

# Senate Standing Committee Foreign Affairs, Defence and Trade

## Radioactive Waste at Woomera

### RESPONSE TO REQUEST FOR INFORMATION

#### Department of Defence

**Outcome:**

**Question Number:**

**Senator:** Rex Patrick

**Question Format:** Written

**Committee Due Date:** 20 February 2019

**Question:**

A brief should be prepared for each sites within the WPA for each site (circa 1-2 page each):

- Name/Identifier
- Rough location
- Rough description of facility (building, shed, bunker etc) and, if possible, a photo
- Who's Responsibility for the site
- Who 'owns' the waste
- Total quantities, also broken down into:
  - o Ownership
  - o Level – low or intermediate
- History of the facility
- History of where the waste originated and a high level description of the waste
- Security and safety
- Any current ongoing activities
- Annual cost
- Future plans – e.g. will remain, will go to NRWMF, will go elsewhere

**Answer:**

Two tables are provided below that set out the requested information in relation to the Koolymilka Radioactive Waste Storage Facility and the Commonwealth Scientific and Industrial Research Organisation waste at the Hanger 5 Annex.

<b>Koolymilka Radioactive Waste Storage Facility</b>	
<b>Rough location</b>	The facility is located adjacent the Technical Area at Koolymilka, within the Rangehead complex of E-Range, which forms the south eastern part of the Woomera Prohibited Area. This area is approximately 50 kilometres west of the Woomera Village.
<b>Rough description of facility</b>	Repurposed explosives storage facility constructed from brick and concrete.
<b>Responsibility for the site</b>	Defence owns the land and the building.
<b>Who 'owns' the waste and total quantities</b>	Defence owns a small proportion (5.68 cubic metres) of the total volume (59.68 cubic metres) of waste that is stored at the facility. The remaining 54 cubic metres is legacy waste that is owned by other Government agencies, but is managed by Defence (this is referred to as Defence administered waste).
<b>Level – low or intermediate</b>	Low and intermediate level waste is held.
<b>History of the facility</b>	The facility was established under an Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Facility Licence F0213, which was issued on 22 December 2009.
<b>History of where the waste originated and a high level description of the waste</b>	The radioactive waste stored at the facility originated from two earlier Defence radioactive waste storage facility sites: Launch Area 5, at the Woomera Prohibited Area (ARPANSA Facility Licence F0084) and Building 16, Edinburgh, South Australia (ARPANSA Facility Licence F0117). The Launch Area 5 waste was originally stored at St Mary's in New South Wales, and was moved to the Woomera Prohibited Area for storage on Commonwealth owned land at the Woomera Rangehead, under a Cabinet Direction in 1995. No waste has been held at Launch Area 5 since 2010.
<b>Security and safety</b>	The facility is licensed by ARPANSA. It operates as a Category 2 facility under the ARPANSA Code of Practice for the Security of Radioactive Sources. As such, it has its own Source Security Site Plan, which has been authorised by ARPANSA. This plan is classified.
<b>Any current ongoing activities</b>	Nil apart from continuing maintenance of the facility, site inspections by Defence personnel and regulatory inspections by ARPANSA. The facility is licensed as a closed facility, and only stores radioactive waste. It is not licensed to operate and to accept new waste.
<b>Annual cost</b>	Defence fixed costs are \$100,000 per annum, with an annual variable cost of \$200,000.
<b>Future plans</b>	As the facility is only licensed for the temporary storage of radioactive waste, and not its final disposal, Defence is required to arrange for the final disposal of all the waste held under licence. It is anticipated that the waste will be transferred to the National Radioactive Waste Management Facility, once established.

<b>Commonwealth Scientific and Industrial Research Organisation waste – Hanger 5 Annex</b>	
<b>Rough location</b>	Waste owned by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is held in the Hanger 5 Annex within the Woomera Prohibited Area. This facility is separate to the Koolymilka Radioactive Waste Storage Facility.
<b>Rough description of facility</b>	The Hanger 5 Annex is the responsibility of CSIRO through a Memorandum of Understanding with Defence.
<b>Responsibility for the site</b>	The Hanger 5 Annex is the responsibility of CSIRO through a Memorandum of Understanding with Defence.
<b>Who 'owns' the waste and total quantities</b>	As stated on CSIRO's public website, CSIRO owns the waste that is held within the Hanger 5 Annex, which equates to 10,000 210 litre drums of waste.
<b>Level – low or intermediate</b>	As stated on CSIRO's public website, initial gamma imaging conducted by the Australian Nuclear Science and Technology Organisation indicates very low levels of activity in those drums scanned. CSIRO expect a large portion of the waste will be so low in radiation it will not require any controls, and can be disposed of in an appropriate landfill. Some material will be low level radioactive waste and a very small amount may be intermediate level waste. Measures will be taken to ensure the material is safely stored to meet ARPANSA regulations until a final disposal pathway has been identified.
<b>History of the facility</b>	Defence does not hold this information. CSIRO are best placed to provide this information.
<b>History of where the waste originated and a high level description of the waste</b>	As stated on CSIRO's public website, almost 10,000 210-litre drums of waste came from the clean-up of a former research site at Fisherman's Bend, Melbourne, in the early 1990s, and comprises of mainly soil and building materials.
<b>Security and safety</b>	CSIRO is responsible for all aspects of security and safety of the radioactive waste stored within the Hanger 5 Annex under ARPANSA license S0013.
<b>Any current ongoing activities</b>	Defence does not hold this information. CSIRO are best placed to provide this information.
<b>Annual cost</b>	Defence does not hold this information. CSIRO are best placed to provide this information.
<b>Future plans</b>	As stated on CSIRO's public website, CSIRO are investigating the best options to prepare waste material stored at the Woomera Prohibited Area for transfer and acceptance at the proposed National Radioactive Waste Management Facility.