Section 3a. Roles and Responsibilities

Full details of health and safety responsibilities of all employees can be found in the University's Health and Safety (HS) Policy. The general responsibilities given in the HS Policy apply to the management of health and safety risks arising from ionising radiation to staff, students and the public. Those of particular relevance are summarised below, along with responsibilities in relation to the management of risks to the environment. Specialist radiation roles are given in detail.

Overall responsibility for health and safety rests with Council. The Vice-Chancellor is the most senior employee responsible for the implementation of the University's Health and Safety Policy. Council has set up a *Health and Safety Group* with delegated responsibility for approving health and safety related policies, monitoring operational health and safety performance and ensuring that appropriate consultation on health and safety issues. It reports annually to Council. The *Ionising Radiation Protection Sub-Group* is a sub-committee of the Health and Safety Group and has been delegated responsibility for overseeing the arrangements for the management of health, safety and environmental risks arising from the use of ionising radiation at the University. It reports biannually to the Health and Safety Group.

Head of Department (HoD)

Heads of Department have overall responsibility for ensuring their Department complies with the University's requirements relating to the control of health and safety risks arising from work with ionising radiation. They must ensure that there are effective systems in place for the management of health and safety risks arising from their Department's storage, use, movement or disposal of ionising radiation.

Heads of Department also have overall responsibility for ensuring that environmental risks arising from the acquisition, keeping, disposal, transfer and transport of radioactive substances are controlled and that their Department complies with the requirements of Environment Agency permits.

Academic Supervisors

Academic supervisors are responsible for the safety of staff and students whilst they are under their supervision, which includes ensuring that they understand the health and safety risks associated with academic activities and follow health and safety instructions.

In relation to radiation work, Academic Supervisors are responsible for ensuring that:

- the University's Local rules for use of ionising radiation and departmental rules are implemented in their area of responsibility
- the University's requirements for ensuring the use of Best Available Technique (BAT) are met¹
- risks associated with radiation work are assessed prior to any work starting, and appropriate control measures implemented to limit doses and reduce exposure to as low as reasonably practicable (ALARP)
- an application for a written scheme of work (Form 4) is produced for all new projects involving ionising radiation and that existing schemes are reviewed a minimum of every 3 years
- BAT is observed, by considering non-radioactive alternatives to the use of radioactive materials (justification) and ensuring their use is optimised
- the activity and volume of radioactive waste is minimised, taking account of operator risk, time, trouble, money and social factors
- maintaining a list of registered radiation workers (staff and post-graduates who are currently working or have worked with ionising radiation) and informing the UIRPO of any changes to lists of radiation workers
- ensuring radiation workers have the required competency in the use of radiation (as detailed in section 3(b) of the *Local Rules*) prior to their starting work on ionising radiation and ensuring records of training (Form 3) are kept
- regular monitoring and review of working practices and risk assessments takes place

Employees (including Registered Radiation Workers)

Employees must:

- follow the University's Local rules for use of ionising radiation, departmental rules and the approved scheme of work for working with ionising radiation that they are registered to work under
- report radiation incidents, defects in engineering systems and concerns regarding the control of radiation risk in accordance with the department's procedures

¹ As detailed in Best Available Technique Assessment for University of Essex (December 2012) [to be updated in 2022 prior to work starting]

- take part in any training and development required for their safety whilst working with radioactivity
- Where required, wear a dosemeter (or finger extremity dosemeter), look after it and return it to the UIRPO for processing as required

Department Health and Safety Officer (DHSO)

The DHSO assists the Head of Department with the coordination of health and safety within the Department and supports the development, review and revision of departmental health and safety codes of practice and local procedures.

The DHSO provides departmental staff with advice on departmental health and safety procedures or directs them to specialist technical advice.

Departmental Ionising Radiation Protection Supervisor (DIRPS)

The DIRPS fulfils the legally defined role of Radiation Protection Supervisor, as described in the Ionising Radiations Regulations 2017. S/he is the competent person responsible for the supervision of the Head of Department's arrangements for the acquisition, keeping, using and disposal of radioactive substances in accordance with the University's *Local rules for use of ionising radiation*.

S/he also supervises departmental compliance with the requirements of the Ionising Radiations Regulations 2017 and Environmental Permitting Regulations 2016.

The DIRPS is responsible for:

- Reviewing written schemes of work and advising academic supervisors on its suitability, prior to forwarding to the UIRPO for approval
- Checking that employees who have been designated as radiation workers are suitably competent
- Ensuring there are suitable arrangements in place in the department for the ordering, receipt, storage, use, transport and disposal of radioactive materials. This includes:

a. defining controlled and designated radiation working areas

b. ensuring there are suitable arrangements in place for the protection of others who may need to access designated radiation areas (e.g. contractors, cleaners), including the issuing of permits to work for areas where radio-isotopes are handled and stored

c. monitoring compliance with EA permits, the University's BAT Assessment and the *Local rules for use of ionising radiation*.

- d. arranging the periodic disposal of radiation waste
- e. carrying out periodic leak tests on closed sources

f. maintaining departmental records of radiation sources, waste and radiation workers

g. ensuring there are suitable emergency arrangements (including clearly defined roles and responsibilities) in the event of unplanned exposure, personal contamination, loss, theft, spillage or spread of contamination

h. representing the department on the University's Ionising Radiation Protection Sub-Group

i. liaising with the UIRPO to ensure periodic calibration of monitoring equipment used by the Department

j. supporting the UIRPO with periodic review of the University's *Local rules for the use of ionising radiation.*

k. reporting radiation incidents to the UIRPO as soon as possible

I. investigating radiation incidents and reports of significant doses with the UIRPO, following the advice of the RPA

m. reporting any concerns regarding the adequacy of the University's / Department's procedures and engineering control of radiation risks to the UIRPO

University Ionising Radiation Protection Officer (UIRPO)

The UIRPO is responsible for ensuring arrangements are in place for the University's compliance with the requirements of the Ionising Radiations 2017 and Environmental Permitting Regulations 2016. S/he provides a communication link between the RPA and DIRPS.

The UIRPO:

- ensures that the University appoints a competent RPA and liaises with the RPA as appropriate to ensure the provision of competent advice
- approves written schemes of work, in accordance with advice given by the RPA.
- keeps the University's Local rules for use of ionising radiation under review
- chairs the University's Ionising Radiation Protection Sub-Group and provides reports to the Health and Safety Group

- ensures regular monitoring and auditing of the University's systems for managing radiation; and investigates significant incidents with the DIRPS
- manages the monitoring of radiation doses
- arranges for regular calibration of contamination monitors
- maintains University records of radiation sources, waste and radiation workers
- monitors compliance with permits for storage and disposal of radio-isotopes
- manages applications for amendments to permits
- approves the transport or periodic disposal of radiation waste
- monitors review of written schemes of work
- liaises with enforcement bodies and ensures statutory reports and pollution inventory returns to enforcing bodies are completed as required
- ensures regular BAT assessment is carried out

Radiation Protection Adviser (RPS) and Radioactive Waste Adviser (RWA)

The University has appointed RPA Plus as its Radiation Protection Adviser and Radioactive waste Adviser.

The RPA is the University's qualified expert and provides professional, competent advice on radiation safety, and compliance with regulations. The RPA:

- provides advice on the suitability of written schemes of work, local rules and procedures for managing ionising radiations
- provides technical advice to the Ionising Radiation Protection Sub-Group
- supports the UIRPO with the monitoring of University's systems for managing radiation, through audits and investigations

The RWA advises the University on the compliance of the Environmental Permitting Regulations 2016 which covers the legal requirements of the University to hold radioactive material, accumulate and dispose of radioactive waste.

As the role of the RPA and RWA is fulfilled by the same person, reference to RPA in this policy document may also taken to refer to the role of RWA.

Reference should also be made to *Ionising radiation: processes and responsibilities* which details responsibility by process.

Competence

The competency and training requirements for the RPA/RWA, UIRPO and DIRPS can be found in the <u>Health and Safety Competence and Training Matrix</u>, available on the University's website. Competency requirements for radiation workers are detailed in Section 3(b) of the *Local rules for use of ionising radiation*.



Flow chart showing responsibility and advisory links at the University

