**Section 335.8100 Periodic Spot-Checks for Teletherapy**

a) A licensee authorized to use teletherapy units for medical use shall perform spot-checks on each teletherapy unit at intervals not to exceed 1 month.

b) To satisfy the requirement of subsection (a) of this Section, spot-checks shall include the taking of measurements that permit the determination of:

1) Timer constancy and linearity over the range of use;

2) On-off error;

3) The coincidence of the radiation field and the field indicated by the light beam localization device;

4) The accuracy of all distance measuring and localization devices used for medical use;

5) The output for one typical set of operating conditions; and

6) The difference between the measurement made in subsection (b)(5) of this Section and the anticipated output, expressed as a percentage of the anticipated value obtained at the last full calibration corrected mathematically for physical decay.

c) A licensee shall use the dosimetry system described in Section 335.8080 of this Part to make the measurement required in subsection (b)(5) of this Section.

d) A licensee shall perform measurements required by subsection (a) of this Section in accordance with written procedures established by the authorized medical physicist. The authorized medical physicist does not need to actually perform the spot-check measurements.

e) A licensee shall have the authorized medical physicist review the results of each spot-check within 15 days. The authorized medical physicist shall, within 15 days, notify the licensee in writing of the results of each spot-check. The licensee shall keep a copy of each written notification for 5 years.

f) A licensee authorized to use a teletherapy unit for medical use shall perform safety spot-checks of each teletherapy facility at intervals not to exceed 1 month. To satisfy this requirement, checks shall assure proper operation of:

1) Electrical interlocks at each teletherapy room entrance;

2) Electrical or mechanical stops installed for the purpose of limiting use of the primary beam of radiation (i.e., restriction of source housing angulation or elevation, carriage or stand travel, operation of the beam on-off mechanism);

3) Beam condition indicator lights on the teletherapy unit, on the control console and in the facility;

4) Viewing systems;

5) Treatment room doors from inside and outside the treatment room; and

6) Electrically assisted treatment room doors with the teletherapy unit electrical power turned off.

g) If the results of the checks required in subsection (f) of this Section indicate the malfunction of any system, a licensee shall lock the control console in the off position and not use the unit except as may be necessary to repair, replace or check the malfunctioning system.

h) A licensee shall retain a record of each spot-check required by subsections (a) and (f) of this Section for 5 years. The record shall include the date of the spot-check, the model and serial number for both the teletherapy unit and source, the model and serial number of the instrument used to measure the output of the teletherapy unit, a determination of the coincidence of the radiation field and the field indicated by the light beam localizing device, an assessment of timer constancy and linearity, the calculated on-off error, the determined accuracy of each distance measuring or localization device, the difference between the anticipated output and the measured output, notations indicating the operability of each entrance door electrical interlock, each electrical or mechanical stop, each beam condition indicator light, the viewing system and doors and the identity of the individual who performed the periodic spot-check and the signature of the authorized medical physicist who reviewed the record of the spot-check.

(Source: Amended at 30 Ill. Reg. 9029, effective April 28, 2006)