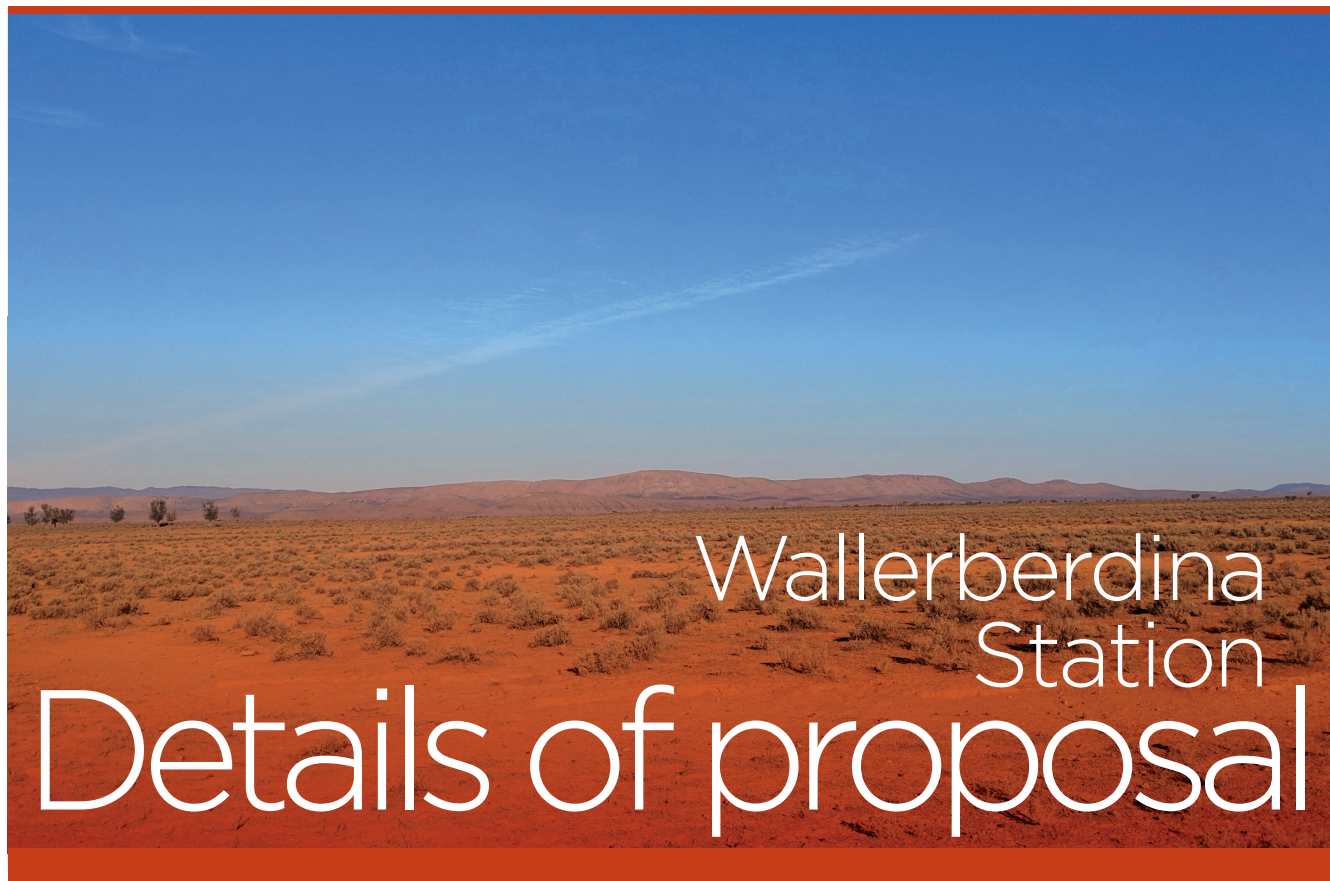




Australian Government  
Department of Industry, Science,  
Energy and Resources

## National Radioactive Waste Management Facility

OCTOBER 2019



# Wallerberdina Station Details of proposal

*The landscape and terrain of Wallerberdina Station*

### Overview

Wallerberdina Station is some 23 580 hectares. In 2016, a parcel approximately 6 300 hectares in size was voluntarily nominated by the landowners as a possible site for the National Radioactive Waste Management Facility (the facility). The station is about 36 kilometres (by car) north-west of the town of Hawker and a 102 kilometre drive north-east of Quorn.

The station is covered by a pastoral lease and is actively used for grazing pasture for cattle and sheep.

More information describing the technical aspects of Wallerberdina Station is at [www.radioactivewaste.gov.au](http://www.radioactivewaste.gov.au).

### Our requirements

The original call for site nominations in 2015 stated that the Department of Industry, Innovation and Science required 'no less than 100 hectares' of land for the facility.

Our initial scoping identified that about 40 hectares would be required for the core operational facility, plus at least 60 hectares to provide a buffer zone between the facility and its neighbours, as well as room for supporting infrastructure.

Since then, the department has undertaken extensive site characterisation works at Wallerberdina Station and other volunteered sites, to understand aspects such as cultural heritage, site geography, flora and fauna, and access to infrastructure.

Based on this, the buffer zone will need to expand from 60 to approximately 120 hectares to accommodate a water treatment plant and community agricultural research & development that has been requested by the community. The (approximately) 40 hectare operational footprint has not changed.

The total size of the site needed to accommodate items included above at Wallerberdina Station is approximately 160 hectares\*.

\*subject to survey and confirmation of boundaries



This is part of a series of factsheets for the National Radioactive Waste Management Facility.

Call  
Email  
Facebook  
Visit

**13 28 46**  
**[radioactivewaste@industry.gov.au](mailto:radioactivewaste@industry.gov.au)**  
**[@radioactivewasteproject](https://www.facebook.com/radioactivewasteproject)**  
**[www.radioactivewaste.gov.au](http://www.radioactivewaste.gov.au)**

## Detail of what we've learned

### Consideration for site specific geography and heritage leads to adjustment within Wallerberdina Station borders

Preliminary site investigations were undertaken by AECOM in 2018 and 2019.

Working alongside Aboriginal monitors, their work included installing boreholes to gather groundwater samples, LIDAR mapping to capture the site features, flood modelling, and flora and fauna studies to identify any significant or threatened species and supporting habitats.

More information on the AECOM site characterisation studies can be found at <https://bit.ly/2NmWDoT>.

Site use	Early estimate (approx ha)	Revised estimate (approx ha)
Operational facility	40	40
Buffer and enabling infrastructure	60	100
Community agricultural R&D	0	20
Total	100	160*

### Community uses and enabling infrastructure increase the size of the footprint

In 2018, the Australian Senate undertook an inquiry into the selection process for a National Radioactive Waste Management Facility.

In response to the recommendations from that inquiry and expressions of interest from the community, around 20 hectares has been added to the site proposal to accommodate community agricultural research and development activities.

More information on the inquiry and its recommendations can be found at <http://bit.ly/2LxgCyL>.

\*subject to survey and confirmation of boundaries

Site characterisation work identified a need for a water treatment plant at Wallerberdina Station.

If the site is chosen, approximately 20 hectares will be required to provide this infrastructure and a contractors' compound to support the incremental development of waste facilities on the site as required.

### Technical studies inform a change in shape and position for the land package

The shape of the proposed site has also changed to enable access from Lake Torrens Homestead Road. If Wallerberdina is chosen, this would improve public access to the community zone; for visitors to the facility; movements of waste to the facility and access to the water treatment plant.

The proposed location of the facility within the station boundaries has been adjusted to accommodate the specific characteristics of the Wallerberdina site - taking into account the landform conditions, predicted water movements and the need to minimise impacts on vegetation.

## Heritage value areas

Extensive technical studies since 2018 have shown that there are no impediments (environmental, flora, fauna, geology, etc.) to siting the facility at Wallerberdina Station. These studies have informed the revised site size and location within the property.

In addition, an Aboriginal cultural heritage assessment of Wallerberdina was conducted in 2017 alongside many members of the Adnyamathanha community.

This assessment covered areas including the previous and currently scoped locations for the facility, and showed how the facility could be delivered without impacting on heritage.

If selected, a cultural management plan will be developed in partnership with the Adnyamathanha community.

**NB: The proposed site for the facility comprises only around 2.5% of Wallerberdina Station.**

## Usage zones

The estimated operational footprint of the facility remains at approximately 40 hectares of usable land.

If Wallerberdina Station is chosen, approximately 160 hectares in total would be acquired by the Australian Government to accommodate a buffer zone, community uses and supporting infrastructure.

Once the site was acquired, the precise location of the operational and buffer zones within the site would be determined based on detailed, site-specific investigations and design.

### Operational zone

The operational zone would comprise, among other things, a waste operations centre, several low-level waste disposal vaults, temporary storage for intermediate level waste, and security infrastructure.

All vehicles and personnel will require validation prior to being allowed on site.

### Buffer and enabling infrastructure zone

The buffer zone comprises essentially two sections. The first would be a sterile section located immediately around the entire operational zone to provide an empty, secure space in line with regulatory requirements and to form an area for bushfire protection.

Secondly, beyond supporting utilities, a public zone would accommodate a visitor centre and administration building, a contractors' compound and a water treatment plan as noted above.

In total, the buffer zone will be extended to around 100 hectares in size to meet these community, infrastructure, technical and regulatory requirements.

### Community agriculture research and development zone

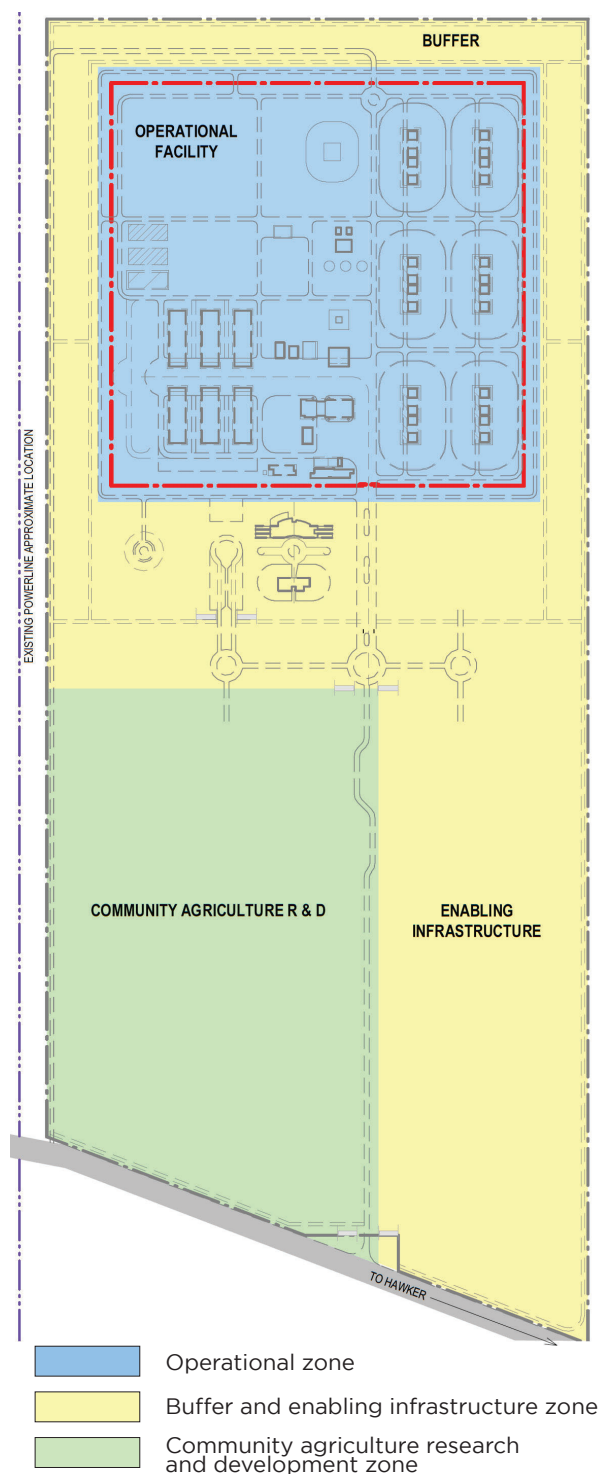
As mentioned previously, approximately 20 hectares has been set aside for a community zone.

The final sizing and placement of the community zone will be decided once the facility's operational footprint and its supporting infrastructure, security and safety measures have been determined.

This could take some time to determine and is dependent on detailed site investigation and site-specific design and technical works being completed.

During this time, consultations with the host community would be undertaken to plan some elements of the community zone.

## Design concept



**NB: The location of zones and boundaries on maps within this factsheet are indicative only and may be subject to change in future.**





Aerial shot of road and rail adjacent to Wallerberdina Station

