

Diagnostic Radiology (DR)
User Guidelines for regulatory
applications submission in e-
Licensing of Radiation
Applications (e-LORA) system

Radiological Safety Division
ATOMIC ENERGY REGULATORY BOARD, Mumbai
September, 2021

Steps to be followed in e-LORA system for obtaining licence for operation of diagnostic X-ray Equipment (Except dental X-ray Equipment)*

Step-1: Institute Registration (one time only)



Step-2: Apply for Procurement Permission
(Applicable for both new and pre-owned x-ray equipment)



Step-3: Add instruments, radiation workers and designate / nominate RSO



Step-4: Installation of X-ray equipment by Supplier



Step-5: Apply for licence for operation

The detailed steps are mentioned in subsequent pages in Table-A.

**For obtaining Registration of dental X-ray equipment, pl. refer e-LORA Dental Radiology Guidelines.*

(Link location: <https://10.55.55.11/images/PDF/dentalguidelines05082019.pdf>)

A. Steps for obtaining licence for operation of New/Pre-owned diagnostic X-ray equipment

Step	Purpose	Regulatory Form / Regulatory Process	Page Number	
Step-1	Register Institute in e-LORA System	Register Institute	4	Click here
Step-2	Obtain Procurement Permission	a. Procurement of new X-ray Equipment	5-6	Click here
		b. Procurement of Pre-owned X-ray Equipment	6-7	Click here
Step-3	Add instruments, radiation workers and designate / nominate RSO			
	a. Add Operator and Medical Practitioner	a. Add Employee	7-10	Click here
	b. Declaration of Instruments(Radiation Protection Devices)	b. Add Instrument	10-11	Click here
	c. Radiological Safety Officer (RSO)	c. Nominate / Designate RSO (Separate RSO approval for CT and IR installation)	11-14	Click here
Step-4	Installation of x-ray equipment	a. For new X-ray equipment: Submission of installation report (including QA and Radiation Protection Survey) by the supplier from his e-LORA account	14-17	Click here
		b. For pre-owned X-ray equipment: Submission of Intimation of Receipt by the user from its account	17-18	Click here
Step-5	Obtaining Licence for operation	Licence for operation of New/Pre-owned X-ray Equipment	18-19	Click here

Other regulatory processes such as modification of installation, renewal of licence, and decommission of x-ray equipment are listed in below Table-B.

B. Other Regulatory Approvals / Procedures applicable for Diagnostic X-ray Equipment

Sr. No.	Process	Regulatory Form / Regulatory Process	Page Number	Reference
1	Obtaining Renewal of Licence	a. Renewal of Licence for operation (New/Pre-owned)	20	Click here
		b. Renewal of Licence for operation of Existing X-ray Equipment(declared X-ray equipment)	20-21	Click here
2	Obtaining Decommission Permission	a. Intimation of Decommissioning	21-22	Click here
		b. Confirmation of decommissioning by supplier	22	Click here
3	Modification of Installation, relocation and reposition of equipment from its original place	Change in Layout	22-23	Click here
4	QA test summary of periodic QA or QA test summary after layout change	QA Test Summary	23	Click here
5	Periodic Radiation Protection Survey Report	Radiation Survey Report	23-24	Click here
6	Non-compliance response	NC response screen	24	Click here
7	Safety Status Report of the Institute	Safety Status Report	25	Click here
8	Procurement of X-ray tube	Procurement of X-ray tube	25	Click here
9	Submission of receipt after receiving x-ray tubes	Intimation of receipt	26	Click here

Adhoc Applications


Sr. No.	Process	Regulatory Form / Regulatory Process	Page Number	Reference
1	Remove duplicate or incorrect declared x-ray equipment	Adhoc Application	26-27	Click here
2	Recognition of X-ray Technologist course	Adhoc Application	27	Click here
3	Application for enforcement compliance report	Adhoc Application	27	Click here

Step-1: Register Institute in e-LORA System

- Visit AERB website www.aerb.gov.in.
- Click on the button e-LORA, which is available on website home page



- Click on “Go directly to e-LORA System” and “Click to proceed for e-LORA server”.
- It will redirect you to the following screen of e-LORA home page and then click on below Guidelines for Institute Registration to proceed for registration in e-LORA. (<https://elora.aerb.gov.in/ELORA/PDFs/Guidelines%20for%20Institute%20Registration.pdf>)



Always use employer e-mail ID and mobile number while submitting Institute Registration Application in e-LORA system and save your user Id and password for submission of e-LORA applications.

A. Steps for obtaining licence for operation of diagnostic X-ray Equipment

Step-2: Obtain Procurement Permission

a. Procurement of new X-ray Equipment

- After submitting the general details in e-LORA system, follow below path to open Procurement form for **new equipment**:

Regulatory Forms >>>Medical Diagnostic Radiology >>> Procurement of X-ray Equipment

The screenshot shows the AERB e-Licensing portal interface. At the top, the Government of India Atomic Energy Regulatory Board logo and name are visible. Below the logo, the text 'Government of India Atomic Energy Regulatory Board e-Licensing of Radiatio...' is displayed. A navigation menu on the right side lists various options, with 'Procurement of X-ray Equipment' highlighted in a red box. Below this menu, a yellow box contains the text 'In case of any difficulty/issue relat...'. On the left side, there is a sidebar menu with 'Regulatory Forms' highlighted in a red box, and 'Medical Diagnostic Radiology' highlighted in a red box. Below this, 'Transport' is also highlighted in a red box. The main content area shows a list of options including 'Adhoc Application', 'Licence for Operation', 'Procurement of Pre-Owned Equipment', 'Change in Layout', 'Safety Status Report', 'QA Test Summary', 'Radiation Survey Report', 'Procurement of X-ray Tube', 'Intimation of receipt', 'Intimation of Decommissioning', 'Existing X-ray Equipment Forms', and 'Dental X-ray'.

- You will be required to provide the shielding details in the application form. For details, please refer 'Layout and shielding guidelines' available at AERB website (Link location: https://10.55.55.11/images/PDF/layout_guidelines.pdf)

The screenshot shows the 'DIAGNOSTIC RADIOLOGY > PROCUREMENT OF X-RAY EQUIPMENT' form. The form is divided into three tabs: 'Equipment Details', 'Layout and Shielding Details', and 'Attachments'. The 'Equipment Details' tab is active. The form contains several fields, all marked with an asterisk to indicate they are mandatory. The fields are: 'Type of Equipment*' (dropdown menu), 'Whether equipment to be used as vehicle mounted*' (radio buttons for Yes/No), 'Expected workload*' (dropdown menu), 'Purpose of the Equipment*' (dropdown menu), and 'Approval required for*' (dropdown menu). A checkbox at the bottom of the form reads 'I have read and agree to the Terms & Conditions'. A note at the top right of the form states 'All fields marked by * are mandatory'.

DIAGNOSTIC RADIOLOGY ► PROCUREMENT OF X-RAY EQUIPMENT

Equipment Details | **Layout and Shielding Details** | Attachments

All fields marked by * are mandatory

Location of x-ray Installation

Room number*

Floor*

Wing

Department*

Layout Details

Wall Identification	Distance from exposure area (from center of the couch) (m)	Material used for shielding	Occupancy behind the wall	Thickness of the shielding material (cm)
Wall A*	<input type="text"/>	[Select] ▼	[Select] ▼	<input type="text"/>
Wall B*	<input type="text"/>	[Select] ▼	[Select] ▼	<input type="text"/>
Wall C*	<input type="text"/>	[Select] ▼	[Select] ▼	<input type="text"/>
Wall D*	<input type="text"/>	[Select] ▼	[Select] ▼	<input type="text"/>
Entrance Door*	<input type="text"/>	Lead	[Select] ▼	<input type="text"/>
Any other door	<input type="text"/>	Lead	[Select] ▼	<input type="text"/>
Window, if any, if at the height less than 2 m from outside finished floor of testing room	<input type="text"/>	[Select] ▼	[Select] ▼	<input type="text"/>

Whether all the walls are identified and distances of walls from the centre of the couch/equipment are indicated in the layout drawing* Yes No

Whether layout drawing indicates x-ray machine, couch, control panel/ control room, chest stand, windows, doors, mobile protective barrier, make and model of the x-ray equipment (As applicable)* Yes No

Whether the layout drawing is as per values filled in the above table.* Yes No

Whether Chest Stand is on the opposite wall of control console and entrance door* Yes No

Whether height of the window from outside finished floor of x-ray room is > 2 m* Yes No

DIAGNOSTIC RADIOLOGY ► PROCUREMENT OF X-RAY EQUIPMENT

Equipment Details | Layout and Shielding Details | **Attachments**

We recommend you to complete the Form first and then proceed for the upload for your attachments. The maximum file size allowed for each file upload is 2 MB and allowed file types are: doc, docx, xls,xlsx, odt, jpeg, jpg, png, zip, pdf. Alternatively, you might zip it and upload it. Software for compressing files can be downloaded for free from <http://www.7-zip.org/download.html>

All fields marked by * are mandatory

Layout drawing of proposed x-ray equipment installation(Please refer to the guidelines)* No file selected.

Other Attachments, if any No file selected.

I have read and agree to the Terms & Conditions

- Upload scan copy of duly signed and stamped layout plan.
- Read Terms and Condition of application prior to click Submit bottom.

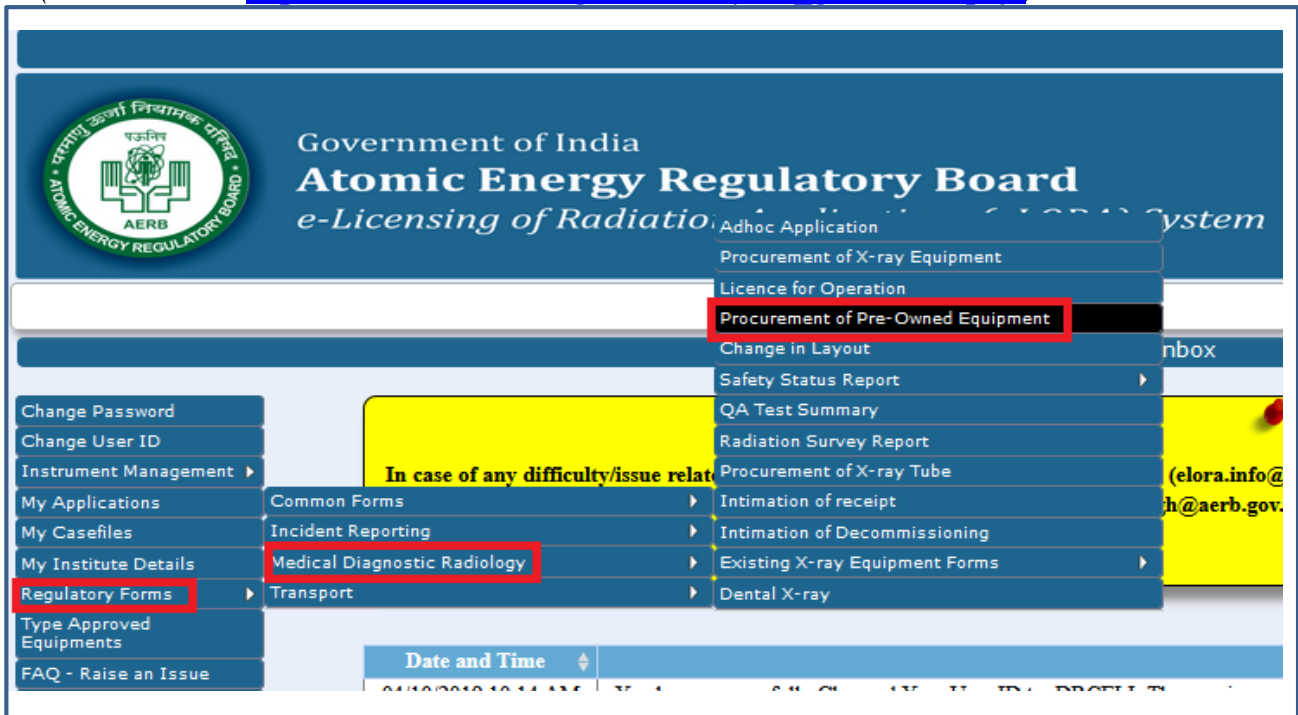
When installation of X-ray equipment is complete in all aspects in your institute, contact your supplier to submit installation report from eLORA account. After acceptance of installation report by AERB, e-LORA system will allow you to submit application for Licence.

b. Procurement of pre-owned X-ray equipment

- User is required to submit application form for “Procurement of pre-owned X-ray equipment” through eLORA account.

Kindly attach a documentary evidence in support of year of manufacturing of the x-ray equipment to be imported such as photographs of the x-ray equipment in which year of manufacturing is engraved along with serial no. of the equipment.
 Acceptable Criteria: Year of manufacturer for pre-owned diagnostic X-ray equipment to be imported is ten years for supplier authorized by OEM or seven years for service agency.

- You will be required to provide the shielding details in the application form. For details, please refer 'Layout and shielding guidelines' available at AERB website
 (Link location: https://10.55.55.11/images/PDF/layout_guidelines.pdf)



Step 3. Add instruments, radiation workers and designate / nominate RSO

Prior to apply for Licence; follow following steps:

a. Add Operator and Medical Practitioner:

Employee can be added in three tabs as follows:

- Radiation Worker (This is to add employee with role Operator and Medical Practitioner)
- Non Radiation Worker (This is to add Employer/ Licensee, who may not be a radiation worker)
- Radiation Professional (This is to add Radiation Professional who is to be nominated as RSO).

Please use individual email ID for every Radiation Worker/Radiation Safety Professional in place of using common email ID of the institution.

- You are required to add Operator and Medical practitioner in Radiation Worker.
 For adding employees to your institution, please follow the path as:
 User management>>>Add Employee>>> Select required Type of Employee from drop down



Government of India
Atomic Energy Regulatory Board
e-Licensing of Radiation Applications (eLORA) System

My Inbox

- Change Password
- Instrument Management
- My Applications
- My Casefiles
- My Institute Details
- Regulatory Forms
- Type Approved Equipments
- Raise an Issue
- User management**
- View Inspection Documents
- Verify Mobile and Email

- Add Employee**
- Change Licensee
- Designate Licensee
- Institute Closure
- Nominate/Relinquish Employees
- Profile Closure
- Update/Dissociate Employee
- Update Institute Details

for procurement of x-ray equipment with application no. SE-
n has been added successfully with identification no. SE-
ive Barrier with Viewing Window has been added success
n has been approved and the Institute Number is : MH-5

ADD EMPLOYEE

Select Employee Type

Type Of Employee*

Radiation Worker

Personal Details

Select profile*

- Medical diagnostic x-ray facility
- Supplier of x-ray equipments/x-ray tubes
- Manufacturer of x-ray equipments/x-ray tubes
- Medical Diagnostic-Service Agency

PMS NO
(Applicable for 'Medical diagnostic x-ray facility, Radiotherapy, Nuclear Medicine' only.)

Role
*(Applicable for 'Medical diagnostic x-ray facility' only.
Role shall be selected based on appropriate qualifications. Refer AERB website for
required minimum qualifications.)*

- Operator-Medical diagnostic x-ray facility
- Medical Practitioner-Medical diagnostic x-ray facility

Education Qualification
*(Applicable for 'Medical diagnostic x-ray facility' only.)
Attachment for uploading copy of proof of education
(Applicable for 'Medical diagnostic x-ray facility' only.)*

X-Ray Technologists Course

Browse... No file selected. Clear

Submit Close Reset

The screenshot shows a web form for adding a Radiation Worker. Key elements include:

- Department:** A text input field.
- Designation:** A dropdown menu with 'select profile' circled in red. The selected option is 'Medical diagnostic x-ray facility'.
- PMS NO *:** A text input field with a red circle around the label.
- Role:** A dropdown menu with 'Operator-Medical diagnostic x-ray facility' circled in red.
- Education Qualification:** A dropdown menu with 'X-Ray Technologists Course' selected, circled in red.
- Permanent Address:** Fields for Address Line1, Address Line2, Landmark, State, City/District, PIN, Email, and Phone.
- Attachments:** Two 'Browse...' buttons for uploading documents, each with a 'Clear' button.
- Buttons:** 'Submit', 'Close', and 'Reset' buttons at the bottom.

While adding Radiation Worker in e-LORA, provide the following details;

- Provide required personal information of employee viz. Title, Name, Gender and Date of Birth
- Provide required service information of employee viz. Date of Joining (of service in your institute), PMS No. (i.e. complete TLD No.), Department, Designation,
- Profile (select 'Medical diagnostic x-ray facility') ,
- Role (select any one or both using Ctrl key – as applicable) and Education Qualification (select value from drop down)
- Provide address and contact detail of employee
- Browse and upload scan copy of educational qualification, joining /confirmation letter of employee and
- click on **Submit**

Repeat the above procedure to add your other Operators and Medical practitioners.

The minimum qualification requirement for personnel in diagnostic x-ray installation is mentioned in Annexure-1.

You will not be able to fill application form for Licence (and will get following error message) unless you declare operator and medical practitioner of your institute. For CT and Cath lab facility please add one of your employee as Radiation Professional for nominating him as RSO.

The guideline for radiation professional registration is available in the link;

https://10.55.55.13/ELORA/PDFs/GUIDELINES%20FOR%20SUBMISSION%20OF%20RADIATION%20PROFESSIONAL%20FORM%20_09Nov2016.pdf

b. Declaration of Instruments (Radiation Protection Devices)

- Diagnostic X-ray facility must have certain types of safety tools (radiation safety devices). The list is given in the below table and the same must be declared in e-LORA. Hence, please add the instrument in ‘*Safety Tool*’ option.
- To declare instruments, follow the path as:
Menu>>>Instrument Management>>>Add Instrument

- Add following Instruments as applicable to each type of equipment.

Type of Equipment	Instruments to be added	
	Type of Instrument	Instrument Sub Type
Interventional Radiology	Safety Tool	<ul style="list-style-type: none"> • Protective Apron (Minimum 3) • Protective Rubber Flaps • Ceiling suspended protective glass
Computed Tomography	Safety Tool	<ul style="list-style-type: none"> • Protective Apron
Radiography and Fluoroscopy	Safety Tool	<ul style="list-style-type: none"> • Mobile Protective Barrier with lead equivalent Viewing Window • Protective Apron • Protective Rubber Flaps
Radiography(fixed)	Safety Tool	<ul style="list-style-type: none"> • Mobile Protective Barrier with lead equivalent Viewing Window • Protective Apron
Mammography Dental (OPG) Dental (CBCT)	Safety Tool	<ul style="list-style-type: none"> • Mobile Protective Barrier with lead equivalent Viewing Window
Radiography (Mobile) Radiography (Portable) C-arm/ O- Arm Dental (Intra-oral) Dental(Handheld)	Safety Tool	<ul style="list-style-type: none"> • Protective Apron

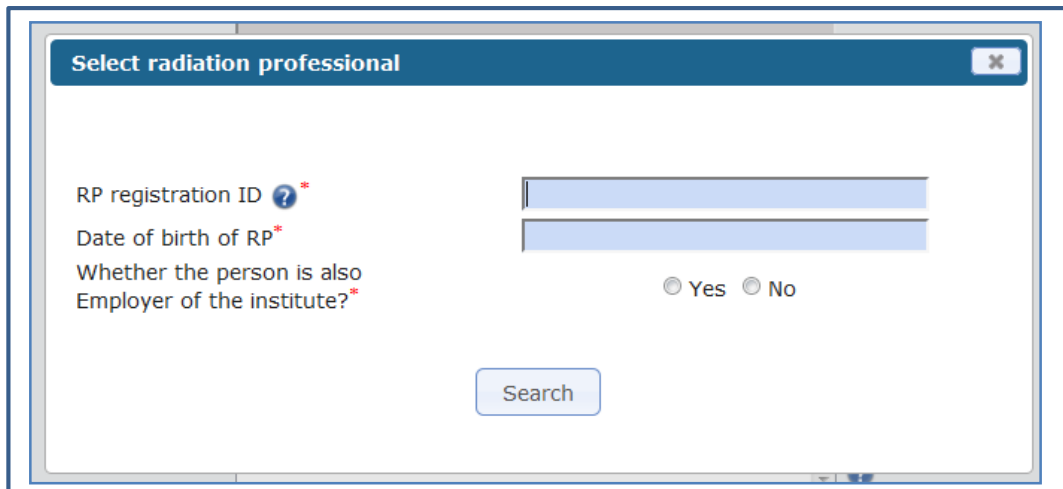
c. Radiological Safety Officer (RSO)

For obtaining RSO approval follow the path as:

- **Path-a:** For a person required to be nominated as RSO, you need to add him/her in the type **Radiation Professional (RP)**. While adding RP, system will ask RP registration ID and Date of birth of RP. (Obtain these details from Radiation Professional).
- For RSO Nomination: Select name of the “**RSO Designate**” from the employee List

Email ids of both employer and Radiation Professional should be different. Use separate (unique) email id and mobile no. for each employee. For Radiation professional, please use personnel email id and mobile no. for verification in eLORA.

In the form for adding **Radiation Professional**,



The screenshot shows a web form titled "Select radiation professional". It includes the following fields and controls:

- RP registration ID (with a help icon and asterisk)
- Date of birth of RP (with an asterisk)
- Whether the person is also Employer of the institute? Yes No
- Search

- Enter **Registration ID** and Date of birth of RP–personal detail of RP will come automatically.
- In case RP is Employer of Institute, select ‘Yes’ for ‘Whether the person is also Employer of the Institute?’
- Provide Date of Joining (of service in your institute),
- PMS No. (i.e. complete TLD No. e.g.: 000297C0198),
- Department and Designation,
- Profile (i.e. ‘Medical diagnostic x-ray facility’) and Role (i.e. ‘Operator’, Medical Practitioner’ or both)
- Provide Email (O)
- Browse and upload scan copy of joining /confirmation letter of employee and
- click on Submit

Radiation professional can subsequently be nominated for the approval of RSO. The process of RSO is as follows;

- **Path-b: First generate the transaction key by using tab “Transaction key”**

Before generating the transaction key, verify whether email id and Mobile number of an employee in eLORA. The process of verification is as follows;

- First log in to the employer profile (Institute Log in),
- Click on “My Institute Details”,
- Click on “Contact Details”.

Important Instructions

1. As per the current regulatory requirement wherein two party authentication required, this transaction key need to be generated
2. Left side block displayed below shows Employer e-mail id and mobile number by default
3. Right side block displayed below will contain only those Employee (who will be the applicant of the application - Employer or Licensee). Make sure, e-mail id and mobile number of the list of employees are verified. If not, then [Click Here](#)
4. All OTP and keys expires at 12 midnight everyday
5. One key can be used only once
6. Multiple keys can be generated for 1 employee
7. Keys can be used across practices and profiles

Employer Details	Employee Details (Applicant/RSO to be nominated)
Employer Registered Email: <input type="text" value="bharat.bang@tcs.com"/>	Employee Name: <input type="text"/>
Employer Registered Mobile: <input type="text" value="9619672774"/>	Employee Registered Email: <input type="text"/>
Email OTP: <input type="text"/>	Employee Registered Mobile: <input type="text"/>
Mobile OTP: <input type="text"/>	Email OTP: <input type="text"/>
	Mobile OTP: <input type="text"/>

Existing OTP's are the latest received OTPs, not used within valid time. If not valid, use **Send OTP** facility.

Existing OTP
Send OTP
Verify
Transaction Key :
Reset

- You can check the verification status of the email and mobile number of the employer from the list appears.
- If status of verification is “no”, then corresponding employee has to Log in to the system (RP log in for RSO).

Only name of employee, whose email id and mobile number are verified, will appear in the employee list for transaction key generation. For RSO, email id and mobile number has to be verified after log in to his/her Radiation Professional (RP) Profile (Using RP user id and password).

- **Path-c:** Fill the form by following path; Menu>> Regulatory Forms>> Common Forms>>Nominate RSO

<ul style="list-style-type: none"> Change Password Instrument Management ▶ My Applications My Casefiles My Drafts My Institute Details <li style="background-color: #0070C0; color: white;">Regulatory Forms User management ▶ View Inspection Documents 	<ul style="list-style-type: none"> Common Forms <li style="background-color: #0070C0; color: white;">Medical Diagnostic Radiology 	<ul style="list-style-type: none"> Nominate RSO
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Date and Time	Message
26/02/2014 10:49 AM	Your application for registration of x-ray insert [Ref: No 14-3156, Date:26/02/2014] has b
26/02/2014 10:47 AM	You have successfully submitted Application for registration of an x-ray insert with applic
	ABC DE successfully dissociated from your Institute.
25/02/2014 01:26 PM	Your application ref no. 14-3137 is Approved. Approval No 14-RSO-2718
25/02/2014 01:21 PM	You have successfully submitted RSO Nomination with Application No. 14-3137 for HAM
25/02/2014 01:21 PM	Signed PDF has been uploaded successfully.
25/02/2014 01:21 PM	You have successfully frozen RSO Nomination with application no. 14.3137

Radiation Professional Details

All fields marked by *are mandatory.

Select Radiation Professional

Radiation Professional*

Date of Birth*

Registration ID*

Role of RP*

RSO Status*

e-Mail Id Official*

Education Details

Experience Details

Transaction Key Details*

Enter Transaction Key*

- For submission of RSO nomination application form, fill the generated the transaction key and then nominate. Your RSO nomination form will be reviewed by AERB and after acceptance; you will get its notification in your e-LORA account.

Step-4: Installation of X-ray equipment

a. For new X-ray equipment: submission of installation report by the supplier from his e-LORA account

- Users should obtain the procurement permission.
- Prior to supply of x-ray equipment, Supplier should ensure that the end user has obtained **Procurement Permission** from AERB.
- After Installation of X-ray equipment carry out the QA and Radiation protection Survey around the X-ray installation.

Quality Assurance and radiation protection survey: Prior to apply for license for operation of x-ray equipment, arrange Quality Assurance (QA) from authorized suppliers/ accredited service agencies as per AERB prescribed formats. The Quality Assurance (QA) formats are available on AERB website:

- ❖ **Radiography / Radiography & Fluoroscopy /C-Arm / Interventional Radiology**
<https://10.55.55.11/images/PDF/DiagnosticRadiology/1-FORMAT-FOR-QUALITY-ASSURANCE-TEST-FOR-DIAGNOSTIC-X-RAY-EQUIPMENT.pdf>
- ❖ **Computed Tomography**
<https://10.55.55.11/images/PDF/DiagnosticRadiology/2-PERIODIC-QUALITY-ASSURANCE-TEST-REPORT-FOR-COMPUTED-TOMOGRAPHY-EQUIPMENT.pdf>
- ❖ **Mammography**
<https://10.55.55.11/images/PDF/DiagnosticRadiology/3-FORMAT-FOR-PERIODIC-QUALITY-ASSURANCE-TEST-REPORT-FOR-MAMMOGRAPHY-EQUIPMENT.pdf>

Radiation Protection Survey: Radiation protection survey needs to be carried out from authorized supplier of equipment or approved service agency as per prescribed format and provide the details in the application form (as applicable).

Keep the water phantom on the table (In place of water phantom plastic bucket with 30 cm height water in it can be used) to simulate the patient. The primary beam has to be directed to the water phantom by opening collimator setting to the maximum and measure the radiation level at different locations of interest by using calibrated Ionisation Chamber/Semiconductor based survey meter.

The typical exposure parameters (column 2, 3 and 4) to be selected for carrying out survey and the typical workload for each type of facility are mentioned in the table;

Type of Equipment	Applied Voltage (kV)	Applied Current (mA)	*Exposure time (Sec)	Typical Workload (mA-min/Week)
Interventional Radiology	70-80	8-10 (fluoro mode)	1.0 -2.0	5000
Radiography (fixed)	~70	~50	1.0 -2.0	500
Radiography & Fluoroscopy (Use fluoro mode)	~70	3-10	1.0-2.0	500
OPG CBCT	60-80	10-12	1.0 -2.0	300
Computed Tomography	100-120	40-50	1.0 – 2.0	25000
Mammography	30-35	~50	1.0 – 2.0	300

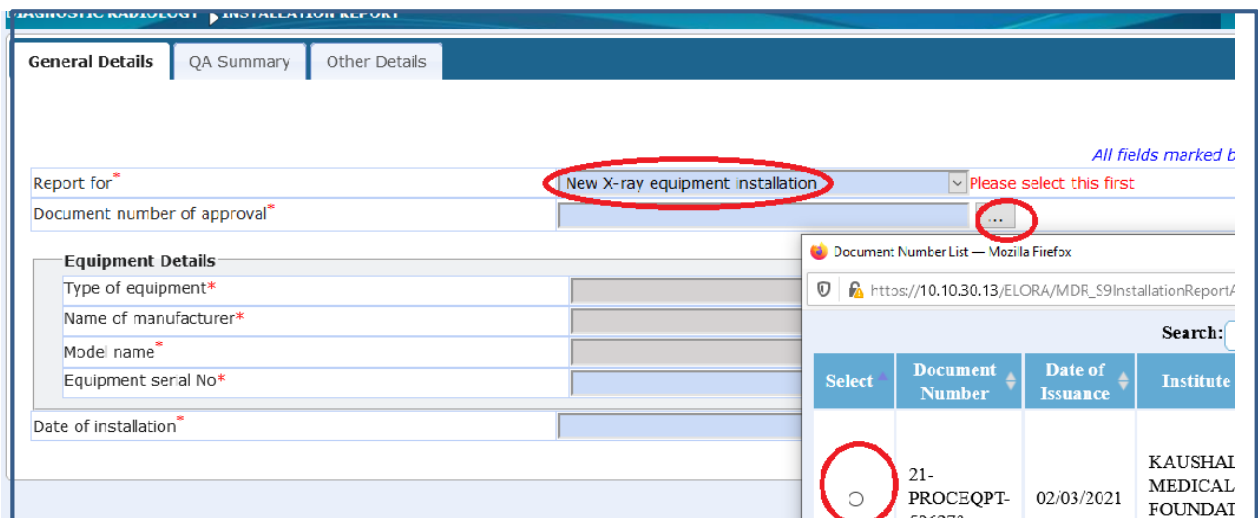
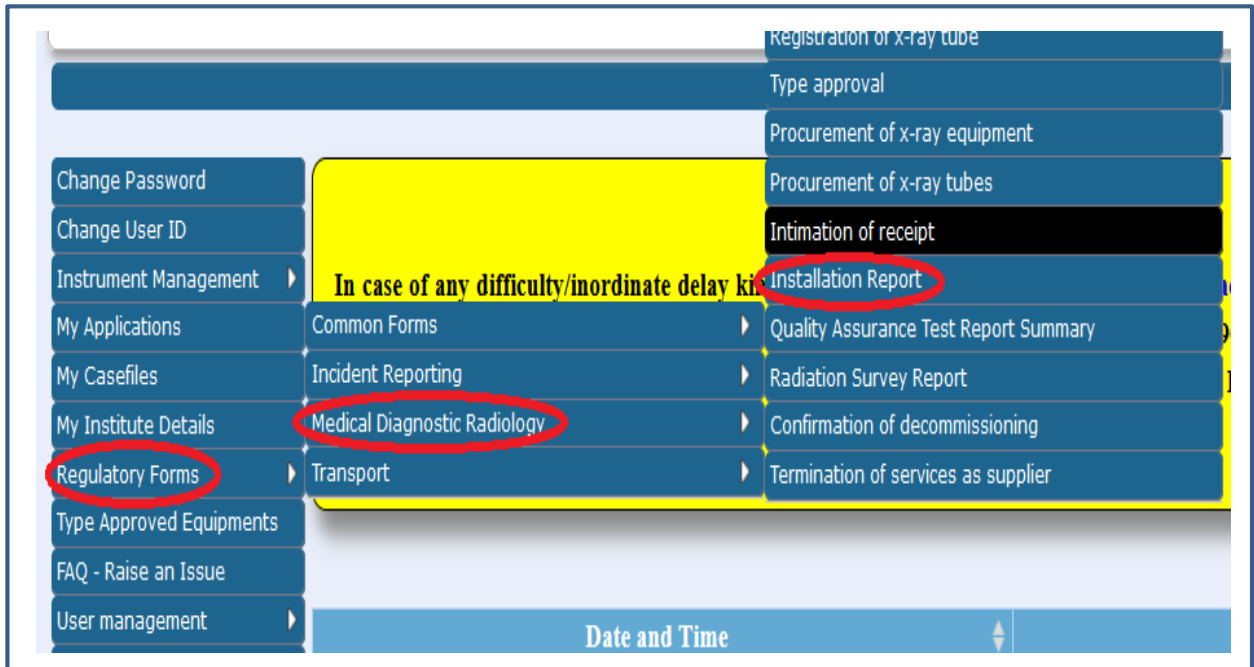
* Exposure time should not be less than 1 Sec

Provide the values of maximum radiation level (in mR/hr), measured by radiation survey meter at following places:

Place of Interest	Maximum radiation level (in mR/hr)
Near control console (operators position)	
Outside patient entrance door	
Behind chest stand wall	
Behind window (if any)	
Patient waiting area	

- Supplier should submit installation report after installing the x-ray equipment

- To submit the installation report. Supplier need to fill the form for Installation report from his e-LORA account and follow the path; Regulatory forms -> Medical Diagnostic radiology -> Installation Report.



The screenshot displays the 'DIAGNOSTIC RADIOLOGY - INSTALLATION REPORT' form. The 'Installation Details' tab is highlighted with a red circle. Below it, the 'QA Summary' tab is also circled in red. The 'Radiation Survey Report' tab is circled in red in the second screenshot. The form contains the following sections:

- Installation Details:**
 - Whether the installation location of the equipment is same as declared* Yes No
 - Whether layout and shielding details are as per procurement permission* Yes No
- Equipment Settings:**
 - Applied voltage* [] kv
 - Applied current* [] mA
 - Exposure time* [] Sec
 - Workload* [] mAmin/week
- Survey Details:**
 - Date of survey* []
 - Whether radiation survey meter used for the survey have valid calibration certificate* Yes
- Maximum Radiation Levels at:**
 - Operator control console (operator's position)* [] mR/hr
 - Patient entrance Door(s)* [] mR/hr
 - Control console room entrance door* [] mR/hr
 - Behind chest stand wall* [] mR/hr
 - Below A/C Baffle (if Any) [] mR/hr
 - Behind windows (if Any) [] mR/hr
 - Patient waiting area* [] mR/hr

Buttons: Submit, Reset, Close

After filling all the tabs then click on **submit**.

b. For pre-owned X-ray equipment: Submission of Intimation of Receipt by the user from its account

- Users should obtain the procurement permission
- After installation & commissioning of X-ray equipment, user should submit “Intimation of Receipt” through eLORA.

(Please approach to Supplier/ Service Agency to obtain installation report, QA report and radiation protection survey as referred above it is one of the conditions mentioned in authorization/approval of supplier/service agency. Also check whether QA report and survey report and installation report is as per AERB guidelines).

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e-Licensing of Radiology System

Regulatory Forms (highlighted)

- Common Forms
- Incident Reporting
- Medical Diagnostic Radiology (highlighted)
- Transport

Adhoc Application
Procurement of X-ray Equipment
Licence for Operation
Procurement of Pre-Owned Equipment
Change in Layout
Safety Status Report
QA Test Summary
Radiation Survey Report
Procurement of X-ray Tube
Intimation of receipt (highlighted)
Intimation of Decommissioning
Existing X-ray Equipment Forms
Dental X-ray

Notification: You have successfully Changed Your User ID to :DRCELL The previous username was DR80955

Date and Time	Message to User
04/10/2019 10:14 AM	You have successfully Changed Your User ID to :DRCELL The previous username was DR80955
11/07/2019 11:55 AM	DNT001:Your application for New Indeginous Dental Xray Registration [Reference No.:19-492106,Date

Step-5: Obtaining Licence for Operation

- After checking approval/submission status of installation report (for new) and intimation of receipt (for pre-owned) of X-ray equipment in e-LORA system, fill the application form for Licence.
- Ensure that required Employee(s) and Instrument details are provided in your account.
- Follow below path to access Licence form: Regulatory Forms >> Medical Diagnostic Radiology >>Licence for Operation

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Atomic Energy Regulatory Board
e-Licensing of Radiology System

Regulatory Forms (highlighted)

- Common Forms
- Incident Reporting
- Medical Diagnostic Radiology (highlighted)
- Transport

Licence for Operation (highlighted)

Adhoc Application
Procurement of X-ray Equipment
Licence for Operation
Procurement of Pre-Owned Equipment
Change in Layout
Safety Status Report
QA Test Summary
Radiation Survey Report
Procurement of X-ray Tube
Intimation of receipt
Intimation of Decommissioning
Existing X-ray Equipment Forms
Dental X-ray

Notification: You have successfully Changed Your User ID to :DRCELL The previous username was DR80955

Date and Time	Message to User
04/10/2019 10:14 AM	You have successfully Changed Your User ID to :DRCELL The previous username was DR80955
11/07/2019 11:55 AM	DNT001:Your application for New Indeginous Dental Xray Registration [Reference No.:19-492106,Date

DIAGNOSTIC RADIOLOGY ▶ LICENCE FOR OPERATION OF X-RAY EQUIPMENT

Employee Details | Safety Tools Details | **Equipment Details**

Application for* Licence for operation of new x-ray equipments

Equipment Id* [Dropdown menu with ellipsis]

Supplier/Service Agency responsible for QA* [Dropdown menu with ellipsis]

I have read and agree to the Terms & Conditions.

DIAGNOSTIC RADIOLOGY ▶ LICENCE FOR OPERATION OF X-RAY EQUIPMENT

Employee Details | Safety Tools Details | **Equipment Details** | Attachment Details

Application for* Licence for operation of pre-owned x-ray equipments

Equipment Id* [Dropdown menu with ellipsis]

I have read and agree to the Terms & Conditions.

- Select the equipment ID, agree terms and conditions and
- Press submit button for submission of your application form.
- After submission you can get the application status by using “My Application” tab which is available in your e-LORA account.
- After getting approval you can **download your issued Licence/Registration certificate** by using following path My Application>>Select Application No.>>Show Details>>Approval letter attachment

The screenshot shows the AERB e-LORA portal interface. On the left, a navigation menu includes 'My Applications', which is highlighted with a red circle. The main content area displays a table of applications:

Select	Application
<input type="radio"/>	21-719436
<input type="radio"/>	19-492106
<input type="radio"/>	19-467568
<input checked="" type="radio"/>	19-463488
<input type="radio"/>	19-424030

A 'Show Details' button is circled in red. Below the table, a transaction description table is visible:

Application No.	Application Form	Attachment Description	Search	Data Load Link
19492106	Application Form	Approval letter		
19492106	Application Form	Approval letter		

The 'Approval letter' attachment is circled in red.

B. Other Regulatory Approvals / Procedures applicable for Diagnostic X-ray Equipment

I: Obtaining Renewal of Licence

a. Renewal of Licence for operation (New/Pre-owned)

The application form for Renewal of License is available in Menu: Regulatory Forms> Medical Diagnostic Radiology> Licence for Operation > equipment details tab>>select renewal.

The screenshot shows the AERB e-Licensing System interface. The header includes the Government of India logo and the text "Government of India Atomic Energy Regulatory Board e-Licensing of Radiatio...". A navigation menu on the left lists various options, with "Regulatory Forms" highlighted. A dropdown menu is open under "Regulatory Forms", showing "Medical Diagnostic Radiology" and "Transport" as sub-options. The "Licence for Operation" option is highlighted in red. Below the menu, there is a table with columns "Date and Time" and "Message to User".

Date and Time	Message to User
04/10/2019 10:14 AM	You have successfully Changed Your User ID to :DRCELL The previous username was DR80955
11/07/2019 11:55 AM	DNT001:Your application for New Indeginous Dental Xray Registration [Reference No.:19-492106,Date

The screenshot shows the "DIAGNOSTIC RADIOLOGY LICENCE FOR OPERATION OF X-RAY EQUIPMENT" form. The form has three tabs: "Employee Details", "Safety Tools Details", and "Equipment Details". The "Equipment Details" tab is active. The form contains several fields: "Application for" (with a dropdown menu set to "Renewal of Licence for operation"), "AERB License Number", "Equipment Id", and "Supplier/Service Agency responsible for QA". Below these fields is a section titled "Maintenance of Records" with three questions, each followed by "Yes" and "No" radio buttons. At the bottom, there is a checkbox for "I have read and agree to the Terms & Conditions."

b. Renewal of Licence for operation of Existing X-ray Equipment (declared X-ray equipment in eLORA)

For Renewal of Existing Equipment, follow the below path;

Regulatory Forms> Medical Diagnostic Radiology> Licence for Operation of X-ray equipment> General details tab>>select application for renewal of licence for operation

2: Obtaining Decommission permission

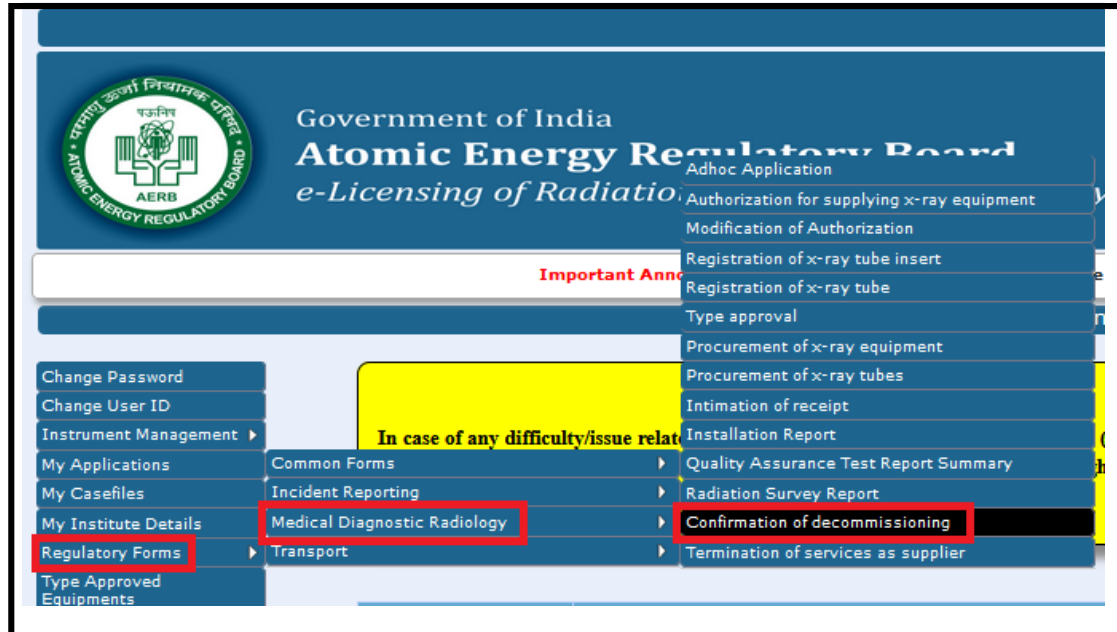
a: Intimation of Decommissioning

- For decommissioning of x-ray equipment, first contact agency to whom you are availing services for decommissioning
- Follow the path:

Regulatory forms -> Medical Diagnostic radiology -> Intimation of Decommissioning.

b: Confirmation of decommissioning

- Contact supplier/service agency for submission of ‘confirmation of decommissioning’ in e-LORA.
- After submission of confirmation of decommissioning by the supplier/service agency e-LORA account, the status of equipment will change to "Decommissioned".



3. Modification of Installation, relocation and reposition of equipment from its original place.

In case of change in layout (due to Layout modification of installation, relocation and reposition of equipment from its original place), Submit application form for Change in Layout.

- Follow below path to access this form:

Regulatory Forms >> Medical Diagnostic Radiology>> Change in Layout



- Pl. note, in this form you will have to provide detail of shielding around

X-ray equipment as asked in Licence form.

- Fill the detail as required in the form and Submit.

4. QA Test Summary of periodic QA or QA test summary after layout change

Use below path to submit QA test summary of periodic QA or QA done after layout change.

Path to access application form :

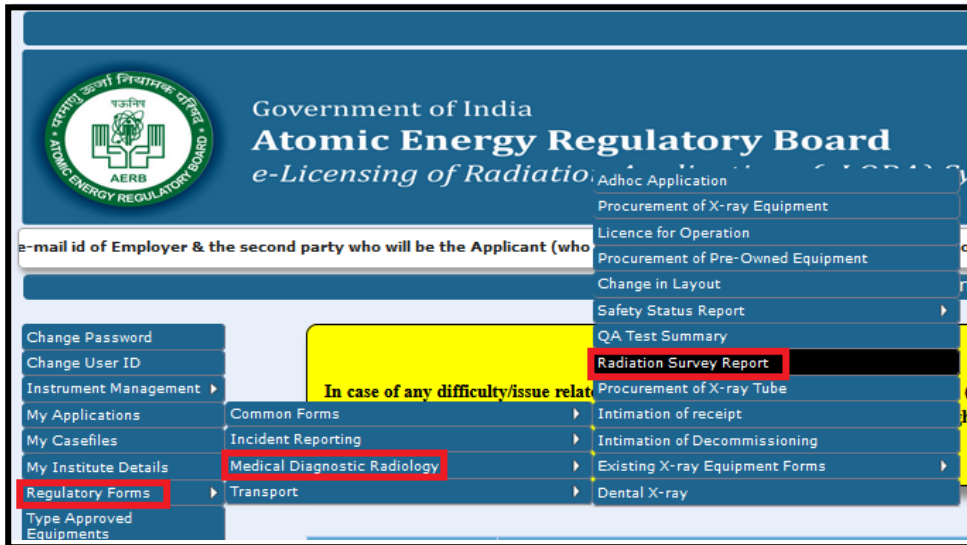
Regulatory Forms >> Medical Diagnostic Radiology >>QA Test Summary

The screenshot shows the AERB website interface. The header includes the AERB logo and the text "Government of India Atomic Energy Regulatory Board e-Licensing of Radiatio...". A navigation menu on the right lists various forms, with "QA Test Summary" highlighted in a red box. A yellow box highlights the text "In case of any difficulty/issue relat...". The "Regulatory Forms" menu item is also highlighted in a red box.

The screenshot shows the "DIAGNOSTIC RADIOLOGY > QUALITY ASSURANCE TEST REPORT SUMMARY" form. The "General Details" section includes fields for "Submission for", "Equipment Id*", "QA test conducted by*", and "Registration No.*". A dropdown menu for "Submission for" is open, showing options: "Layout Change", "--Please Select--", "Periodic QA", and "Layout Change". A checkbox at the bottom is labeled "I hereby certify that the particulars provided above are true and correct to the best of my knowledge and belief. I understand that if at any stage it is found that appropriate regulatory action may be initiated against me and my institution."

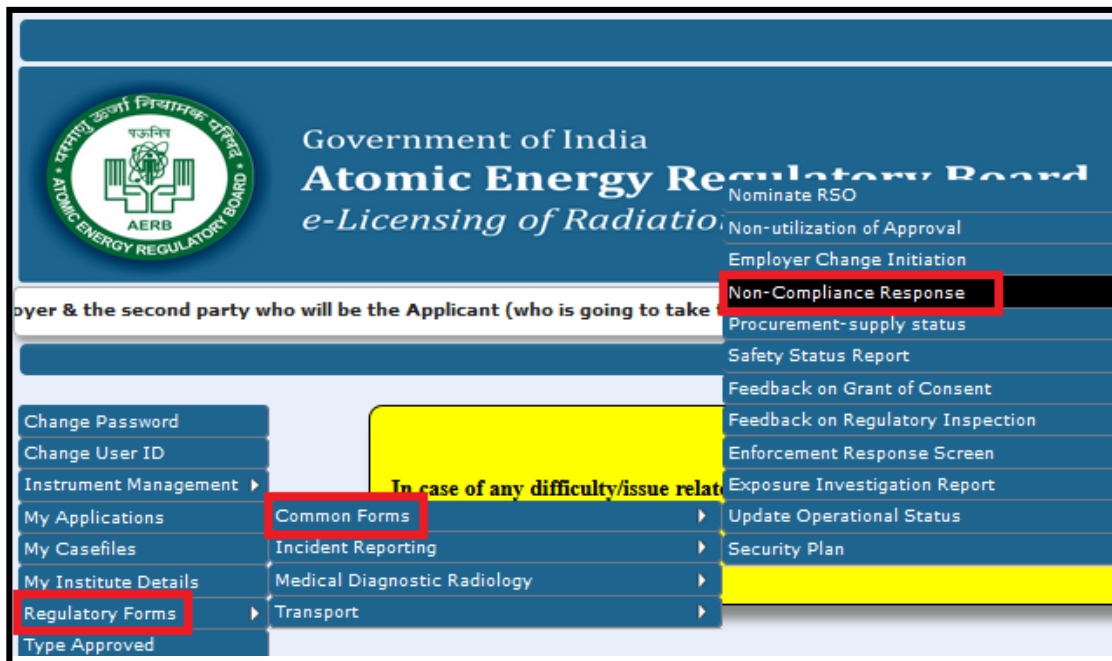
5. Periodic Radiation Protection Survey Report

- In case of change in layout, you are required to submit radiation survey around the installation.
- The same form is also be used to submit Periodic RSR (RSR – Radiation Survey Report).
- Follow the path to access this form:
Regulatory Forms >> Medical Diagnostic Radiology >> Radiation Survey Report



6. Non-compliance Response

- To check active Non-compliances details in your institute follow the path:
My Institute details>>Non-Compliance Details
- For submission of response to the non-compliances raised through **regulatory inspection**, follow the path: **Regulatory Forms>> Common Forms>>Non-Compliance Response**.
- You are required to attach the documentary evidences against the compliance status.



- In case, Non-compliance (NC) is raised against the institute, Employer needs to take immediate action to resolve it.
- If more time is required for resolution of NC, same may be intimated to AERB with necessary justification in NC extension form, which can be downloaded from “Help” menu of e-LORA system.
- For closing NCs related to Renewal of Licence and Renewal of RSO Approval, kindly apply Renewal of Licence and Renew RSO Approval for their closure.

7. Safety Status Report

- Use this form to submit safety annual safety status of your Institute.
- Follow following path to access this form:

Regulatory Forms >>Common forms>>Safety Status Report

Government of India
Atomic Energy Regulatory Board
e-Licensing of Radiation Applications (eLORA) System

Regulatory Forms > Common Forms > Safety Status Report

In case of any difficulty/issue related to...

8. Procurement of X-ray Tube

- This form is used to apply for procurement of x-ray tube (in case of replacement of old/damaged x-ray tube).
- Follow following path to access this form:

Regulatory Forms → Medical Diagnostic Radiology → Procurement of X-ray Tube

Government of India
Atomic Energy Regulatory Board
e-Licensing of Radiation Applications (eLORA) System

Regulatory Forms > Medical Diagnostic Radiology > Procurement of X-ray Tube

In case of any difficulty/issue related to...

Date and Time	Message
24/03/2021 03:28 PM	Your application for Update Operational Status with application no source(s)/equipment(s) is/ are lying in your institute, immediate act
04/10/2019 10:14 AM	You have successfully Changed Your User ID to :DRCELL The pr
11/07/2019 11:55 AM	DNT001:Your application for New Indeginous Dental Xray Regist

9. Submission of receipt after receiving X-ray tubes Intimation of Receipt

- After receipt of new X-ray tube, pl. submit its receipt through Intimation of Receipt form.
- Follow following path to access this form:
Regulatory Forms → Medical Diagnostic Radiology → Intimation of Receipt

Home | eL

Government of India
Atomic Energy Regulatory Board
e-Licensing of Radiation Applications (e-LORA) System

Adhoc Application
Procurement of X-ray Equipment
Licence for Operation
Procurement of Pre-Owned Equipment
Change in Layout
Safety Status Report
QA Test Summary
Radiation Survey Report
Procurement of X-ray Tube
Intimation of receipt
Intimation of Decommissioning
Existing X-ray Equipment Forms
Dental X-ray

e) from the right side screen. In the right side screen, the list will pop

In case of any difficulty/issue related to

Change Password
Change User ID
Instrument Management
My Applications
My Casefiles
My Institute Details
Regulatory Forms
Type Approved Equipments

Common Forms
Incident Reporting
Medical Diagnostic Radiology
Transport

Adhoc Application:

1. Remove duplicate or incorrect declared x-ray equipment

- For Removal of duplicate or incorrect entry, follow the path:
Regulatory Forms>> Medical Diagnostic Radiology>>Adhoc application.
- Attach an application form 'Removal of duplicate or incorrect declaration of medical x-ray equipment,' which can be downloaded from "Help" Menu of e-LORA system.

Government of India
Atomic Energy Regulatory Board
e-Licensing of Radiation Applications (e-LORA) System

Adhoc Application
Procurement of X-ray Equipment
Licence for Operation
Procurement of Pre-Owned Equipment
Change in Layout
Safety Status Report
QA Test Summary
Radiation Survey Report
Procurement of X-ray Tube
Intimation of receipt
Intimation of Decommissioning
Existing X-ray Equipment Forms
Dental X-ray

e Employer or Licensee). By default the Employer details displayed at the

In case of any difficulty/issue related to

Change Password
Change User ID
Instrument Management
My Applications
My Casefiles
My Institute Details
Regulatory Forms
Type Approved

Common Forms
Incident Reporting
Medical Diagnostic Radiology
Transport

Adhoc Details

Before filling this form you need to download and fill the requisite form and upload the same. To download the form [click here](#)

We recommend you to complete the Form first and then proceed for the upload for your attachments. The maximum file size allowed for are: doc, docx, xls,xlsx, odt, jpeg, jpg, png, zip, pdf. Alternatively, you might zip it and upload it. Software for compressing files can be downloaded for free from <http://www.7>

Type of Application* **Application for removal of incorrect declaration X-ray Equipment**

Application description (Reason for submission)
maximum 500 characters allowed

Attachment 1* No file selected.

Attachment 2 No file selected.

11. Recognition of X-ray technologist course:

- Submit the completely filled the application for Medical Imaging Technologist course, which is available in AERB website;
<https://10.55.55.11/images/PDF/DiagnosticRadiology/Application-form-for-Recognition-of-X-ray-technologists-courses.pdf>.
- Submit the filled application forms with necessary documents through the path;

Regulatory Forms>> Medical Diagnostic Radiology>>Adhoc application

Adhoc Details

Before filling this form you need to download and fill the requisite form and upload the same. To download the form [click here](#)

We recommend you to complete the Form first and then proceed for the upload for your attachments. The maximum file size are: doc, docx, xls,xlsx, odt, jpeg, jpg, png, zip, pdf. Alternatively, you might zip it and upload it. Software for compressing files can be downloaded for free from <http://www.7>

Type of Application* **Application for Course Recognition (X-ray-Technologist)**

Application description (Reason for submission)
maximum 500 characters allowed

Attachment 1* No file selected.

Attachment 2 No file selected.

12. Enforcement compliance report:

- For submission of compliance with respect to enforce inspection action viz. Seal/ Warning of Seal of x-ray equipment of your institute, inspection compliance along with documentary evidence based on Inspection recommendations are required to be submitted through the following path:

Regulatory Forms>> Medical Diagnostic Radiology>>Adhoc application

Adhoc

Adhoc Details

Before filling this form you need to download and fill the requisite form and upload the same. To download the form [click here](#)

We recommend you to complete the Form first and then proceed for the upload for your attachments. The maximum file size are: doc, docx, xls,xlsx, odt, jpeg, jpg, png, zip, pdf. Alternatively, you might zip it and upload it. Software for compressing files can be downloaded for free from <http://www.7>

Type of Application* **Application for enforcement compliance report**

Application description (Reason for submission)
maximum 500 characters allowed

Attachment 1* No file selected.

Attachment 2 No file selected.

Annexure-1

1. The Qualification and Experiences for Personnel in medical X-ray installations are available at AERB website. (<https://www.aerb.gov.in/images/PDF/DiagnosticRadiology/Qualification-Requirements-for-personnel-in-Medical-X-ray-Installation.pdf>)
2. For registering personnel of medical X-ray installation in e-LORA system, kindly refer below table

Role	Qualifications and Experience
Medical Practitioner	<ul style="list-style-type: none">• Medical Practitioner having qualification such as MD/MS/DNB /DM/M.Ch./Post MBBS Diploma or equivalent in Radiology/Cardiology/Orthopedics/Neurology/Urology/ Gastroenterology/ Radiotherapy/ Nuclear Medicine or equivalent or BDS/MDS degree.• For veterinary medicine facility, medical practitioner having qualification B.V.Sc. & AH/ M.V.Sc. & AH or equivalent <p><i>Note: Certificate from MCI or equivalent is required if the qualification obtained by the medical practitioner from Abroad.</i></p>
Operator *	X-ray technologist passed Radiographer's/ X-ray Technologist's course from a recognized Institution/Board/University or Medical Practitioner
Radiological Safety Officer (RSO)	A. RSO for medical X-ray installation (CT/IR installation) Medical practitioner having qualification mentioned above Or X-ray technologist passed Radiographer's/ X-ray Technologist's course from a recognized Institution/Board/University with three years working experience in the field of Computed Tomography (CT) / Interventional Radiology (IR). Or Medical Physicist having qualified certificate of RSO level-III (RSO-Medical) Or Nuclear Medicine Technologist / Nuclear Medicine Physician having qualifying certificate of RSO Level-II (RSO-Nuclear Medicine) B. RSO for medical X-ray installation (other than CT/IR installation) Employer/Licensee shall designate appropriate person as RSO subject to furnishing "Undertaking" that he/she is familiar with the regulatory requirements and radiation protection aspects of medical x-ray installation by mentioning his/her name in Registration Application Form submitted to AERB.

***Note:-**

In certain installations such as Interventional Radiology/Computed Tomography/Fluoroscopy equipment, it is not practicable for a Medical Practitioner to operate the equipment, while also performing the procedure. It is advisable that such institute should ensure that a qualified X-ray technologist is available for operating such equipment in addition to the Medical practitioner.

More Information:

- I. Pl. refer Frequently asked Questions of Diagnostic Radiology Practice available in 'Help' menu of e-LORA system
- II. In case, issue persist, pl. submit the problem through 'Raise an issue' option of e-LORA system
- III. Please click quick help on e-LORA:
<https://10.55.55.11/index.php/english/quick-help-on-e-lora>
- IV. You contact us at following Help Desk Number

Help Desk No. and Email id for Diagnostic Radiology Users

022-25990675 & elora.info@aerb.gov.in

Important Message**NO LICENSE FEE /PROCESSING FEE BY AERB**

It may please be noted that at present AERB does not charge any fee for issuance of regulatory consents including License or Registration. However, It has been brought to the notice that some of the suppliers/agencies, while providing services/assistance to the users of Diagnostic X-ray facility for getting their X-ray equipment licensed or registered by AERB, are demanding money to be paid to AERB. In case anybody demands for payment to be made to AERB or any of its officials, kindly provide all the details to:

The Vigilance Officer,
Atomic Energy Regulatory Board
Niyamak Bhavan, Anushaktinagar,
Tel: 022-25990611
Email: vigilance@aerb.gov.in

References:

- I. AERB Safety Code ‘Radiation Safety in Manufacture, Supply and Use of Medical Diagnostic X-Ray Equipment’ (No. AERB/RF-MED/SC-3 (Rev. 2), 2016)
<https://10.55.55.11/images/PDF/DiagnosticRadiology/Safety-Code-for-Diagnostic-Radiology.pdf>
- II. Diagnostic radiology AERB Web Page
<https://10.55.55.11/english/regulatory-facilities/radiation-facilities/application-in-medicine/diagnostic-radiology>
- III. Qualification Requirements for personnel in Medical X-ray Installation
<https://www.aerb.gov.in/images/PDF/DiagnosticRadiology/Qualification-Requirements-for-personnel-in-Medical-X-ray-Installation.pdf>
- IV. Layout and shielding guidelines:
https://10.55.55.11/images/PDF/layout_guidelines.pdf
- V. TLD badges
<https://www.aerb.gov.in/images/PDF/tldpage.pdf>
- VI. Format for warning placards to be pasted outside x-ray installations
<https://www.aerb.gov.in/images/PDF/placard.pdf>
- VII. List of licensed X-ray Facilities
<https://10.55.55.13/ELORA/prePopulateGraphData.htm>
- VIII. List of type approved x-ray equipment
<https://10.55.55.13/ELORA/prePopulateGraphDataTypeApproved.htm>
- IX. List of approved service agencies
<https://10.55.55.13/ELORA/prePopulateGraphData.htm>
- X. Quick Help on e-LORA
<https://10.55.55.11/index.php/english/quick-help-on-e-lora>
- XI. Booklet on ‘Radiation Safety in Diagnostic Radiology- Information for X-ray Technologist’
<https://www.aerb.gov.in/images/PDF/drsafetybook.pdf>
- XII. Booklet on ‘Radiation Safety in Diagnostic Radiology’ in Hindi
https://www.aerb.gov.in/images/PDF/DiagnosticRadiology/29_06_2020_hindi_safety_booklet.pdf

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