



Guideline of Management  
of Radiological Waste

AMRH/IC/GUD/005/Vers.01  
Effective Date: August 2022  
Review Date: August 2025

| Institution Name: Al Masarra Hospital                      |                    |   |                     |             |           |
|--|--------------------|---|---------------------|-------------|-----------|
| Document Title: Guideline of Radiological Waste Management |                    |   |                     |             |           |
| Approval Process   |                    |   |                     |             |           |
|  | Name               | Designation   | Institution         | Date        | Signature |
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**Acronyms:**

|             |                               |
|-------------|-------------------------------|
| <b>AMRH</b> | Al Masarra Hospital           |
| <b>HCW</b>  | Health Care Worker            |
| <b>PPE</b>  | Personal Protective Equipment |
| <b>WHO</b>  | World Health Organization     |



## Guideline of Radiological Waste Management

### 1. Introduction:

Radioactive wastes are materials contaminated with radionuclides. They are produced as a result of procedures such as in vitro analysis of body tissue and fluid, in vivo organ imaging and tumor localization, and various investigative and therapeutic practices. **this type of waste not applicable in al Masarra hospital**

### 2. Scope

This document is applicable to all Health Care Workers (HCWs) of AMRH and hospital's cleaning Contractor Company.

### 3. Purpose

3.1-To encourage and establish the culture of safe management of radiological hospital wastes

### 4. Definitions

4.1-**Radioactive wastes** are materials contaminated with radionuclides. They are produced as a result of procedures such as in vitro analysis of body tissue and fluid, in vivo organ imaging and tumor localization, and various investigative and therapeutic practices.

4.2 **Segregation** is the sorting of healthcare waste clearly identifying the various types of wastes and how they can be collected separately

### 5. Guidelines

#### 5.1 Segregation, handling and packaging of Radioactive waste

5.1-Radioactive wastes should be collected and packed under the supervision of the radiation officer.



5.2-The radioactive waste should be placed in proper lead boxes

5.3- Radioactive waste that is to be stored during radioactive decay should be labeled with the:

5.3.1-Type of radionuclide,

5.3.2-The date

5.3.3- Details of required storage conditions

5.4- Each container of radioactive waste should have a label indicating date, time and point of production.

## **5.2 Waste management in radiology department in ALMasarra Hospital**

Radiology department in Al Masarra Hospital contain of general x-ray room and plain CT room that means the contrast media is not available. Therefore, there are no sharp waste, no chemical waste and no radioactive waste. There are two colors coding for biomedical waste management in radiology department: yellow bags and black bags refer to P&P for waste segregation according hazard level and color coding it (AMRH/IC/P&P/013/Vers.02).

### **5.2.1 How to get rid of x-ray film?**

5.2.1.1 Waste is collected in suitable container and labeled

5.2.2 All information in the waste is recorded and a waste inventory is established.

5.2.3 A written approval to carry out the waste management.

5.2.4 A waste should be returned to the suppliers or manufacturers.

5.2.5 HSE Department with collaboration with post and document department to discarded this type of waste. (New plane from ministry in 2023)



## 6. Responsibility

### 6.1-Health, safety & environmental officer:

- 6.1.1 Train all HCW and cleaners in AMRH regarding of radiological waste management guideline.
- 6.1.2 Perform quarterly audit in all departments regarding radiological waste management guideline.
- 6.1.3 Collaboration with mail and document department to discarded **x-ray film** (New plane from ministry in 2023). And Implementation of the current plan to dispose of this waste

### 6.2 Radiologist:

- 6.2.1 Must wear appropriate PPE while handling the wast.
- 6.2.2 Must aware about get rid of x-ray film.

## 7. Document History and Version Control

| <b>Document History and Version Control</b> |                                 |                    |                    |
|---|---------------------------------|--------------------|--------------------|
| <b>Version</b>                              | <b>Description of Amendment</b> | <b>Author</b>      | <b>Review Date</b> |
| 1   | Initial Release                 | Thuraya Al Farsi   | August 2025        |
| <b>Written by</b>                           | <b>Reviewed by</b>              | <b>Approved by</b> |                    |
| Thuraya Al Farsi                            | Wafa Al Balushi                 | Dr. Bader Al Habsi |                    |



## 8. Related Document

9.1 Audit Tool

## 9. References

| <b>Title of book/journal/articles/<br/>Website</b>         | <b>Author</b>   | <b>Year of<br/>Publication</b> | <b>Page</b> |
|--|---|--------------------------------|-------------|
| Decontamination and waste<br>management                    | World Health Organization   | 2020                           | 25-29       |
| Infection Prevention & Control<br>Manual(Waste Management) | GCC Centre for Infection<br>Control. Ministry of National<br>Guard. KSA | 2013                           | 251-256     |



## Appendices

### Appendix 1. Audit Tool

| S.N. | Audit Process             | Standard/ Criteria                                 | Yes | No | N/A | Comment |
|------|---------------------------|--|-----|----|-----|---------|
| 1.   | Observation/<br>interview | What types of waste in radiology department?       |     |    |     |         |
| 2.   | interview                 | How to get rid of x-ray film?                      |     |    |     |         |
| 3.   | interview                 | Are radioactive waste placed in proper lead boxes? |     |    |     |         |





## Appendix 2. Document Request Form

| Document Request Form                                    |   |   |           |
|--|---|---|-----------|
| <b>Section A: Completed by Document Requester</b>        |   |   |           |
| 1. Requester Details                                     |   |   |           |
| Name   | Thuraya Al Farsi                                  | Date of Request                                 | July 2022 |
| Institute  | Al Masarra Hospital                               | Mobile  | —         |
| Department   | HSE   | Email   | —         |
| The Purpose of Request                                   |   |   |           |
| <input checked="" type="checkbox"/> Develop New Document | <input type="checkbox"/> Modification of Document | <input type="checkbox"/> Cancelling of Document |           |
| 1. Document Information                                  |   |   |           |
| Document Title   | Guideline of Management Radiological Waste        |   |           |
| Document Code  | AMRH/IC/GUD/005/Vers.01                           |   |           |
| <b>Section B: Completed by Document Controller</b>       |   |   |           |
| <input checked="" type="checkbox"/> Approved             | <input type="checkbox"/> Cancelled                | <input type="checkbox"/> Forward To:.....       |           |
| Comment and Recommendation:                              |   |   |           |
| Name   | Kunooz Al Balushi                                 | Date  | 01 07 22  |
| Signature  |   | Stamp   |           |



## Appendix 3. Document Validation Checklist



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| Document Validation Checklist   |   |  |    |     |          |
|---|---|--|----|-----|----------|
| Document Title: Guideline of Management Radiological Waste                                      |   | Document Code: AMRH/IC/GUD/005/Vers.01 |    |     |          |
| No  | Criteria  | Meets the Criteria                     |    |     | Comments |
|   |   | Yes                                    | No | N/A |          |
| <b>1. Approved format used</b>  |   |  |    |     |          |
| 1.1   | Clear title – Clear Applicability                 | ✓                                      |    |     |          |
| 1.2   | Index number stated                               | ✓                                      |    |     |          |
| 1.3   | Header/ Footer complete                           | ✓                                      |    |     |          |
| 1.4   | Accurate page numbering                           | ✓                                      |    |     |          |
| 1.5   | Involved departments contributed                  | ✓                                      |    |     |          |
| 1.6   | Involved personnel signature /approval            | ✓                                      |    |     |          |
| 1.7   | Clear Stamp                                       | ✓                                      |    |     |          |
| <b>2. Document Content</b>  |   |  |    |     |          |
| 2.1   | Clear purpose and scope                           | ✓                                      |    |     |          |
| 2.2   | Clear definitions                                 | ✓                                      |    |     |          |
| 2.3   | Clear policy statements (if any)                  |  |    | ✓   |          |
| <b>3. Well defined procedures and steps</b>   |   |  |    |     |          |
| 3.1   | Procedures in orderly manner                      |  |    | ✓   |          |
| 3.2   | Procedure define personnel to carry out step      |  |    | ✓   |          |
| 3.3   | Procedures define the use of relevant forms       |  |    | ✓   |          |
| 3.4   | Procedures to define flowchart                    |  |    | ✓   |          |
| 3.5   | Responsibilities are clearly defined              | ✓                                      |    |     |          |
| 3.6   | Necessary forms and equipment are listed          | ✓                                      |    |     |          |
| 3.7   | Forms are numbered                                | ✓                                      |    |     |          |
| 3.8   | References are clearly stated                     | ✓                                      |    |     |          |
| <b>4. General Criteria</b>  |   |  |    |     |          |
| 4.1   | Policy is adherent to MOH rules and regulations   | ✓                                      |    |     |          |
| 4.2   | Policy within hospital/department scope           | ✓                                      |    |     |          |
| 4.3   | Relevant policies are reviewed                    | ✓                                      |    |     |          |
| 4.4   | Items numbering is well outlined                  | ✓                                      |    |     |          |
| 4.5   | Used of approved font type and size               | ✓                                      |    |     |          |
| 4.6   | Language is clear, understood and well structured | ✓                                      |    |     |          |
| Recommendations..... ✓ For implementation ..... More revision ..... To be cancelled             |   |  |    |     |          |
| Reviewed by: <u>Kwosoz A. Al-Balushi</u> ..... Reviewed by: <u>Ruvilga... E. V. N. D.</u> ..... |   |  |    |     |          |

*[Handwritten signature]*

