CHECKLIST – AUTHORIZATION FOR PHYSICAL MEASUREMENTS

We request you to submit this optional checklist along with supporting documents to:
RHBRMT@cdph.ca.gov

Date: _____ State Facility Registration Number *(if already registered)*: **FAC_____**

Facility Name: _____

Physical Address: _____

Mailing Address: _____

Individual Responsible for the Facility (ex: Medical Director):

Name: _____ Title: _____

Therapeutic Medical Physicist Name: _____

Facility Contact:

Name: _____ Title: _____

Phone: _____ Email: _____

Machine Make and Model: _____

Room (Vault) Name/Number: _____

All Photon Energies (MV): _____ All Electron Energies (MeV): _____

Machine Output Rates (cagy/min at isocenter): _____MU/min max

Max Field Size: _____cm^2

SHIELDING EVALUATION REPORT

☐ Notify RHB at least 60 days prior to possession of radiation machine or at least 60 days prior to commencement of construction or reconstruction of vault.

☐ All wall, floor, and ceiling areas that can be struck by the useful beam shall be provided with primary protective barriers, plus a border of one foot.

☐ Control station shielding shall be an integral part of the building or anchored to the building.

☐ Control station shall be provided with a window (with radiation attenuation equal to that required by the adjacent barrier), a mirror system, or CCTV. Patient area must be visible without having to leave the protected area during exposure.

☐ Treatment room shall be provided with interlocks. It shall be possible to restore machine to full operation only from the control panel.

☐ Control station shall be in protective booth or in adjacent room.

☐ Where large power-driven doors offer the only access to the room, a minimum of one door shall be provided with an auxiliary means for being opened in case of power failure or mechanical breakdown.

☐ A flashing red warning signal light energized only when the useful beam is "ON" shall be located adjacent to the entrance(s) to a therapy room.

☐ Shielding barriers in rooms housing machines shall comply with mandatory (sic) standards and appendixes of NCRP reports numbers 49 and 51.

☐ Occupational dose less than 5000 mrem per year.

☐ Public dose less than 100 mrem per year and less than 2 mrem in any one hour for unrestricted areas.

☐ Assumed that the individual is at least one foot away from the barrier.

REASONABLE AND CONSISTENT VALUES PROVIDED IN REFERENCE MATERIAL FOR:

☐ Barrier requirements

☐ Workload and leakage factor

☐ Workload, secondary barrier, adjusted for additional modalities

☐ Use Factor

☐ Occupancy Factor

ENGINEERING DRAWINGS THAT CLEARLY SPECIFY SHIELDING DESIGN INCLUDING:

- ☐ Materials/Compositions
- ☐ Thicknesses
- ☐ Densities
- ☐ Distances
- ☐ Penetrations/Joints
- ☐ Observation Windows

☐ TVL's specified and acceptable for each material for primary and leakage barrier calculations.

☐ Controlled and uncontrolled areas are clearly specified.

☐ Additional sources of radiation exposure, such as neutrons or sky shine, are identified and accounted for in shielding calculations.

☐ The roof is adequately addressed by shielding, or access restricted by engineering/administrative controls.

☐ Conclusion meets regulatory requirements and signed by the Medical Physicist.