



Revised June 2014

GOVERNMENT OF BERMUDA
Ministry of Health, Seniors and Environment
Department of Health

License Conditions
CEPHALOMETRIC X-Ray Equipment

Following the International and/or Canadian "Radiation Protection in Dentistry Recommended Safety Procedures for Dental E-Ray Equipment (Safety Code 30),
the Licensee will comply with the following conditions:

1. The operator **shall** keep a distance of at least three meters from the x-ray tube during radiography.
2. **All x-ray equipment shall be calibrated and kilo voltage accurate.**
 - (a) Radiography **shall** be done with calibrated equipment using an acceptable technique.
 - (b) The irradiation times and kilo voltage **shall** be accurate.
3. Leakage radiation **shall** be less than 100 mR in one hour at one meter from the tube.
4. Manual film processing is not recommended. If used, the darkroom shall be well designed and a timer shall be used. **Sight developing shall not be done.**
5. Radiation leakage outside of the shielded room **shall** not exceed **7.5µSv/hr.**
6. The beam limiting device **shall** collimate x-rays with light beam within 2% of SID.
7. The size of the radiation beam **shall** align to the cassette used within 2% of SID.
8. The patient **shall** be provided with a lead-rubber shielding apron.
9. The radiation dose to the patient **shall** be within the range of International acceptable values for kilo voltage used.
10. **The tube head and arm shall be stable and shall not float, drift or vibrate.** The suspension tube of the head **shall** be stable in all positions so that motion distortion is minimized.
11. Image quality **shall** be of an acceptable standard.
12. Operator and personnel doses **shall** fall within the annual recommended dose limits.
13. Radiation protection inspection **shall** be done bi-annually to verify that:
 - (a) The cephalometric 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.

Environmental Health – Occupational Safety & Health
Metro Building, 6 Hermitage Road. Devonshire FL01
P.O. Box HM 1195. Hamilton HM EX, Bermuda