e-LORA Guidelines

for End-users of

Electron & X-ray based Inspection Systems, Electron Capture Detector, Ion Mobility Spectrometer and Container Scanners

[Registered under Consumer Products and Scanning Facilities]

Radiation Applications Safety Division
Atomic Energy Regulatory Board
Niyamak Bhavan-B, Anushaktinagar
Mumbai-400094
Website: www.aerb.gov.in
September, 2025

Regulatory Processes for End-users in e-LORA System

Section A: Registration for Electron and X-ray based Inspection Systems

This Section mentions the steps to be followed by end-user(s) for obtaining ***Registration for Operation*** for following:

i.) x-ray baggage inspection system

ii.) x-ray food inspection system

iii.) x-ray diffraction system

iv.) x-ray fluorescence system (cabinet/hand-held)

v.) x-ray printed circuit board (PCB) analyser

vi.) portable x-ray scanner and

vii.) any other x-ray inspection system.

It also covers the steps to be followed by end-user(s) for obtaining ***Registration for Operation*** for following:

i.) electron microscope,

ii.) electron beam welding unit and

iii.) any other electron based inspection system etc.

eLORA Guidelines; Page 2-3 and 4-9

Section B: Registration for Electron Capture Detector and Ion Mobility Spectrometer

This Section mentions the steps to be followed by end-user(s) for obtaining ***Registration for Operation*** for following:

i.) Electron Capture Detector (ECD) and

ii.) Ion Mobility Spectrometer (IMS).

eLORA Guidelines; Page 2-3 and 9-11

Section C: Licence for Container Scanners

This Section mentions the steps to be followed by end-user(s) for obtaining ***Licence for Operation*** for following:

i.) Radioactive source (Co-60) based container scanner and

ii.) Accelerator based container scanner.

eLORA Guidelines; Page 2-3 and 12-29

Type Approved Equipment

Link: https://elora.aerb.gov.in/ELORA/prePopulateGraphDataTypeApproved.htm

No Licence/Processing Fee

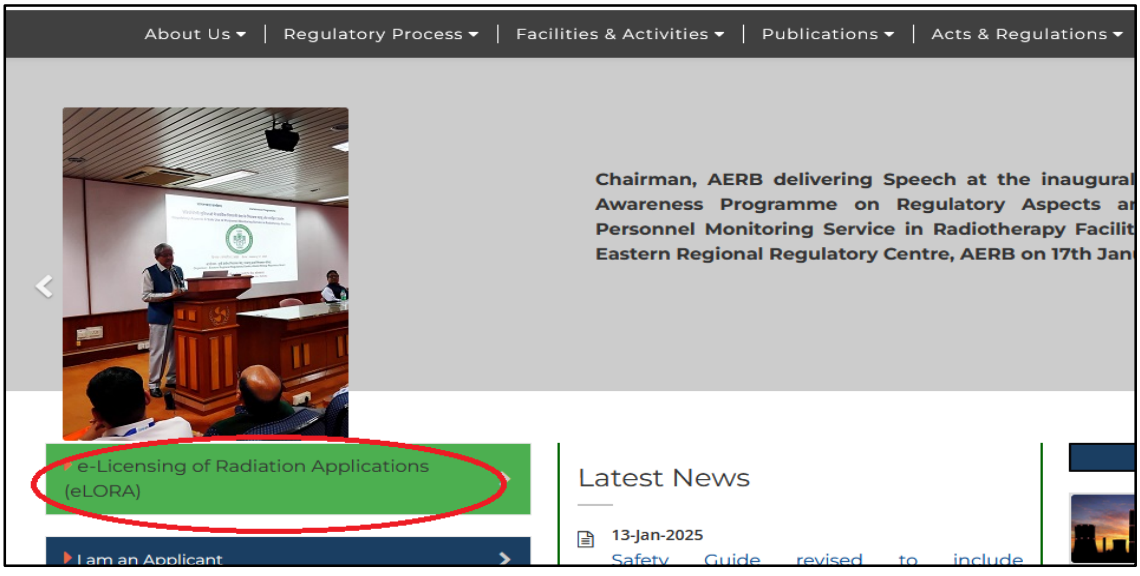
AERB does not charge any fee for issuance of Licence for Operation.

Regulatory Processes for End-users in e-LORA System

Steps	Purpose	Regulatory Form / Regulatory Processes	Page	Reference
Step 1	Registration of Institute in eLORA (one time process)	Register Institute	2-3	Click here
Step 1 is common to all the equipment mentioned in Section A, B & C				
Section A: Registration Process of Electron and X-ray based inspection systems				
Step 2	Procurement of Equipment	Procurement of Radioactive Source/Radiation Generating Equipment	5	Click here
Step 3	Equipment Receipt Intimation	Equipment Receipt Intimation	5-6	Click here
Step 4	Registration for Operation	Licence for Operation	6-7	Click here
Step 5a	Decommissioning of Radiation Equipment	Decommissioning of Radiation Equipment	8	Click here
Step 5b	Intimation of Decommissioning	Intimation of Decommissioning	9	Click here
Section B: Registration Process of Electron Capture Detector & Ion Mobility Spectrometer				
Step 2	Procurement of Equipment	Procurement of Radioactive Source/Radiation Generating Equipment	10	Click here
Step 3a	Equipment Receipt Intimation	Equipment Receipt Intimation	10	Click here
Step 3b	Source Receipt Intimation	Source Receipt Intimation	10	Click here
Step 4	Registration for Operation	Licence for Operation	11	Click here
Step 5a	Transport of Registered Source	Transport of Registered Source	11	Click here
Step 5b	Intimation of Transport	Intimation of Transport	11	Click here
Step 5c	Decommissioning of Radiation Equipment	Decommissioning of Radiation Equipment	11	Click here
Step 5d	Intimation of Decommissioning	Intimation of Decommissioning	11	Click here
Section C: Licence Process of Container Scanners				
Step 2	Layout Approval	Application for Layout Approval	13-14	Click here
Step 3	Declaration of Safety Infrastructure		14	Click here
Step 3a	Declaration of Radiation Monitoring Instrument	Add Instrument	14-15	Click here
Step 3b	Declare Trained manpower	Nominate Employee	15-17	Click here
Step 3c	RSO Approval	RSO Nomination (New/Renew)	17-20	Click here

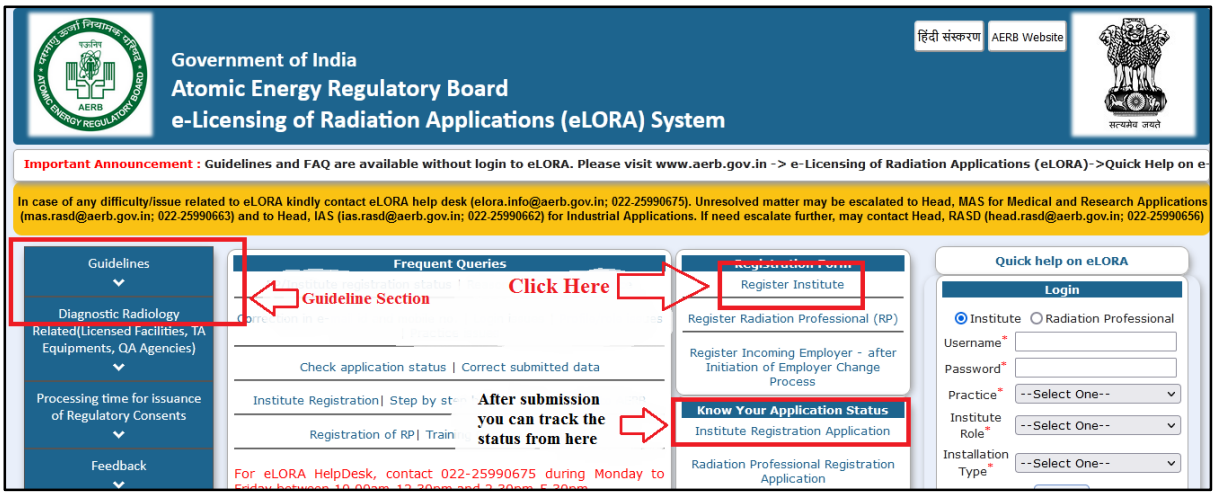
Step 1: Register Your Institute

- To facilitate online submission of applications, AERB has launched e-governance application e-LORA (electronic Licensing of Radiation Applications) System.
- All user-institutes are advised to use eLORA system for obtaining requisite Licence/Approval from AERB.
- Visit AERB website https://www.aerb.gov.in/



- Click on the button **e-LORA**. Click on "Go directly to e-LORA System" and "Click to proceed for e-LORA server". It will redirect you to below screen of **e-LORA home page.**

- Click on application form "Register Institute" to proceed for registration in e-LORA portal directly.



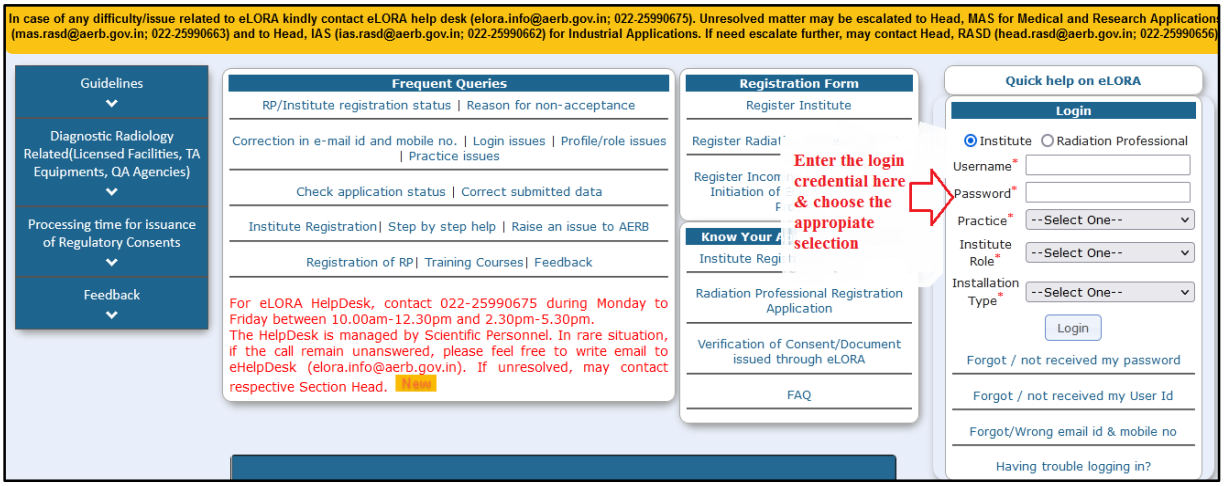
Guidelines to fill application form for Institute Registration is available on eLORA home page.
https://elora.aerb.gov.in/ELORA/PDFs/Guidelines%20for%20Institute%20Registration.pdf
It is advised to read the guidelines and keep soft copy of required attachments ready before start filling of application form.

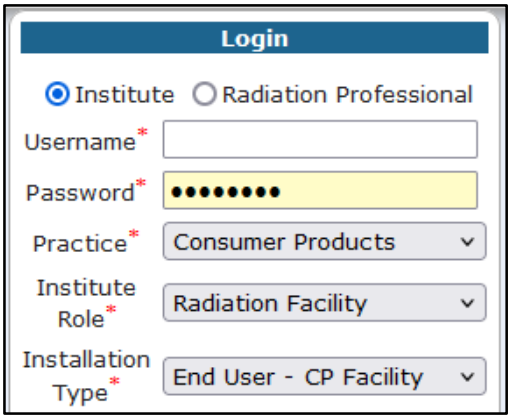
- Select Practice: **Consumer Product and Scanning Facility**
- Role of Institute:

  End User-Consumer Products and Scanning Facility for electron & x-ray based inspection systems & device containing small amount of radioactive source, and

  Radiation Facility - Vehicle Scanner for container scanner facilities.

Login into eLORA system (use Employer login credential)





Section A: Registration Process at a glance for Electron & X-ray based Inspection Systems

Step-1: Register your Institute
Log-in your eLORA account

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Step-2: Apply for Procurement of Equipment
Path: Regulatory Forms → Consumer Product and Scanning Facility →Procurement of Radioactive Source/Radiation Generating Equipment

↓

Step-3: Submit Equipment Receipt Intimation
Path: Regulatory Form → Consumer Product and Scanning Facility → Equipment Receipt Intimation

↓

Step-4: Apply for Registration for Operation
Path: Regulatory Form → Consumer Product and Scanning Facility → Licence for operation

After useful life

↓

Decommissioning of Radiation Equipment
Path: Regulatory Form → Consumer Product and Scanning Facility → Decommissioning of Radiation Equipment

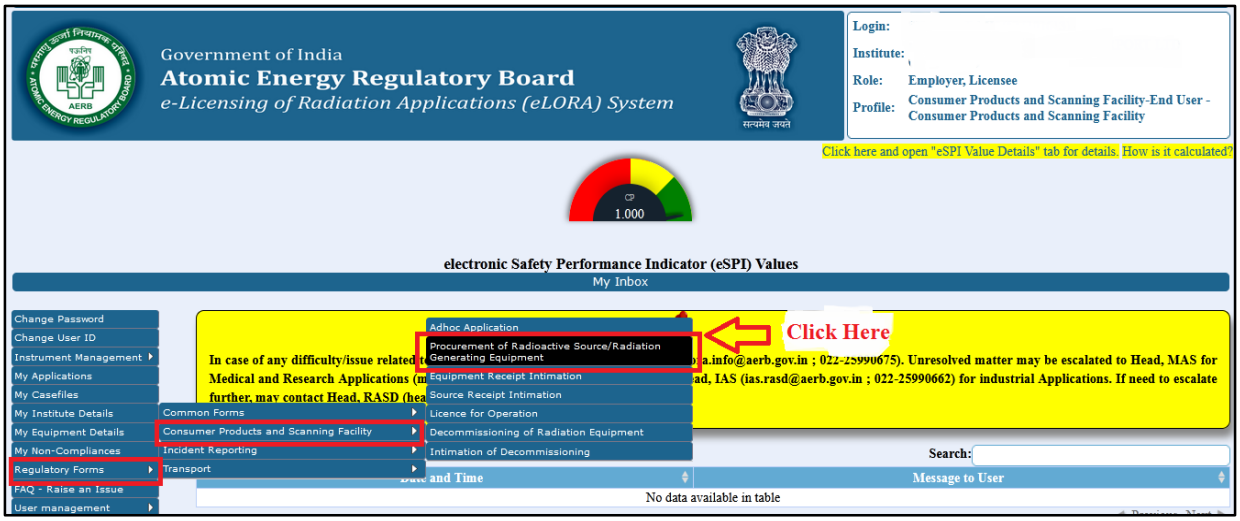
↓

Submit Intimation of Decommissioning
Path: Regulatory Forms → Consumer Product and Scanning Facility → Intimation of Decommissioning

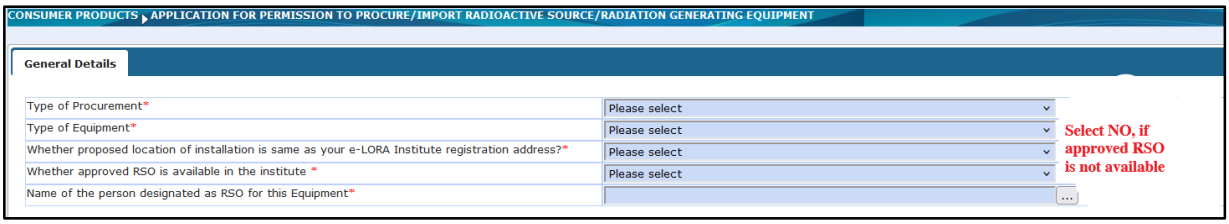
Step 2: Procurement of Equipment

Path: Regulatory Form → Consumer Product and Scanning Facility → Procurement of Radioactive source/Radiation generating equipment

Screen-1



Screen-2



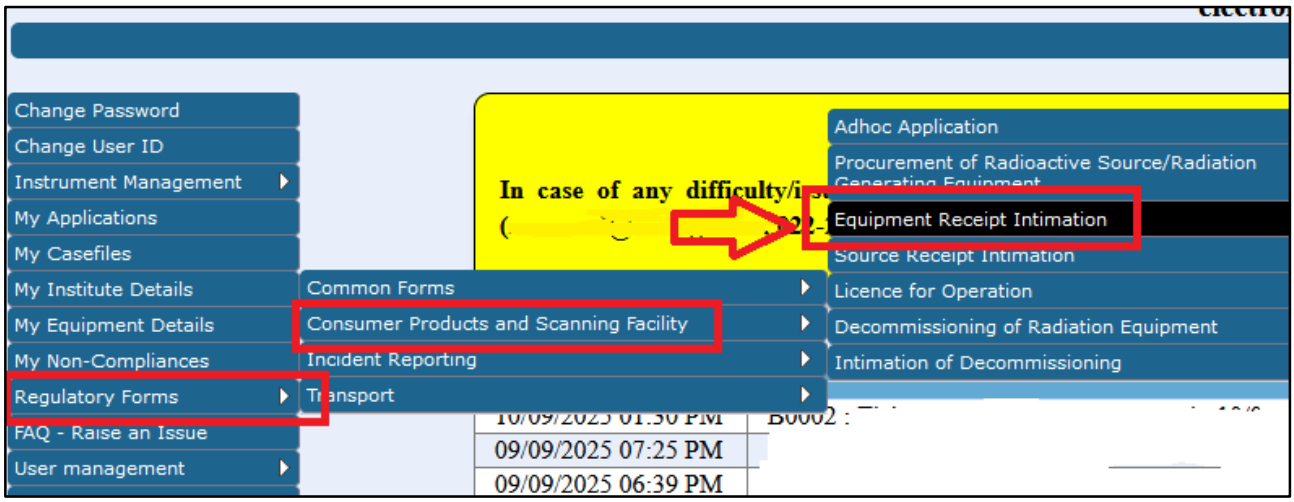
Type approved equipment list:
https://elora.aerb.gov.in/ELORA/prePopulateGraphDataTypeApproved.htm

Step 3: Equipment Receipt Intimation

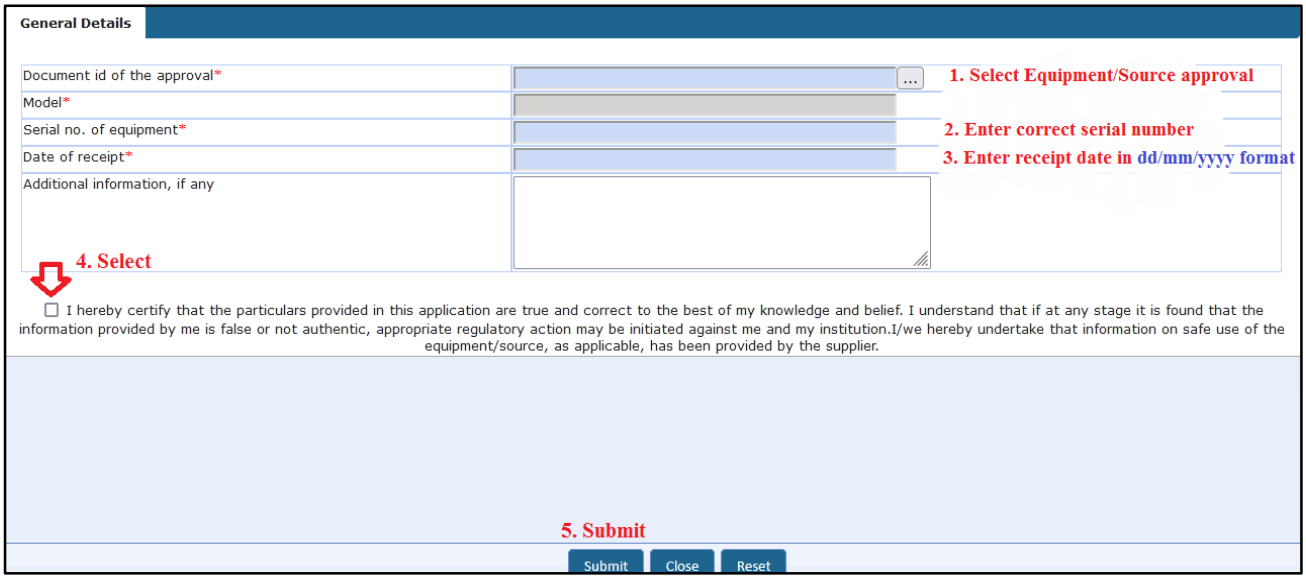
Upon receipt of the equipment, **submit receipt intimation within the validity of Procurement Permission**.

Path: Regulatory Form → Consumer Product and Scanning Facility → Equipment receipt intimation

Screen-1



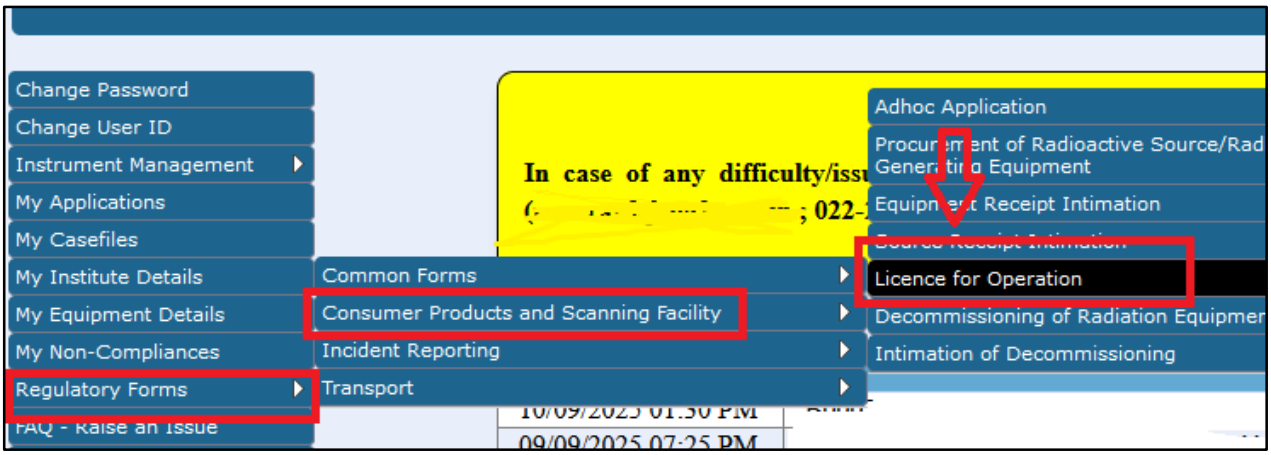
Screen-2



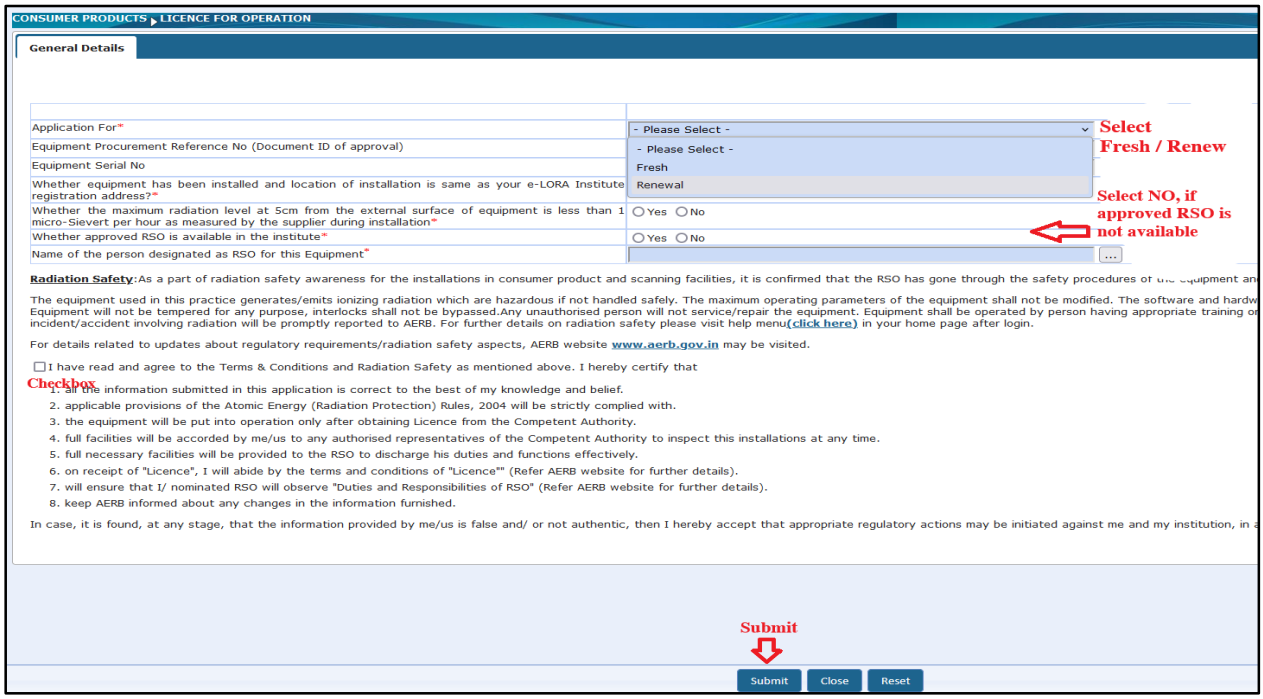
Step 4: Registration for Operation

Path: Regulatory Form → Consumer Product and Scanning Facility → Licence for operation

Screen-1



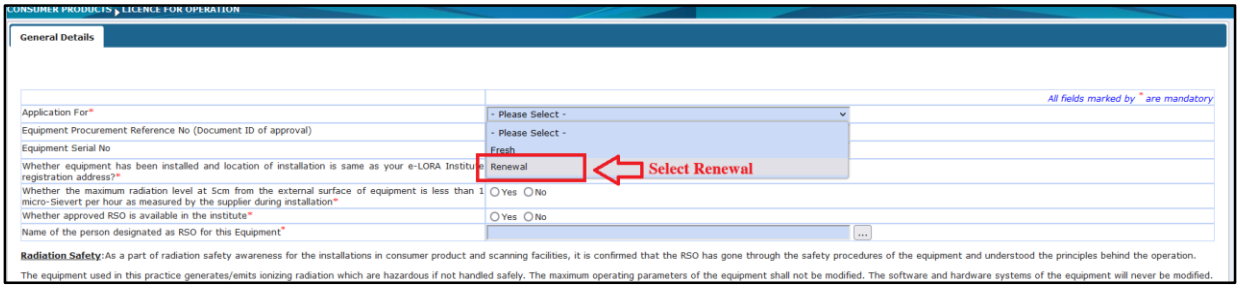
Screen-2



- For downloading Licence/Registration certificate, follow below path:
  My Application → Select Application No. → Show Details >> Approval letter attachment

Renewal of Registration for Operation

- Apply Renewal of Registration before its expiry.
- Renewal window will be lives before one month (30 days) of its expiry.
- Check Registration validity date from **My Application** section.

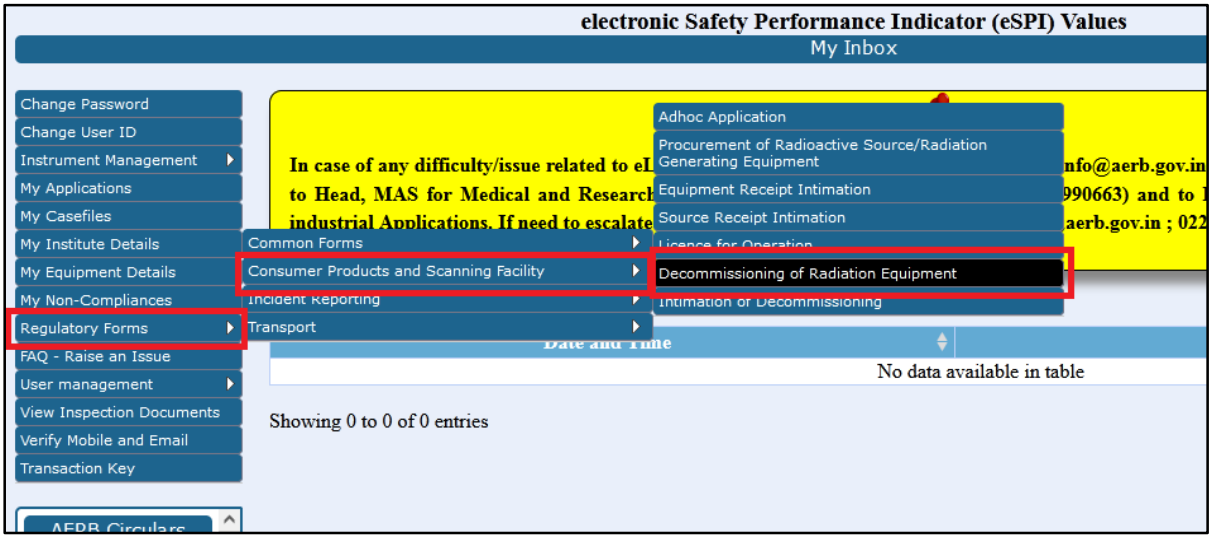


Step 5a: Decommissioning of Radiation Equipment

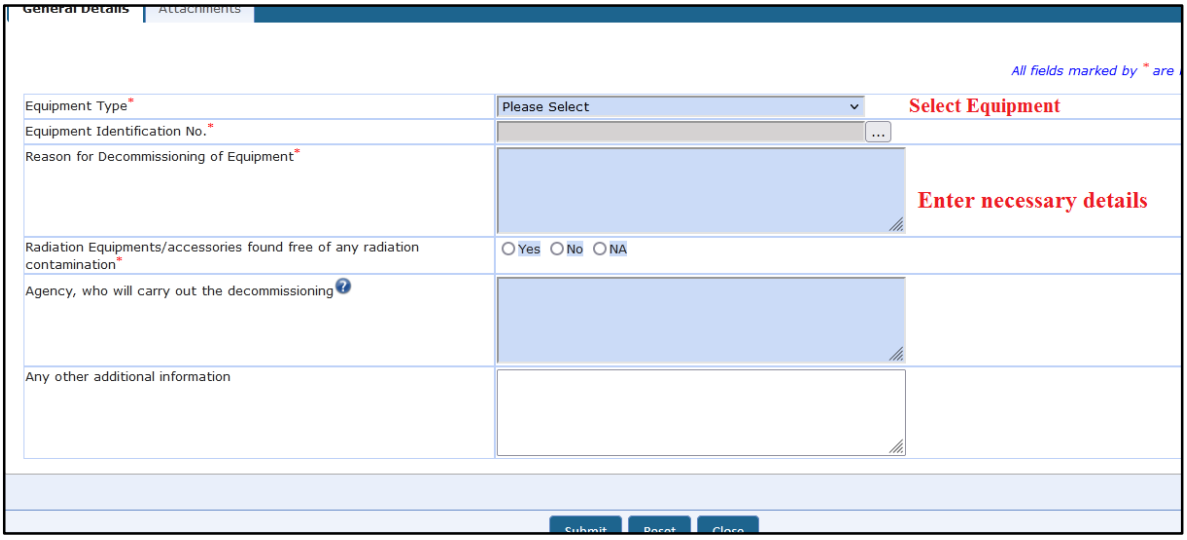
After completion of useful life, apply for decommissioning of equipment.

Path: Regulatory Form → Consumer Product and Scanning Facility → Decommissioning of Radiation equipment

Screen-1

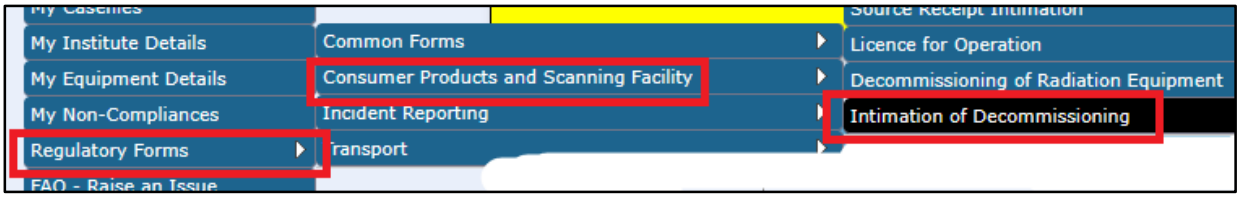


Screen-2



Step 5b: Intimation of Decommissioning

Submit *Intimation of Decommissioning* for updating '**Equipment Status**' in eLORA system. Path: Regulatory Form → Consumer Product and Scanning Facility → Intimation of Decommissioning



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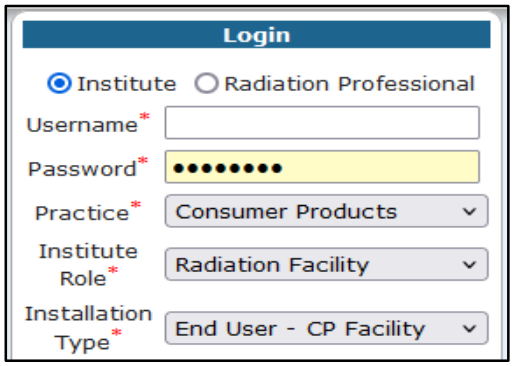
Section B: Registration Process at a glance of Electron Capture Detector and Ion Mobility Spectrometer

Login into eLORA system (use Employer login credential)



Step-1: Register your Institute
Log-in your eLORA account

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Step-2: Apply for Procurement of Equipment
Path: Regulatory Forms → Consumer Product and Scanning Facility → Procurement of Radioactive Source/Radiation Generating Equipment

↓

Step-3 a: Submit Equipment Receipt Intimation
Path: Regulatory Form →Consumer Product and Scanning Facility → Equipment Receipt Intimation

↓

Step-3 b: Submit Source Receipt Intimation
Path: Regulatory Form →Consumer Product and Scanning Facility → Source Receipt Intimation

↓

Step-4: Apply for Registration for Operation
Path: Regulatory Form → Consumer Product and Scanning Facility → Licence for operation

After useful life

Step-5 a: Transport of Registered Source

Path: Regulatory Forms → Transport → Transport of Registered Source

Step-5b: Intimation of Transport

Path: Regulatory Forms → Transport → Intimation of Transport

Step-5c: Decommissioning of Radiation Equipment

Path: Regulatory Form → Consumer Product and Scanning Facility → Decommissioning of Radiation Equipment

Step-5 d: Submit Intimation of Decommissioning

Path: Regulatory Forms → Consumer Product and Scanning Facility → Intimation of Decommissioning

Step 2: Procurement of Equipment

Path: Regulatory Form → Consumer Product and Scanning Facility → Procurement of Radioactive source/Radiation generating equipment

For more details, refer page 5 of **Section A** (Click here)

Step 3a: Equipment Receipt Intimation

Upon receipt of the equipment, **submit receipt intimation within the validity of Procurement Permission**.

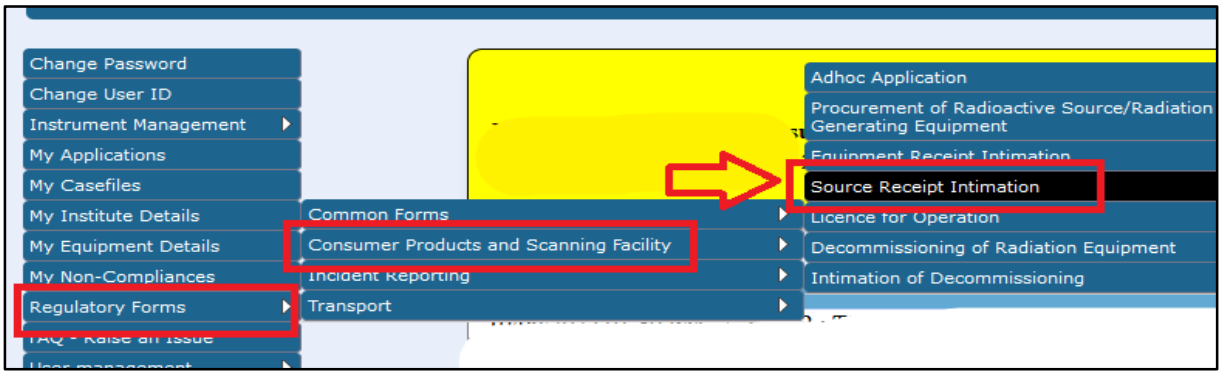
Path: Regulatory Form → Consumer Product and Scanning Facility → Equipment receipt intimation

For more details, refer page 5 and 6 of **Section A** (Click here)

Step 3b: Source Receipt Intimation

Submit this form after receipt of radioactive source along with equipment.

Path: Regulatory Form → Consumer Product and Scanning Facility → Source Receipt Intimation



Step 4: Registration for Operation

Path: Regulatory Form → Consumer Product and Scanning Facility → Licence for operation

For more details, refer page 6 and 7 of **Section A** (Click here)

Renewal of Registration for Operation

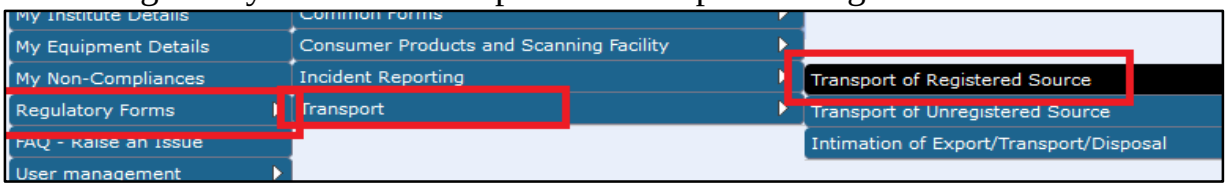
- Apply Renewal of Registration before its expiry.
- Check Registration validity date from **My Application** section (left panel menu).

For decommissioning of equipment after its useful life, first complete disposal process of radioactive source, then apply for decommissioning of equipment.

Step 5a: Transport of Registered Source

Follow below path for obtaining permission for export/transport/disposal of radioactive source.

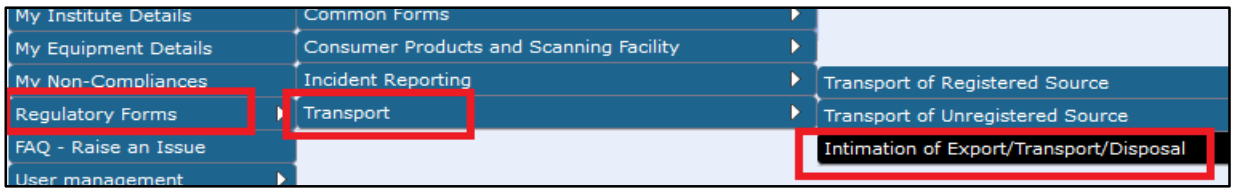
Path: Regulatory Form → Transport → Transport of Registered Source



Step 5b: Intimation of Transport

Submit below application to notify about the export/transport/disposal of radioactive source and to update the source status in eLORA system.

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



Step 5c: Decommissioning of Radiation Equipment

After completion of useful life, apply for decommissioning of equipment.

Path: Regulatory Form → Consumer Product and Scanning Facility → Decommissioning of Radiation equipment

For more details, refer page 8 of **Section A** (Click here)

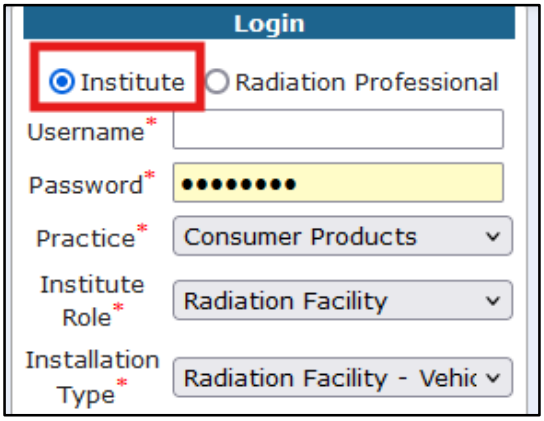
Step 5d: Intimation of Decommissioning

Submit *Intimation of Decommissioning* for updating 'Equipment Status' in eLORA system.

Path: Regulatory Form → Consumer Product and Scanning Facility → Intimation of Decommissioning. For more details, refer page 9 of **Section A** (Click here)

Section C: Licence Process of Container Scanner at a glance

Login into eLORA system (use Employer login credential)



Step-1: Register your Institute

Log-in your eLORA account

Step-2: Layout Approval

Path: Regulatory Forms → Consumer Product and Scanning Facility → Application to AERB for obtaining consent → Application for Layout Approval

Step-3: Declaration of Safety Infrastructure

(Monitoring tool & trained manpower)

Add Radiation Survey Meter: Menu>>Instrument Management>>Add Instrument

RSO Approval: Regulatory Forms → Common Forms → Nominate RSO

Step-4: Apply for Procurement of Equipment

Path: Regulatory Forms → Consumer Product and Scanning Facility → Application to AERB for obtaining consent →Application for Equipment Procurement Equipment

Step-5: Submit Equipment Receipt Intimation

Path: Regulatory Form → Consumer Product and Scanning Facility → Equipment Receipt Intimation

Step-6: Permission for Trial Run

Path: Regulatory Forms → Consumer Product and Scanning Facility → Application to AERB for obtaining consent →Permission for Trial Run operation

Step-7: Apply for Licence for Operation

Path: Regulatory Form → Consumer Product and Scanning Facility → Permission to Operate

After useful life

Step-8 a: Decommissioning of Radiation Equipment

Path: Regulatory Form →Consumer Product and Scanning Facility →Decommissioning of Radiation Equipment

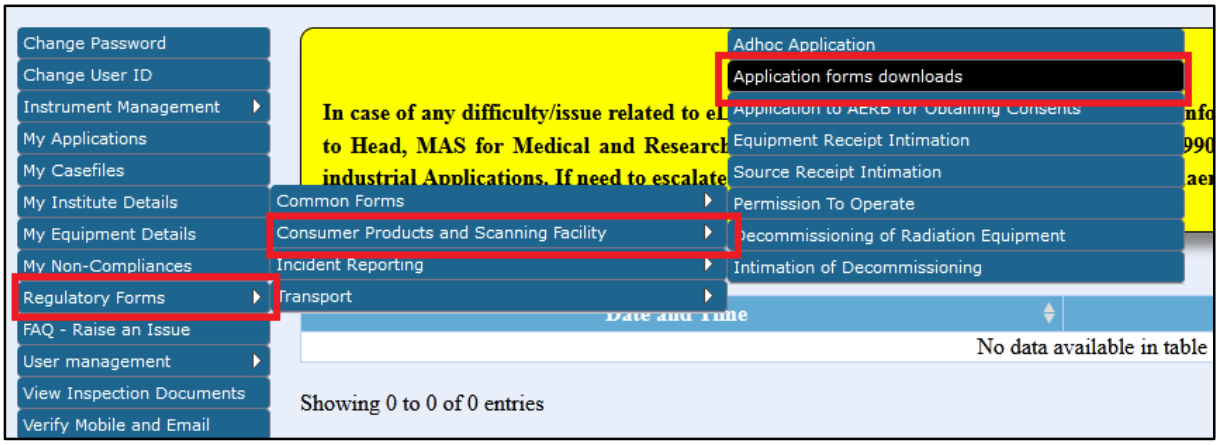
Step-8 b: Submit Intimation of Decommissioning

Path: Regulatory Forms → Consumer Product and Scanning Facility → Intimation of Decommissioning

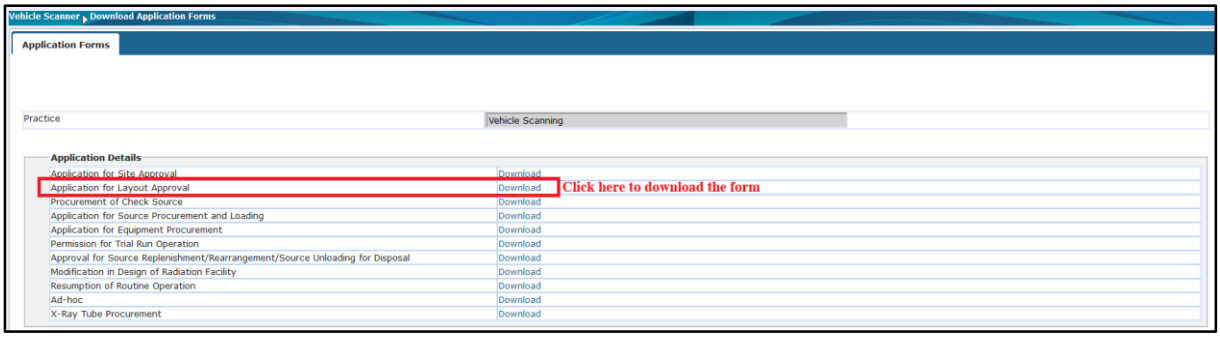
Step-2: Layout Approval

Path for downloading manual application: Regulatory Forms → Consumer Products and Scanning Facility → Application Forms Download

Screen-1

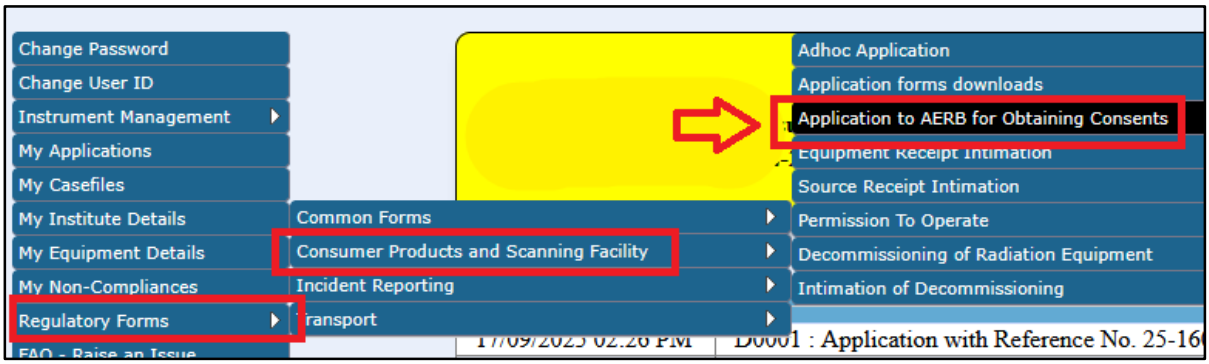


Screen-2

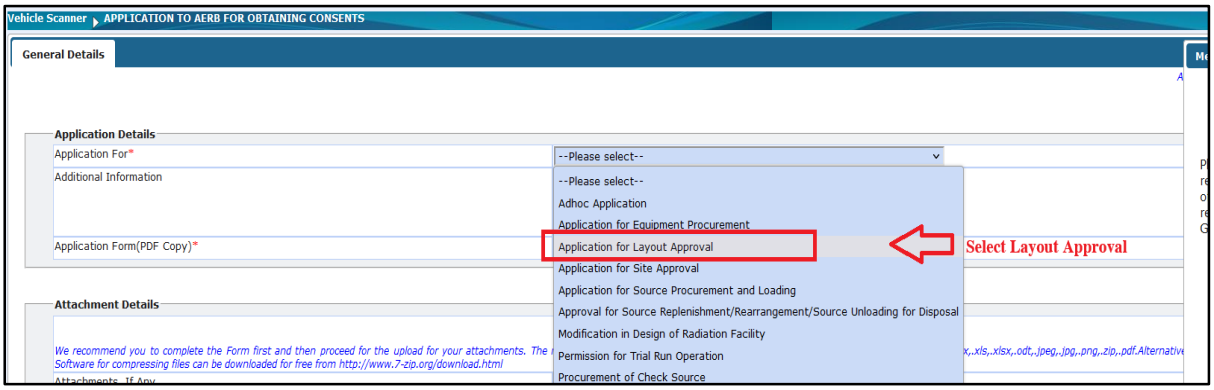


Steps for <u>submitting duly filled application</u> in eLORA system:

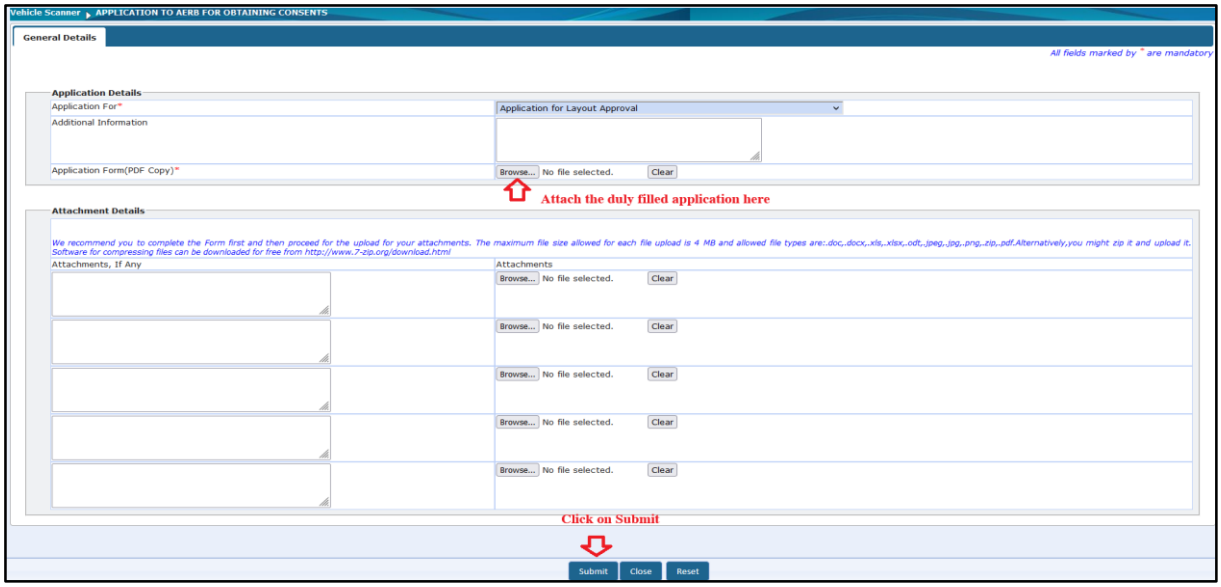
Screen-1



Screen-2



Screen-3



Step 3: Declaration of Safety Infrastructure

Step 3a: Declaration of Radiation Monitoring Instrument

- Add details of calibrated Radiation Survey Meter in eLORA system.

  Link of laboratories providing calibration services

  https://www.aerb.gov.in/images/PDF/RSD12.pdf

  The range of radiation survey meter (RSM) used in a container scanner facility

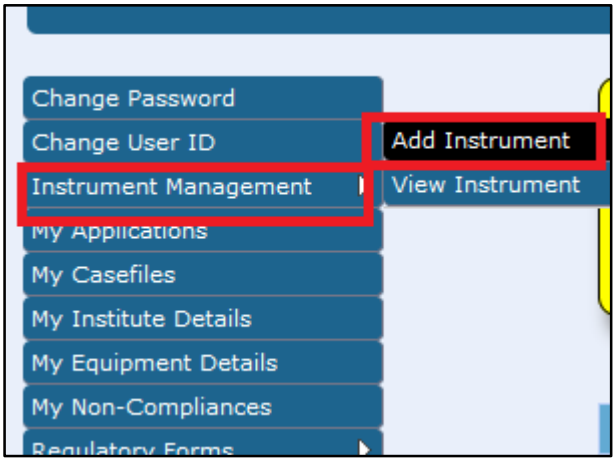
should be from 0.1µSv/h to 50 mSv/h.

- To declare instruments in eLORA, follow below path:

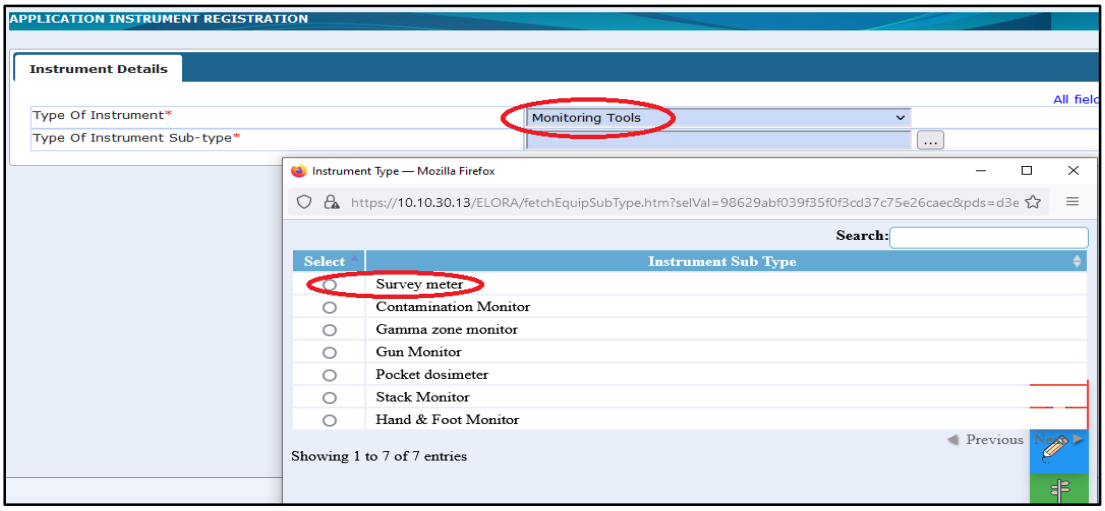
  Menu: Instrument Management → Add Instrument

- Select Monitoring tools from the field Type of Instrument.
- From the pop-up list, select Survey Meter.
- After filling all relevant information in the subsequent screen, submit for addition.

Screen-1



Screen-2



Step 3b: Declare Trained Manpower

- Employer of container scanner facility, should have at least one person trained in *RSO Certification for Scanning Facilities* to be nominated as **R**adiological **S**afety **O**fficer (RSO). This person should be registered in eLORA system as *Radiation Professional*.
- **Qualification of RSO**

Diploma in Engineering or Basic degree in Science or equivalent from a recognized University/Institution, and
RSO Certification for Scanning Facilities

Training Course:

Training course entitled “RSO Certification for Scanning Facilities" is conducted by Radiological Physics and Advisory Division (RP&AD), Bhabha Atomic Research Centre (BARC), Mumbai.
C/o Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, CT & CRS Building, Anushaktinagar, Mumbai - 400094

For further information related to courses, please contact RP&AD, BARC: Phone (Off): 022-69298653, 022-25598627/25598628

- Click here to submit Radiation Professional (RP) application in eLORA
- For adding such employee details in eLORA system, follow below path after logging into institute profile:

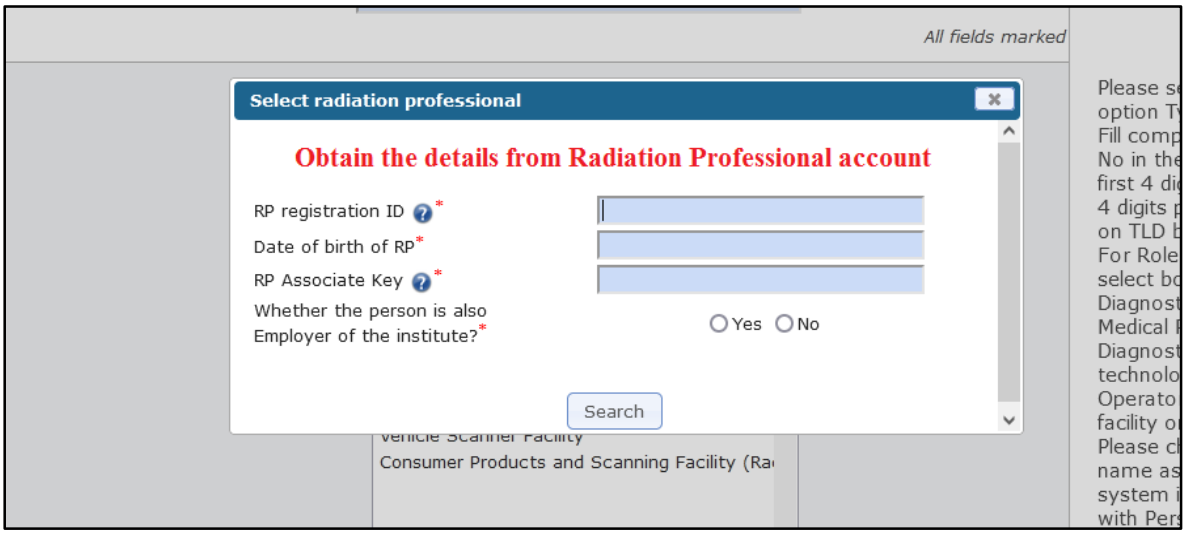
  Menu: User Management → Add Employee (Select *Radiation Professional* from drop down in Type of Employee)
- Fill complete PMS No. in the field PMS No in the format XXXXCXXXX that is first 4 digits institute number and last 4 digits personnel number as written on TLD badge.

  Fill the requisite details and press Submit.
- For availing personnel monitoring services, click below link:

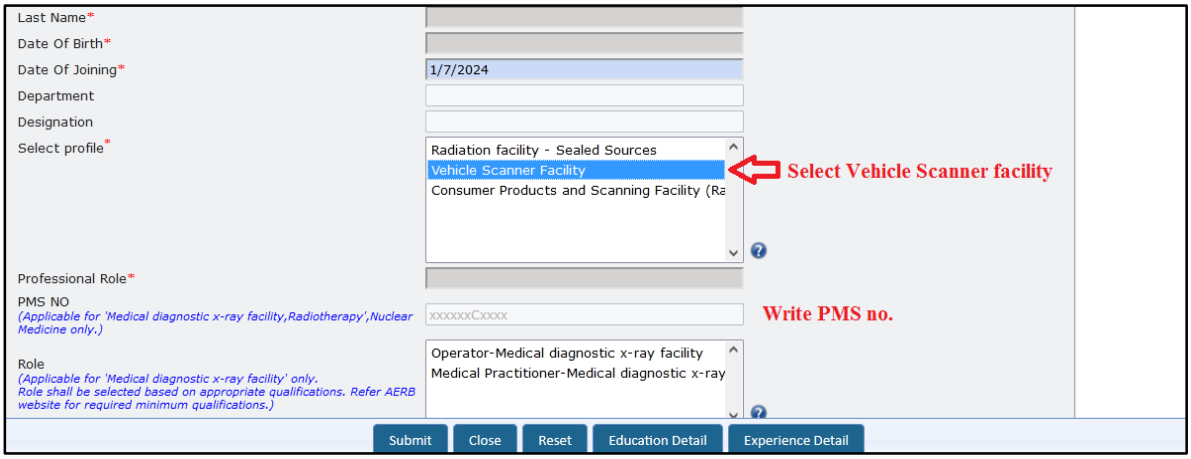
  https://www.aerb.gov.in/images/PDF/tldpage.pdf

Screen-1

Screen-2



Screen-3

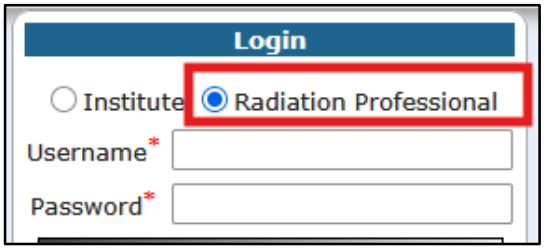


Step 3c: RSO Approval

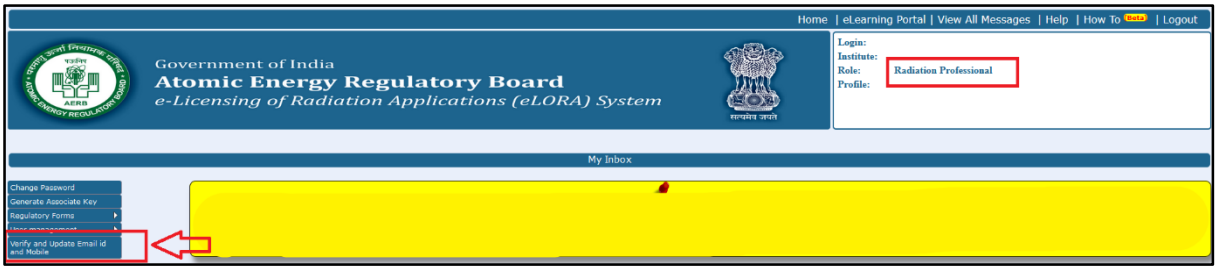
Step 3C.1: (*from Radiation Professional account*)

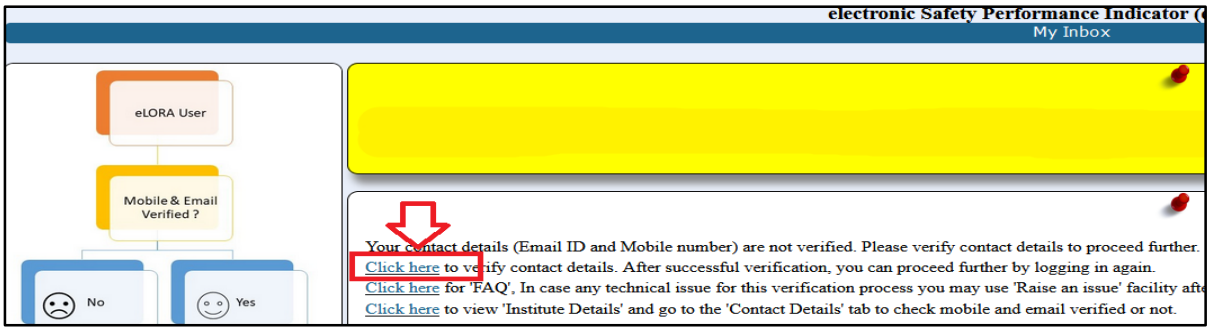
- Log-in from Radiation Professional (RP) account.
- Verify **both** personal email and mobile number, but one at a time.
- Pass RSO awareness course from menu: **eLearning portal** for Consumer Products practice as mentioned below:

Screen-1



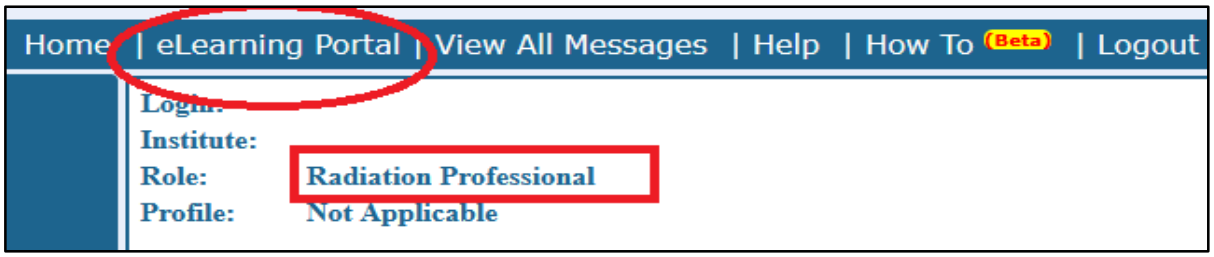
Screen-2





(After first time login)

Screen-3



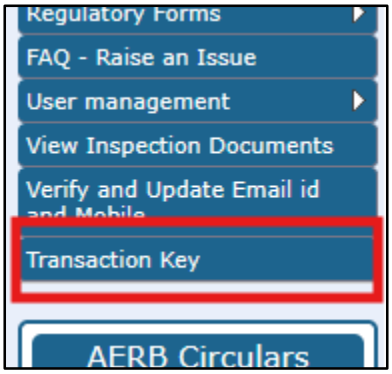
Step 3C.2: (*from employer eLORA account*)

i.) Generate Transaction Key : Menu → Transaction Key

ii.) Select Role: Radiation Professional under 'Employee Details'(right side)

iii.) Generate OTP, the OTP generation message will appear on the screen.

Screen-1

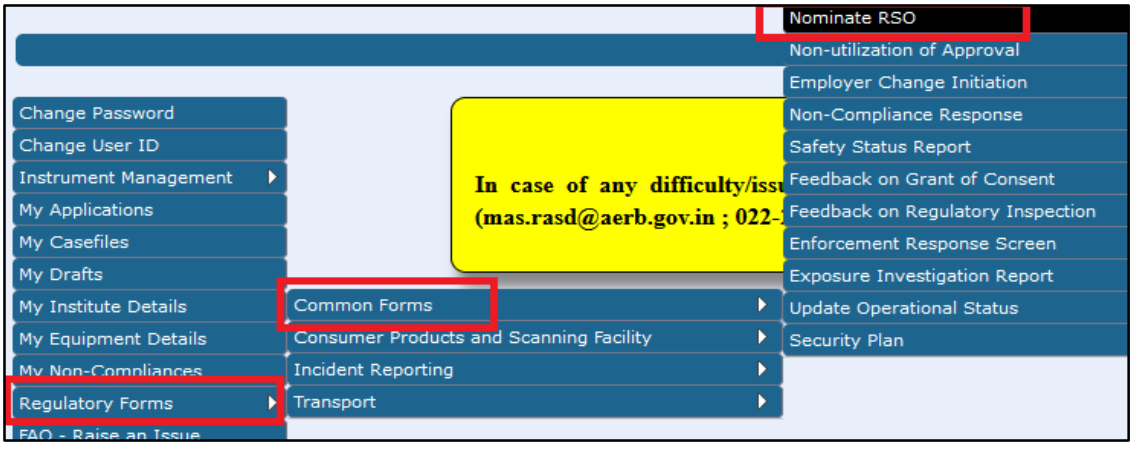


Screen-2

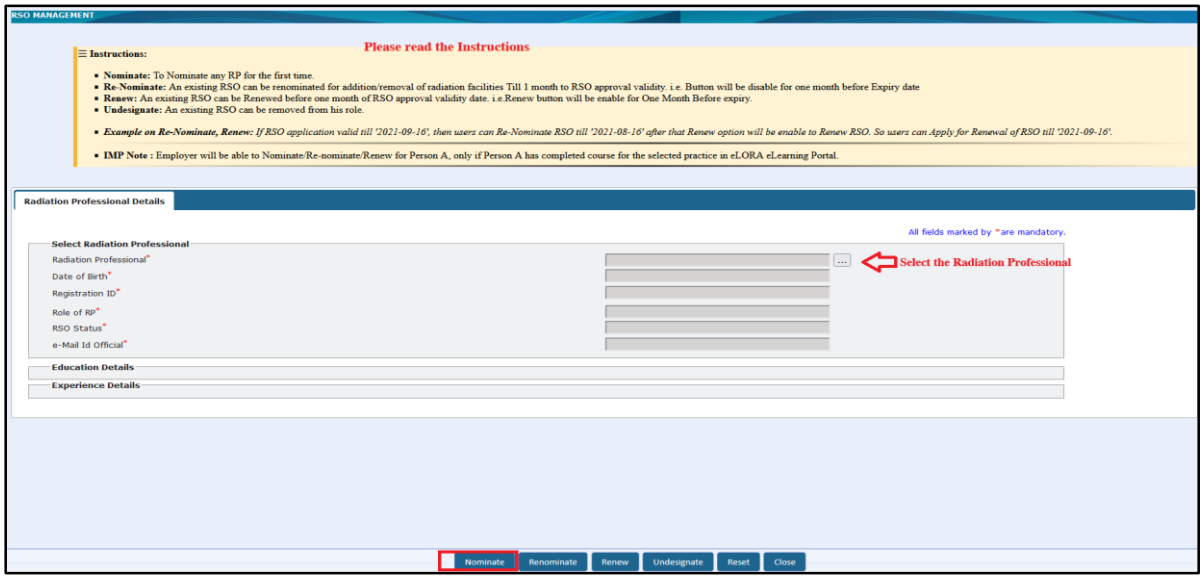
iv.) Nominate RSO from below path:

Path: Regulatory Forms → Common Form → Nominate RSO (*Select name and nominate)*

Screen-1



Screen-2



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

Following provisions are available in Employer account:

i.) **Nominate**: To nominate any RP for the first time and after expiry of previous approval.

ii.) **Re-Nominate**: An existing RSO can be re-nominated for addition/removal of radiation facilities till one month to RSO approval validity (*Button will be disable for one month before Expiry date*).

iii.) **Renew**: An existing RSO can be renewed before one month of RSO approval validity date (*Renew button will be enable for one month before expiry*).

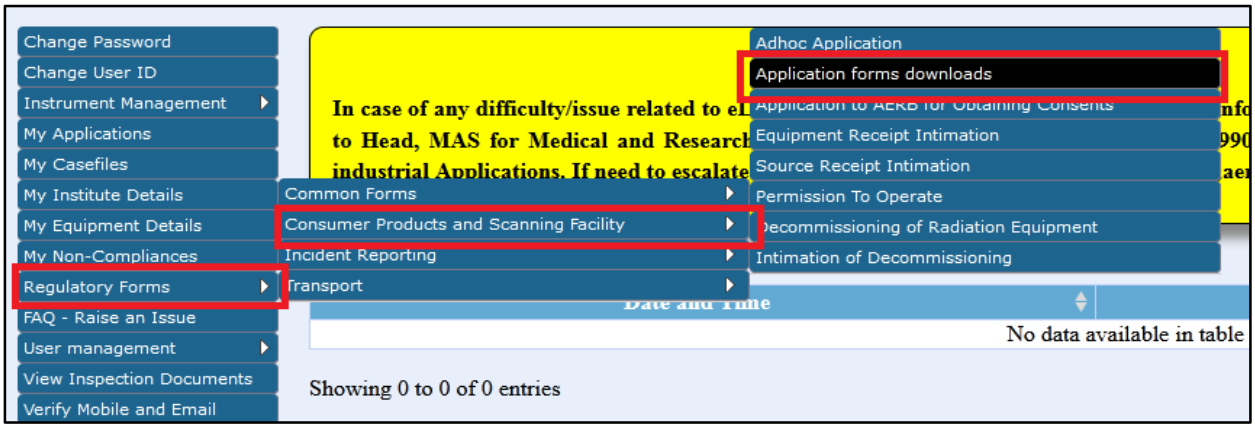
iv.) **Un-designate**: An existing RSO can be removed from his role.
Example: If RSO approval is valid till '2021-09-16', then, employer can Re-Nominate him till '2021-08-16'.
After that Renew option will be enable, then, employer can Renew him/her till '2021-09-16'.

Employer can nominate/re-nominate/renew person, only if he/she has completed eLearning course for selected practice from eLORA eLearning Portal.

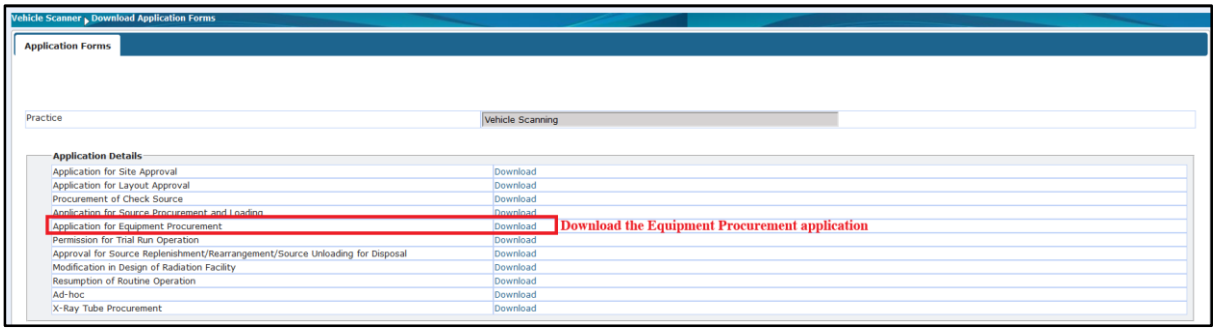
Step 4: Procurement of Equipment

Path for downloading manual application: Regulatory Forms → Consumer Products and Scanning Facility → Application Forms Download

Screen-1



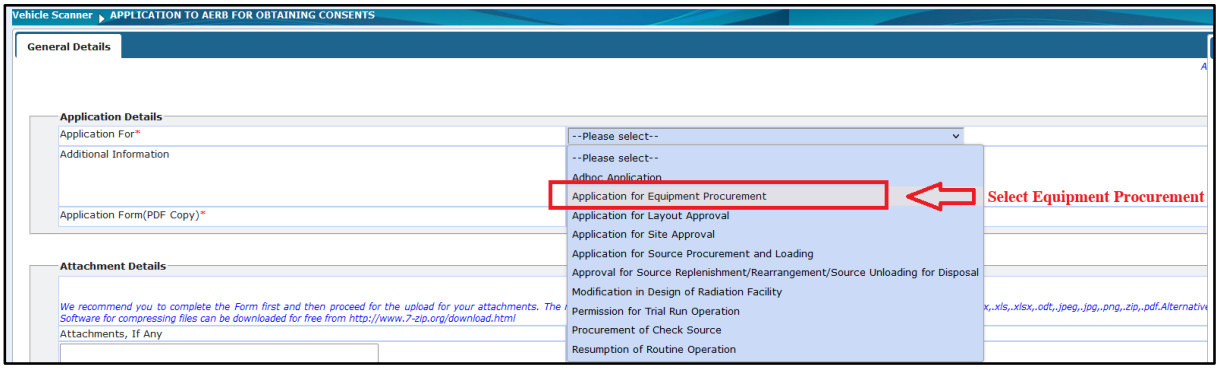
Screen-2



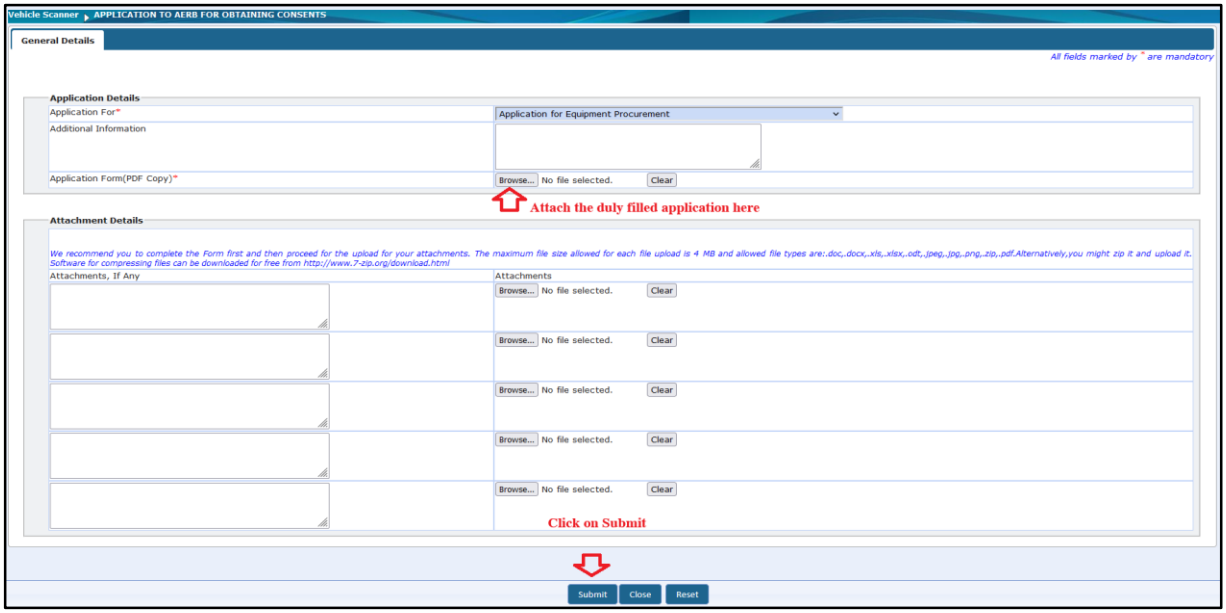
Steps for submitting duly-filled application in eLORA System:

Path: Regulatory Forms → Consumer Products and Scanning Facility → Application to AERB for obtaining Consents

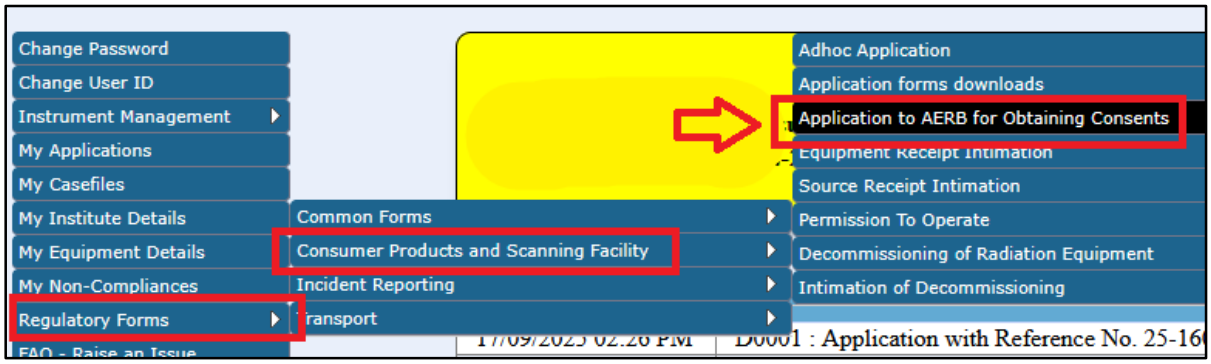
Screen-1



Screen-2



Screen-3

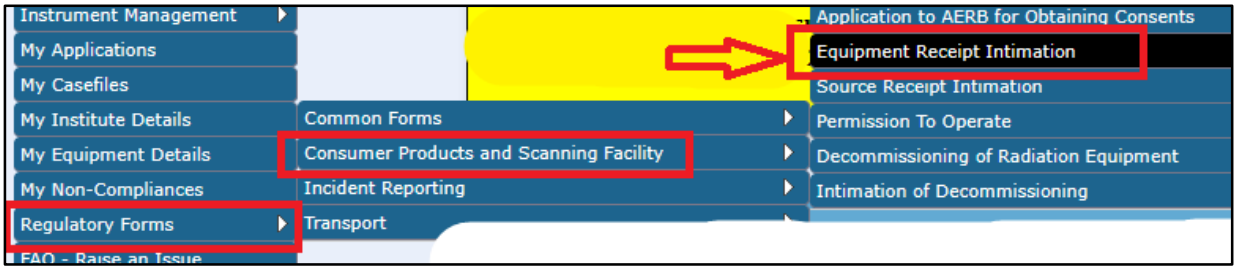


Type approved equipment list:
https://elora.aerb.gov.in/ELORA/prePopulateGraphDataTypeApproved.htm

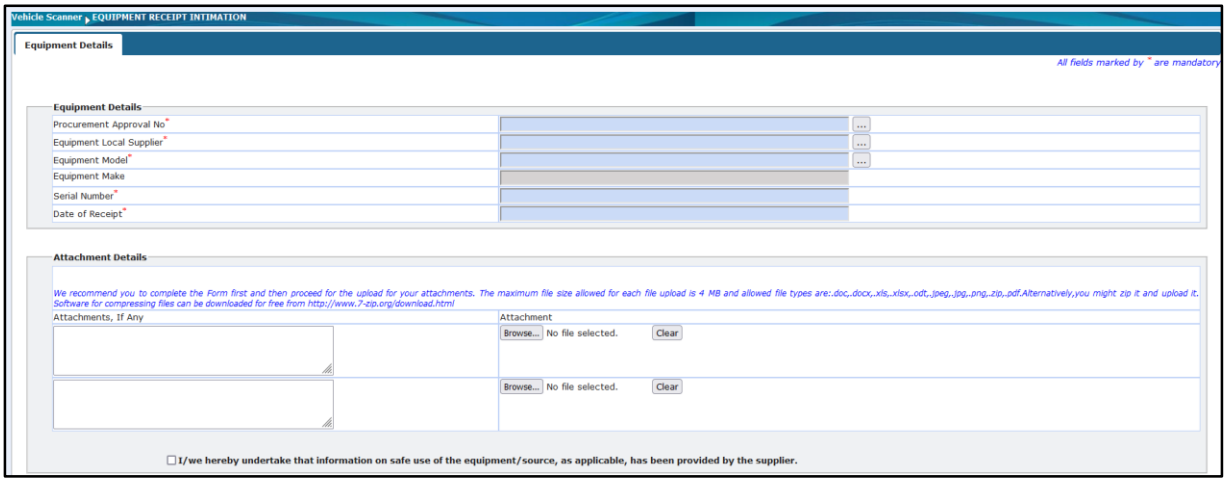
Step 5: Equipment Receipt Intimation

Path for updating 'Equipment Receipt Intimation': Regulatory Forms → Consumer Products & Scanning Facility → Equipment Receipt Intimation

Screen-1



Screen-2

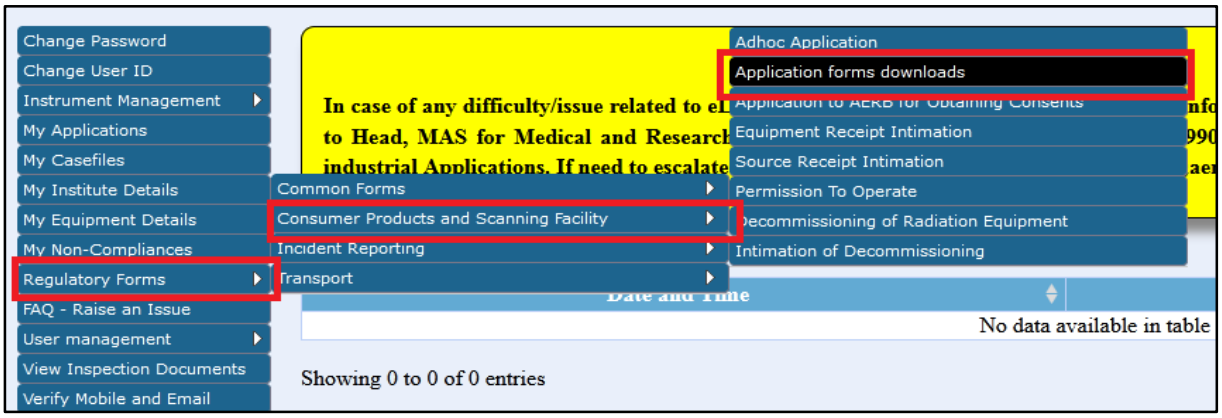


Application for Source Procurement

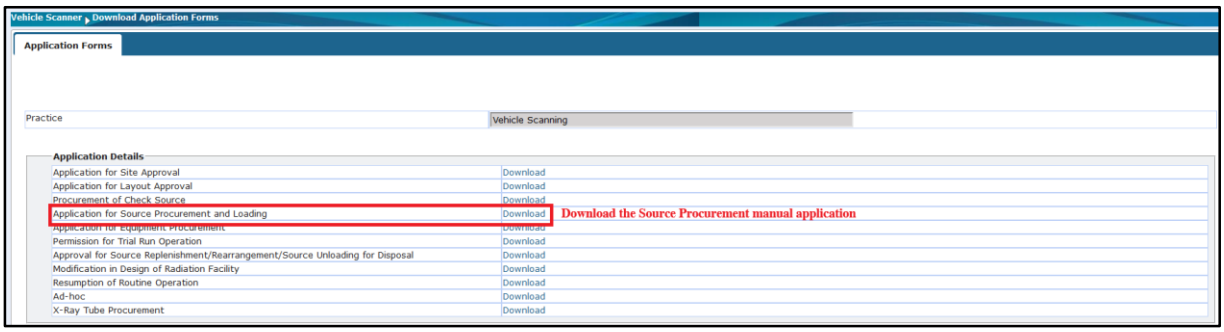
This application is applicable for radioactive source based container scanner.

Path for downloading manual application: Regulatory Forms → Consumer Products and Scanning Facility → Application Forms Download

Screen-1



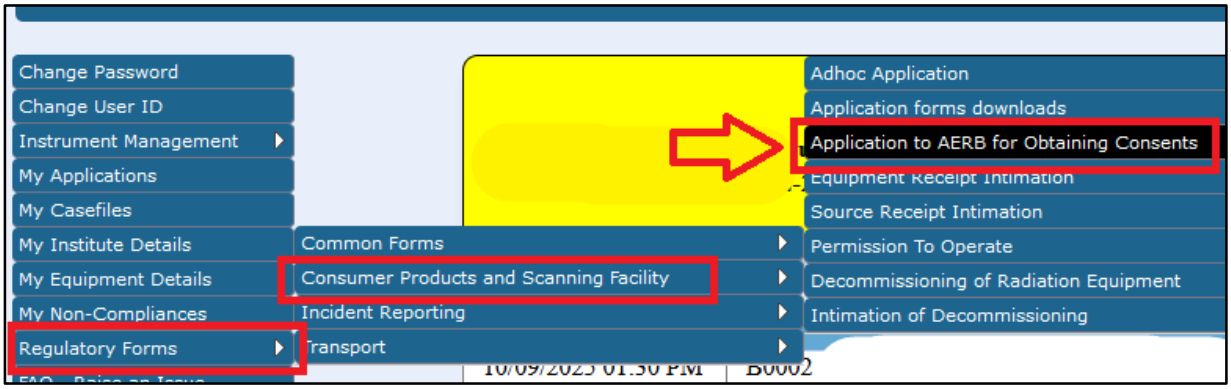
Screen-2



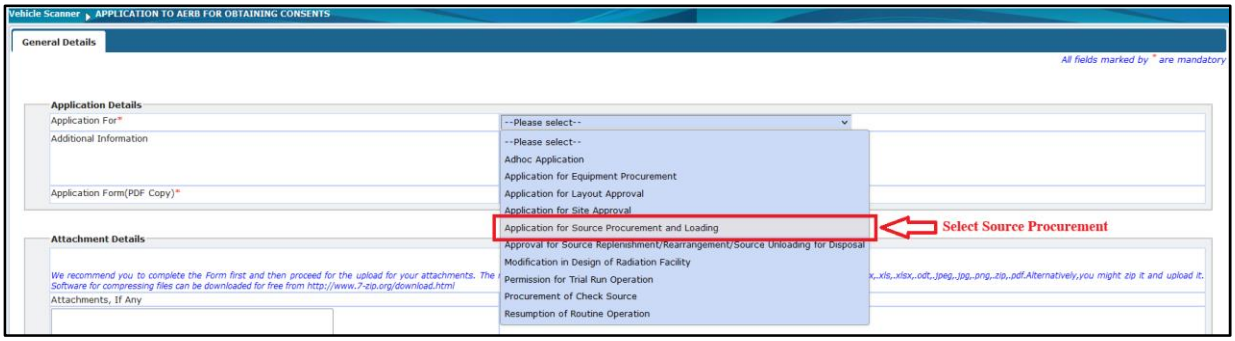
<u>Steps for submitting duly filled application</u> in eLORA System:

Path: Regulatory Forms → Consumer Products and Scanning Facility → Application to AERB for obtaining Consents

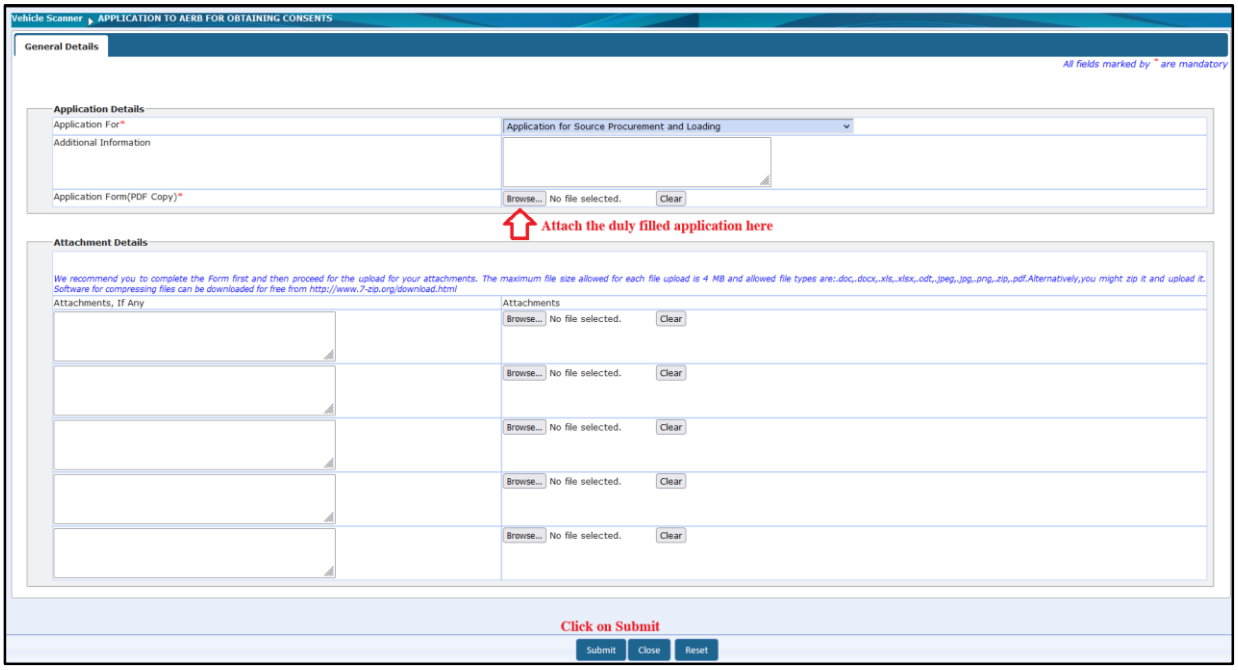
Screen-1



Screen-2



Screen-3

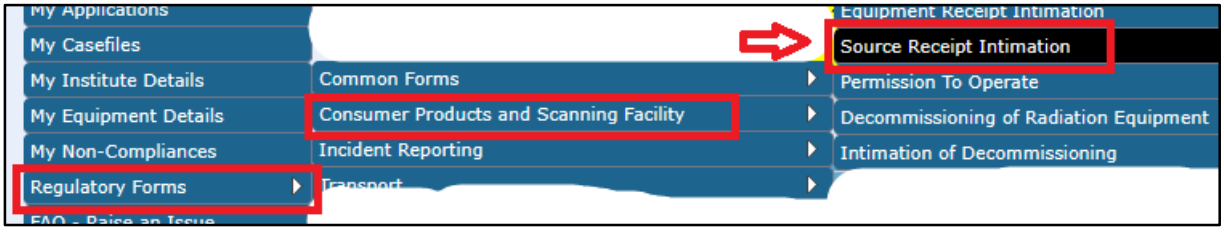


Source Receipt Intimation

This application is applicable for radioactive source based container scanner.

Submit this form after receipt of radioactive source along with equipment.

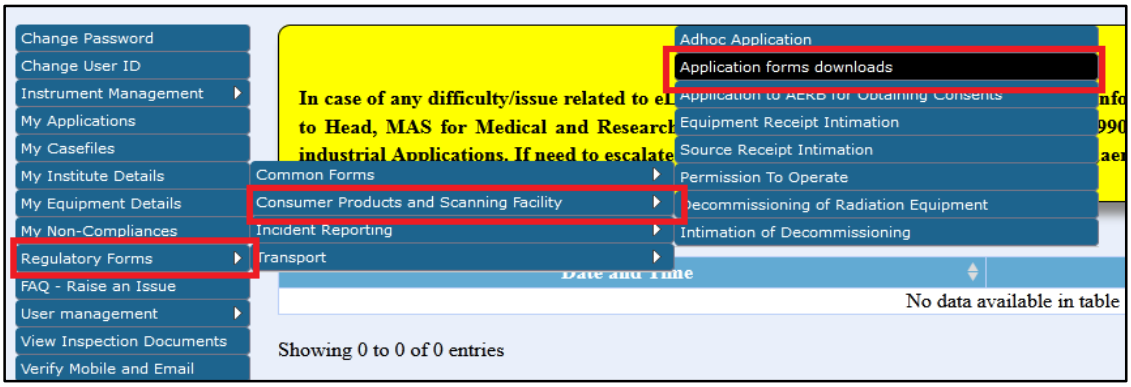
Path: Regulatory Form → Consumer Product and Scanning Facility → Source Receipt Intimation



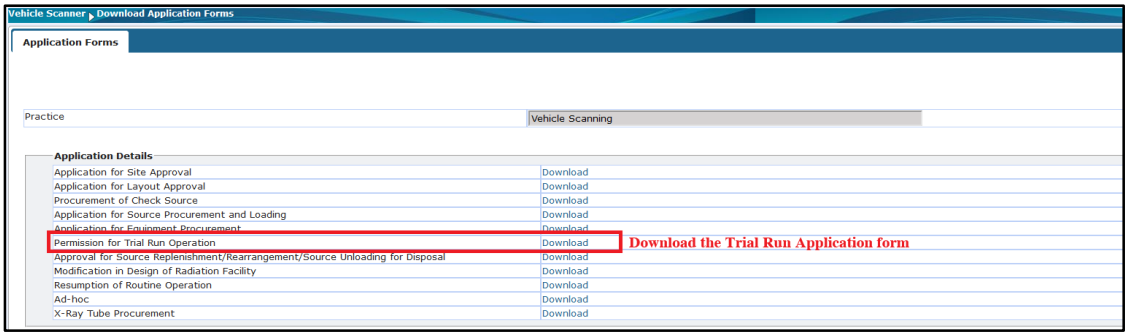
Step 6: Permission for Trial Run

Path for downloading manual application: Regulatory Forms → Consumer Products and Scanning Facility → Application Forms Download

Screen-1



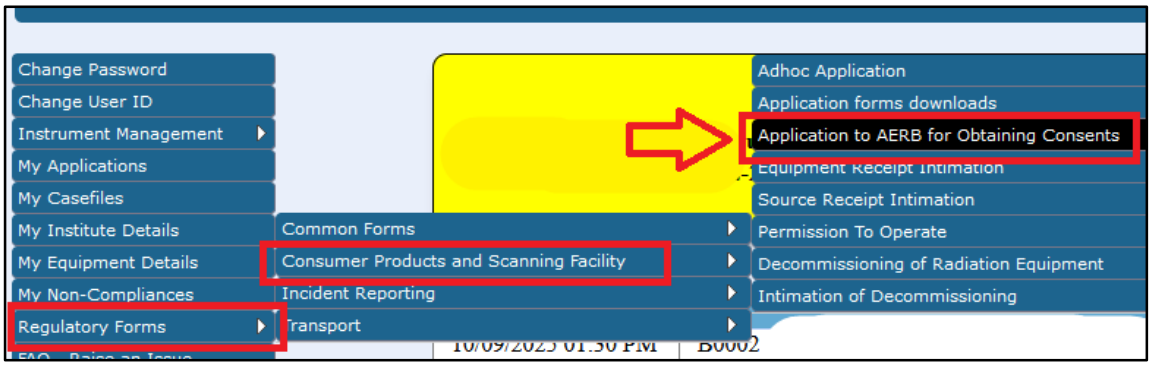
Screen-2



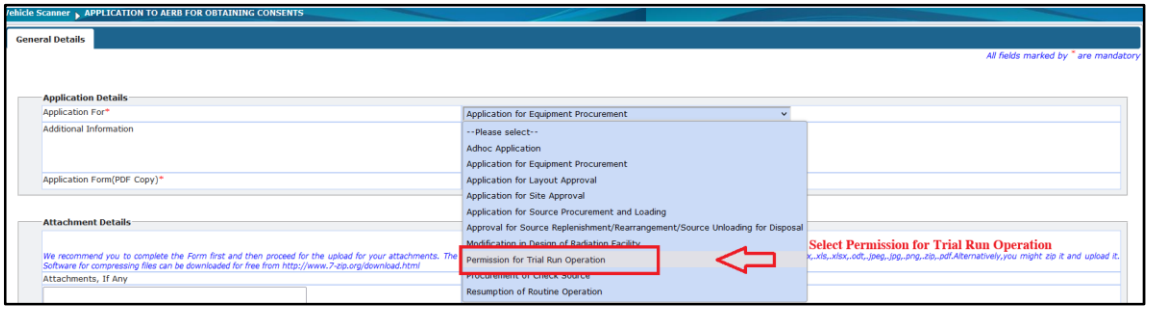
Steps for submitting duly filled application in eLORA System:

Path: Regulatory Forms → Consumer Products and Scanning Facility → Application to AERB for obtaining Consents

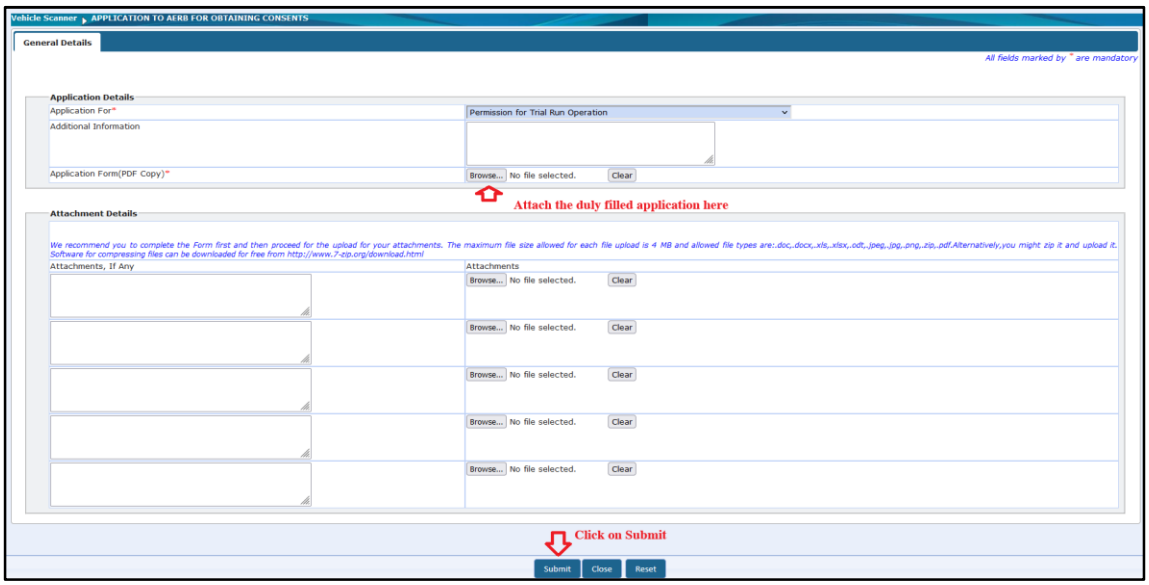
Screen-1



Screen-2

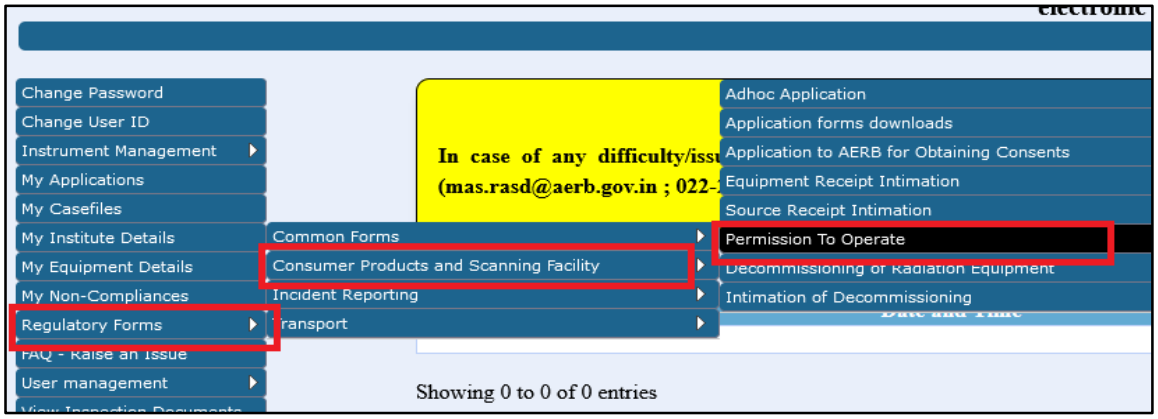


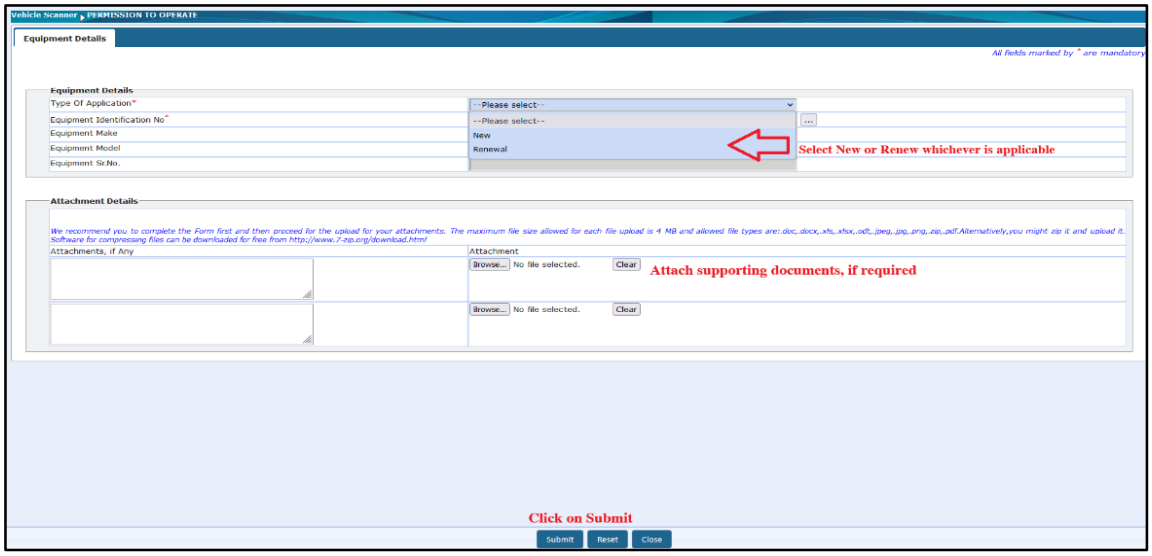
Screen-3



Step 7: Licence for Operation

Path: Regulatory Forms → Consumer Products and Scanning facility → Permission to Operate



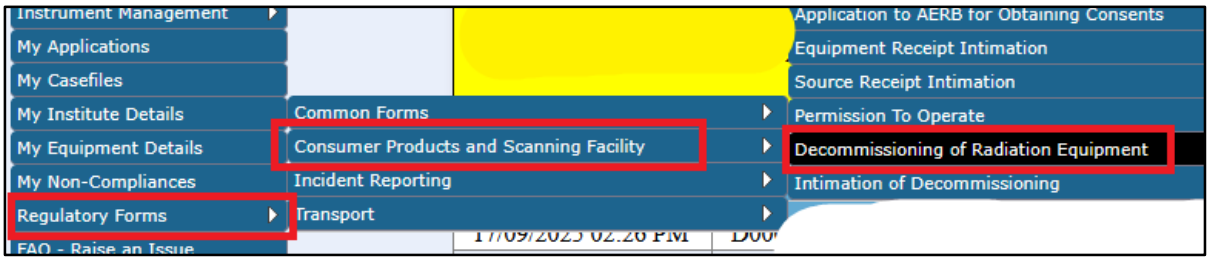


Renewal of Registration for Operation

- Apply Renewal of Registration before its expiry.
- Check Registration validity date from menu: **My Application** section.

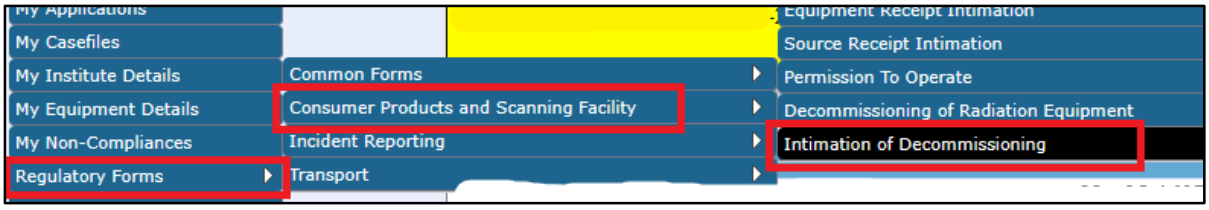
Step 8a: Decommissioning of Radiation Equipment

Path: Regulatory Forms → Consumer Products & Scanning Facility → Decommissioning of Radiation Equipment



Step 8b: Intimation of Decommissioning

Path: Regulatory Form → Consumer Product and Scanning Facility → Intimation of Decommissioning



For radioactive based source based container Scanner,

Follow Transport of Radioactive Source followed by Intimation of Transport prior to initiating Step 8a & Step 8b.

Step for Transport of Registered Source

Submit this application for obtaining permission for export/transport/disposal of radioactive source.

Path: Regulatory Form → Transport → Transport of Registered Source

For unregistered source, Path: Menu: Regulatory form →Transport →Transport of Unregistered Source.

Step for Intimation of Transport

Submit below form to notify about the export/transport/disposal of radioactive source and to update the source status in eLORA system.

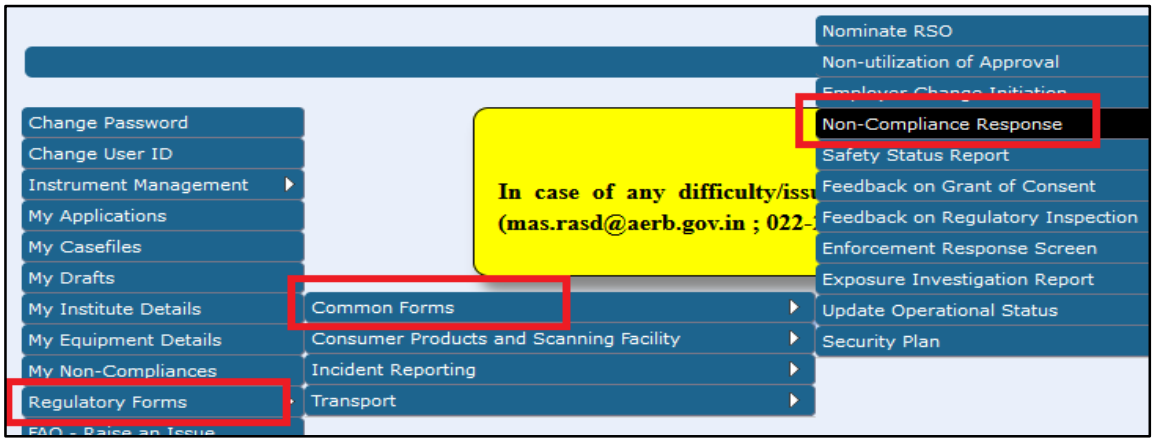
Follow below path to access the form:

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

Section D: Other Processes

NC response screen

- For submitting response to non-compliances (NCs) raised through regulatory inspection, follow below path:
  Regulatory Forms → Common Forms → Non-Compliance Response.
- Please attach documentary evidences against the compliance status.



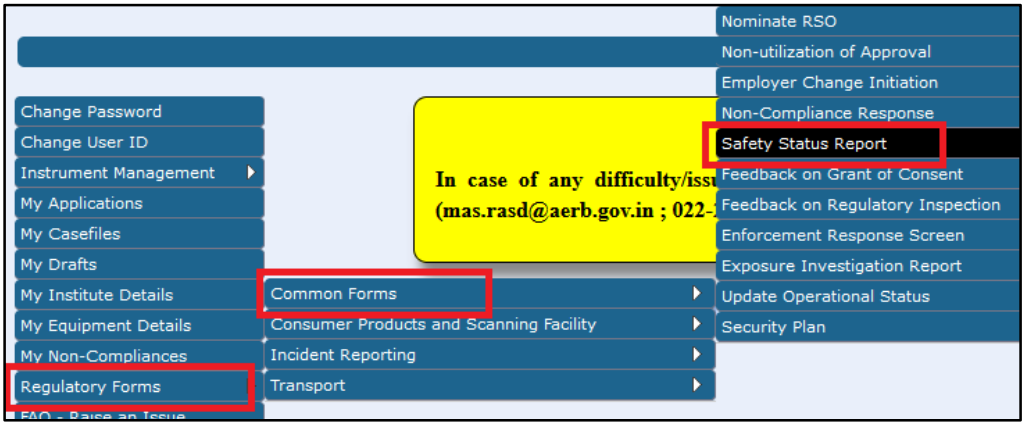
Safety Status Report

Safety Status Report must be submitted in the eLORA system using the following path once a year.

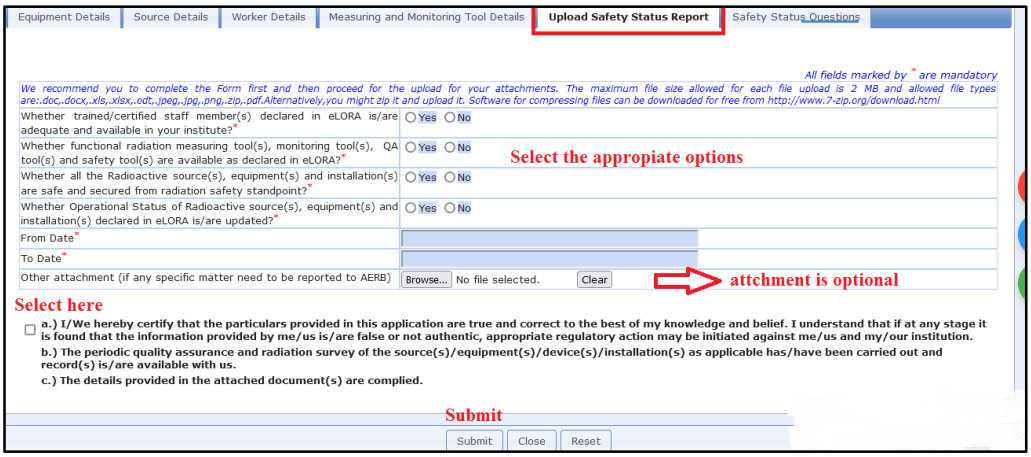
Path: *Regulatory Form → Common Forms → Safety Status report*

*Note: Before submission of Safety Status report, submit '**Operational Status**' of available equipment and source individually.*

Screen-1

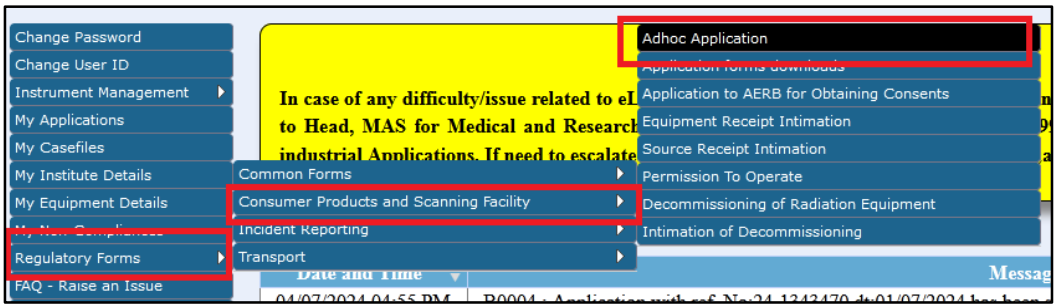


Screen-2



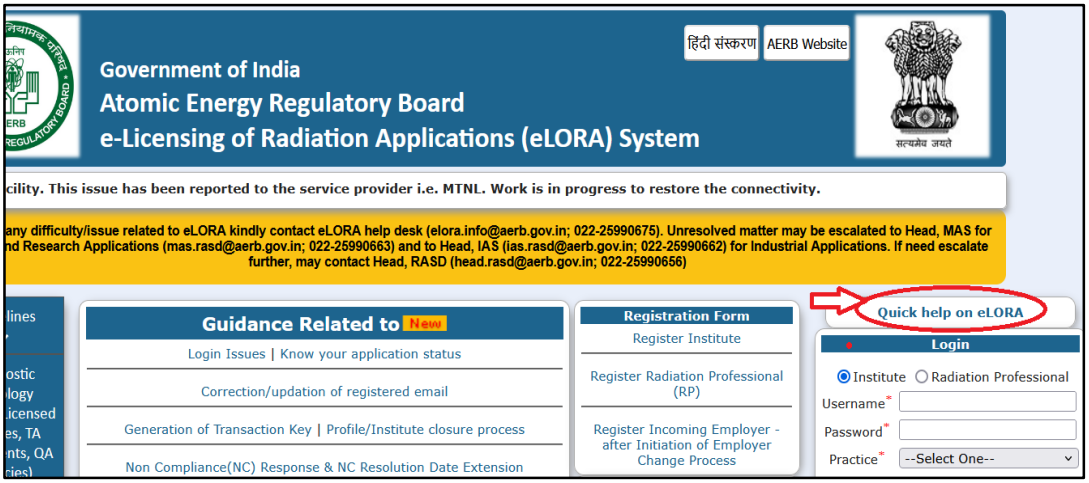
Adhoc Application

- For equipment and sources not listed in eLORA system, please apply permission through Adhoc application.
- **Path:** Regulatory Form → Consumer Products → Adhoc application



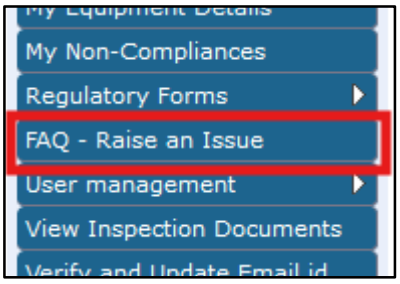
More Information

I. For more details click on "Quick help on eLORA"



II. Pl. refer Frequently asked Questions (FAQs) of Consumer Product and Scanning facility Practice available in 'Help' menu of e-LORA system.

III. In case, technical issue persist, please submit a Ticket Application through '**Raise an issue**' option of e-LORA system along with relevant screen shot(s).



eLORA Help Desk
E-mail ID: elora.info@aerb.gov.in
Tel: 022-25990675
(Monday–Friday, 10:00 AM – 12:30 PM & 2:30 PM – 5:30 PM)

Important Message

NO LICENCE 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 Licence or Registration. 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: 022-25990606
Email: vigilance@aerb.gov.in

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