License Conditions for VETERINARY FILM X-Ray Equipment

1. The operator must keep a distance of at least two meters from the x-ray tube during radiography.

2. a) Radiography must be done with calibrated equipment using an acceptable technique.
   b) The irradiation times and kilovoltage must be accurate.
   c) Exposure duration shall be controlled by a preset timing mechanism that requires positive action by the operator to continue exposure.

3. Leakage radiation must be less than 100mR in one hour at one meter from the tube.

4. Manufacturers recommendations for film processing must be followed to ensure optimum film processing. If a darkroom is used it must be well designed.

5. Beam limiting device must collimate x-rays well.

6. The x-ray tube housing must be equipped with a beam-limiting device that enables adjustment of the size of the x-ray field.

7. The animal being x-rayed should be restrained by mechanical means where practicable. If an animal is required to be restrained by hand, any person providing such restraint must wear a protective apron and gloves.

8. Radiography should be performed in a manner that minimizes the dosage given to the animal, thus maximizing both the animal and operator safety.

9. The x-ray tube must be securely fixed and correctly aligned within the x-ray tube housing. The x-ray source assembly must maintain its required position without excessive drift or vibration during operation.

10. Image quality must be of an acceptable standard.

11. a) Operator and personnel doses should fall within the annual recommended dose limits below.
    b) To minimize dosage the radiographic cassette must never be held by hand.

<table>
<thead>
<tr>
<th>Body Organ or Tissue</th>
<th>Radiation Workers</th>
<th>Members of the Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Body</td>
<td>20 mSv</td>
<td>1 mSv</td>
</tr>
<tr>
<td>Lens of the eye</td>
<td>150 mSv</td>
<td>15 mSv</td>
</tr>
<tr>
<td>Skin</td>
<td>500 mSv</td>
<td>50 mSv</td>
</tr>
<tr>
<td>Hands</td>
<td>500 mSv</td>
<td>50 mSv</td>
</tr>
</tbody>
</table>

12. Radiation protection inspection will be done biennially to verify that:
   a) The veterinary x-ray equipment functions properly.
   b) Equipment is installed in a safe environment and is used in a way that provides maximum radiation safety for patients and operators.

A copy of these conditions shall be displayed at each licensed unit in a place readily visible to the public.