

THE ROLE OF THE RADIATION PROTECTION SUPERVISOR AT AWE

RI Wilkins

AWE plc, Aldermaston, Reading, Berkshire, RG7 4PR UK

ABSTRACT

The Radiation Protection Supervisor (RPS) function at AWE is discussed. A review recognised the need to strengthen the RPS role in the work place and better define the interaction between them and Health Physics personnel. AWE requirements now ensure that RPS's importance is recognised and that they concentrate on the role required by legislation with emphasis on getting into the workplace. This is achieved by ensuring and demonstrating that they are knowledgeable of workplace radiological conditions and are an essential part of the safety management system.

To ensure a good RPS standard, the training and appointment process is a three day examined course (or appropriate for contractors), a workplace assessment and interview.

In large establishments the RPS function has to be clearly defined since all personnel appointed have multifunctional roles and need to remain focused. It also avoids conflict with the service provided by Health Physics personnel. The paper describes this.

INTRODUCTION

A series of internal audits on the implementation at AWE of the Ionising Radiations Regulations, 1985 (IRR 85) was carried out by Company Radiation Protection Advisors (RPAs). This indicated that the system for training and appointing Radiation Protection Supervisors (RPSs) required some improvements. The situation was addressed and predominantly concentrated on their accreditation and formal appointment to meet the requirements of Regulation 11 of IRR 85. Following these improvements several occurrences indicated that although the legal appointment requirements were being satisfied there was some confusion over the role that RPSs were expected to perform, in an establishment which has a large integrated operational health physics team. The interface between the operational RPAs and RPSs and their respective responsibilities was reviewed to better understand and define the boundaries.

OPERATIONAL HEALTH PHYSICS SERVICE PROVISION

Radiological Advisory and Monitoring support at AWE is provided by Operational Health Physics Services (OHPS). AWE is divided into four Business Management areas each provided with an operational RPA supported by a team of Health Physicists, supervisors and surveyors. The teams are fairly well integrated within the areas which has meant that RPSs were not being used and routine supervision by them was not always being carried out adequately. Business areas were perceived therefore not to be taking full ownership of all radiological safety issues.

RPS REVIEW

The review to define the boundaries between RPAs and RPSs identified a number of issues which may be common to organisations that have operational health physics service arrangements similar to AWE.

The principal finding was that the majority of workers perceived that radiological issues were the sole responsibility of OHPS and RPS involvement in this was only peripheral. When seeking radiological advice, workers would turn to OHPS personnel in preference to an RPS, since they were not automatically considered in that role even though in some cases the RPSs may have been more qualified to give the particular advice because of a better understanding of a process for instance.

The RPS role is carried out in addition to normal duties and very little time was being devoted to the role and at best was little beyond basic supervision. In many cases insufficient time was being spent in the operational workplace. There was very little involvement by RPSs in the production and review of Safe Systems of Work (SSoW) documentation, which was mainly devolved to the local Health Physics. Most RPSs were found to have little sight of personal and workplace radiological information on people and areas for which they were responsible. Many did not attend any safety meetings, and contact between RPS and OHPS personnel was found to be variable with many having little or no contact at all. Once personnel had passed through the RPS formal training and appointment process, there was no further opportunity for continuous development.

A working group was set up which included a number of RPSs and health physicists and proposals for improvement were discussed. This centred around formalising arrangements through the Company Safety Procedures (CSPs) that would ensure that RPSs were regularly in the operational work areas carrying out the role required by legislation. RPSs would be appropriately supported by their management and the RPAs

RPS REQUIREMENTS AT AWE

The key to forming a correct interface arrangement between the RPS and RPA is to clearly define the expected RPS role. The working relationship should then emerge with little confusion. AWE's relevant CSP was revised to make the RPS function more prescriptive with specific requirements that must be included in their Terms of Reference. This formally ensures they are carrying out the duties expected of them within legislation which is predominantly to supervise work with ionising radiation to enable work to be carried out in accordance with the Regulations. They should therefore be directly involved in the work and preferably in the line management position to allow close supervision of the work to be exercised. In addition to the regulatory requirements AWE's CSP places the responsibility on RPSs to develop a working relationship with the Company RPAs and other health physics staff. The main requirements placed on RPSs in the CSP is summarised in the following paragraphs:

RPSs are required to review all radiological data relevant to the personnel which they

supervise and must ensure therefore that they have access to the information and be fully aware of any local dose restraints appropriate to them. This is vital to their role since they must understand local working conditions and the doses their personnel receive, to adequately supervise the work. To ensure that this is done RPSs are required to provide summaries to the local RPA of the applicable dose information reported against any work programmes. A simple proforma is provided for this.

RPSs are required to be involved in the initial planning of any task with radiological implications and to raise or sign on to relevant assessments that form part of a SSoW. Currently some of these need Health Physicist endorsement but the intention is to eventually remove that requirement. RPSs are also expected to ensure that perceived radiological risks are adequately represented in any contingency arrangements and that ALARP concepts are applied to procedures.

RPSs have a responsibility to ensure that personnel work to procedures etc. and that appropriate standards are maintained, which implies providing instruction or information to personnel. RPSs are therefore expected to be present at the onset of any new work or if there has been a major change to an operation which is assessed to have a significant radiological risk. The RPSs are expected to regularly observe all work with ionising radiation in which their personnel are involved. This does not imply that they are necessarily expected to be present at all times but their attendance is expected to relate to the risk. RPSs are also expected to play a more significant role in incident investigations, audits and local workplace inspections and assisting with casualty liaison in incident situations.

RPSs carry out the above requirements within their own limitations and a close working relationship is expected to be developed between the RPS and OHPS personnel. To ensure interaction with RPAs and their teams a formal arrangement of quarterly "Contact" meetings has been established. These meetings form a basis for two way communication in which RPSs can present their reports and discuss local problems and RPAs can provide information on changes in legislation or lessons learnt from incidents etc. This continuous learning aspect is important to ensure that the correct level of competence is maintained. The Company has also introduced the requirement to review RPS appointments annually and in advising on re-appointment regular attendance at the Contact meetings is taken into account.

THE TRAINING AND APPOINTMENT PROCESS

AWE's RPS training package consists of three days classroom training with some self learning at the place of work. The aim of the course is to provide candidates with the general theoretical knowledge and practical skills required of an RPS appointed on an AWE Site. Some basic nuclear physics knowledge is provided but a large emphasis is placed on a number of syndicate exercises in which scenarios are risk assessed and a set of local rules written. The local rules refer out to a Contingency Plan which the delegate is expected to write for foreseeable incidents associated with their particular scenario. The process consolidates the RPS role at each stage and asks them to consider the parts of any local rules or contingency plan that they are most involved in supervising. RPAs assist in the syndicate exercises which serves to forge the links required when out in the working environment. Candidates undergo a written exam at

the end of the course.

Candidates must pass the first stage before proceeding to complete a Course Work Book at the workplace. These are received via the local RPA which ensures that an initial contact between the two personnel is made. They should be returned to the RPA within two weeks and are passed to the relevant Manager when assessed. The Work Book looks for a demonstration that the RPS can reproduce information that has been learnt and relate it to their specific areas of work. The standard of completion also gives an indication of the persons attitude which is an important aspect of the approval process. If candidates pass through this satisfactorily they are interviewed by the local RPA and relevant Manager and if successful the appointment is endorsed and formal letters of appointment raised. Successful candidates are provided with a handbook containing appropriate information to assist them in their duties.

Contractors must work to CSPs on site but an exemption from the course is permitted if it can be demonstrated that they have already received adequate training. They must still complete the Work Book which tests their knowledge of local conditions and undergo an interview. This is to ensure that standards for RPSs are consistent across AWE sites particularly between contractor and AWE personnel.

CONCLUSION

The changes discussed formalise the role RPSs should be fulfilling as required by legislation which is further emphasised in the proposed new IRRs. Each aspect of the CSP is linked to the requirement to adequately supervise personnel working with ionising radiation since proper supervision implies that some associated knowledge of workplace conditions is required. A culture change has been necessary to move away from the tradition that OHPS teams provide all radiological protection and that the appropriate RPS role should be carried out. The change process is continuing and improvements have already been observed in some Business Management areas.