

**RADIATION PROTECTION  
POLICY AND PROCEDURES  
NUMBER : HEYH02XR**

**Hull & East Yorkshire Hospitals NHS Trust**

**Radiology Department**

PROCEDURE FOR TAKING X-RAY IMAGING EQUIPMENT OUT OF SERVICE, AND RECEIVING BACK INTO SERVICE FOLLOWING FAULT REPAIR OR ROUTINE SERVICING.

*Note: This procedure applies only to X-ray equipment owned or managed by the Radiology Service. For other X-ray imaging equipment not the responsibility of Radiology the radiographer operating the unit must report any problems to an appropriate member of staff in the department responsible for the equipment.*

**1. Fault reporting to In-house & External X-ray Engineers**

- 1.1. All faults found are to be reported to the most senior radiographer for the area, who will be responsible for completing **sections 2 & 3** of a department service/fault log sheet, ('log sheet' for the rest of this document) , and reporting the fault(s) to the X-ray service engineers, including a clear concise description of the fault.
- 1.2. Apart from minor faults which do not affect radiation output, and are not likely to be hazardous, the equipment must be shut down and made safe and a 'Do Not Use' sign attached in a prominent position. All communications from staff regarding the equipment must be directed to a Senior Radiographer. No-one must attempt to use the equipment until informed that it is safe to use.
- 1.3. For portable x-ray equipment such as mobiles the radiographer operating the equipment will be responsible for removing the equipment from service, adding the signage, completing **section 2** of the log sheet, and reporting the situation to the most senior radiographer available.
- 1.4. The Senior Radiographer will complete **section 3** of the log sheet, and report the fault to X-ray service engineers, giving the equipment/system ID number. Note that during out-of-hours working the person on call may be a Radiographer grade, but for the purposes of fault reporting will be deemed a 'Senior' and will be responsible for completing the log sheet, and reporting the condition to a senior Radiographer as soon as possible.
- 1.5. When an engineer arrives, he must report first to a Senior Radiographer covering the appropriate area before attending the equipment.
- 1.6. The engineer attending the job will check the equipment/system ID number on his service sheet matches the number on the log sheet for the equipment. Job progress will be communicated verbally to the Senior Radiographer who will be informed of any delay in return of the equipment to clinical use (e.g. awaiting spare parts, etc.).
- 1.7. On concluding the work the engineer must provide a **written report**. **It is not acceptable for hand-over to be effected only by the signing of an**

**electronic notepad, with no written record of work carried out being presented.** All reports must include adequate information as recommended in paragraphs 3.32 & 3.33 of the IRR99 Guidance Notes<sup>1</sup> to enable the Senior Radiographer/Authorised Signatory to make an informed decision about accepting back the equipment as outlined in the HSE Guidance HSG226 para 5.4.3<sup>2</sup>.

- 1.8. The engineer must complete **section 4** of the log sheet, and must sign off the work in **section 5**. It must be indicated in **section 4** whether or not the work carried out could potentially affect radiation output, and will require the involvement of the Radiation Protection Adviser (RPA), who will arrange for acceptance checks to be carried out before the equipment returns to clinical service.
- 1.9. The engineers service report is signed off by both the engineer and an Authorised Signatory from the Radiology department. Under no circumstance must any other individual sign off the report. If the work was completed by an in-house engineer he will give the YELLOW copy of his report to the Senior Radiographer for filing in the equipment QA/Service folder, and arrange for the PINK copy to be sent to the RPA when acceptance testing is required. Where the RPA is required to check the equipment, he must be contacted by telephone or e-mail as soon as possible to arrange the work.
- 1.10. Any work carried out by the RPA will be reported as soon as possible, but a fast response report may be given at the time of completion of acceptance testing to enable a quicker return to clinical service. However, the RPA or his representative must sign in **section 5** of the log sheet on completion of the work, and before the equipment may return to clinical service,
- 1.11. The equipment must not return to service until the Senior Radiographer is satisfied that it is safe to do so, which may entail waiting for a report from the RPA.
- 1.12. Once the Senior Radiographer is satisfied that the equipment is ready to be put back into clinical service, they must sign off the work finally in **section 5** of the log sheet, remove any signage and communicate that the unit is ready for service.
- 1.13. The completed log sheet is to be filed in the equipment QA folder.

## **2. Routine Servicing by in-house or external X-ray Service Engineers**

- 2.1. The X-ray service engineers will start the process by contacting Radiology and booking the equipment in for routine work with the Superintendent Radiographer for the area. The Superintendent will communicate the date(s) that the equipment will be out of service, with the Senior Radiographer for the room. For servicing by external engineers the proposed service dates should be forwarded to the in-house X-ray engineers as their attendance may be required to oversee the work undertaken.
- 2.2. On the day of the service the Senior Radiographer will take the unit out of service, complete the log sheet **section 1** and attach an Out of Service label to the equipment. The job number must be obtained from the service engineer. The procedure is now the same as paras 1.5- 1.13.

**References:**

- 1. NRPB/HSE/DoH – Medical & Dental Guidance Notes – A good practice guide on all aspects of ionising radiation protection in the clinical environment.**
- 2. HSE - April03.doc draft - Equipment used in connection with Medical Exposure**