

Ionising Radiations Regulations 2017 – Overview – XRF Analysers

Ionising Radiation Regulations 2017 (IRR17) came into force on 1 January 2018 and replaced Regulations IRR99.

The main changes are:

- how you inform HSE that you work with ionising radiation
- the dose limit for exposure to the lens of the eye - reduced from 150mSv to 20mSv in a year

Notifying the HSE that you work with ionising radiation

- Previously you had to notify the HSE that you were planning to use the XRF Analyser and were required to give a 30 day notice period – this is no longer required
- Depending on usage, you either have to “notify”, “register” or get “consent”
- For XRF analysers, you need to “register”
 - The following activity applies to XRF Analysers” “Register working with a radiation generator (for example, X-ray devices)”
- You can register via the HSE portal
 - <https://services.hse.gov.uk/bssd/?c=1>
 - It costs £25 to register
 - Payment is taken via credit / debit card or via PayPal
 - To register, you’ll need to provide the following company information:
 - E1. Which of the following best describes your employer?
 - E2. What is your employer's registered name?
 - E3. What's your employer's address?
 - E4. How many employees (in Great Britain) are there in your organisation?
 - E5. How many are classified radiation employees?
 - Classified radiation employees are higher-risk radiation workers whose doses are monitored. Your radiation risk assessment should identify any employees likely to be defined as a classified radiation worker.
 - *For XRF Analysis only the number would be zero*
 - You’ll also be asked the following about radiation activities:
 - Do you transport radioactive material either as your main work or in connection with it? (This doesn’t apply to X-ray devices)
 - *Answer No*
 - Does your organisation carry out work with portable ionising radiation sources (this includes X-ray devices) at sites other than your own?
 - *Answer yes or no depending on where you’ll be carrying out the work*
 - How many fixed sites is your employer responsible for where they carry out work with ionising radiation?
 - *Select the appropriate number of sites depending on where you plan to use the XRF*
 - You’ll then be asked to confirm the following:
 - *R1. Have you completed a radiation risk assessment to identify the main radiological risks associated with your work and identified any reasonably foreseeable radiation accident (regulation 8 and associated Approved Code of Practice (ACOP) of IRR17)?*
 - *R2. Have you taken steps to measure and/or estimate your employees’ exposure to ionising radiation and taken appropriate action based on those expected doses (regulation 8 and associated ACOP of IRR17)?*
 - *R3. Have you completed the actions identified in your radiation risk assessment that will restrict your employees’ and other persons’ exposure to ionising radiation so far as is reasonably practicable (regulation 9 of IRR17)?*
 - *R4. Have you drawn up contingency plans for all reasonably foreseeable radiation accidents identified in the radiation risk assessment and, where appropriate, are rehearsals carried out at suitable intervals (regulation 13 of IRR17)?*

- *R5. Have you appointed and consulted a suitable radiation protection adviser (RPA) (regulation 14 of IRR17)?*
 - *R6. Do you provide appropriate training, information and instruction to any of your employees engaged in work with ionising radiation, and those likely to be affected by that work, and do you repeat this at appropriate intervals (regulation 15 of IRR17)?*
 - *R7. Have you, where required, correctly designated and demarcated any controlled and/or supervised areas (regulations 17 and 19 of IRR17)?*
 - *R8. Have you drawn up written local rules where required and appointed radiation protection supervisor(s) for all your work in controlled areas and, where appropriate, supervised areas (regulation 18 of IRR17)?*
- You will then be asked to confirm that you have read the HSE's terms and conditions.
 - Once you've completed all of the relevant information, you can proceed to payment.
 - Once you've processed the payment, you'll receive an email confirmation from the HSE.
 - A registration summary and registration certificate (granting you permission to do the work) will subsequently be available to download in the portal.

Previous notification

Even if you have previously notified the HSE of your intended use, you will still need to register on the new portal.