



KOOLYMILKA
Radioactive Waste Storage Facility
Emergency Response Plan

Issued by:

s22

Director, Defence Radiation Safety and Environment

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Version 4.0



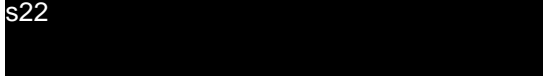


AMENDMENT SHEET

If you have any questions regarding this document or suggestions for improving this document, please contact:

Name: Koolymilka Radiation Safety Officer

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Issue	Description	Date	Authority
1	Original EIG Procedure	20 Mar 16	EIG-SA RSO
2	Transfer of responsibility to JLC-LAB-DRSE	29 Aug 17	CRSO (JLC)
3	Establishment of DRSE Management Control	08 Sep 17	DDRSE
4	1 st Annual Update	01 Jun 18	DDRSE



EMERGENCY RESPONSE PLAN – KOOLYMILKA RWSF

1 Introduction

1.1 The Koolymilka Radioactive Waste Storage Facility (RWSF) is a prescribed radiation facility (PRF) licensed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) to hold low level and intermediate level radioactive waste under facility licence F0213. The licence allows Defence to possess and control the facility but not to operate, hence it is classed as a closed facility, ie will not routinely accept new material. As a PRF, it has specific requirements for site access, physical security and emergency management.

2 Purpose

2.1 The purpose of this Emergency Response Plan (ERP) is to describe the response taken to control an emergency involving unauthorised access to, or loss of control of, the RWSF or its contents.

3 Emergency Scenarios

3.1 The types of emergency scenario that may affect the RWSF are as follows:

- 3.1.1 Fire, flood or storm event on the Woomera Test Range (WTR) that could damage the RWSF building structure
- 3.1.2 Civil protest activity in Woomera that may spill over onto the WTR or affect the delivery of services from Defence Support Woomera (DS-W)
- 3.1.3 Missile strike from WTR activity that could damage the RWSF building structure and cause contamination of the site if the drums were ruptured
- 3.1.4 Aircraft strike from the Woomera airfield that could damage the building structure and cause contamination of the site if the drums were ruptured
- 3.1.5 Terrorist activity aimed at accessing the facility for publicity purposes or for removing drums from the facility for use in a ‘dirty bomb’

4 Emergency Response within the WTR

4.1 In the event of a general emergency affecting the WTR, Woomera Emergency Services (WES) will attend immediately and provide Fire/Hazmat and Medical services as required. The Base Support Operations Manager (BSOM) will notify affected stakeholders including Defence Radiation Safety and Environment (DRSE) as the manager of the RWSF. Prompt notification will enable DRSE to quickly review the situation and its possible effects on the RWSF and therefore to be better prepared.

5 Emergency Response at the RWSF

5.1 In the event of a local emergency, which directly affects the RWSF (eg multiple security alarms triggered or the detection of spurious activity by observer on site), the emergency response will proceed as follows:

- 5.1.1 DRSE is to be advised as soon as possible, in order that it can notify the On Scene Commander (CO 20 SQN or D/SADFO depending on SAFEBASE Level) and provide specialist Radsafe advice to responders.
- 5.1.2 WTR Security Patrol will attend and reconnoitre the site for signs of entry, damage or spurious activity as follows:
 - 5.1.2.1. If no outward signs of entry, damage or spurious activity are

[REDACTED]

seen, the patrol will contain the RWSF against further access (eg increase frequency of security patrols) and await the arrival of the DRSE Inspection team. Containment options are aimed at restoring an effective level of security for the RWSF s33 [REDACTED].

5.1.2.2. If entry to the building has been made or damage to the building has been found, the patrol is to protect the RWSF against further access/loss and await the arrival of the DRSE Inspection team. Protection options are aimed at establishing:

5.1.2.2.1. a radsafe barrier to prevent unauthorised entry to the RWSF until it has been rendered safe to approach; and

5.1.2.2.2. a physical security barrier to prevent the uncontrolled loss of material from the RWSF until the damage has been repaired.

6 Emergency Response Coordination and Communications

6.1 WES is to remain the first point of contact for the local reporting of emergencies involving the RWSF. The WES Duty Officer or BSOM is to notify personnel listed in the Emergency Contact Plan (Annex A) and seek their advice on further action. DRSE will inform the chain of command and ARPANSA of the emergency.

6.2 In the event of an emergency, DRSE will mobilise a response team s33 [REDACTED], within 24 hours, to provide Radsafe expertise to the Woomera Emergency Coordination Centre (ECC) and Radsafe services at the RWSF. DRSE must conduct a Radsafe survey and render safe any damage at the RWSF before allowing entry to non-Radsafe qualified personnel.

6.3 In the event of a security incident, the Koolymilka Source Security Site Plan is to be effected. DRSE-LAB-JLC will draft the Hot Issues Brief to inform MINDEF and maintain the communications link between Defence and ARPANSA.

7 Escalation Procedure

7.1 During SAFEBASE A/B/C, incidents are dealt with by the CO 20 SQN as On Scene Commander. In the event of escalation to SAFEBASE D/E, incident control shifts to the Deputy SADFO.

7.2 Incidents affecting the RWSF are scalable as follows:

7.2.1 **simple building or estate damage**, which requires a local response from WES and/or DS-W

7.2.2 **complex building or estate damage**, which requires a corporate response from DRSE and/or EIG

7.2.3 **source security incident**, which triggers anti-terrorism measures that require a national response

7.3 The responsibility for escalating an RWSF incident lies with DRSE-LAB. The decision to notify ARPANSA is a DRSE-LAB responsibility.

8 Radiation Safety

8.1 First responders are to isolate the RWSF and monitor the radiation levels from a safe distance until relieved by DRSE. An exclusion zone is to be established at the

[REDACTED]

RWSF building outer wall or at the s33 [REDACTED] boundary, whichever is the greater. Pending the conduct of a radiation survey, the exclusion zone is to be set at the inner perimeter fence. No unauthorised personnel are to enter the exclusion zone and/or enter the building until DRSE or another trained response team is in attendance.

Annex:

- A.** Emergency Contact Plan – Koolymilka RWSF



**ANNEX A TO
EMERGENCY RESPONSE PLAN**

EMERGENCY CONTACT PLAN – KOOLYMILKA RWSF

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Koolymilka Procedure - Internal

This 'cook book' provides a step-by-step procedure to arrange, conduct, and finalise a visit to the Koolymilka RWSF.

1. **Minimum 3 Weeks prior to anticipated day of arrival/visit - Access Site Visit Procedure** ^{s22}

14 Days Lead Time Requested for range access approval.

2. Folder: 1. Induction and Range Request.
 - a. Check Range Inducted Personnel spreadsheet to determine if person(s) visiting site has completed Woomera Test Range induction. Note that induction only valid for 12 months, re-induction as needed.
 - b. If not inducted, person(s) must complete WRC Induction Questionnaire – FORM BLANK. Information and answers can be found in Woomera Test Range Induction Presentation.
 - c. Update Range Inducted Personnel spreadsheet with details of any new inductees.
 - d. Complete Range Visit Request and Range Visit Personnel Form.
 - e. Attach these forms, and any necessary induction forms, and email to:

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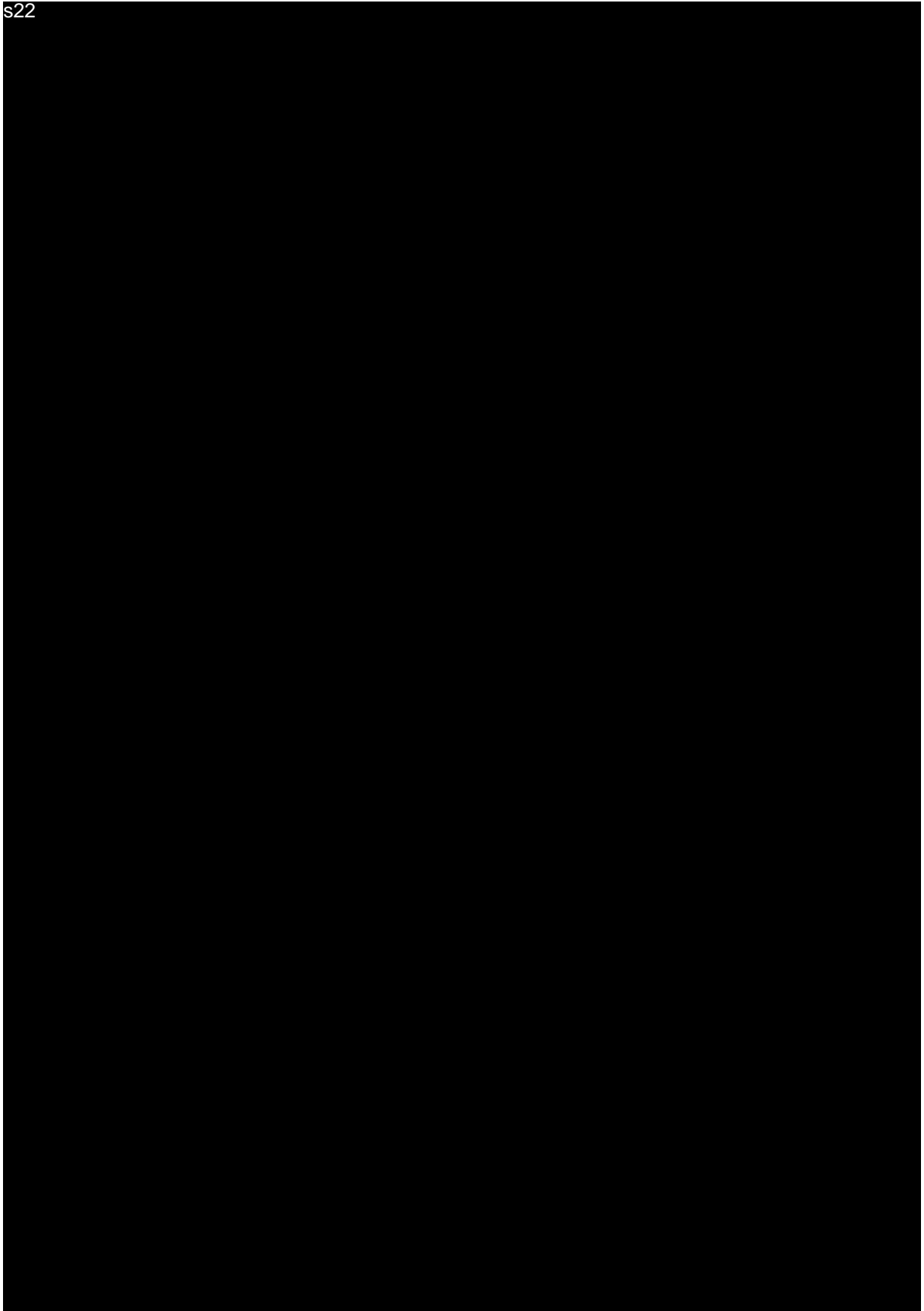
File copy of email in folder Range Access Correspondence

Once approval granted, file email in folder Range Access Correspondence



3. **Gear/Kit to take to Koolymilka:**

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Physical Entry:

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9. Turn lights on and open internal wooden doors to ventilate.
10. Exit the building to conduct outside activities as part of normal entry requirements. This will allow for adequate ventilation of the drum hall.

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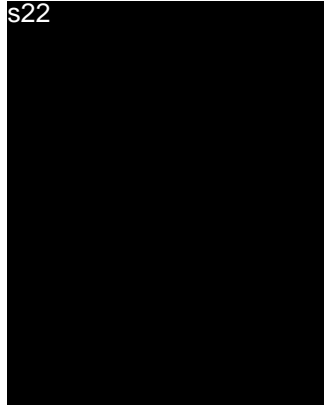
to give Visitors Safety Brief to all persons BEFORE anyone else enters the building.

Visitor's brief to be read by all visitors. s22

Brief to be acknowledged by signing of Site Entry Register form (Annex A).

Normal Inspection Routine:

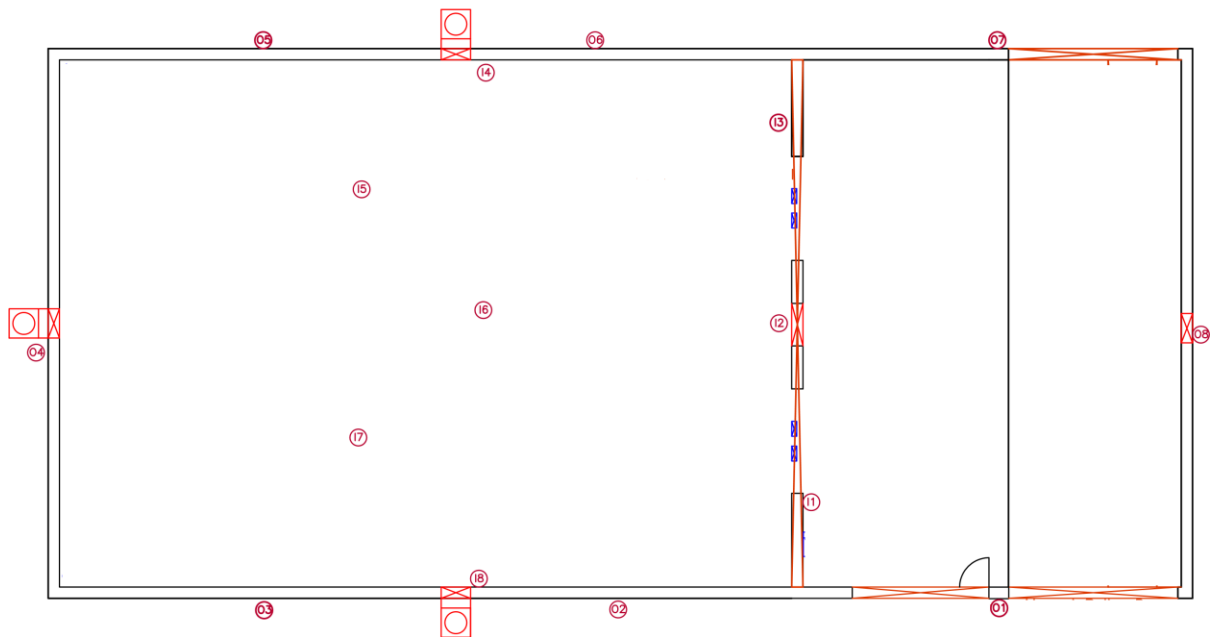
11. Using the S22, take background reading and record on:
KOOLYMILKA RWSF RADHAZ SURVEY RECORD SHEET (Annex B)



12. Conduct outside survey of designated radiation measure points and record on same sheet. Hold meter against wall on marker points.

SURVEY MARKERS

as at 01 Jul 2017



**Before entering drum hall, all persons to put PPE on.
 PPE to wear: Boot covers, gloves and dust mask.**

13. Conduct inside survey of designated radiation measure points on same sheet.
 Hold meter at waist height for three marker points in middle of drum hall, all others
 against wall on marker points.

Normal Inspection Routine cont.:

14. Conduct survey of Security enhanced sources. Measure points are marked on the four drums to be surveyed.
15. Results to be recorded on Sealed Source Inventory Check Register (Annex C).

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16. Complete Quarterly Review Checklist (Annex D).

Exit Procedure:

17. Once all routine duties and checklists have been completed, dispose of all PPE in drum marked 'Used PPE' located in the ante-room.
18. Close wooden doors and have all persons exit the building.
19. RSO or DRSE Rep to arm alarm before exit.

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Exit the building. Close small door behind.

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If not all 'armed', wait 5-10 minutes and call again to confirm. If still not armed, may require entry to building to reset alarm.

If all 'armed', leave site and lock gate behind.

20. Return keys to s22 when leaving Woomera Test Range.