

## Site (Structure) : RadiumHill

Country: AUSTRALIA

Reporting Year: 2013

Full Name: Radium Hill Mine (former uranium mine) - Tailings dam incorporating a low-level waste repository.

Description:

Official Website:

License Holder(s): The facility is managed by the The South Australian Government Department of Primary Industries and Resources.

Comment # 26987: Institutional Framework

There is no specific radioactive waste management organization in Australia. The Commonwealth (national) Department of Primary Industries and Energy is responsible for radioactive waste policy in the country. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is responsible for regulating and licensing Commonwealth nuclear and radiation activities. The States have responsibility for management of radioactive waste produced within their jurisdiction.

Waste management facilities that are located at this site:

Facility:	Repository
Description:	Contaminated soil and solids from uranium processing
Detailed Facility Description:	In 1981-2, the tailings dams were rehabilitated by cover with local clay soil: the cover thickness was approximately 3 m on the sides and 1m on the top. No rock armoring to control water erosion was incorporated. At a later stage, some drummed residues from test work on uranium ores were buried in the top of the cover. The site is inspected regularly, and repairs made as required.
Waste Packages:	200L Drums, 50L drums, 20L drums and tailings.
	The wastes that remain at Radium Hill are estimated to be some 225,000 t of heavy media tailings and in addition around 75,000 t of waste rock. In contrast to the chemical extraction of uranium, the physical concentration process removed a large proportion of the elements of the uranium decay chain, and so the concentrations of radium-226, thorium-230 and other radionuclides are low. The heavy media tailings were contained in two above-ground tailings storage dams, with little containment, and were subject to both wind and water erosion.
Facility Operation:	Under closure.
	The national standard Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia (NHMRC, 1992) requires that prior to the commencement of operations, the operator must prepare draft or conceptual plans for decommissioning the facility and rehabilitating the site, and submit the plans to the regulator for approval. The plans must be reviewed and resubmitted every five years for approval.

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**Disposal part of facility****Repository**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
VLLW	No	No
LLW	Yes	No
ILW	No	No
HLW	No	No

List SRS?	No
List UMMT?	Yes

Type:	engineered near surface
Facility is modular?	No

Depth (m):		Host medium:	crystalline rock (basalt)
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Phase Name	Start Year	End Year	Estimate
operation	1981	1998	False

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<b>Facility:</b>	<b>Tailings</b>		
Description:	Uranium tailings and waste rock		
<b>Storage part of facility</b>		<b>Tailings</b>	
The following shows storage status for waste classes and SRS.			
Waste Class	Actual	Planned	
VLLW	No	No	
LLW	No	No	
ILW	No	No	
HLW	No	No	
List SRS?	No		
List UMMT?	Yes		
Capacity:			