IROC Houston QA Center

### PHOTON MACHINE DATA

1. INSTITUTION: MACHINE (IN HOUSE DESIGNATION):
* MANUFACTURER: MODEL: \_\_\_\_\_\_\_\_\_\_ SN \_\_\_\_\_\_\_\_\_\_\_
* DATE MACHINE STARTED CLINICAL USE: \_\_\_\_/\_\_\_\_/\_\_\_\_
* DATE OF THE LAST MEASUREMENT FOR OUTPUT (ANNUAL): \_\_\_\_/\_\_\_\_/\_\_\_\_
1. OUTPUT DETERMINATION:

 Present calibration protocol: [ ]  TG51 [ ]  TRS398 [ ]  Other

* ANNUAL CALIBRATION SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D, depth: \_\_\_ cm

#  Phantom: composition: Ionization chamber:

#  Output stated at [ ]  dmax [ ]  Other depth \_\_\_\_\_\_ at \_\_\_\_\_ cm S\_\_\_D

 Output is stated to: [ ]  muscle [ ]  water

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Energy (MV) |  |  |  |  |  |
| dmax (cm) |  |  |  |  |  |
| %dd(10)x |  |  |  |  |  |
| Clinical % dd @ 10 cm |  |  |  |  |  |

* MONTHLY CALIBRATION SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D

#  Phantom: composition: , Ionization chamber:

 Date of last comparison between the annual, monthly and daily devices: \_\_\_\_/\_\_\_\_/\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Energy (MV) |  |  |  |  |  |
| Depth of Ion Chamber |  |  |  |  |  |

* DAILY OUTPUT SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D

#  Monitor device: \_\_\_\_\_\_\_\_\_\_ Make \_\_\_\_\_\_ Model \_\_\_\_\_\_\_

* What are the criteria for readjusting the output?

 [ ]  >2% [ ] >3% [ ] >5% [ ]  other/explain

* If output is allowed to float, what are the criteria for adjusting the monitor set for patient?

 [ ]  >2% [ ] >3% [ ] >5% [ ]  other/explain

PHOTON MACHINE DATA (cont’d.)

* FACTORS USED TO CALCULATE ABSORBED DOSE RATE (Gy/mu) FROM DOSIMETER READING Attach a copy of the most recent annual TG-51 calibration and monthly output verification for each of the photon energies.
1. TREATMENT DELIVERY MODALITIES USED WITH THIS MACHINE

#  A. [ ]  3DCRT B. [ ]  IMRT

#  C. [ ]  SRS D. [ ]  TBI

#  E. [ ]  SBRT F. [ ]  IGRT

#  G. [ ]  VMAT H. [ ]  OTHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Type of MLC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Image Guided Radiation Therapy

# IGRT is defined here to include only those procedures where imaging is used in combination with computer-assisted manual or automatic registration with the planning-CT image. Use of MV EPID or film images as a visual comparison to DRRs does not meet this definition.

* What Image Guidance is available on this machine?

#  A. [ ]  None

#  B. [ ]  kV cone-beam CT

#  C. [ ]  MV cone-beam CT

#  D. [ ]  Planar stereoscopic kV images (e.g., OBI)

#  E. [ ]  Planar stereoscopic MV images

#  F. [ ]  Helical MV tomography

#  G. [ ]  Dual kV imaging panels (e.g., ExacTrac, Cyberknife)

#  H. [ ]  Ultrasound localization

#  I. [ ]  Patient skin-surface alignment

#  J. [ ]  In-room diagnostic CT scanner

#  K. [ ]  OTHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_