Health and Safety Executive

Office for Nuclear Regulation

Joint temporary Covid-19 Regulatory Position Statement (RPS) from the Health and Safety Executive (HSE) and Office for Nuclear Regulation (ONR):

Dutyholder's arrangements in relation to the Ionising Radiations Regulations 2017 during the ongoing COVID-19 emergency

Valid for 11 May – 10 July 2020

This temporary RPS is valid for the period stated above unless it is withdrawn or extended.

In the light of advice from Public Health England (PHE) and Devolved Administrations on the serious risks to health from the COVID-19 pandemic, HSE and ONR have set out this temporary RPS that addresses parts of the Guidance and Approved Code of Practice (ACoP) contained in Work with Ionising Radiations - Ionising Radiations Regulations 2017 (IRR17), L121 (2nd edition).

This temporary RPS addresses a number of IRR17 regulatory requirements affected by the current lockdown. It is intended to facilitate dutyholders' consideration of the potential radiological risks in each case, with additional risk mitigation arrangements in place, compared to the wider COVID-19 risks to individuals and public health in general. Specifically it is intended to help dutyholders comply with the Government's COVID-19 advice, including restrictions on movement and staff shortages, while still achieving appropriate standards of safety, optimised so far as is reasonably practicable in the circumstances.

This RPS only applies if a dutyholder cannot follow with the elements of the ACoP and Guidance in L121 identified below due to Covid-19 restrictions.

Dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the ACoP and Guidance in L121 (or, as with all ACoP and Guidance, be able to show that they continue to comply with the law and good practice in some other way). Only the parts of L121 indicated below are covered by this RPS. The regulatory position in respect of all other parts remains unchanged. This RPS is only for the period stated (three months) unless withdrawn or extended.

This temporary statement covers the regulatory issues summarised below and addressed in detail in the subsequent sections:

1. Personal Dosimetry Arrangements:

- Extended dosemeter issue/wear periods with respect to passive personal dosimetry and the assessment of doses to classified persons as detailed in guidance relating to Regulations 22(1)-(3)), and for non-classified persons as required under Regulation 19(6).
- Going beyond the period of test validity of electronic personal dosemeters (EPD), as detailed in L121 guidance. This applies to EPD use for both personal dosimetry and personal radiation protection purposes.

- Not following existing routine bio-assay sampling regimes periodicity in support of personal dose assessment, as described in guidance relating to Regulations 22(1)–(3).

2. Medical Surveillance – Classified Persons:

- Adding to guidance issued in March by HSE for classified persons, or those seeking designation as a classified person, undertaking face to face IRR medical with an appointed doctor under Regulations 25(1)-(2).

3. Testing of Radiation Monitoring Instruments:

- Going beyond the period of test validity of radiation monitoring instruments described in the ACoP for Regulations 20(3)-(4).

4. Routine Sealed Source Leak Testing:

- Going beyond the period of test validity of leak tests of sealed radioactive sources described in the ACoP for Regulation 28(3).

1. Personal Dosimetry Arrangements

Under Regulation 22(1) and 22(2) employers must make an assessment of and record all doses of ionising radiation received by employees designated as Classified Persons, which are likely to be significant. Such assessments are recorded under arrangements with one or more approved dosimetry services (ADS). Regulation 22(3)(b) requires the ADS to provide the employer at suitable intervals with summaries of the maintained dose records. Regulation 9(1) requires the employer to take all necessary steps to restrict so far as is reasonably practicable the extent to which its employees and other persons are exposed to ionising radiation, and Regulations 19(3)-(6) requires the employer to demonstrate by personal dose monitoring or other suitable measurements that doses are restricted of non-classified employees, non-classified outside workers, and any other persons who are permitted entry in to a controlled area.

Passive Dosimetry

L121 paragraph 456 states that the dosemeter issue period would often be one month, although periods of up to three months may be appropriate where doses are very low.

As a result of the current restrictions to movement imposed in response to the COVID-19 situation, there is a risk that the provision of dosimetry services and personal dosimetry could be delayed or postponed by third party providers (usually Approved Dosimetry Services), resulting in extended issue/ wear periods.

It is considered that extension of the issue/ wear period for passive dosemeters, and delays of several weeks (and even months) to the renewal and processing of dose data pose minimal risk to the health of workers if other suitable dose management measures are instigated.

HSE/ONR temporary RPS:

- *This COVID-19 RPS only applies if you cannot follow the identified ACoP and Guidance in L121 due to the impact of COVID-19 restrictions, and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the Guidance in L121.*
- *Should there be a situation where an employer needs to extend the period of dosemeter issue, any extension must be considered in relation to:*
    - *a radiation risk assessment (with appropriate reviews) for the individuals concerned (including the nature of work undertaken, other dosimetry used, and the potential for an inadvertent acute but significant exposure);*

- *the advice of the Radiation Protection Adviser (RPA);*
- *instigation, where appropriate, of additional dose management measures; and*
- *advice from the approved dosimetry service on the specific dosemeter type being used, such as TLD or traditional film badges.*

- *In considering dutyholder compliance the following may be appropriate: Passive dosimetry can be issued/ worn for extended periods of up to 6 months without significant fade of the recoverable dose exposure information.*

Electronic Dosimetry

Many employers use electronic personal dosemeters (EPD) as the approved legal dosemeter for monitoring their classified persons as required under Regulations 22(1) and 22(2). This is because EPDs provide real time dose exposure information allowing greater control than passive dosimetry, and are frequently used as part of the radiation area access control system.

As part of the ADS service approval, there are requirements to ensure the approved dosemeters continue to meet required performance tests, with EPDs undergoing annual testing to ensure they perform as required.

Regulation 9(1) requires the employer take all necessary steps to restrict so far as is reasonably practicable the extent to which its employees and other persons are exposed to ionising radiation.

EPDs are extensively utilised to monitor and assist in restricting exposure for non-classified persons, and to provide task dose controls for classified persons who are also issued with a passive legal dosemeter. In these instances the EPD can be considered a warning device as detailed in Regulation 9(2) to, so far as is reasonably practicable, achieve restriction of exposure. Regulation 11(1) requires that a warning device is properly maintained, and that thorough examinations and tests are carried out at appropriate intervals.

As a result of the current restrictions to movement imposed in response to the COVID-19 situation, there is a risk that the provision of instrument test services and facilities may be limited or even cease to be available.

This could result in EPDs falling outside their stated test validity, and so impact on employees being able to enter radiation designated areas, and employers being unable to record personal exposures.

HSE/ONR temporary RPS:

- *This COVID-19 related RPS only applies if you cannot follow the identified ACoP and Guidance in L121 due to the impact of COVID-19 restrictions, and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the Guidance in L121.*
- *Should there be a situation where an employer needs to extend the period of EPD test validity, any extension must be considered in relation to:*
  - *a radiation risk assessment (with appropriate reviews) for the individuals concerned (including the nature of work undertaken, other dosimetry used);*
  - *consultation with the Radiation Protection Adviser (RPA).*
- *In considering dutyholder compliance the following may be appropriate: It is considered that an extension of the period of test validity of electronic personal dosemeters by 3 months poses minimal risk to the health of workers.*
- *Pre-use checks should be undertaken to identify any visible faults, and the unit quarantined if applicable.*

- *All EPDs to which this guidance is applied should undergo performance testing as soon as reasonably practicable when testing facilities are available.*

Internal Dosimetry

Depending on the source of ionising radiations, the employer may require their employees to be subject to periodic internal dose assessments which may include biological samples (particularly urine). However, normal processes for obtaining, transporting and laboratory analysis of samples may be affected a result of the restrictions to movement imposed in response to COVID-19.

HSE/ONR temporary RPS:

- *This COVID-19 related RPS only applies if you cannot follow the identified ACoP and Guidance in L121 due to the impact of COVID-19 restrictions, and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the Guidance in L121.*
- *Should there be a situation where an employer needs to reduce the frequency of their routine bio-assay sampling regimes, any consideration of a reduction must include the following:*
    - *consultation with the Radiation Protection Adviser (RPA);*
    - *reviews of the risk assessment that identifies the requirement for internal dosimetry (including a review of historical internal doses and the potential for incidents that may lead to intakes of radioactive materials at the facility); and*
    - *potential restriction of some activities that pose a material risk of acute and significant committed exposure.*
- *The justification for such changes and implementation of any new mitigation measures must be suitably recorded in the risk assessment.*

Accident Dosimetry Assessments

There are a number of employers who appoint an ADS to provide emergency dose assessment services, such as assessment of criticality lockets, under Regulation 13(2), and Regulation 24.

As a result of the current restrictions to movement imposed in response to the COVID-19 situation, there is a risk that the provision of special accident dosimetry services (as referred to in HSE-RADS1 guidance to Approved Dosimetry Services) and the prompt dose assessment by the ADS could be affected and significantly delayed. Where employers are continuing work that requires the availability of accident dosimetry, it is important that measures to suitably and promptly assess doses in the event of a radiation accident are maintained.

HSE/ONR temporary RPS:

- *This COVID-19 related RPS only applies if you cannot follow the identified ACoP and Guidance in L121 due to the impact of COVID-19 restrictions and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the Guidance in L121.*
- *Where an employer has established that there is a situation where they need to make additional arrangements for the provision of accident dosimetry, any changes must be considered in relation to revision (with appropriate reviews) of the radiation risk assessment for the individuals concerned and on the advice of the Radiation Protection Adviser (RPA).*

- *Where the availability of accident dosimetry and the provision of this facility by ADSs is or is likely to be compromised by COVID-19 restrictions, employers should assess if continuing the work that requires accident dosimetry is essential. If so, they must ensure that alternative measures to suitably and promptly assess doses in the event of a radiation accident are instigated and available.*

2. Medical Surveillance – Classified Persons

HSE issued guidance on 20 March 2020 detailing revised arrangements for medical surveillance at this time, with the following relating to medical surveillance under IRR17:

For routine medical surveillance of classified persons under IRR17, the appointed doctor can conduct a paper review. For high risk radiation workers such as industrial radiographers, or those classified persons at the end of the five-year cycle where a face to face review is planned, they can carry out a telephone consultation and review the dose records and sickness absence records. If there are no problems, a follow up face to face review can be scheduled three months later. Where there is a problem, a judgement can then be made on whether to see the worker face to face and, if so, how to do so safely.

Additional guidance from HSE Appointed Doctors regarding first medicals for those intending to be designated as classified persons, and the number of IRR17 appointed doctors confirms the following:

HSE/ONR RPS:

- *As a result of the current restrictions to movement and social distancing imposed in response to the COVID-19 situation, there is the potential for appointed doctors to adopt the use of video or telephone consultations in place of the physical face to face IRR medical assessment.*
- *For new workers who have not previously been classified persons, fitness should be assessed on a case by case basis, taking account of the type of work to be undertaken and the work environment. A telephone consultation would not be sufficient to decide on fitness to work with ionising radiation. However, the appointed doctor could consider whether enough information can be obtained using telemedicine to enable them adequately to assess fitness. On this basis, they may be able to defer a full assessment for up to three months. If the appointed doctor decides the circumstances justify a face to face review to establish fitness, they must conduct it safely, undertaking a suitable and sufficient risk assessment and put in place appropriate controls, taking into account PHE and Devolved Administrations advice regarding COVID-19.*
- *For those who have worked previously as a classified person, are returning to work with ionising radiation and have had a face to face review within the last four years, the appointed doctor can review their medical records and conduct a telephone consultation to check they have not got any new health problems that would affect their fitness to work with ionising radiation. They should then follow a normal pattern of medicals going forward. If the individual has not had a face to face review in the last four years, the appointed doctor should follow the guidance above for new workers.*
- *There are around 250 doctors currently appointed under IRR17. Even in the current circumstances, it is unlikely that they will all be unavailable. However, HSE will be keeping the position under review and will consider any further emerging issues and respond where appropriate.*

3. Radiation Monitoring Instruments

Where the employer uses radiation monitoring instruments / equipment to meet the requirements of Regulations 20(1)-(2) they are required to comply with Regulations 20(3)-(4) in so much that:

20(3) The employer upon whom a duty is imposed by paragraph (1) must provide suitable and sufficient equipment for carrying out the monitoring required by that paragraph, which equipment must

(a) be properly maintained so that it remains fit for the purpose for which it was intended; and

(b) be adequately tested and examined at appropriate intervals.

In addition, ACOP 20(3) states:

Monitoring equipment should normally be tested and thoroughly examined at least once every year. A radiation risk assessment (regulation 8) will determine whether more frequent examination is necessary.

As a result of the current restrictions to movement imposed in response to the COVID-19 situation, there is a risk that the provision of instrument test services and facilities may result in a number of hand-held and installed radiation monitoring instruments falling outside the stated 'normal' test validity period (and in excess of 12 months in many cases) and not being able to be tested. This may result in the potential unavailability of instruments or use of un-tested instruments.

HSE/ONR temporary RPS:

- *This COVID-19 related RPS only applies if you cannot follow the identified ACoP and guidance in L121 due to the impact of COVID-19 restrictions and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the Guidance in L121.*
- *Should there be a situation where an employer needs to extend the period of monitoring instrument test validity, any extension must be considered in relation to:*
    - *a radiation risk assessment (with appropriate reviews) for the equipment concerned;*
    - *the advice of the Radiation Protection Adviser (RPA); and, where appropriate*
    - *the qualified person for testing equipment (Regulation 20(4)).*
- *In considering dutyholder compliance the following may be appropriate: It is considered that an extension of the period of test validity of radiation monitoring instruments and items of equipment by up to 3 months poses minimal risk to the health of workers.*
- *Pre-use checks, including a response check using suitable check sources should be undertaken to identify any instrument response issues, along with a visible check for faults, and the unit quarantined if applicable.*
- *All instruments to which this RPS is applied should undergo performance testing as soon as reasonably practicable when testing facilities are available.*

4. Sealed Source Leak Testing

Where an employer uses a sealed radioactive source, Regulation 28(3) requires that:

The employer must

(a) ensure that, where appropriate, suitable tests are carried out at suitable intervals to detect leakage of radioactive substances from any article to which paragraph (2) applies; and
(b) make a suitable record of each such test and retain that record for at least 2 years after the article is disposed of or until a further record is made following a subsequent test to that article.

In addition, ACOP para. 567 states:

Where testing is appropriate under normal operating conditions, the interval between tests should not exceed two years.

As a result of the current restrictions to movement and social distancing imposed in response to the COVID-19 situation, there is the potential for employers to be unable to practically undertake sealed source leak tests due to resource constraints, as required by the regulations, or do so within the period identified in the ACoP 'under normal operating conditions'.

HSE/ONR temporary RPS:

- *This COVID-19 related statement only applies if you cannot follow the identified ACoP and guidance in L121 and dutyholders must be able to demonstrate that they have taken all reasonable steps to follow the guidance in L121.*
- *Should there be a situation where an employer needs to extend the period of validity of the leak tests for their sealed sources, any extension must be considered in relation to:*
    - *a radiation risk assessment (with appropriate reviews) for each specific source concerned;*
    - *instigation, where appropriate, of additional measures aimed at ensuring the integrity of the source (eg. changes to the environment where the source is located, methods of identifying gross source leakage); and*
    - *the advice of the Radiation Protection Adviser (RPA).*
- *In considering dutyholder compliance the following may be appropriate: The maximum time of any extension of a sealed source requiring use beyond the leak test date should be limited to 3 months.*
- *All radioactive sources to which this guidance is applied should undergo leakage testing as soon as reasonably practicable when testing is no longer significantly impacted by COVID-19 restrictions.*

This temporary RPS is valid from 11 May to 10 July 2020, will be subject to review, and may be withdrawn or extended as appropriate. (If withdrawn, dutyholders will notified primarily via the UK radiological protection professional bodies.)

If you have any additional enquiries:

- For work with ionising radiation on premises where HSE is the enforcing authority, please email HSE at: Rad.Admin@hse.gov.uk.
- For work with ionising radiation taking place on nuclear premises (i.e. where ONR is the enforcing authority), please email ONR at: contact@onr.gov.uk.

11 May 2020