PROCEDURE: ROUTINE INSTRUMENT CHECK

To be performed:

1. Monthly;

   and;

2. After use / cleaning.

Requires:

1. Instrument;
2. Instrument service log.

Procedure:

1. Make visual inspection of instrument to identify any external damage;
2. Check instrument service log to see whether annual battery change is due, if so, change battery before proceeding further ;
3. Turn instrument on. If instrument fails to switch on, change batteries and re-start procedure; If instrument still fails to switch on go to section 'action in event of instrument failing';
4. Record that battery condition is good and whether battery has been changed;
5. Perform a function test as follows:
   - 5.1. Turn instrument on;
   - 5.2. Ensure that the audio sounds continuously for approximately 1 second;
   - 5.3. Ensure that the RATE LED illuminates continuously for approximately 1 second;

   - 5.4. Ensure that the liquid crystal display shows 8.8:8.8
   - 5.5. Set the instrument to the dose rate mode – CAP ON
   - 5.6. Ensure that the DOSE RATE LED is illuminated continuously;
   - 5.7. Observe for at least 10 seconds and ensure that the audio bleeps and the RATE LED illuminates intermittently;
   - 5.8. Ensure the display indicates between 0.01and 0.20 µSv/h

5.9. Set the instrument to the contamination mode – CAP OFF

5.10. Ensure that the CONTAMINATION LED is illuminated continuously;

5.11. Observe for at least 10 seconds and insure that the audio bleeps and the RATE LED illuminates intermittently;

5.12. Ensure the display indicates between 0 and 1 cps

5.13. Replace cap and ensure that the instrument returns to the dose rate mode;

6. Switch instrument off and return to storage box.

Action in event of instrument failing

1. Return instrument to storage box;
2. Clearly label the outside of the box 'instrument faulty';
3. Inform head of department that instrument has failed;
4. Contact Radiation Metrology group at the HPA Centre for Radiation, Chemical and Environmental Hazards for advice. Telephone: 01235 831600