Purpose: To outline the annual radiation safety laboratory audit process.

General: Audits of laboratories using radiation and radioactive materials are conducted annually. The audit process provides a mechanism for more detailed inspections than are allowed for in the routine survey and inspection process. The annual audit may be combined with the monthly lab inspection to satisfy both requirements.

Materials: Audit form, pen, clipboard
AU information – lab listing, personnel listing, etc…

Frequency: Annual for all active Authorized Users.

Procedure:

1. Preparation
   a) Review previous survey and audit results.
   b) Review current isotope inventory of Authorized User.
   c) Review current room listing, isotopes, lab personnel and instrument information for the AU.

2. Inspection
   a) Verify that all radioactive materials are secured from unauthorized access or removal. (materials are secured or attended by trained personnel).
   b) Verify the storage locations for radioactive materials.
   c) Verify that appropriate signage and postings are present.
   d) Verify that use areas (labs) match those authorized.
   e) Verify that appropriate shielding is present and used.
   f) Verify that appropriate radiation detection instruments are available, operational and in calibration if any inventory is present.
   g) Verify that appropriate hoods are present and used (if volatile radioactive materials are used).
   h) Verify that waste, equipment, and contaminated items are properly labeled.
   i) Verify that the waste stream(s) are in compliance with program requirements (contents, labeling, records)
   j) Verify that mixed waste is not produced, or if it is that appropriate procedures are in place to manage the waste stream.
   k) Verify that lab personnel are trained.
1) Verify that personnel working with radioactive materials are wearing appropriate PPE and dosimetry (when required).

m) Verify that inventory logs (yellow cards) are maintained.

n) Verify that a spill kit, or spill supplies are available.

o) Verify that staff know how to respond to a spill (radioactive).

p) Verify that staff know how to contact radiation safety.

3. **Reporting**

a) Record all information on the audit form, including corrective actions.

b) File original inspection form.
## Radiation Laboratory Audit Form

**Authorized User:**

**Lab Contact:**

**Auditor:**

### Inventory Control

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM Secured?</td>
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<tr>
<td>Yellow Cards Present?</td>
<td></td>
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<tr>
<td>Does physical inventory match records?</td>
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<tr>
<td>If waste disposals are indicated, is there waste?</td>
<td></td>
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<tr>
<td>Are yellow card entries maintained?</td>
<td></td>
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<tr>
<td>Are old stocks disposed of in a timely fashion?</td>
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</tbody>
</table>

### Posting and Labeling

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Are authorized labs labeled?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Is equipment labeled appropriately?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Are radioactive materials labeled?</td>
<td></td>
<td></td>
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<tr>
<td>Is radioactive waste labeled correctly?</td>
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</tbody>
</table>

### Safety Equipment

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Is an appropriate survey meter available?</td>
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<tr>
<td>Is the meter operational and in calibration?</td>
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<tr>
<td>Is an LSC or Gamma Counter available for wipe tests?</td>
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<tr>
<td>Is appropriate shielding present?</td>
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<tr>
<td>Is an appropriate fume hood present and used?</td>
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<tr>
<td>Are workers wearing appropriate PPE when using RAM?</td>
<td></td>
<td></td>
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<tr>
<td>Are radiation badges used if required?</td>
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<tr>
<td>Is a spill kit available?</td>
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</table>

### Waste Management

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Are waste disposal records maintained?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Is waste properly contained?</td>
<td></td>
<td></td>
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<tr>
<td>Is mixed waste generated?</td>
<td></td>
<td></td>
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<tr>
<td>Is waste transferred to Radiation Safety in a timely manner?</td>
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</tbody>
</table>

### Radioactive Materials Authorization

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Is Authorization Active?</td>
<td></td>
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<tr>
<td>Are possession limits adequate?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Is lab listing accurate?</td>
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### Training

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<thead>
<tr>
<th>Question</th>
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<th>No</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Are lab personnel trained?</td>
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<tr>
<td>Do lab personnel know how to respond to a RAM spill?</td>
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<tr>
<td>Do lab personnel know how to contact Radiation Safety?</td>
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