e-Licensing of Radiation Applications (eLORA) System



Guidelines

Gamma Irradiation Chamber Module

June 2025

Table of Contents

Qui	ck Reference for steps to be followed:				
1.	Register Institute				
2.	Register Radiation Professional (RP)				
3.	Login to e-LORA system				
4.	Declaration of Instrument (Addition of Radiation Survey Meter)				
4	.1 Add Instrument(s)	9			
4	.2 Manage Instrument Status	.10			
5.	Addition of Radiation Professional (Declaration of Staff)				
6.	Obtaining RSO approval				
Det	Detail of Regulatory Forms				
A.	Application for Layout Approval of GIC/XIC Installation				
B.	Application for Procurement of GIC/XIC				
C.	Intimation of Receipt of XIC/GIC (Equipment Receipt Intimation)				
D.	Intimation of Receipt of Source of GIC				
E.	Submission of Security Plan				
F.	Licence for Operation				
G.	Permission for source Replenishment/Replacement				
Н.	Transport of Registered Source				
I.	Intimation of Export/Transport/Disposal				
J.	Application for Decommissioning of GIC equipment				
K.	Intimation of Decommissioning				
Common Forms					
L.	Raise an Issue in eLORA				
M.	How to submit Response to the Non-compliance				
N.	Submission of Safety Status Report				
Ο.	Update Operational Status of Equipment/Source				
P.	Annexure: Frequently Asked Questions (FAQs)				

Quick Reference for steps to be followed:

Steps	Purpose	Regulatory Form	Reference		
First Time Licence					
Step-1	Registration of Institute into eLORA System	Register Institute	Click here		
Step-2	Obtaining Layout approval of GIC Installation	Application for Layout Approval of GIC Installation	Click here		
Step-3	Trained person should register as radiation professional so that he/she can be added as RP in the institute. Later RP can be nominated as RSO for GIC facility	Register Radiation Professional (RP)	Click here		
Step-4	Addition of Survey meters	Add Instrument	Click here		
Step-5	Addition of Radiation Professional	Add Employee	Click here		
Step-6	Obtaining RSO approval	Nominate RSO	Click here		
Step-7	Obtaining procurement permission of equipment	Application for Procurement of GIC	Click here		
Step-8	Intimation of receipt of equipment	Equipment Receipt Intimation	Click here		
Step-9	Intimation of Receipt of Source	Source Receipt Intimation	Click here		
Step-10	Submission of Security Plan	Security Plan	Click here		
Step-11	Obtaining Licence for operation of GIC	Licence for Operation	Click here		
Decommissioning of the GIC/XIC Equipment					
Step-1	Obtaining transport permission of disused radioactive source	Transport of Registered Source	Click here		
Step-2	Intimating disposal of radioactive source	Intimation of Export/Transport/Disposal	Click here		
Step-3	Obtaining consent for decommissioning	Application of Decommissioning of GIC/XIC	Click here		
Step-4	Intimating decommissioning of equipment	Intimation of Decommissioning	Click here		

e-LORA Guidelines for Gamma Radiation Processing Facility Module

e-LORA module of Gamma Irradiation Chamber user allows online submission of applications for regulatory consents i.e. Layout approval, import/procurement of GIC/XIC equipment, RSO approval, Licence for Operation etc). There are other profiles defined for GIC facilities i.e. supplier and manufacturer for them separate guidelines are available which are not covered here.

This document provides guidelines to use e-LORA system for obtaining requisites regulatory consents from AERB for end-users of Gamma Irradiation Chamber facility.

Important Note: Guidelines for common functionalities of e-LORA system are available on e-LORA home page as 'General Guidelines to use e-LORA System'. Users are also advised to refer these guidelines.

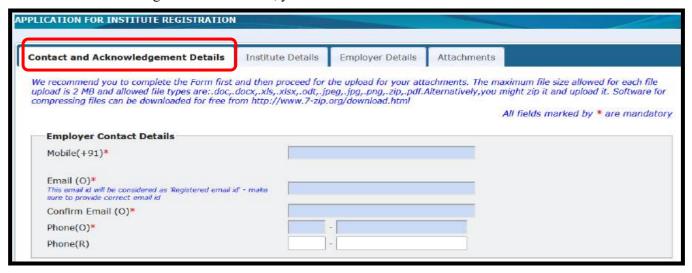
1. Register Institute

Visit home page of AERB website <u>www.aerb.gov.in</u> and click on the button **e-LORA**, It will redirect you to e-LORA system.

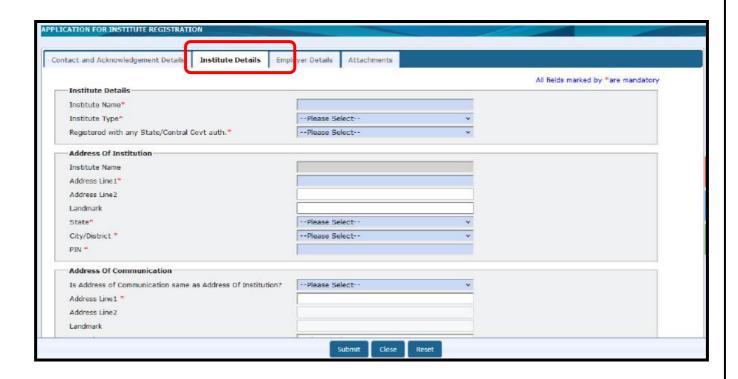


Click on **Register Institute** (see above figure) link available on e-LORA home page i.e https://elora.aerb.gov.in/. This will open application form for Institute Registration. Application form has four tabs.

i. **Contact and Acknowledgement Details**: You have to verify the employer mobile number and email id here. After entering the mobile number, you will receive OTP which need to be entered here.



ii. Institute Details

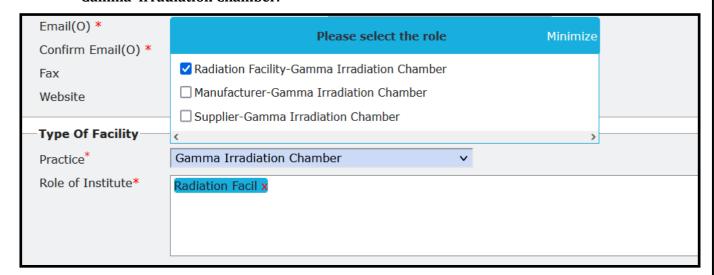


Important Note: Guidelines to fill application form for Institute Registration is available on e-LORA home page. It is advised to read the guidelines and keep soft copy of required attachments ready before start filling of application form.

Fill the application form as per the guidelines. However, important points in each tab are mentioned below:

Tab Institute Details:

- **Type of Institute:** Select type of institute as either 'Central Government', 'State Government', Private' or 'Joint Venture'.
- **Address**: Address of Institute: Address to be provided where the radiation sources/equipment to be installed/operated
- Type of Facility: In Type of Facility section, for the field Practice select Gamma Irradiation Chamber and for the field Role of Institute select the role Radiation Facility
 Gamma Irradiation Chamber.



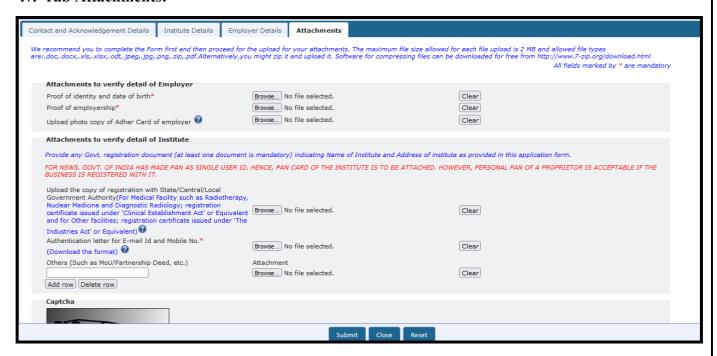
iii. Tab Employer Details



Name: Fill the complete name of employer as appearing in his/her document for Proof of Identity/Date of Birth (DOB) to be attached.

- **Date of Birth:** Fill the DOB as appearing in the proof of identity/DOB to be attached
- **Document/card for proof of identity and date of birth** (of employer): Select one from the drop down. (Soft copy of this is a mandatory attachment). DOB attachment should mention DOB in DD-MM-YYYY format.
- **Document/Card No.** (of Proof of Identity/DOB): Must match with the proof of identity/DOB attached.

iv. Tab Attachments:



Upload of following attachments are mandatory:

- **Proof of Identity and Date of Birth** (of employer): Attach any one of the following Acceptable documents:
 - o Passport
 - o PAN card issued by Income Tax Department
 - o Driving Licence issued by RTO
 - Photo identity document/card having serial number and date of birth issued by Central/State Government or PSU
- **Proof of Employership:** Example: (i) Appointment Letter of Employer, (ii) Board Resolution, (iii) Any Govt./PUC document substantiating proprietorship (iv) Partnership deed (notorised)
- Upload scan copy of any one of the document listed below (in the relevant position) for the proof of existence of institute (The institute name and address mentioned in the application form must match with any of the attached document):
 - o PAN of Institute
 - o TAN of Institute
 - o Registration with State/Central/Local Government Authority

Enter the Captcha and submit the application form.

Important Note: Fields marked with * in the application form are mandatory. Application form will not be submitted if any mandatory field left blank.

You will get acknowledgement message upon successful submission of application form. The copy of submitted application (.pdf file) can be downloaded for which link will be provided (Please note, this link will be active for a short period). You will also receive an acknowledgement mail with the copy of your application form (.pdf file) in your email (email address as provided in the application form).

Application for Institute Registration will be scrutinized by AERB. After the approval of institute registration by AERB, you will receive user ID and password in your registered email (email address of Employer, as provided in the application form).

Note: Please note that Institute Registration does imply that you have obtained the required AERB registration certificate. This step may be considered as an entry path to the online eLORA system.

2. Register Radiation Professional (RP)

It is essential for person to be nominated as RSO of Gamma Irradiation Chamber facility to register himself/herself as Radiation Professional (RP) in e-LORA. Only registered RP can be associated with an institution through his/her RP registration Id.



Application form for Radiation Professional registration is available on e-LORA home page. Once RP application is approved, the applicant will be considered as a radiation professional in eLORA and all useful information e.g RP Registration Id., Username and Password (Username and password of RP account) will be sent to the registered email id of the radiation professional.

Important Note: Guidelines to fill application form for RP registration is available on e-LORA home page. It is advised to read the guidelines and keep soft copy of required attachments ready before start filling application form.

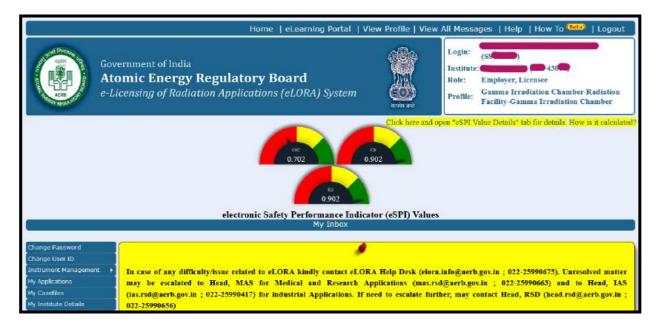
3. Login to e-LORA system

Login to the system using the "Username" and "Password" received no your registered email after approval of Institute Registration application. On first time login system will prompt to change the password.

In case, your Institute has multiple profiles, system will ask you to select the Practice and Institute Role. Please select Practice as "Gamma Irradiation Chamber", Institute Role as "Radiation Facility" and Installation Type as "Radiation Facility – Gamma Irradiation Chamber".



On clicking on 'LOGIN' button, the following screen will be displayed



4. Declaration of Instrument (Addition of Radiation Survey Meter)

Monitoring Tool(s) (Viz. Survey meter) can be declared one time in your e-LORA account through Instrument Management menu. The status of instruments (viz. proposed/available, update in calibration date, etc) can also be managed through this menu.

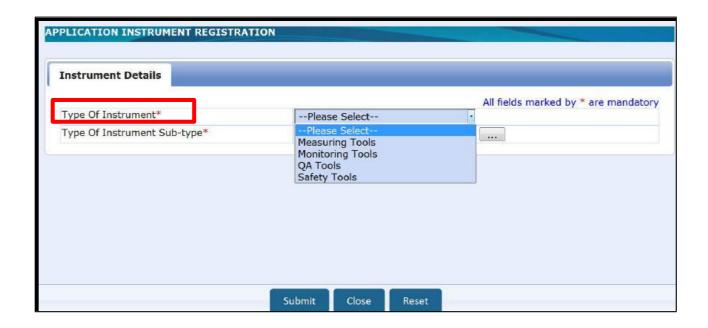
4.1 Add Instrument(s)

Use **Menu: Instrument Management** → **Add Instrument** to declare/ add instruments



Instruments are classified in to below four types:

- Measuring Tools (Not applicable for Gamma Irradiation Chamber users)
- Monitoring Tools (applicable for Gamma Irradiation Chamber users)
- QA Tools (Not applicable for Gamma Irradiation Chamber users)
- Safety Tools (Not applicable for Gamma Irradiation Chamber users)



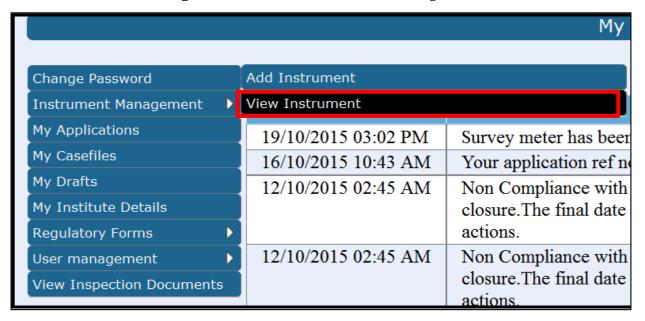
For adding Survey meter, select "Type of Instrument" as "Monitoring Tools" and "Type of Instrument Sub-type" as "Survey Meter" from the list of values.

Provide the detail of survey meter as asked in form (Please refer to survey meter manual/specification for providing tech-specs as asked in the form).

Important Note: Regulatory clearances will not be issued till requisite Monitoring instrument (i.e. Survey Meter) is declared in e-LORA.

4.2 Manage Instrument Status

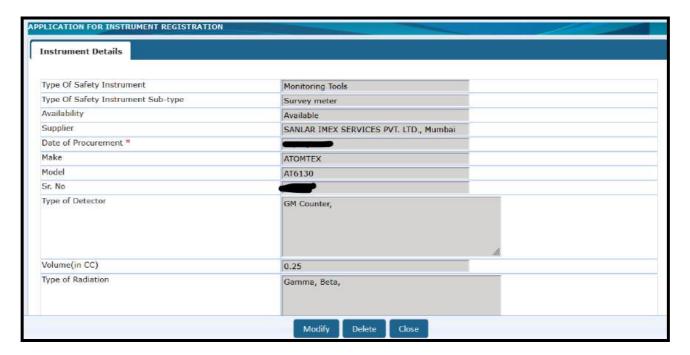
Use **Menu: Instrument Management** → **View Instrument** to manage status of Instrument

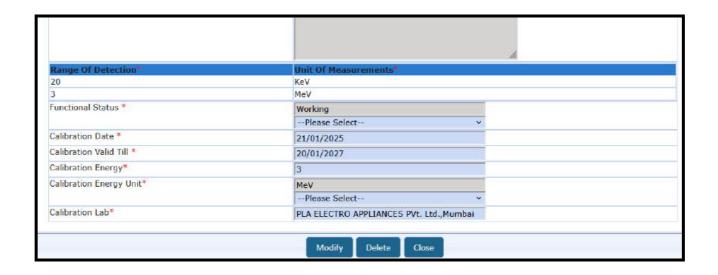


After clicking on "View Instrument" the following screen will appears. You can view details of all instruments or update details of particular instrument or delete any particular Instrument from your Institute account. Select the instrument and click on "View" as shown below.



After clicking on "view" the following screen will appear. Through this, Employer of the Institute can modify status of the instruments (viz. Functional status, Calibration date, Calibration valid till date, Calibration energy and calibration lab detail). The selected equipment can also be deleted by clicking on 'Delete' button.

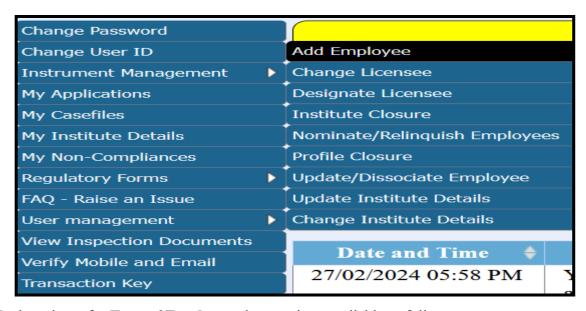




5. Addition of Radiation Professional (Declaration of Staff)

Radiation worker/Radiation Professional can be added in e-LORA account through

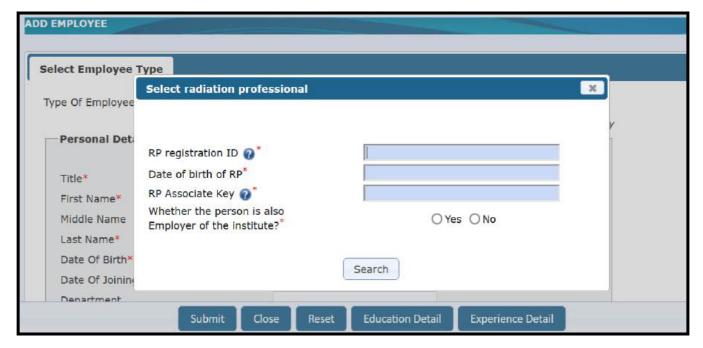
Menu: User Management → Add Employee



In drop down for **Type of Employee**, three options available as follows:

- Radiation Worker (this is to add non-RP radiation workers)
- **Non Radiation Worker** (this is to add employee to be nominated as Licensee and he/she is not a radiation worker; (Employer will fall under this category)
- Radiation Professional (this is to add Radiation Professionals of Gamma Irradiation Chamber i.e. Radiation Safety Professional)

While adding RP, system will ask RP registration ID and Date of birth of RP. (Obtain these details from the Radiation Professional).



In the form for adding Radiation Professional,

- Enter **Registration ID** and Date of birth of RP –personal detail of RP will come automatically.
- RP Associate Key- It should be generated by RP through his/her Radiation Professional LOGIN
- 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. if availed), Department and Designation, Provide Email (O)
- Browse and upload scan copy of joining /confirmation letter of employee and click on **Submit**

To upload "Attachment for uploading copy of Joining/Confirmation*", you can attach a Scanned copy of the Joining/confirmation letter of the added staff or a letter signed by the appropriate authority of the facility mentioning the Name and Designation of all existing staff members working in the facility.

6. Obtaining RSO approval

Radiological Safety Officer (RSO) approval process can be initiated by Employer through institute login.

Prerequisites for Nominate RSO Process

Step-1: Employer and RP should verify his mobile number and email id

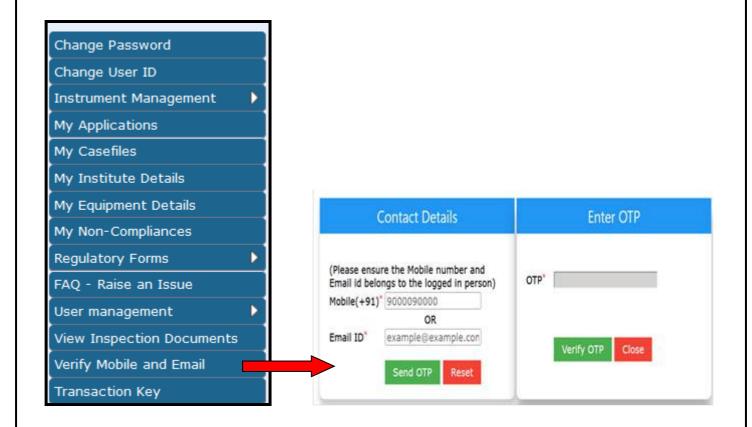
Step-2: RP should complete the eLearning course through his/her RP LOGIN credentials

Step-3: Generation of Transaction key for RSO Nomination

Step-4: Submission of RSO Application

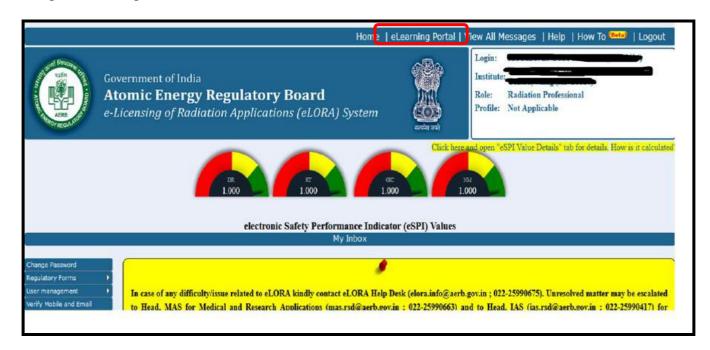
Step-1: Employer and RP should verify his mobile number and email id through their respective

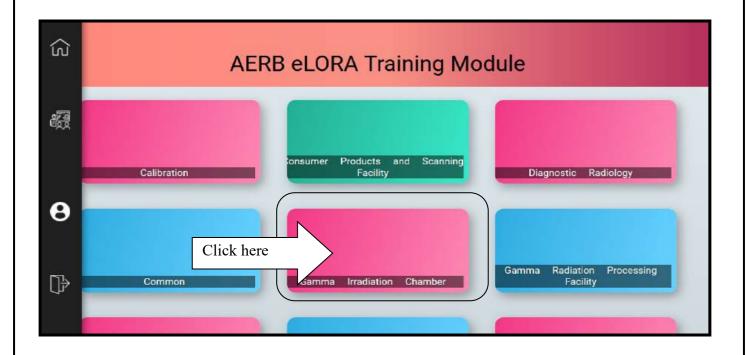
LOGIN's



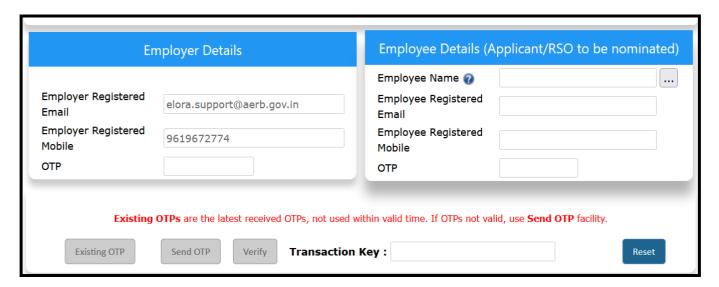
Step-2: RP should complete the eLearning course through his/her RP LOGIN credentials

RSO nominee should complete the eLearning course or presentation for the practice for which he/she is going to become an RSO. To complete this process, he/she should LOGIN to eLORA by using eLORA Login Credentials





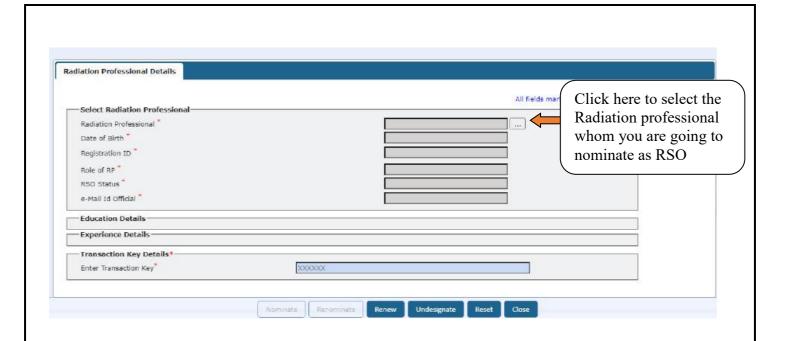
Step-3: Generation of Transaction key for RSO Nomination



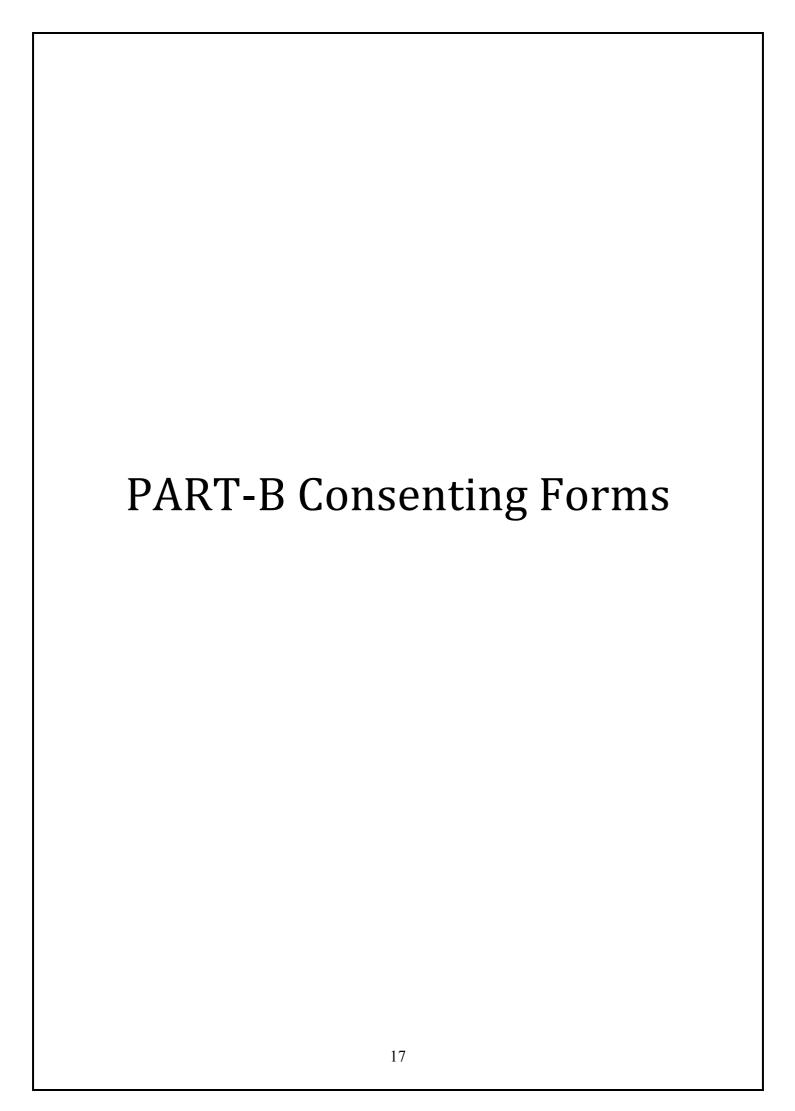
From the employee list you have to select the RP to whom you are going to nominate as RSO. Then click on **Send OTP** option. Both employer and radiation professional receive the OTP's on their respective mobiles and emails. Then click on **Verify**, once it is verified the **Transaction Key** will appear as 6 digit number

Step-4: Submission of RSO Application

Menu: Regulatory form → Common Forms → Nominate RSO



Click on Nominate



Detail of Regulatory Forms

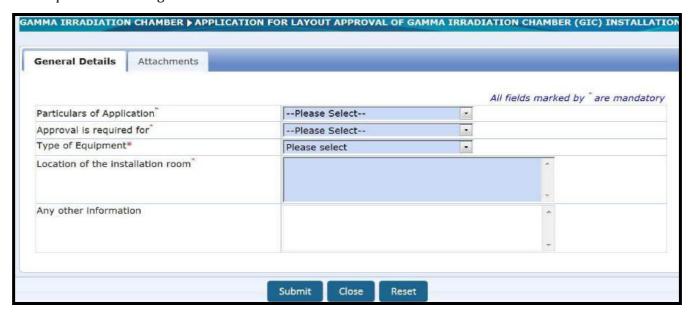
In order to obtain requisite regulatory clearance from AERB, user need to fill and submit application form in e-LORA.

A. Application for Layout Approval of GIC/XIC Installation

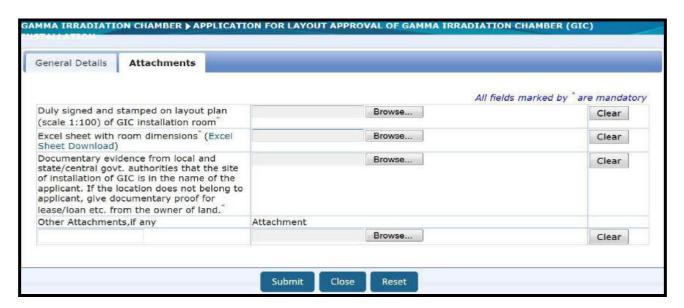
In e-LORA, Employer should obtain the Layout approval of the GIC/XIC installation room through the following application

Menu: Regulatory Form → Gamma Irradiation Chamber → Layout Approval of GIC Installation

Pre-requisite for site registration:



Note: Installation location should be within the institute premises only.



Provide all the necessary attachments mentioned above.

After submission, the application will be reviewed by AERB and takes the necessary action.

B. Application for Procurement of GIC/XIC

Submit this form for obtaining NOC for import/procurement permission of equipment with or without radioactive source. This application to be submitted after obtaining the layout approval.

Pre-requisite for Procurement of GIC/XIC:

- 1. RSO approval in e-LORA
- 2. Availability of survey meter with valid calibration
- 3. Financial provision cum decommissioning undertaking (format available in eLORA help menu). This is required for source based irradiation chamber
- 4. Security plan for radiation facility

Follow below path to access this form:

Menu: Regulatory Form → Gamma Irradiation Chamber → Application for Procurement of GIC

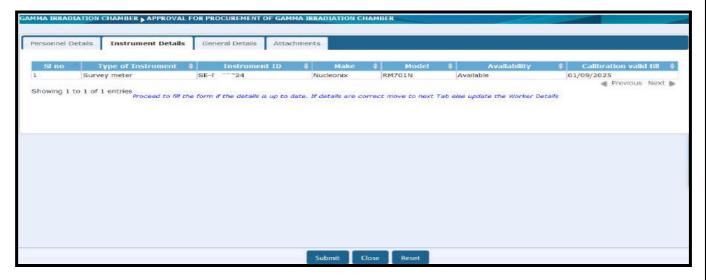
I. Personnel Detail:

Approved RSO details will be shown here



II. Instrument Detail:

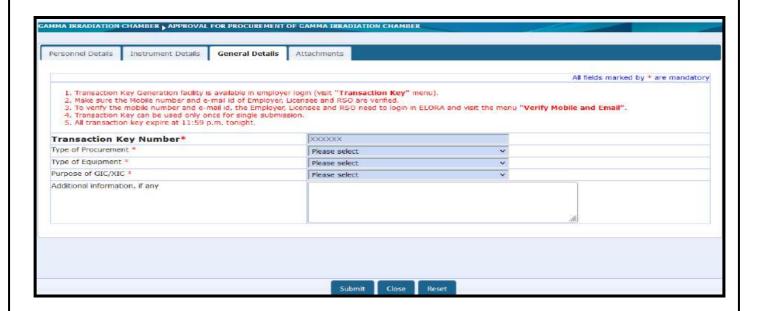
Radiation Survey Meter details which are updated through Instrument management will appear here.



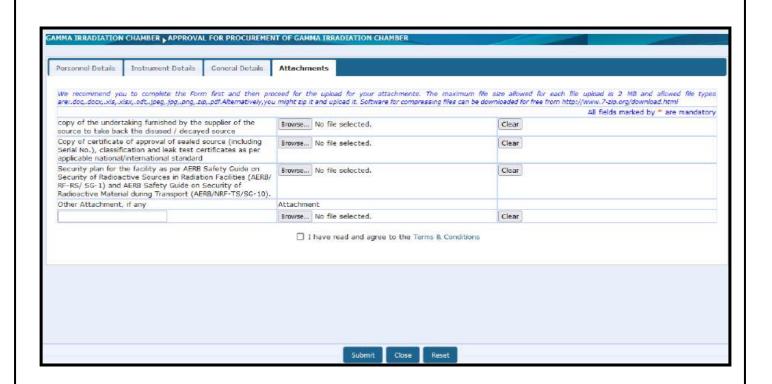
III. General Detail:

- a. Transaction Key need to be generated (Read the guidelines of Transaction Key)

 Note: This Transaction key is different from transaction key generated during RSO nomination. For proper transaction key generation read the guidelines of transaction key page
- b. Select either "Local Procurement" or "Import" in field of "Type of Procurement".
- c. Select either "Gamma Irradiation Chamber" or X-ray Based Irradiation Chamber "in field of "Type of Equipment".



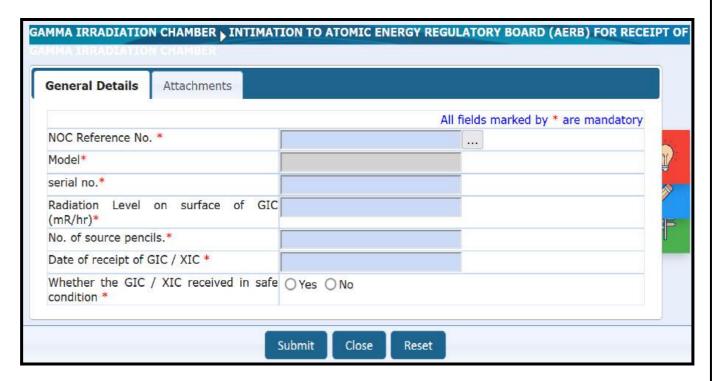
IV. Attachments: Following attachments are mandatory.



C. Intimation of Receipt of GIC/XIC (Equipment Receipt Intimation)

Submit this form after receipt of equipment. Follow below path to access this form:

Menu: Regulatory Form → Gamma Irradiation Chamber → Intimation of Receipt of GIC



Important Note: User institute should provide exact no. of pencils. Depending on the number you have entered, same number of source pencil table will be generated while submitting the source receipt intimation. Confirm from the supplier about the number of source pencils in the GIC while providing these details.

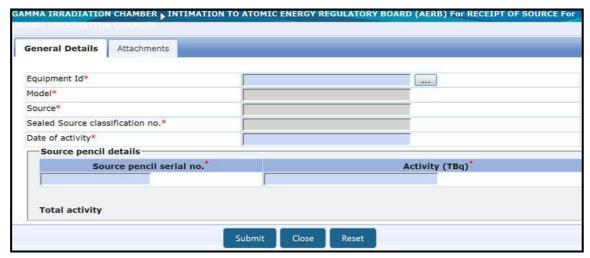
In case of X-ray based irradiation Chamber, you have to provide the serial number of the equipment in this form.

D. Intimation of Receipt of Source of GIC

This stage is not applicable for XIC

Submit this form after receipt of radioactive source. Follow below path to access this form:

Menu: Regulatory Form → Gamma Irradiation Chamber → Intimation for receipt of source

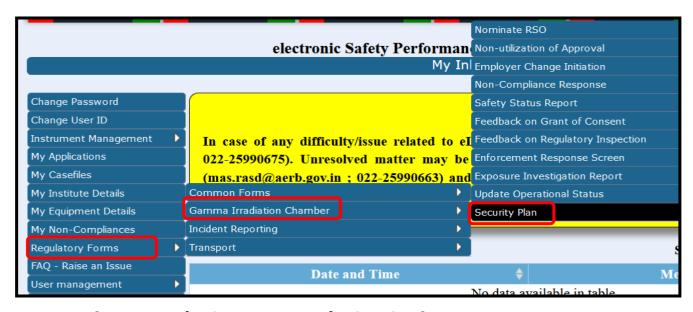


Important Note: This form captures details of radioactive source received against procurement permission. In this step user can mention activity of radioactive source which has been received by them. The data provided in this stage will be carry forwarded for further regulatory processes like license. Hence, submit this form after verification with the procurement permission, to avoid any mismatch of details during later regulatory stages.

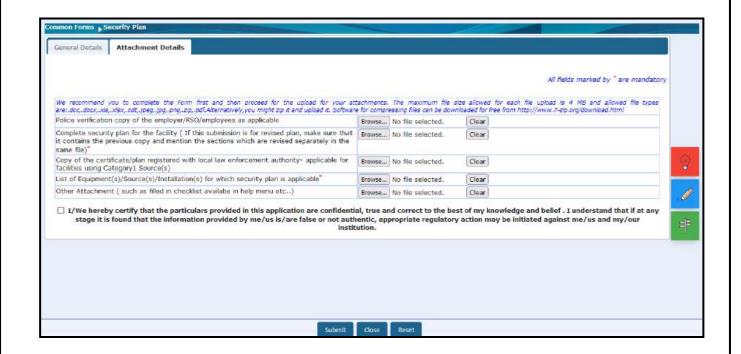
E. Submission of Security Plan

Not Applicable for XIC

Submit the security plan for the approval through eLORA. The security plan should be prepared as per the AERB/RF-RS/SG-1 guidelines. The format for the security plan is also available in HELP menu.



Menu: Regulatory Form → Common Forms → Security Plan

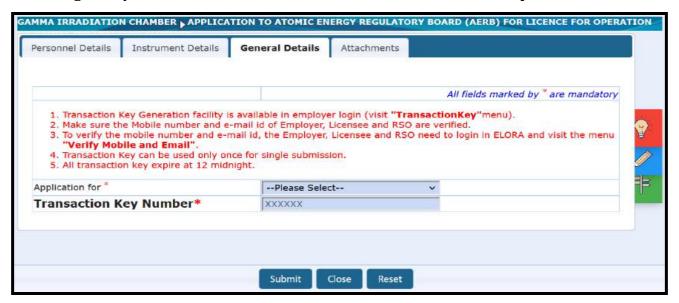


F. Licence for Operation(First time/Renewal)

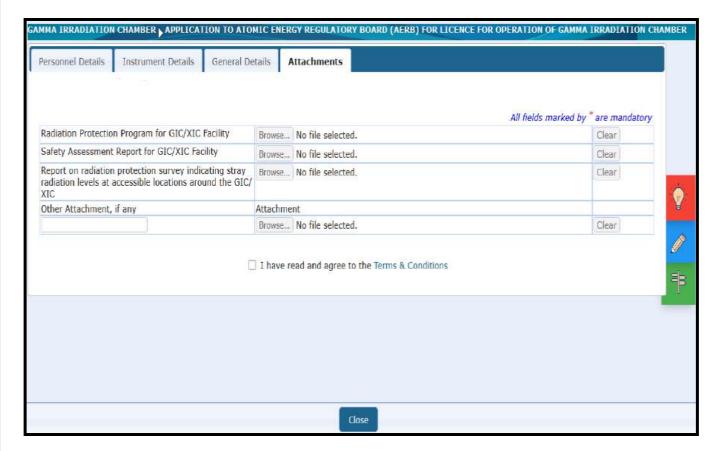
It is mandatory to obtain the Licence for Gamma Irradiation Chamber Facility as per provisions of Rule 3 of Atomic Energy (Radiation Protection) Rules, 2004. This form is required to be filled to obtain the Licence for Gamma Irradiation Chamber Facility and user is able to filled, only if the institute has radiation survey meter having valid calibration and RSO approval through e-LORA. The renewal of licence can also be obtained through the same form.

Follow below path to access this form:

Menu: Regulatory Form → Gamma Irradiation Chamber → Licence for Operation



Note: This Transaction is key different from transaction key generated during RSO nomination. For proper transaction key generation read the guidelines of transaction key page



Safety Assessment Report(SAR) and Radiation Protection Program(RPP) need to be prepared. The template of the both formats are available in **eLORA HELP** menu. Also the guidance material top prepare the SAR and RPP are available in **eLORA HELP** menu.

G. Permission for source Replenishment/Replacement

For replacement or replenishment of source in existing GIC unit, user you can decommission the device and obtain the fresh procurement approval as it is not possible to perform onsite source transfer.

Important Note

Decommissioning of GIC/XIC Unit:

The following steps need to be followed for decommissioning of GIC/XIC

- a. Transport of Registered Source (not applicable for XIC)
- b. Intimation of Transport of Source (not applicable for XIC)
- c. Decommissioning of GIC Unit
- d. Intimation of Decommissioning

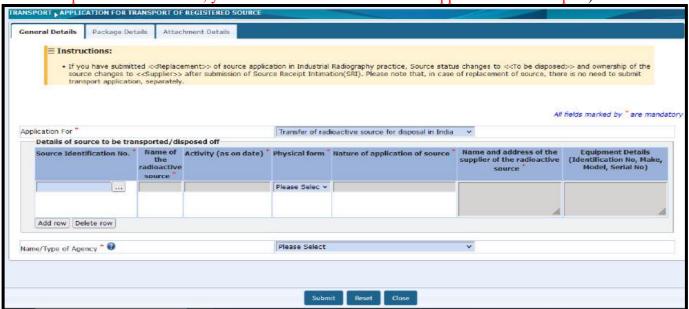
H. Transport of Registered Source

Submit this form for obtaining permission for export/transport/disposal of disused radioactive source. Follow below path to access this form:

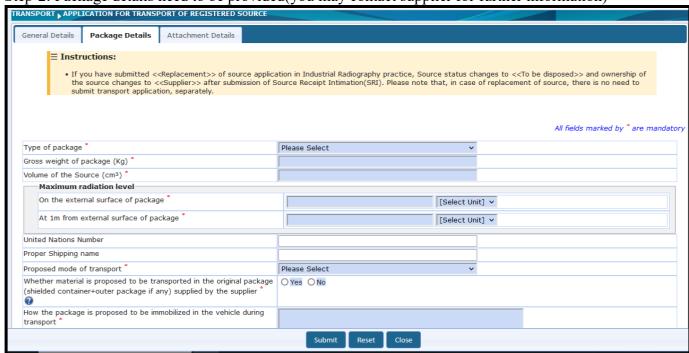
Menu: Regulatory Form → Transport → Transport of Registered Source

Please mention the option to choose under "Application for..." in below screen print.

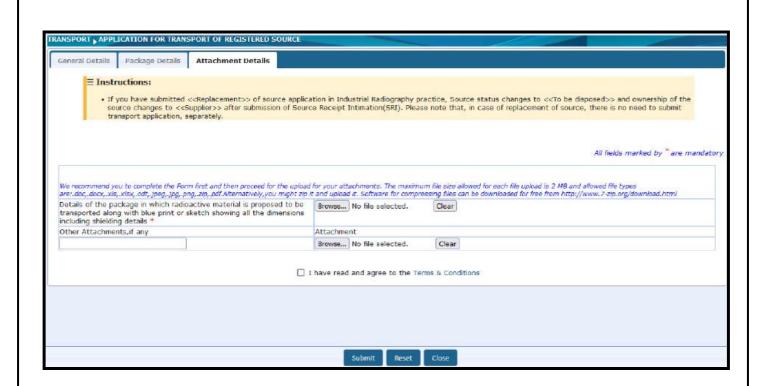
Step-1: need to select sources from list (at a time max. 10 no. of source pencils can be selected. If more number of pencils are available, you need to submit more than one application for transport)



Step-2: Package details need to be provided (you may contact supplier for further information)



Step-3: necessary attachmnets need to be attached

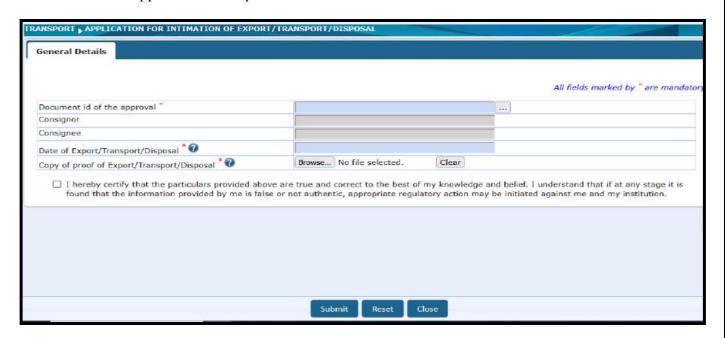


I. Intimation of Export/Transport/Disposal

Submit this form for intimating export/transport/disposal of radioactive source. Follow below path to access this form:

Menu: Regulatory Form → Transport → Intimation of Export/Transport/Disposal

- i. Pre-requisite for intimation
- 1. Approval for transport



J. Application for Decommissioning of GIC/XIC equipment

Submit this application for obtaining approval for decommissioning of equipment. Follow below path to access this form:

Menu: Regulatory Form → Gamma Irradiation Chamber → Decommissioning of Radiation Equipment



K. Intimation of Decommissioning

It is necessary to intimate decommissioning of Gamma Irradiation Chamber equipment within 15 days of its decommissioning. Use this form to intimate decommissioning of equipment. Follow below path to access this form:

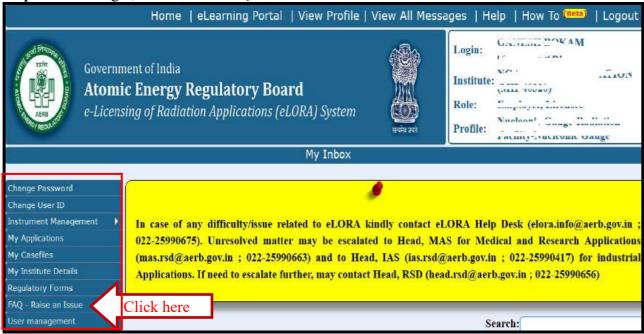
Menu: Regulatory Form → Gamma Irradiation Chamber → Intimation of Decommissioning



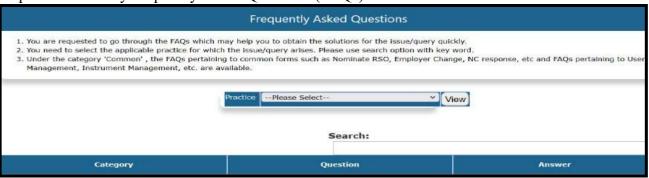
Common Forms

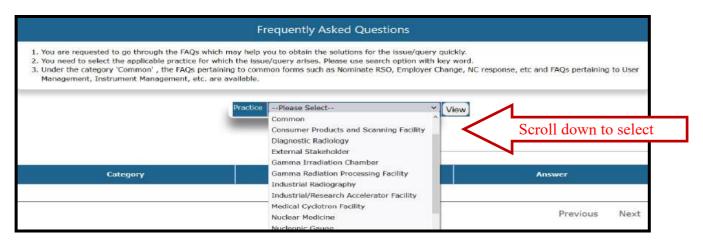
L. Raise an Issue in eLORA

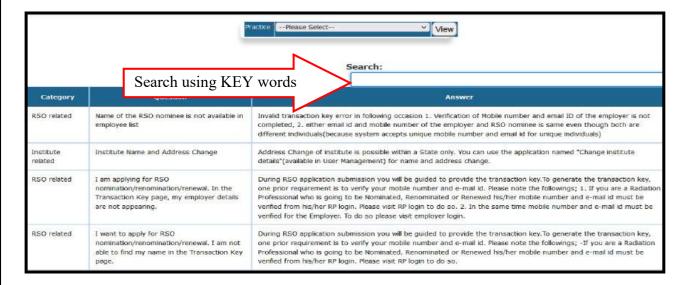
Step-1: After Login, click on the FAQ-Raise an Issue



Step-2: First Verify frequently Asked Questions (FAQs)





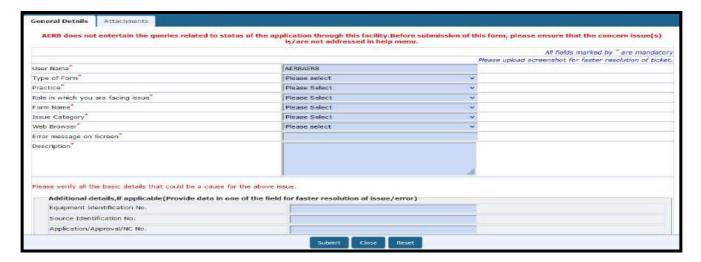


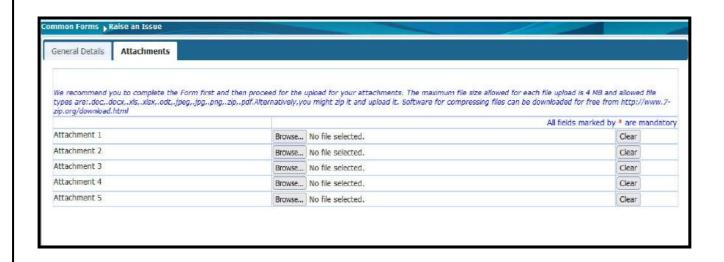
Step-3: If your question is not listed or any other issue please select the blow options and Raise Issue

I have gone through the FAQ



Step-4: Fill the application form (all are mandatory requirements) and provide the screen shots of the issue and other supportive documents as attachments





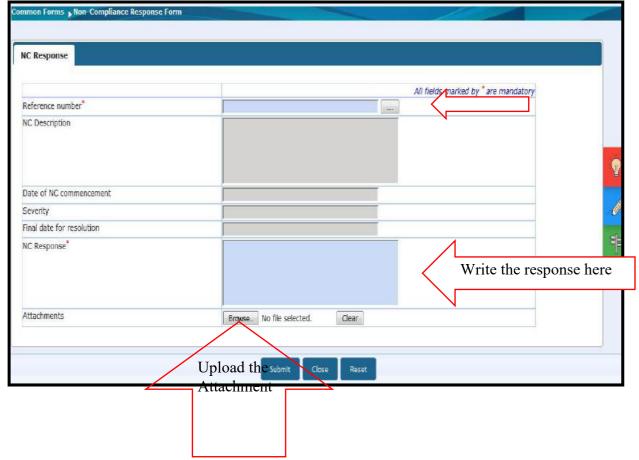
M. How to submit Response to the Non-compliance

Step-1: After LOGIN, please follow the path shown below

Regulatory forms → Common Forma → NC Response (Click on NC Response)



Step-2: Select the Noncompliance reference number from the LOV (three dotted box shown below)



Important Note: For non-compliance raised regarding the Calibration of Radiation Survey meters/Gamma Zone Monitors, there is no need to submit the response through NC Response Screen. Please update the fresh Calibration details through instrument management after that the Non-Compliance will be closed within 24 hours.

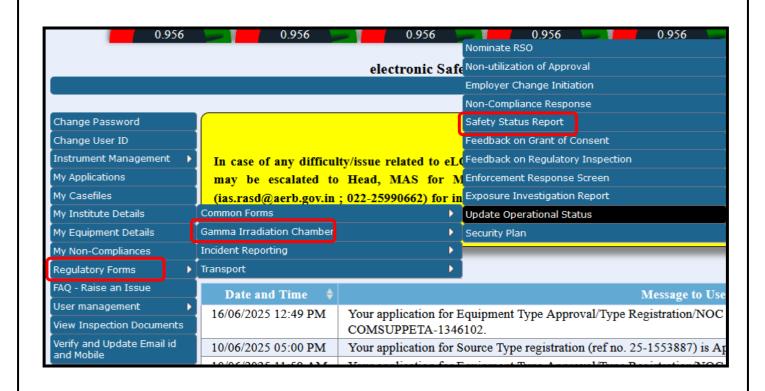
N. Submission of Safety Status Report

This safety status report should be submitted periodically by every radiation facility through eLORA system, as per the terms and conditions of the Licence issued under the Atomic Energy (Radiation Protection) Rules, 2004.

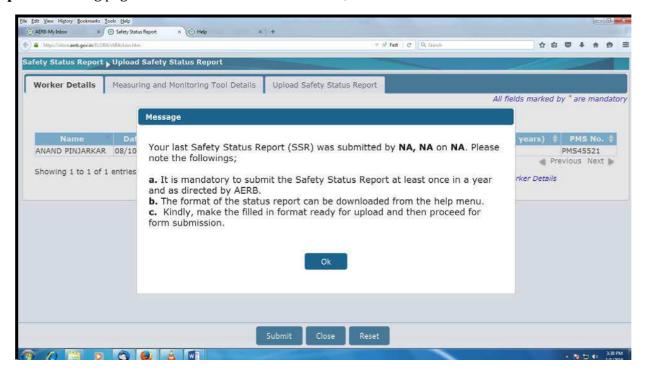
Important Note: Prior to submission of safety status report, you should update the operational status of all the radiation sources and equipment available with you (Once in 6 months). Otherwise system will not allow you to submit the safety status report.

For submission of safety status follow the procedures as mentioned below:

Step-1: Regulatory Forms ----> Common Forms ----> Safety Status Report

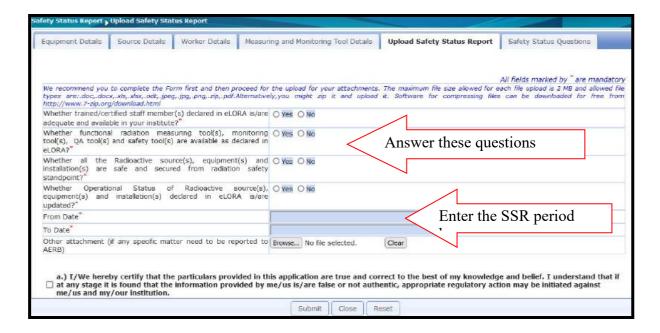


Step-2: Following page will be shown after SSR selection, click on OK



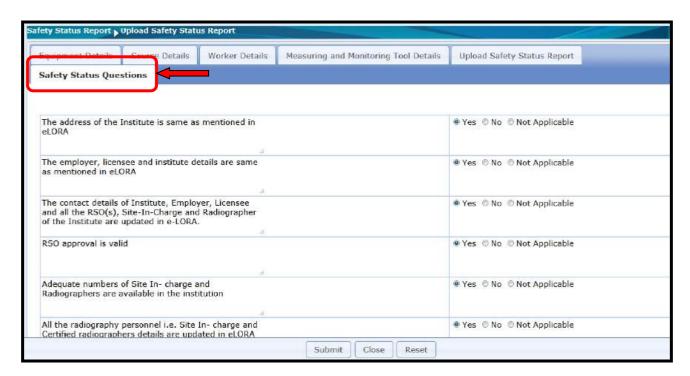
Step-3:

Note: Update the Workers details, Measuring and Monitoring Tool Details if not updated earlier in eLORA, by following the proper procedures. General Guidelines are available on eLORA webpage



Step-4:

Now select Click on "Safety Status Report", answer the questions as YES or NO or NA.



###Expectations of the requirements are given in practice specific guidelines which are available in HELP menu of employer, please read the same before submitting SSR

O. Update Operational Status of Equipment/Source

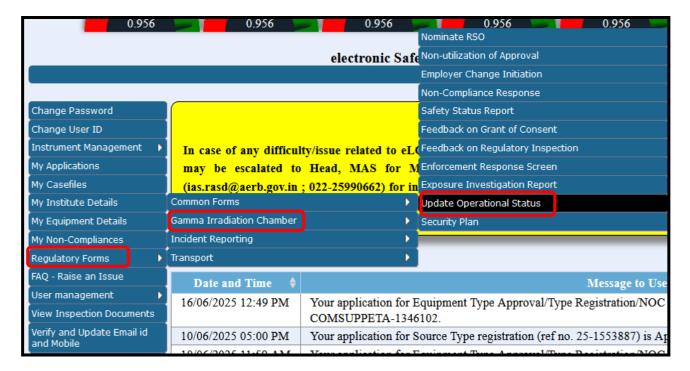
Guidelines for Update Operational Status of Equipment Housing Radiation Source/Source/Radiation Generating Equipment (X-Ray Device)

Prior to submission of safety status report, you should update the operational status of all the

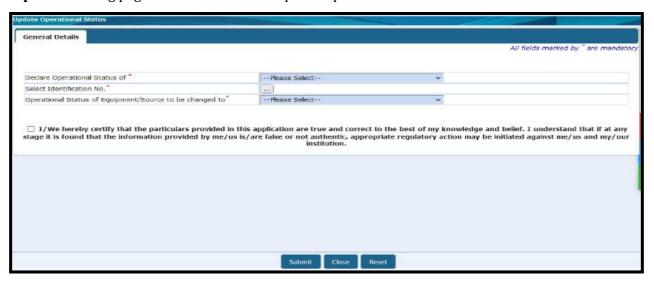
radiation sources and equipment housing sources, radiation generating equipment (ex. X-ray device) available with you. Otherwise system will not allow you to submit the safety status report.

For Updating Operational Status of RADIATION SOURCE/SOURCE/RADIATION GENERATING EQUIPMENT (X-RAY DEVICE) follow the procedures as mentioned below:

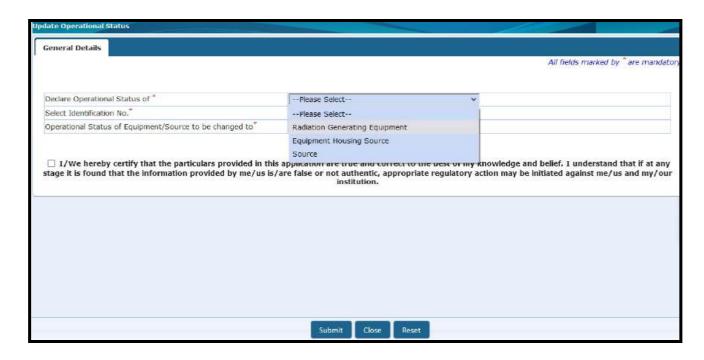
Step-1: Regulatory Forms -----> Common Forms -----> Update Operational Status



Step-2: Following page will be shown after Update Operational Status selection

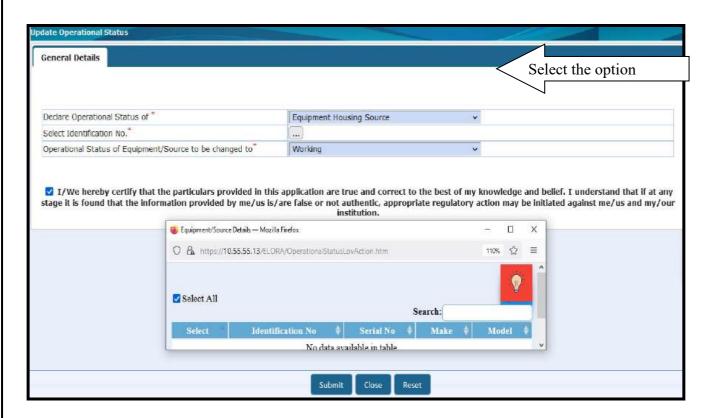


Step-3:

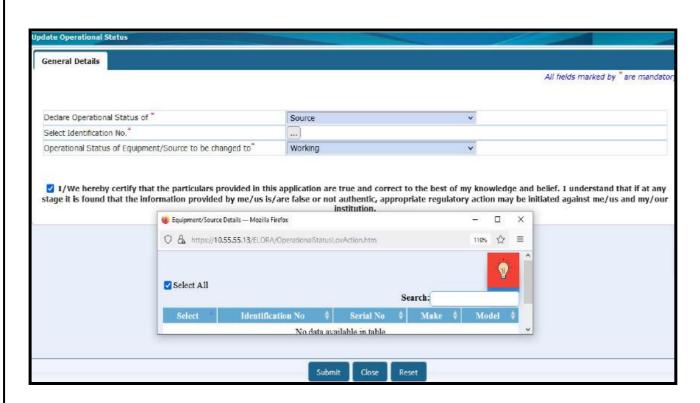


Note: When it is Equipment with Source, you have to submit the operational status for both Equipment housing Source and source separately

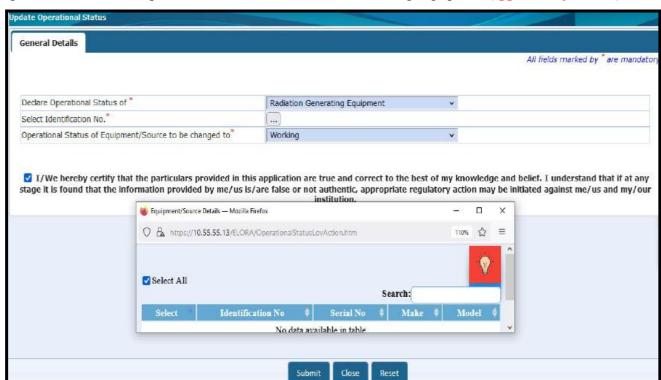
Step-4: Submission of operational status of equipment



Step-5: Submission of operational status of Source



Step-6: Submission of operational status of Radiation Generating Equipment(applicable for XIC)



P. Annexure: Frequently Asked Questions (FAQs)

i. RSO related questions:

Q. While submitting RSO application, eLORA showing error as "Invalid Transaction Key" Ans: While Generating transaction Key: for RSO approval, RSO nominee name

For Procurement and Licence for Operation, Employer name should be selected from employee list

Q. While submitting RSO application, eLORA showing error the RSO nominee not completed the RSO awareness course.

Ans: Many RSO nominees are completing the RSO awareness course through employer LOGIN which is the wrong practice, they should undergo the RSO awareness course through their RP LOGIN.

Q. Unable to apply for transport permission for all sources or while applying for transport permission able to select maximum 10 number of sources only?

Ans: eLORA allows only 10 sources for transport for registered source permission at a time. If your GIC is containing more than 10 number of pencils apply for transport permission more than one time.

Q. Update operational has been updated for GIC equipment but still system shows the error that operational status of the GIC is not updated?

Ans. When it is Equipment with Source, you have to submit the operational status for both Equipment housing Source and source separately.

$$= 0 = 0 = 0 = 0 =$$