

# **National Registry System**

# **User Guide**

V 2.0

01/07/2025

Heuristic



# TABLE OF CONTENTS

| Table of contents                         | 1  |
|---|----|
| introduction                              |    |
| Target Audience                           | 3  |
| start                                     | 4  |
| Log in to the system                      |    |
| Log in via the Nafath platform            | 5  |
| Landing Page Overview                     | 6  |
| Change Language:                          |    |
| Notifications:                            | 7  |
| Profile                                   | 7  |
| Contact Support                           |    |
| Sources                                   |    |
| Adding sources to facilities              |    |
| Add a sealed source                       | 11 |
| Add unsealed radioactive source           | 15 |
| Add short-lived radioactive source        |    |
| Review the status of sources              | 22 |
| Edit the source                           | 23 |
| Copy source data                          |    |
| Associated equipment                      |    |
| Add associated equipment                  |    |
| Review the status of associated equipment |    |
| Edit associated equipment                 |    |
| Copy the associated equipment data        |    |
| Radiation Generators                      |    |
| Add a new Radiation Generator             |    |
| Review the status of radiation generators |    |
| Edit of radiation generators              |    |
| Copy of Radiation Generator               |    |
| Transfer Ownership                        |    |
| Radiation Worker Data Management Guide    |    |



| Add a new worker                                      | 43 |
|---|----|
| Edit worker data                                      | 45 |
| Extracting Worker data                                | 46 |
| Instructions for uploading an Excel file for readings | 47 |
| Recording readings                                    | 48 |
| Appendix A:   | 51 |



#### INTRODUCTION

- The Nuclear and Radiological Regulatory Commission (NRRC) is pleased to present the User Guide for the National Nuclear Registry System. This guide serves as a comprehensive reference to help licensed entities and registered facilities maximize the benefits of the National Nuclear Registry System and use it efficiently and effectively.
- The system covers all aspects related to the management of all types of radioactive sources (sealed, unsealed, and short-lived), associated equipment, radiation-generating devices, and personnel working in licensed facilities specialized in nuclear and radiological activities.
- This guide aims to clarify the main functions of the system and the services provided through it, to ensure optimal use and to achieve the highest levels of regulatory compliance, safety, and security

#### Target Audience

This guide targets all facilities licensed by the Nuclear and Radiological Regulatory Commission and registered in the National Nuclear Registry System in the Kingdom of Saudi Arabia. If your facility is classified among these entities, this guide is your primary reference for understanding how to use the National Nuclear Registry System, ensuring full compliance with approved regulations and standards.



#### START

## Log in to the system

- 1. Open a web browser on your device.
- 2. Access the National Nuclear Registry System via the Nuclear and Radiological Regulatory Authority website
- 3. The address of the National Nuclear Registry System can be obtained by clicking on the link: <u>here</u>

| هيئة الرقابة النووية والإشعاعية<br>Nuclear and Radiological Regulatory Commission |  |
|---|--|
| National Single Sign On   |  |
| National Single Sign-On   |  |
|   |  |



## Log in via the Nafath platform

4. Click on the "Nafath Login" button to go to the Unified Access Portal and complete the verification procedures.



- 5. Enter your national ID number or residence number, then click the "Sign in" button.
- 6. After logging in, you will be directed to the National Registry system to select your facility.
  - From the drop-down menu, select the facility whose records you want to manage.
  - You can navigate between your registered facilities by refreshing the page.

| هيئة الرقابة النووية والإشعاعية<br>Nuclear and Radiological Regulatory Commission |                            | ه شارد الم |
|---|----------------------------|------------|
|   | Select Your FacilitySelect |            |



# Landing Page Overview

After selecting a facility, you will be directed to the system's landing page, which displays a comprehensive overview of the system's functions, available services, and the latest activities and statistics related to the facility.

| Active Sources 5                                 | Sources Services                     |                     |                        |                 |        |                   |         |
|--|--------------------------------------|---------------------|------------------------|-----------------|--------|-------------------|---------|
| UnSealed 1 R<br>Short Lived 1 /<br>Workers 2     | Add Sealed Source Request Status All | Add Unsealed Source | Add Short Lived Source | Transfer Source | Search |                   |         |
| Radiation Generators 3<br>Associated Equipment 3 | Type                                 | Radionuclide        | Serial Number          | Status Date     | Status | Request<br>Status | Actions |

(The above data is for display and clarification purposes)

## Change Language:

Click on the language icon to change the display language to Arabic by clicking on the option shown.

| ميلة الرقابة النووية والإشعاعية<br>Nuclear and Indicipical Registroy Convision |                   | N                    | lational Nuclear Reg   | istry                |        | ŧ              | ່ງມຸງຼະ Contact Support | <b>*</b> 0 |
|--|-------------------|----------------------|------------------------|----------------------|--------|----------------|-------------------------|------------|
| A CONTRACTOR   |                   |                      |                        |                      |        |                |                         |            |
|  |                   |                      |                        |                      |        |                |                         |            |
| License Number   | Sources           | Associated Equipment | Workers                | Radiation Generators |        |                |                         |            |
| Active Sources 15  | Sources Services  |                      |                        |                      |        |                |                         |            |
| Sealed 12  | Add Sealed Source | Add Unsealed Source  | Add Short Lived Source | Transfer Sources     |        |                |                         |            |
| UnSealed 1<br>Short Lived 2  | Request Status    | ~                    |                        |                      |        |                |                         |            |
| Workers 3  |                   |                      |                        |                      |        |                |                         |            |
| Radiation Generators   | 10 🗸              |                      |                        |                      |        |                | Search                  |            |
| Associated Equipment 7   | Туре              | Radionuclide         | Serial Number          | Status Date          | Status | Request Status | Actions                 |            |



## Notifications:

To view your notifications, click the Notifications icon at the top of the page, where the

latest alerts and messages associated with your account or facility will be displayed.

| میله الرولیه الاوری والاشعاییه<br>Mutter and fullying along territation |                   | Nat                    | ional Nuclear Registry |                   |        | ŧ              | ່ງແມຼວ Contact Support | <b>*</b> 0 |
|---|-------------------|------------------------|------------------------|-------------------|--------|----------------|------------------------|------------|
| Acres and Area &  |                   |                        |                        |                   |        |                | /                      |            |
| License Number  | Sources           | Associated Equipment   | Workers Rad            | lation Generators |        |                |                        |            |
| Active Sources 15   | Sources Services  |                        |                        |                   |        |                |                        |            |
| Sealed 12   | Add Sealed Source | Add Unsealed Source Ad | d Short Lived Source   | ransfer Sources   |        |                |                        |            |
| Short Lived 2   | Request Status    | ~                      |                        |                   |        |                |                        |            |
| Workers 3   |                   |                        |                        |                   |        |                | 100 M                  |            |
| Radiation Generators  | 10 🗸              |                        |                        |                   |        |                | Search                 |            |
| Associated Equipment 7  | Туре              | Radionuclide           | Serial Number          | Status Date       | Status | Request Status | Actions                |            |

(The above data is for display and clarification purposes

## Profile

Click on the profile icon to view your account name, access technical support options, and log out of the system.

| ميلة الرقابة النووية والإشعاعية<br>Nuccer and Indedgical Registery Conversion |                   | Nat                    | ional Nuclear Registry | 1                 |        | *              | ່ງທຸງc Contact Support | <b>*</b> 0 |
|---|-------------------|------------------------|------------------------|-------------------|--------|----------------|------------------------|------------|
| Acres and Mar M.  |                   |                        |                        |                   |        |                |                        | /          |
|   |                   |                        |                        |                   |        |                |                        |            |
| License Number  | Sources           | Associated Equipment   | Workers Rad            | lation Generators |        |                |                        |            |
| Active Sources 15   | Sources Services  |                        |                        |                   |        |                |                        |            |
| Sealed 12   | Add Sealed Source | Add Unsealed Source Ad | d Short Lived Source T | ransfer Sources   |        |                |                        |            |
| UnSealed 1<br>Short Lived 2   | Request Status    | ~                      |                        |                   |        |                |                        |            |
| Workers 3   |                   |                        |                        |                   |        |                | - L3-                  |            |
| Radiation Generators 1  | 10 🗸              |                        |                        |                   |        |                | Search                 |            |
| Associated Equipment 7  | Туре              | Radionuclide           | Serial Number          | Status Date       | Status | Request Status | Actions                |            |



## **Contact Support**

Click on the technical support icon to contact the support team and submit inquiries or reports related to using the system.

| 8 | نووية والإشعاعية<br>Nucleor and Padiological A | میلة الرقابة ال<br>rejulatory Commission | tional Nuclear R  | egistry     | Contact Sup        | port 3 🌲 🙁  |
|---|--|--|-------------------|-------------|--------------------|-------------|
|   |  |  |                   |             |                    |             |
|   |  | All                                      | Requests          |             | Conta              | act Support |
|   | Request ID<br>℃                                | Request SubCategory                      | Request Date<br>∏ | Status<br>7 | Latest Update Date | Action      |
|   |  |  | « <  >            | »           |                    | 1           |

(The above data is for display and clarification purposes)

i. Click the "Contact Support" button to open a direct communication channel with the technical support team.

|                 |                       | All Requests |                   |        | Conta                   | act Support |
|-----------------|-----------------------|--------------|-------------------|--------|-------------------------|-------------|
| Request ID<br>℃ | Request SubCategory 7 |              | Request Date<br>℃ | Status | Latest Update<br>Date 🍸 | Action      |
| RE<br>00        |                       |              |                   |        |                         | View        |
|                 |                       | «< < 1 > »>  |                   |        |                         |             |



- ii. Fill in the required fields, including the subcategory, subject, description, and attachments relevant to the inquiry (if any).
- iii. After completing the information, click "Submit" to forward the request to the relevant authority.
- iv. You will be responded to as soon as possible by our support team.

|                     | 4            | Request الاستفسارات   | Category سارات المتعلقة بالسجلات الوطنية | SubCategorySelect | 2                  |
|---------------------|--------------|---|--|-------------------|--------------------|
|                     |              | Subject<br>Enter subject  |  |                   | Contact Support    |
| Request ID          | Requ         | Description<br>Enter description                                    |  |                   | Update<br>T Action |
| REQ-2025-<br>001957 | Inqu<br>طنية | Attachments   |  |                   | , 2:35 PM View     |
|                     |              | Choose Files No file chosen<br>Max Files: 5. Allowed Types: JPG, JF | PEG, PNG, PDF, DOC, DOCX.                |                   |                    |
|                     |              |   |  | submit            |                    |



#### Sources

The main screen displays details of sealed, unsealed, and short-lived radioactive sources within licensed facilities, based on the selected license.

The displayed data includes source information such as source type, current radioactivity, and serial number.

This screen allows the user to view the inventory of sources registered with the facility by the selected license, in addition to the source status (draft, submitted, accepted, correction required). Licenses can also be navigated through the Change License option, indicated by the arrow in the image below.

You can also navigate to:

- The Transfer of Ownership screen using the Source Transfer option.
- The Sealed Radioactive Source Registration screen.
- The Unsealed Radioactive Source Registration screen.
- The Short-Lived Radioactive Source Registration screen.

| ٩   | Sources   | Associated Equipment | Workers                | Radiation Generat | prs    |         |  |
|---|---|----------------------|------------------------|-------------------|--------|---------|--|
| Active Sources 5<br>Sealed 3<br>JnSealed 1<br>Short Lived 1 | Sources Services<br>Add Sealed Source<br>Request Status | Add Unsealed Source  | Add Short Lived Source | Transfer Source   | 5      |         |  |
|   |   |                      |                        |                   |        |         |  |
| Vorkers 2<br>adiation Generators 3                          | 10 🗸  |                      |                        |                   | Search | Request |  |

The contents of each screen will be explained separately in this document.



## Adding sources to facilities

#### Add a sealed source

- To complete the process of registering a sealed radioactive source in the system, please follow the following steps:
- a. Select the Permit number from the drop-down list.
- b. Enter the actual receipt date.
- c. Determine if it contains one or more Radionuclides.

| dd Sealed Source    |                       | 🗢 Bac |
|---------------------|-----------------------|-------|
| rmit Number*        | Actual Receipt Date * |       |
| -Select             | ✓                     |       |
|                     |                       |       |
|                     |                       |       |
|                     |                       |       |
| Single Padionuclide | Mixed Padionuclide    |       |
| Single Radionaciae  | Mixed Radionaction    |       |
|                     |                       |       |

- d. Enter the following source information:
  - i. Select the source serial number from the drop-down list
  - ii. Select the manufacturer from the drop-down list
  - iii. Select the country of manufacture from the drop-down list
  - iv. Enter the source facility number
  - v. Enter the model number

| Source Identification |               |   |                        |   |                    |
|-----------------------|---------------|---|------------------------|---|--------------------|
| Source Serial No*     | Manufacturer* |   | Manufacturer Country * |   | Facility Source ID |
| Mandatory             | Select        | ~ | Select                 | ~ | Optional           |
| Model No *            |               |   |                        |   |                    |
| Mandatory             |               |   |                        |   |                    |
|                       |               |   |                        |   |                    |



- e. Enter Characteristics:
  - i. Select the source status from the drop-down menu.
  - ii. Select the physical status from the drop-down menu.
  - iii. Select the associated equipment from the drop-down menu. menu.

| Characteristics |   |                 |   |                    |     |
|-----------------|---|-----------------|---|--------------------|-----|
| Source Status * |   | Physical Form * |   | Associated Equipme | nt* |
| Select          | ~ | Select          | ~ | Select             | ~   |

Note: The facility must have pre-registered and linked equipment to appear among the available options in the system.

One or more sources may be linked to associated equipment, depending on its type.

- f. Enter Radionuclide data: :
  - i. Select the Radionuclide from the drop-down list.
  - ii. Enter the initial activity value.
  - iii. Select the activity unit from the drop-down list.
  - iv. Enter the initial activity date.

| dionuclides    |   |                    |        |   |                        |
|----------------|---|--------------------|--------|---|------------------------|
| Radionuclide * |   | Initial Activity * | Unit * |   | Initial Activity Date* |
| Select         | ~ | Mandatory          | Select | ~ | <b>B</b>               |



Additional information: Some types of resources, such as uranium, thorium, and plutonium, require the entry of additional data, which are:

- i. Select an item from the drop-down list
- ii. Enter an item's mass
- iii. Select an item's mass unit from the drop-down list

| adionuclides       |               |          |        |   |                    |   |
|--------------------|---------------|----------|--------|---|--------------------|---|
| Radionuclide *     |               | Element* |        | Element Mass*   | Element Mass Unit* |   |
| Th-226             | $\times \sim$ | Select   | $\sim$ | Mandatory   | Select             | ~ |
| Initial Activity * |               | Unit *   |        | Initial Activity Date *   | _                  |   |
| Mandatory          |               | Select   | $\sim$ | t diama di anti |                    |   |



#### g. Attachments

- i. Source Certificate From Manufacturer
  - If the certificate is not available, activate the option, then attach a copy of the source's ID card.
  - If the ID card is also not available, activate the option, then download the storage report form.
- ii. Shipper's Declaration For Dangerous Goods
  - If the declaration is not available, activate the option, then attach the customs declaration.
  - If the customs declaration is not available, activate the option, then attach a copy of the source.
- iii. Other documents (optional)

#### h. Save

- Click the "Save" or "Save as Draft" button.
- Choosing "Save" will send the request to the Nuclear and Radiological Regulatory commission for review.
- If the data is incomplete or needs to be reviewed later, you can use the "Save as Draft" option to avoid losing the entered information.

| <ul> <li>I don't have source certificate from<br/>manufacturer</li> </ul>      | I don't have shield tag image                                    | Download, fill, and upload the form 😃 template.              |
|--|--|--|
| Source Certificate From Manufacturer*  | Source Tag Image *   | Storage Record Form *  |
| Press Ctrl to select multiple, or drag & drop<br>attachments                   | Upload Picture, Press Ctrl to select multiple                    | Press Ctrl to select multiple, or drag & drop<br>attachments |
| Other Attachments  |  |  |
| <ul> <li>I don't have shipper's declaration<br/>for dangerous goods</li> </ul> | <ul> <li>I don't have customs declaration<br/>(Bayan)</li> </ul> |  |
| Shipper's Declaration For Dangerous Goods                                      | Customs Declaration (Bayan)                                      | Source Picture *   |
| Press Ctrl to select multiple, or drag & drop<br>attachments                   | Press Ctrl to select multiple, or drag & drop<br>attachments     | Upload Picture, Press Ctrl to select multiple                |
| Other Documents (Optional)   |  |  |
| Press Ctrl to select multiple, or drag & drop<br>attachments                   |  |  |



## Add unsealed radioactive source

To complete the process of registering an unsealed radioactive source in the system, please follow the following steps:

- 1. Adding an unsealed radioactive source:
  - a. Select the Permit number from the drop-down list.
  - b. Enter the actual receipt date.
  - c. Indicate if it contains one or more Radionuclide s.

| Add UnSealed Sou                        | urce   |  | G Back |
|---|--------|--|--------|
| Permit Number*                          |        | Actual Receipt Date *                  | _      |
| Select                                  | $\sim$ |  |        |
|   |        |  |        |
|   |        |  |        |
|   |        |  |        |
| <ul> <li>Single Radionuclide</li> </ul> |        | <ul> <li>Mixed Radionuclide</li> </ul> |        |
|   |        |  |        |
|   |        |  |        |
|   |        |  |        |

(The above data is for display and clarification purposes)

- d. Enter the following source information:
  - i. Serial number (the same number cannot be repeated for more than one source).
- ii. Factory name from the drop-down list.
- iii. Country of manufacture from the drop-down list.
- iv. Facility source number (optional).
- v. Model number.

| Source Identification |                |                       |                    |
|-----------------------|----------------|-----------------------|--------------------|
| Source Serial No*     | Manufacturer * | Manufacturer Country* | Facility Source ID |
| Mandatory             | Select 🗸       | Select 🗸              | Optional           |
| Model No *            |                |                       |                    |
| Mandatory             |                |                       |                    |
|                       |                |                       |                    |



- e. Characteristics
  - i. Select the source status from the drop-down list
- ii. Select the physical form from the drop-down list
- iii. Enter the quantity
- iv. Select the unit from the drop-down list
- v. Select the associated equipment from the drop-down list

| Source Status*     Physical Form*     Associated Equipment*      Select    Select    Select     V | Characteristics |   |                 |   |                    |      |
|---|-----------------|---|-----------------|---|--------------------|------|
| Select VSelect V  | Source Status * |   | Physical Form * |   | Associated Equipme | ent* |
|   | Select          | ~ | Select          | ~ | Select             | ~    |

Note: The facility must have pre-registered and linked equipment to appear among the available options in the system. One or more sources may be linked to Associated equipment, depending on its type.

- f. Enter Radionuclide data
  - i. Select the Radionuclide from the drop-down list
- ii. Enter the initial activity value
- iii. Select the activity unit from the drop-down list
- iv. Enter the initial activity date

| Initial Activity* | Unit *             | h   | nitial Activity Date *   |
|-------------------|--------------------|---|--|
| V Mandatory       | Select             | ~   | 8  |
|                   | Initial Activity * | Initial Activity*     Unit*       Mandatory    Select | Initial Activity*     Unit*     Initial Activity       Mandatory    Select |



\*\*Note: Some sources, such as uranium, thorium, and plutonium, require additional information:

- i. Select the element from the drop-down list.
- ii. Enter the mass of the element.
- iii. Select the element's mass unit from the drop-down list.

| Radionuclide *    | Element*  | Element Mass *         | Element Mass Unit* |   |
|-------------------|-----------|------------------------|--------------------|---|
| Th-226            | × ×Select | ✓ Mandatory            | Select             | ~ |
| Initial Activity* | Unit *    | Initial Activity Date* |                    |   |
| Mandatory         | Select    | ~                      | <b>—</b>           |   |



#### g. Attachments

- i. Source Certificate From Manufacturer
- If the certificate is not available, activate the option, then attach a copy of the source's ID card.
- If the ID card is also not available, activate the option, then download the storage report form.
- ii. Shipper's Declaration For Dangerous Goods
  - If the declaration is not available, activate the option, then attach the customs declaration.
  - If the customs declaration is not available, activate the option, then attach a copy of the source.
- iii. Other documents (optional)

#### h. Save

- Click the "Save" or "Save as Draft" button.
- Choosing "Save" will send the request to the Nuclear and Radiological Regulatory commission for review.
- If the data is incomplete or needs to be reviewed later, you can use the "Save as Draft" option to avoid losing the entered information.

| <ul> <li>I don't have source certificate from<br/>manufacturer</li> </ul>      | I don't have shield tag image                                    | Download, fill, and upload the form 🕁 template.              |
|--|--|--|
| Source Certificate From Manufacturer *   | Source Tag Image *   | Storage Record Form *  |
| Press Ctrl to select multiple, or drag & drop<br>attachments                   | Upload Picture, Press Ctrl to select multiple                    | Press Ctrl to select multiple, or drag & drop<br>attachments |
| Other Attachments  |  |  |
| <ul> <li>I don't have shipper's declaration<br/>for dangerous goods</li> </ul> | <ul> <li>I don't have customs declaration<br/>(Bayan)</li> </ul> |  |
| Shipper's Declaration For Dangerous Goods                                      | Customs Declaration (Bayan)                                      | Source Picture *   |
| Press Ctrl to select multiple, or drag & drop<br>attachments                   | Press Ctrl to select multiple, or drag & drop<br>attachments     | Upload Picture, Press Ctrl to select multiple                |
| Other Documents (Optional)   |  |  |
| Drane Chaldre gelant multiple, or dran 9, dran                                 |  |  |



## Add short-lived radioactive source

To complete the process of registering a short-lived radioactive source in the system, please follow these steps:

- 1. Add a short-lived radioactive source:
  - a. Select the Permit number from the drop-down list.

(The above data is for display and clarification purposes)

- b. Enter the following source information:
  - i. Serial number (the same number cannot be repeated for more than one source).
  - ii. Factory name from the drop-down list
  - iii. Country of manufacturer from the drop-down list.

| Source Identification |               |        |                     |     |
|-----------------------|---------------|--------|---------------------|-----|
| Source Serial No*     | Manufacturer* |        | Manufacturer Countr | y * |
| Mandatory             | Select        | $\sim$ | Select              | ~   |

#### c. Characteristics:

- i. Select the physical form from the drop-down menu.
- ii. Enter the quantity (last three months).
- iii. Select the unit from the drop-down menu.
- iv. Select the associated equipment from the drop-down menu.

| Characteristics     |   |                            |        |                        |        |   |
|---------------------|---|----------------------------|--------|------------------------|--------|---|
| Physical Form * Qua |   | Quantity * (last 3 months) | Unit * | Associated Equipment * |        |   |
| Select              | ~ |                            | Select | ~                      | Select | ~ |



Note: The facility must have pre-registered and linked equipment to appear among the available options in the system. One or more sources may be linked to a single piece of equipment. depending on its type.

- d. Enter Radionuclide data:
  - i. Select the Radionuclide from the drop-down list.
  - ii. Enter the source activity.
  - iii. Select the unit from the drop-down list.

| Ra | dionuclides   |                  |        |   |
|----|---------------|------------------|--------|---|
| Ra | adionuclide * | Source Activity* | Unit*  |   |
| -  | -Select       | Mandatory        | Select | ~ |
|    |               |                  |        |   |



#### e. Attachments

- i. Source Certificate From Manufacturer
- If the certificate is not available, activate the option, then attach a copy of the source's ID card.
- If the ID card is also not available, activate the option, then download the storage report form..
- ii. Shipper's Declaration For Dangerous Goods
- If the declaration is not available, activate the option, then attach the customs declaration.
- If the customs declaration is not available, activate the option, then attach a copy of the source.
- iii. Other documents (optional)
- f. Save
  - Click the "Save" or "Save as Draft" button.
  - Choosing "Save" will send the request to the Nuclear and Radiological Regulatory commission for review.
- If the data is incomplete or needs to be reviewed later, you can use the "Save as Draft" option to avoid losing the entered information.





#### **Review the status of sources**

All sources registered with the facility are displayed in the Sources list on the home page, visible only to the authorized user. The list includes the current status of all radioactive sources, with the ability to use the search fields at the bottom of the page to facilitate access to a specific source:

- 1. Submitted: This status appears after entering the required information and submitting the request . It remains pending until a response is received from the relevant authority.
- 2. accepted: This means that the request has been fully reviewed and accepted.
- 3. Correction Required: This status appears if there is incorrect or incomplete information. You may request that it be amended and resubmitted.
- 4. Draft: This status indicates that the request is not yet complete and can be saved for later use or for making edits before submission.

<u>\*\* Note: In the draft status, no action is taken until the information is completed and</u> <u>the request is submitted.</u>

| Туре        | Radionuclide                              | Serial Number   | Status Date | Status   | Request Status      | Actions |
|-------------|---|-----------------|-------------|----------|---------------------|---------|
| Sealed      |   |                 |             | In Use   | Draft               |         |
| Unsealed    | Isotope: Be-7   Activity:<br>1.15E+12 Bq  |                 |             | Lost     | Accepted            |         |
| Sealed      |   |                 |             | In Use   | Correction Required |         |
| Short Lived | Isotope: Ac-227   Activity:<br>3.00E+0 Bq |                 |             |          | Accepted            |         |
| Sealed      | Isotope: U-235   Activity:<br>5.00E+0 Bq  |                 |             | In Use   | Submited            |         |
| Sealed      |   |                 |             | In Use   | Correction Required |         |
| Type Q      | Radionuclide Q                            | Serial Number Q | Date Q      | Status Q | Request Status Q    | <b></b> |



## Edit the source

To modify source data, please follow these steps, noting the following:

- The request cannot be modified if its status is "Submitted."
- Some fields can only be modified in the following two cases:
  - "accepted"
  - "Correction Required"

| Туре   | Radionuclide | Serial Number | Status Date | Status | Request Status      | Actions |
|--------|--------------|---------------|-------------|--------|---------------------|---------|
| Sealed |              |               |             | In Use | Correction Required |         |

(The above data is for display and clarification purposes)

a. Click the "Edit" icon to open the editing page and make the required changes to the source data.

| Date           | User Name | Comment            | Action   |  |
|----------------|-----------|--------------------|----------|--|
| 30/04/2025     | NRRC      | تبيه               | Change R | equest Status To Correction Required             |
|                |           |                    |          |  |
|                |           |                    |          | The correction should be based on NRRC feedback. |
| Edit Source    |           |                    |          |  |
| ermit Number * | Ad        | tual Receipt Date* |          |  |
|                | × ~ 1     | 8/03/2025          | <b>#</b> |  |



b. Modify the source data based on the commission employee's comments. You can also review the request history using the designated icon.

| Date                            | User Name   | Comment         |                             |                    |  |                                   | Action   |                          |
|---------------------------------|-------------|-----------------|-----------------------------|--------------------|--|-----------------------------------|--|--------------------------|
| 17/05/2025                      | NRRC        | Please, update  | source profile, you need to | register your asso | iated equipment to link it wi              | th the source.                    | Change Request Status                          | To Correction Require    |
| Q History                       |             |                 |                             |                    |  |                                   |  |                          |
|                                 |             |                 |                             |                    |  |                                   |  |                          |
| Edit Sour                       | ce          |                 |                             |                    |  |                                   |  | 🕒 Ba                     |
| Permit Numbe                    | r*          |                 | Actual Receipt Date *       |                    | Created By:                                |                                   | Cre  | ated On: 26/Jan/2025, 12 |
|                                 |             | ×               |                             | Ë                  | If a correc<br>application o<br>based on t | tion is re<br>lata mus<br>he comn | equired, the<br>at be modified<br>nents of the | d                        |
| <ul> <li>Single Radi</li> </ul> | onuclide    |                 | O Mixed Radionuclide        |                    |  | +                                 |  |                          |
| Source Ide                      | ntification |                 |                             |                    |  |                                   |  |                          |
| Source Serial                   | No.*        |                 | Manufacturer *              |                    | Manufacturer Country*                      |                                   | Facility Source ID                             |                          |
| Source Schar                    |             |                 |                             | × ~                | USA  | × ~                               |  |                          |
| Model No *                      |             |                 |                             |                    |  |                                   |  |                          |
| AMN.CYI                         |             |                 |                             |                    |  |                                   |  |                          |
| Characteri                      | istics      |                 |                             |                    |  |                                   |  |                          |
| Source Status                   | •           |                 | Physical Form *             |                    | Associated Equipment *                     |                                   |  |                          |
| In Use                          |             | $\times$ $\sim$ | Solid                       | ×                  | N/A  | × ~                               |  |                          |

(The above data is for display and clarification purposes)

- c. After clicking the "Save" button, the request will be sent back to the Nuclear and Radiological Regulatory commission for review and approval.
- d. The request status will change to "Submitted," and the data cannot be modified afterward unless action is taken by a commission employee.

| Туре   | Radionucline | Serial Number | Status Date | Status | Request Status | Actions |
|--------|--------------|---------------|-------------|--------|----------------|---------|
| Sealed |              |               |             |        | Submitted      |         |



## Copy source data

When you click the copy icon, a new source will be created based on the basic data of the original source.

The remaining fields must be completed before saving and submitting the request as a new one. The copy will remain in "Draft" status until it is saved and submitted. You can also delete the copied source if you no longer wish to complete the request.

| Туре   | Radionuclide   | Serial Number | Status Date | Status | Request Status | Actions |
|--------|--|---------------|-------------|--------|----------------|---------|
| Sealed |  |               |             | In Use | Draft          |         |
| Sealed | Isotope: <b>Be-7</b>   Activity: <b>1.15E+12</b><br>Bq |               |             | Lost   | Accepted       |         |



## Associated equipment.

The main screen displays details of the equipment associated with radiation use within licensed facilities, based on the specific license.

The displayed data includes information such as: device type, intended use, serial number, and manufacturer name.

This module enables the user to view all associated equipment registered with the facility according to the specific license, as well as the equipment status, such as:

- Draft
- submitted
- accepted
- Correction required

You can also switch between licenses to view different equipment data using the Change License option, shown by the arrow in the image below.

This screen allows you to perform several actions, including:

- Add new associated equipment
- Move associated equipment
- Review the status of equipment registered on the license

| Associated Equipmen        | t              |                  |               |               |                | 😁 Back   |
|----------------------------|----------------|------------------|---------------|---------------|----------------|----------|
| Add Associated Equipme     | int            |                  |               |               |                |          |
| Transfer Associated Equipm | nent           |                  |               |               |                |          |
| Request Status All         |                |                  |               |               | Search         |          |
| Serial Number              | Model Number   | Equipment Type   | Status Date   | Status        | Request Status | Actions  |
|                            |                |                  |               | Stuck in Well | Draft          |          |
| 51                         |                | Conventional     |               | Stuck in Well | Accepted       |          |
| Serial Number Q            | Model Number Q | Equipment Type Q | Status Date Q | Status Q      | Request Statu  |          |
| 1-4/4                      |                |                  |               |               | <<             | < 1 > >> |



## Add associated equipment

To add associated equipment, click the "Add Associated Equipment" button, then fill in the following information:

a. Select the Permit number from the drop-down list.

b. Determine whether the equipment contains depleted uranium.

If it does, please enter the following information:

- i. Enter the mass of uranium.
- ii. Select the mass unit from the drop-down list.
- iii. Enter the concentration.

| Depleted Uranium<br>Contains Depleted Uranium |             |              |  |
|---|-------------|--------------|--|
| Depleted Uranium Mass *                       | Mass Unit * | Enrichment * |  |
| Mandatory                                     | Select      | Mandatory    |  |

#### c. Attachments :

- i. Equipment Manufacturer Certificate.
- ii. Equipment Tag Image.
- d. Click the "Save" or "Save as Draft" button to save the entered data.

| Attachments<br>Please upload at least one file of the following |   |              |        |
|---|---|--------------|--------|
| Equipment Manufacturer Certificate *                            | Equipment Tag Image *                         |              |        |
| Press Ctrl to select multiple, or drag & drop<br>attachments    | Upload Picture, Press Ctrl to select multiple |              |        |
|   | Sa  | ave As Draft | Submit |



#### Review the status of associated equipment

On the Associated Equipment page, all equipment registered on the facility is displayed to the authorized user.

The status of each piece of equipment is displayed directly, with the ability to use the search fields at the bottom of the page to quickly and accurately locate the required equipment.

Equipment statuses are displayed as follows:

- 1. Submitted: This status appears after entering the required information and submitting the request . It remains pending until a response is received from the relevant authority.
- 2. accepted: This means that the request has been reviewed and accepted.
- 3. Correction Required: This status appears when incorrect information is discovered and the user requests correction.
- 4. Draft: This means that a copy of the request has been saved without submitting it. No action will be taken on it unless the information is completed and it is submitted as a new request .

| Associated Equipment       | :              |                  |               |               |                 | O Back                          |
|----------------------------|----------------|------------------|---------------|---------------|-----------------|---------------------------------|
| Add Associated Equipmer    | t              |                  |               |               |                 |                                 |
| Transfer Associated Equipm | ent            |                  |               |               |                 |                                 |
| Request Status             |                |                  |               |               |                 |                                 |
| 10 🗸                       |                |                  |               |               | Search          |                                 |
| Serial Number              | Model Number   | Equipment Type   | Status Date   | Status        | Request Status  | Actions                         |
|                            |                |                  |               | Stuck in Well | Draft           |                                 |
|                            |                |                  |               | Stuck in Well | Accepted        |                                 |
|                            |                |                  |               | In Use        | Accepted        |                                 |
|                            |                |                  |               | In Use        | Accepted        |                                 |
| Serial Number Q            | Model Number Q | Equipment Type Q | Status Date Q | Status Q      | Request Statu 🞗 |                                 |
| 1-4/4                      | ~              | ~                | ~             |               | <<              | $\langle 1 \rangle \rightarrow$ |

(The above data is for display and clarification purposes)



#### Edit associated equipment

To modify the associated equipment data, please follow these steps:

- No modifications can be made to the request if its status is "Submitted."
- Modifications are only permitted if the request status is "accepted" or "Correction Required." Some fields can be modified as needed.

You can also make the required modifications based on the commission employee's comments appearing within the request .

a. Click the "Edit" icon to open the editing page and make the desired changes..

| Request | Status    |     |               |             |        |                     |         |
|---------|-----------|-----|---------------|-------------|--------|---------------------|---------|
| All     | ~         |     |               |             |        |                     |         |
| 10 🗸    |           |     |               |             |        | Search              | h       |
| Туре    | Radionucl | ide | Serial Number | Status Date | Status | Request Status      | Actions |
|         |           |     |               |             |        | Correction Required |         |

(The above data is for display and clarification purposes)

b. Review the request record and Edit some of the information that may be modified based on the comments recorded by NRRC .

| Date            | User Name     | Comment                           | Action   |  |                      |
|-----------------|---------------|-----------------------------------|--|--|----------------------|
| 16/05/2025      | NRRC          | Please, update equipment profile. | Change Request Status                                  | To Correction Required                                 |                      |
| Q History       |               |                                   |  |  |                      |
|                 |               |                                   |  |  |                      |
| Edit Associat   | ted Equipment |                                   |  |  | 🕒 Bac                |
| ermit Number *  |               |                                   | Created By:  | Created C  | n: 30/Apr/2024, 11:0 |
| ermit Number    | × ~           |                                   | If a correction<br>application data<br>based on the co | is required, the<br>must be modified<br>omments of the |                      |
| Characteristic  | 5             |                                   |  |  |                      |
| Equipment Type* |               | Model Number*                     | Equipment Serial Number *                              | Manufacturer*  |                      |
| Select          | ~             |                                   |  | EDF  | × ~                  |
| Manufacturer Co | untry *       | Equipment Status *                |  |  |                      |
|                 |               |                                   |  |  |                      |



| Characteristics                               |                    |                           |  |
|---|--------------------|---------------------------|--|
| Equipment Type *                              | Model Number*      | Equipment Serial Number * | Manufacturer *                         |
| Associated Equipment Test 02   Max. 🗸         |                    |                           | ×                                      |
| Manufacturer Country *                        | Equipment Status * |                           |  |
| ×   | ×                  | Edit                      |  |
| Depleted Uranium<br>Contains Depleted Uranium |                    | 4                         | Edit to the request status<br>Accepted |
| Depleted Uranium Mass*                        | Mass Unit *        | Enrichment *              |  |
| 7   | kg ~               | 2                         |  |

(The above data is for display and clarification purposes)

c. After clicking the "Save" button, the request will be sent back to the Nuclear and Radiological Regulatory commission for review and approval.

The request status will change to "Submitted," and data at this stage cannot be modified until action is taken by the relevant employee.

|      | Add Sealed Source Add Unsealed Source | Add Short Lived S | iource Trans | sfer Sources |                |         |
|------|---------------------------------------|-------------------|--------------|--------------|----------------|---------|
| All  | st Status                             |                   |              |              |                |         |
| 10 🗸 |                                       |                   |              |              | Search         | h       |
| Туре | Radionuclide                          | Serial Number     | Status Date  | Status       | Request Status | Actions |
| D    |                                       |                   |              |              | Submited       |         |

(The above data is for display and clarification purposes)



## Copy the associated equipment data

When you click the copy icon, a new piece of equipment will be created based on the basic data of the original piece of equipment.

The remaining fields must be completed before submitting the request.

The new request will be in "Draft" status until it is saved and submitted as a new request.

You can also delete the copied piece of equipment if you no longer wish to complete the request.

| Serial Number | Model Number | Equipment Type                          | Status Date | Status        | Request Status | Actions |
|---------------|--------------|---|-------------|---------------|----------------|---------|
|               |              | 2D Mamography Machine -<br>Conventional | 2025-04-30  | Stuck in Well | Draft          |         |
|               |              | 2D Mamography Machine -<br>Conventional | 2025-04-22  | Stuck in Well | Accepted       |         |



#### **Radiation Generators**

The main screen displays details of the radioactive generators used within licensed facilities, based on the selected license.

The displayed data includes information such as: device type, serial number, and manufacturer name.

This module enables the user to view all generators registered with the facility according to the selected license, as well as the status of each generator, such as:

- Draft
- submitted
- accepted
- Correction required

The user can also navigate between licenses to view generator data based on the selected license, using the Change License option shown by the arrow in the image below.

This screen allows you to perform several actions, including:

- Add a new radioactive generator
- Move a radioactive generator
- Review the status of generators registered on the license

| License Number         | Radiation Gene     | rators        |              |       |        |             |                     | G Back  |
|------------------------|--------------------|---------------|--------------|-------|--------|-------------|---------------------|---------|
|                        | Add Radiation      | Generator     |              |       |        |             |                     |         |
|                        | Transfer Radiatio  | n Generators  |              |       |        |             |                     |         |
| Active Sources 14      | Request Status     |               |              |       |        |             |                     |         |
| Sealed 9               | All                | ~             |              |       |        |             |                     |         |
| UnSealed 1             |                    |               |              |       |        |             |                     |         |
| Short Lived 4          |                    |               |              |       |        |             | Search              |         |
|                        | Equipment Type     | Serial Number | Manufacturer | Model | Status | Status Date | Request Status      | Actions |
| vvorkers               |                    |               |              |       |        | 05/04/2025  | Draft               |         |
| Radiation Generators 3 |                    |               |              |       |        | 04/22/2025  | Correction Required |         |
| Associated Equipment   |                    |               |              |       |        | 03/27/2025  | Correction Required |         |
|                        |                    |               |              |       |        | 03/27/2025  | Accepted            |         |
|                        | spectroscopy (XPS) |               |              |       |        |             |                     |         |
|                        | Equipment Type     | Serial Number | Manufacturer | Model | Status | Date        | Request Status      |         |



### Add a new Radiation Generator

To add a new radiation generator to the facility, follow these steps:

a. Click Add New "Radiation Generator".

| Radiation Generators          |        | 🕒 Back |
|-------------------------------|--------|--------|
| Add Radiation Generator       |        |        |
| Transfer Radiation Generators |        |        |
| Request Status                |        |        |
| 10 🗸                          | Search |        |

(The above data is for display and clarification purposes)

b. Select the Permit number from the drop-down list.

| Permit Number* |        |
|----------------|--------|
|                |        |
| Select         | $\sim$ |

- c. Enter the Radiation Generator Identification :
  - i. Select the generator type from the drop-down list.
  - ii. Enter the model number.
  - iii. Enter the generator serial number.
  - iv. Enter the generator number at the facility (optional).
  - v. Select the factory from the drop-down list.
  - vi. Select the country of manufacture from the drop-down list.
  - vii. Enter the manufacturing date.

| Radiation Generator Identification |                       |                         |                       |  |  |  |  |
|------------------------------------|-----------------------|-------------------------|-----------------------|--|--|--|--|
| Generator Type *                   | Model Number*         | Generator Serial NO *   | Facility Generator ID |  |  |  |  |
| Select V                           | Mandatory             | Mandatory               | Optional              |  |  |  |  |
| Manufacturer *                     | Manufacturer Country* | Date Of Manufacturing * |                       |  |  |  |  |
| Select V                           | Select V              | 8                       |                       |  |  |  |  |
|                                    |                       |                         |                       |  |  |  |  |



- d. Characteristics:
  - i. Select the generator status from the drop-down menu.
  - ii. Enter the maximum power (Kev).
  - iii. Enter the maximum current (mA).

| Characteristics    |   |                        |                        |
|--------------------|---|------------------------|------------------------|
| Generator Status * |   | Maximum Energy (keV) * | Maximum Current (mA) * |
| Select             | ~ | Mandatory              | Mandatory              |
|                    |   |                        |                        |

- e. Determine whether it has an attached X-ray tube or not. If it does, add the following:
  - i. Enter the X-ray tube number.
  - ii. Enter the maximum voltage value (kVp).
  - iii. Enter the maximum current value (mA).

| Associated X-Ray Tube                   |                         |                       |
|---|-------------------------|-----------------------|
| Radiation Generator Contains X-Ray Tube |                         |                       |
| ಸ<br>X-Ray Tube Serial No *             | Maximum Voltage (kVp) * | Maximum Current (mA)* |
| Mandatory                               | Mandatory               | Mandatory             |
|   |                         |                       |

(The above data is for display and clarification purposes)

- f. Determine whether it contains Associated Depleted Uranium or not. If it does, add the following:
  - i. Enter the mass of depleted uranium (kg).

| Associated Depleted Uranium                   |  |
|---|--|
| Radiation Generator Contains Depleted Uranium |  |
| Depleted Uranium Mass (kg) *                  |  |
| Mandatory                                     |  |



#### g. Attachments:

- i. Attach the manufacturer's certificate for the radioactive generator.
  - If the certificate is not available, activate the option, then attach a copy of the identification card.
  - If the identification card is also not available, activate the option, then upload the storage report form.
- ii. Attach the carrier's declaration for dangerous goods.
  - If the declaration is not available, activate the option, then attach the customs declaration.
  - If the customs declaration is not available, activate the option, then attach a copy of the radioactive generator.
- iii. Attach other documents (optional)

#### h. Save

- Click the "Save" or "Save as Draft" button.
- Choosing "Save" will send the request to the Nuclear and Radiological Regulatory commission for review.
- If the data is incomplete or needs to be reviewed later, the "Save as Draft" option can be used to avoid losing the entered information.

| Other Attachments  |   |   |
|--|---|---|
| <ul> <li>I don't have shipper's declaration for<br/>dangerous goods</li> </ul> | I don't have customs declaration (Bayan)                  |   |
| Shipper's Declaration For Dangerous Goods                                      | Customs Declaration (Bayan)                               | Source Picture *                              |
| Press Ctrl to select multiple, or drag & drop attachments                      | Press Ctrl to select multiple, or drag & drop attachments | Upload Picture, Press Ctrl to select multiple |
| Other Documents (Optional)   |   |   |
| Press Ctrl to select multiple, or drag & drop attachments                      |   |   |
|  | Save As   | : Draft Submit                                |
|  |   |   |



#### **Review the status of radiation generators**

On the Radioactive Generators page, all generators registered at the facility are displayed to the authorized user.

The status of each generator is displayed directly, with the ability to use the search fields at the bottom of the page to facilitate access to the required generators.

Generator statuses are displayed as follows:

- 1. Submitted: This status appears after entering the required information and submitting the request . It remains pending until a response is received from the relevant authority.
- 2. accepted: This means that the request has been reviewed and accepted.
- 3. Correction Required: This status appears when incorrect information is discovered, and the user requests correction.
- 4. Draft: This means that a copy of the request has been saved without submitting it. No action will be taken unless the information is completed and it is submitted as a new request .

| Radiation Gene                            | erators       |              |       |             |             |                | G Back  |
|---|---------------|--------------|-------|-------------|-------------|----------------|---------|
| Add Radiation                             | Generator     |              |       |             |             |                |         |
| Transfer Radiatio                         | on Generators |              |       |             |             |                |         |
| Request Status                            | ~             |              |       |             |             | Sea            | arch    |
| Equipment Type                            | Serial Number | Manufacturer | Model | Status      | Status Date | Request Status | Actions |
| X-ray photoelectron<br>spectroscopy (XPS) |               |              |       | Exported    | 05/01/2025  | Draft          | 0 🖊 🛯 📋 |
| Thorium Blanket                           |               |              |       | Disused     | 04/22/2025  | Submitted      | 0       |
| X-ray photoelectron<br>spectroscopy (XPS) |               |              |       | Exported    | 04/10/2025  | Submitted      | 0       |
| X-ray photoelectron<br>spectroscopy (XPS) |               |              |       | Transferred | 03/27/2025  | Accepted       | 0 🖊 🚺   |
| Equipment Type                            | Serial Number | Manufacturer | Model | Status      | Date        | Request Status | <b></b> |



## Edit of radiation generators

To modify the data for radiation generators, please follow these steps:

- No modifications can be made to the request if its status is "Submitted."
- Modifications are only permitted if the request status is "accepted" or "Correction Required." Some fields can be modified as needed.

You can also make the required modifications based on the comments of the commission employee appearing within the request .

a. Click on the "Edit" icon to open the editing page and make the required changes..

| Equipment Type                            | Serial Number | Manufacturer | Model | Status      | Status Date | Request Status | Actions |
|---|---------------|--------------|-------|-------------|-------------|----------------|---------|
| X-ray photoelectron<br>spectroscopy (XPS) |               |              |       | Exported    | 04/10/2025  | Submitted      | 0       |
| X-ray photoelectron<br>spectroscopy (XPS) |               |              |       | Transferred | 03/27/2025  | Accepted       | 0 🔽 🖸   |
| Equipment Type                            | Serial Number | Manufacturer | Model | Status      | Date        | Request Status |         |



b. Modify the generator's data based on the commission employee's feedback. You can also review the request history using the designated icon.

|  | User Marrie        | comment   |   | Action           |                                   |
|--|--------------------|---|---|------------------|-----------------------------------|
| 21/02/2024   | NRRC               | Please modify the basic radioatio   | n generator data.                             | Change Request S | Status To Correction Required     |
| Q History  |                    |   |   |                  |                                   |
|  |                    |   |   |                  |                                   |
| dd New Ra  | adiation Gene      | erator  |   |                  | OB                                |
|  |                    |   |   | Created By:      | Created On: 20/Feb/2024, 1        |
|  |                    |   | b   | ased on the co   |                                   |
| Radiation Ge   | enerator Identific | cation  |   | ,                |                                   |
| Cadiation Ge   | enerator Identific | cation<br>Model Number *  | Generator Se                                  | erial NO*        | Facility Generator ID             |
| Cadiation Ge   | enerator Identific | Model Number*   | Generator Se                                  | erial NO*        | Facility Generator ID<br>Optional |
| Radiation Ge<br>enerator Type *<br>Manufacturer *  | enerator Identific | Model Number*   | Generator Se                                  | rial NO *        | Facility Generator ID<br>Optional |
| Radiation Ge<br>enerator Type *<br>Manufacturer *<br>Siemens                                       | enerator Identifio | Model Number*  Manufacturer Country*  USA                                 | Generator Se<br>Date Of Man<br>X V 04/02/2024 | ufacturing*      | Facility Generator ID<br>Optional |
| Radiation Ge<br>enerator Type *<br>Aanufacturer *<br>Siemens<br>Characteristi                      | enerator Identific | Model Number*<br>Manufacturer Country*<br>VSA                             | Generator Se<br>Date Of Man<br>X V 04/02/2024 | ufacturing *     | Facility Generator ID Optional    |
| Radiation Ge<br>ienerator Type *<br>Aanufacturer *<br>Siemens<br>Characteristi<br>ienerator Statu: | enerator Identific | Model Number *<br>Manufacturer Country *<br>USA<br>Maximum Energy (keV) * | Generator Se<br>Date Of Man<br>X V 04/02/2024 | ufacturing *     | Facility Generator ID Optional    |

#### (The above data is for display and clarification purposes)

| Add New Radiation Generator          | r                      | Created By: H                                       | Back<br>JR Created On: 27/Mar/2025, 14:05 |
|--------------------------------------|------------------------|---|---|
|                                      | ←                      | dit to the request status<br>Correction is required |   |
| Generator Type *                     | Model Number *         | Generator Serial NO *                               | Facility Generator ID                     |
| X-ray photoelectron spectroscopy 💥 🗸 |                        |   |   |
| Manufacturer *                       | Manufacturer Country * | Date Of Manufacturing *                             |   |
| · · · · · ·                          | × ~                    | 26/03/2025  |   |



c. After clicking the "Save" button, the request will be sent back to the Nuclear and Radiological Regulatory Commission for review and approval. The request status will change to "

Submitted," and data at this stage cannot be modified until action is taken by the relevant

employee.

| Equipment Type  | Serial Number | Manufacturer | Model | Status  | Status Date | Request<br>Status | Actions |
|-----------------|---------------|--------------|-------|---------|-------------|-------------------|---------|
| Thorium Blanket |               |              |       | Disused | 04/22/2025  | Submitted         | 0       |

(The above data is for display and clarification purposes)

#### **Copy of Radiation Generator**

When you click the copy icon, a new radioactive generator will be created based on the basic data of the original radioactive generator.

The remaining fields must be completed before saving and submitting the request as a new one. The copy will remain in "Draft" status until it is saved and submitted. You can also delete the copied generator if you no longer wish to complete the request ..

| Radiation G     | ienerators       |              |       |         |             |                   | Seck   |
|-----------------|------------------|--------------|-------|---------|-------------|-------------------|--|
| Add Radi        | iation Generator |              |       |         |             |                   |  |
| Transfer Ra     | diation Generato | rs           |       |         |             |                   |  |
| Request Status  | ~                |              |       |         |             |                   |  |
| 10 🗸            |                  |              |       |         |             | Search            |  |
| Equipment Type  | Serial Number    | Manufacturer | Model | Status  | Status Date | Request<br>Status | Actions  |
| Thorium Blanket |                  |              |       | Disused | 05/04/2025  | Draft             | o 🖊 🚺 🚺  |
| Thorium Blanket |                  |              |       | Disused | 04/22/2025  | Submitted         | Image: A state of the state |

(The above data is for display and clarification purposes)

After adding or transferring radioactive sources, associated equipment, or radiation generators, they will be registered in the system and their status will appear as "Submitted."

The status will subsequently change based on the action taken by the relevant NRC employee.

You can also view statistics for radioactive sources, employees, radiation generators, and associated equipment registered on the license through the designated section on the right side of the screen.



# **Transfer Ownership**

The Transfer of ownership screen regulates the transfer of ownership of radioactive sources, radiation generators, or associated equipment from one facility to another.

This module aims to ensure that the transfer process is conducted in accordance with accepted regulatory controls and ensures continued traceability of the source or device.

It should be noted that no transfer process can be completed until the request is accepted by the competent authority.

To learn about the transfer of ownership mechanism, please follow the steps below:

- a. Click the Transport icon from the Radioactive Sources, Associated Equipment, or Radiation Generators screen.
- b. Select the type from the drop-down list:
  - Radioactive sources.
  - Radiation generators.
  - Associated equipment.
- c. Choose the Permit number.

| ransfer Ownership    |        |                |   |             |        | <b>G</b> B |
|----------------------|--------|----------------|---|-------------|--------|------------|
| rofile Type *        |        | Permit Number* |   |             |        |            |
| -Select              | $\sim$ | Select         | ~ |             |        |            |
|                      | a      |                |   |             |        |            |
| ·                    |        |                |   |             |        |            |
| Radioactive Sources  |        | Serial Number  |   | Fntry Liser | select |            |
| Radiation Generators | -      | Schurrunder    |   | Lindy Osci  | June   |            |
| Accoriated Equipment | -      |                |   |             |        |            |
| Associated Equipment |        |                |   |             |        |            |

(The above data is for display and clarification purposes)

When selecting the type and Permit number, the facility from which the transfer will be made will appear.



a. Select the facility and confirm the displayed data.

|  | • |
|--|---|

(The above data is for display and clarification purposes)

d. Enter the actual transfer date.

| To Facility | Actual Transferred Date * |   |
|-------------|---------------------------|---|
|             | mm/dd/yyyy                | • |
|             |                           |   |

(The above data is for display and clarification purposes)

- e. Enter the Justification.
- f. Add attachments.
- g. Click <u>"Submit"</u>.

| Justification * |   |  |
|-----------------|---|--|
| Attachments *   |   |  |
|                 | Press Ctrl to select multiple, or drag & drop attachments |  |
| submit          |   |  |

(The above data is for display and clarification purposes)

\*\*Important note: After transferring ownership of sealed sources, they need to be linked to related equipment of the receiving facility. This is to separate the sources from the equipment of the old facility, as the system automatically detaches the source from the related equipment. You can also transfer the related equipment of the old facility in a separate transfer process and link it to the source in the new facility.



## **Radiation Worker Data Management Guide**

- This guide aims to clarify the procedures and requirements related to managing data on facilities and workers in the radiation field, within the framework of the National Radiation Registry System. This includes recording worker information and tracking their radiation readings, as essential elements for ensuring compliance with radiation safety requirements and regulatory controls issued by the Authority.
- The guide includes a simplified explanation of the mechanism for adding new workers to the system, clarifying the basic data required for each worker, and the periodic steps required to record radiation readings, which are carried out regularly every quarter.
- The guide also outlines the worker data screen, which includes the license number and related information, as well as the data of the workers registered within the facility. It also includes the mechanism for adding a new worker, recording their radiation readings, methods for disclosing them, and taking the necessary actions based on those readings.

|          | Q | Show 10 🖌 entries           |    |        |                      | Search:                 |           |         |
|----------|---|-----------------------------|----|--------|----------------------|-------------------------|-----------|---------|
|          |   | Name                        | ID | Gender | WholeBody            | Extremity               | Read Date | Action  |
|          |   | Mohammad                    |    | Male   | No Previous Readings | No Previous<br>Readings | 2025 : Q4 |         |
|          |   | Worker Name Arabic          | ID | Gender | WholeBody            | Extremity               |           |         |
| Entity * | ~ | Showing 1 to 3 of 3 entries |    |        |                      | First Prev              | ious 1    | Next La |



## Add a new worker

To learn how to add a new worker, follow the steps below:

- a. Click the "Add New Worker" icon.
- b. The entity, facility, license, and practice data will be automatically retrieved from the system.
- c. Enter the following worker information:
  - i. Enter the worker's name in Arabic.
  - ii. Enter the worker's name in English.
  - iii. Select gender from the drop-down list.
  - iv. Enter date of birth.
  - v. Enter phone number (beginning with 966).
  - vi. Select job from the drop-down list.
  - vii. Enter national ID number.
  - viii. Select nationality from the drop-down list.
  - ix. Select status (Employment Status) from the drop-down list.
  - x. Enter passport number.
  - xi. Click "Save" or "ResetForm"

| ,                   | Facility*             |        | License *      |        | Practise *   |        |
|---------------------|-----------------------|--------|----------------|--------|--------------|--------|
|                     | ~                     | $\sim$ |                | $\sim$ |              | $\sim$ |
| Workers Information |                       |        |                |        |              |        |
| Worker Name Arabic* | Worker Name English * |        | Gender         |        | Birth Date * |        |
| Mandatory           | Mandatory             |        | Select         |        | mm/dd/yyyy   |        |
| Mobile No *         | Job Position          |        | Nationality Id |        | Nationality  |        |
| Mobile No           | Select                | $\sim$ | Mandatory      |        | Select       | ~      |
|                     |                       |        |                |        |              |        |
| Employment Status   | Passport No           |        |                |        |              |        |



You can also Export Excel, print and copy data of registered workers as shown.

| Export Excel Print Co<br>Show 10 ventries | PY                  |                                | Search:          |           |
|---|---------------------|--------------------------------|------------------|-----------|
| Worker Name Arabic                        | Worker Name English | Job Position                   | Facility         | actions   |
|   |                     | Referring Medical Practitioner |                  |           |
| Worker Name Arabic                        | Worker Name English | Job Position                   | Facility         |           |
| Showing 1 to 3 of 3 entries               |                     |                                | First Previous 1 | Next Last |



## Edit worker data

To Edit the worker's data, follow the following steps :

- d. Click the "Edit" icon next to the field for the worker whose data you want to modify.
- e. Make the desired modification to the data.
- f. To modify the status, follow these steps:
  - i. Click the "Edit" icon next to the status field.
  - ii. Enter the transaction date.
  - iii. Select the new status from the drop-down menu.
  - iv. Add notes, if any.
  - v. Click "Save" to update the status or "Exit" to cancel.

| Transac | tion Date        |   | Employme   | nt Status |         |    |
|---------|------------------|---|------------|-----------|---------|----|
| mm/dd   | /уууу            |   | select     |           |         | 13 |
|         |                  |   | select     |           |         |    |
| Remark  | 5                |   | On Job (fu | ll time)  |         |    |
|         |                  |   | On Job (pa | rt-time)  |         |    |
|         |                  |   | Retired    |           |         |    |
| Remarks |                  |   | Resigned   |           |         |    |
| Last Er | nployment Status |   |            |           |         |    |
| #       | Transfer Date    | F | rom        | То        | Remarks |    |



## **Extracting Worker data**

To extract data on employees in the facility for a specific year and quarter in one batch, follow the following steps:

g. Click the "Extract Excel File" option.

| Export Excel File Import Excel File |          |         | @ Back   |
|-------------------------------------|----------|---------|----------|
| Entity                              | Facility | License | Practice |
|                                     |          |         |          |

(The above data is for display and clarification purposes)

- h. Select the year from the drop-down menu.
- i. Select the quarter from the drop-down menu.
- j. Click the "Extract Excel File" option..

| Export Excel File |            |                               |                         |             |       |
|-------------------|------------|-------------------------------|-------------------------|-------------|-------|
| Years             |            | Quarter                       |                         |             |       |
| 2025              | ~          | Second Quarter                | ~                       |             |       |
| Export Excel File | Choose the | e year and quarter you intend | to read before extracti | ng the data |       |
|                   |            |                               |                         |             | Close |



# Instructions for uploading an Excel file for readings:

When extracting the Excel file, previously recorded employee data will be displayed, if available. If data for the selected quarter is not available, new readings can be entered and uploaded in batches after selecting the year and quarter.

Please note that the system does not support uploading more than one quarter in the same file; it only reads data associated with the selected quarter, as shown in the image below.

| C | 11        | Ŧ  |       | ×          | f <sub>x</sub> |               |          |                      |              |              |              |              |              |              |              |              |          |
|---|-----------|----|-------|------------|----------------|---------------|----------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
|   | A         |    | в     | с          | D              | E             | F        | G                    | н            | 1            | J            | к            | L            | м            | N            | 0            | P        |
| 1 | Worker Id | Na | ame E | Birth Date | Gender         | Job Position  | iqame Id | Employment St        | WholeBody Q1 | Extremity Q1 | WholeBody Q2 | Extremity Q2 | WholeBody Q3 | Extremity Q3 | WholeBody Q4 | Extremity Q4 | This Yea |
| 2 |           | 10 |       |            | ذكر            | Referring Mec |          | في الوظيفة (بدوام كا | 100          | 100          |              |              | 12           | 12           | 0            | (            | )        |
| 3 | 10        | 20 |       |            | ذكر            | RSO           |          | في الوظيفة (بدوام ج  | 200          | 200          | 11           | 11           | 13           | 13           | 14           | 14           | 1        |
| 4 | 10        | 21 |       |            | ذكر            | RSO           |          | في الوظيفة (بدوام كا |              |              |              |              |              |              |              |              |          |
| 5 | 10        | 24 |       |            | ذكر            | لمبيب أشعة    |          | في الوظيفة (بدوام ج  |              |              |              |              |              |              |              |              |          |
| 6 |           |    |       |            |                |               |          |                      |              |              |              |              |              |              |              |              |          |



## **Recording readings**

This module allows for the recurring entry of individual dose readings, either manually or by uploading a file, linking each reading to the worker, the department, and the specified quadrant. To record a reading for a worker, follow these steps:

To record a worker's reading, follow these steps:

1. Click on the "Mass Readings Update" icon.

| License Number | Q      | Show 10 🗸 entries           |    |        |                      | Search:                 |           |         |
|----------------|--------|-----------------------------|----|--------|----------------------|-------------------------|-----------|---------|
|                |        | Name                        | ID | Gender | WholeBody            | Extremity               | Read Date | Action  |
|                |        | Mohammad                    |    | Male   | No Previous Readings | No Previous<br>Readings | 2025 : Q4 |         |
|                |        | Worker Name Arabic          | ID | Gender | WholeBody            | Extremity               |           |         |
| Entity *       | ×<br>× | Showing 1 to 3 of 3 entries |    |        |                      | First Prev              | ious 1    | Next La |



- 2. Select the year from the drop-down menu.
- 3. Select the quarter from the drop-down menu; the option to add to the selected quarter will be available.
- 4. Enter the whole-body value (mSv).
- 5. Enter the shallow dose value (mSv).
- 6. Click "Save" to add the values. .

| Exp       | ort Excel File                   | Import Exce      | l File        |            |  |  |                                  |                        |   |                                      |                           |                                 |                           |                   | G                     |
|-----------|----------------------------------|------------------|---------------|------------|--|--|----------------------------------|------------------------|---|--------------------------------------|---------------------------|---------------------------------|---------------------------|-------------------|-----------------------|
| En        | tity*                            |                  |               | Facilit    | ty*  |  | Lice                             | ense *                 |   |                                      | Practis                   | e *                             |                           |                   |                       |
|           |                                  |                  |               | ~          |  |  | ~                                |                        |   |                                      | ~                         |                                 |                           | $\sim$            |                       |
| Ļ         |                                  |                  | ÷.            |            |  |  |                                  |                        |   |                                      |                           |                                 |                           |                   |                       |
| /ear '    | *                                |                  | Quarter       | *          |  |  |                                  |                        |   |                                      |                           |                                 |                           |                   |                       |
| 202       | 5                                | × v              | Second        | Quarter    |  |  | × ×                              |                        |   |                                      |                           |                                 |                           |                   |                       |
|           |                                  |                  | Second        | Quarter    |  |  |                                  |                        |   |                                      |                           |                                 |                           |                   |                       |
| Show      | v 10 v entri                     | ies              | Second        | Quarter    |  |  | Quarter 1 (m                     | 54                     | Selected Qua  | arter                                | Quarter 3 (m              | Se                              | earch:                    |                   |                       |
| Shov      | v 10 v entri<br>Name             | ies<br>ID Number | Gender        | Birth Date | Job Position   | Employment<br>Status                                 | Quarter 1 (m                     | 5v)                    | Selected Qua<br>Quarter 2 (m                        | arter<br>15v)                        | Quarter 3 (m              | Se<br><b>ISV)</b>               | Quarter 4 (n              | n5v)              | This<br>Year          |
| Shov      | v 10 v entri<br>Name             | ies<br>ID Number | Gender        | Birth Date | Job Position   | Employment<br>Status                                 | Quarter 1 (m<br>WholeBody        | Sv)                    | Selected Quarter 2 (m<br>Quarter 2 (m<br>WholeBody  | arter<br>ISV)<br>Extremity           | Quarter 3 (m<br>WholeBody | Se<br>I <b>SV)</b><br>Extremity | Quarter 4 (n<br>WholeBody | nSv)<br>Extremity | This<br>Year          |
| Shov<br># | v 10 v entri<br>Name<br>Mohammad | ies<br>ID Number | Gender        | Birth Date | Job Position<br>Referring<br>Medical<br>Practitioner | Employment<br>Status<br>في الوظيفة<br>(بدوام كامل)   | Quarter 1 (m<br>WholeBody<br>120 | Sv)<br>Extremity<br>55 | Selected Qua<br>Quarter 2 (m<br>WholeBody<br>Insert | arter<br>ISV)<br>Extremity<br>Insert | Quarter 3 (m<br>WholeBody | Se<br>ISV)<br>Extremity         | Quarter 4 (n<br>WholeBody | nSv)<br>Extremity | This<br>Year<br>175.0 |
| Shov<br># | v 10 v entri<br>Name<br>Mohammad | ies<br>ID Number | Gender<br>ذکر | Birth Date | Job Position<br>Referring<br>Medical<br>Practitioner | Employment<br>Status<br>فمب الوظيفة<br>(بدوام، كامل) | Quarter 1 (m<br>WholeBody<br>120 | Sv)<br>Extremity<br>55 | Selected Qua<br>Quarter 2 (m<br>WholeBody<br>Insert | erter<br>ISV)<br>Extremity<br>Insert | Quarter 3 (m<br>WholeBody | Se<br>ISV)<br>Extremity         | Quarter 4 (n<br>WholeBody | nSv)<br>Extremity | This<br>Year<br>175.0 |

(The above data is for display and clarification purposes)

You can also import an Excel file to record and update employee readings by following these steps:

a. Click on the "Import Excel File" icon.

| Export Excel File Import Excel | cel File       |                       |                    | Seck   |
|--------------------------------|----------------|-----------------------|--------------------|--------|
| Entity*                        | Facility*      | License *             | Practise *         |        |
|                                | × OO           | ×                     | ✓ Nuclear medicine | $\sim$ |
|                                |                |                       |                    |        |
| Year *                         | Quarter *      |                       |                    |        |
| 2025 × ~                       | Second Quarter | $\times$ $\checkmark$ |                    |        |
|                                |                |                       |                    |        |





- b. Upload the Excel file containing the readings.
- c. Select the year from the drop-down menu.
- d. Select the quarter from the drop-down menu.
- e. Click "**Upload**" and then "**Save**." .

| Import Excel File          |    |                |   |        |       |
|----------------------------|----|----------------|---|--------|-------|
| Choose File No file chosen | Cł | oose File      |   |        |       |
| 2025                       | ~  | Second Quarter | ~ | Upload |       |
|                            |    |                |   |        | Close |



## Appendix A:

This appendix provides a clear and comprehensive definition of the basic terms used in this guide, which relate to the nuclear and radiation fields in the Kingdom of Saudi Arabia. It aims to standardize concepts and terminology among all relevant parties and facilitate the understanding of the requirements and obligations stipulated in the regulations and procedures.

- 1. Facility: Any site or facility that possesses or uses radioactive or nuclear sources, whether industrial, medical, or research.
- 2. Radioactive source: Radioactive material enclosed in an envelope or device designed to prevent the release of radiation under normal conditions.
- 3. Associated equipment: Devices or systems that contain radioactive sources or produce radiation as part of their operation (such as medical x-ray machines).
- 4. Radiation generators: Equipment that produces ionizing radiation when operated (such as linear accelerators and x-ray machines).
- 5. Authority holder: The person or entity legally authorized to manage the radioactive source or facility.
- 6. Authorized person: The person authorized by the authority holder to exercise specific powers related to radiation safety.
- 7. National Nuclear Registry: The electronic system in which all facilities and entities operating in the nuclear and radiological fields in the Kingdom are registered.
- 8. Kingdom: The Kingdom of Saudi Arabia.
- 9. Authority: The Nuclear and Radiological Regulatory Commission.
- 10. Radiation Protection Officer: The officially qualified and appointed person to ensure the implementation of radiation safety requirements at the facility.
- 11. License: The official document issued by the Commission permitting the practice of radioactive or nuclear activity under specific conditions.
- 12. Permission: The official permission from the Commission to import, export, or transport radioactive sources.
- 13. Personnel: All individuals working at the facility who may be exposed to radiation during their duties.
- 14. Personnel Readings: Recorded data measuring the radiation doses received by employees over a specific period of time.



- 15. Practice: Any activity involving handling or exposure to radiation sources.
- 16. Short-lived Source: A radioactive source with a short half-life.
- 17. Transfer of Possession: The process of transferring possession or responsibility for a radioactive source from one entity to another in accordance with the Commission's procedures.

(Please refer to the Authority's official regulations for any additional details or updates to the definitions, and you can browse the <u>glossary of terms</u>.)