

ALARA in practice - an example from the research sector in Sweden

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Radiation Protection Organisation

In the research sector (universities) in Sweden the practical way to work with ALARA always starts with a distinct Radiation Protection Organisation. All people involved from the vice-chancellor to the cleaning person know their duty and their assignment. A qualified expert assists the organisation with information about the RPO and with theoretical and practical work.

Competence

All people have the competence needed for their work and the qualified expert assists in reaching the correct level of competence. The competence differs and should differ between a biochemist and a nuclear physicist. The guest scientist as well as the plumber get the information they need.

Quality Assurance

Quality Assurance is a practical way to control ALARA and Good Laboratory Practice is a natural process of QA.

Premises and Equipment

The laboratory is equipped with all functional accessories from such as fume cupboards to radiation shields and detectors. Best Available Technique is used to fulfil ALARA.

Work

Before start working one has to plan the work in detail, then discuss the work with the qualified expert or other trained colleagues. In some practices the work can be tailored but for others the work has to be adjusted continuously.

Release, Waste and Decommissioning

Release, waste and decommissioning are included in the work with ALARA. Before starting the research a plan exists how to handle the rest products.

Conclusion

It is essential for ALARA that all people involved in work with ionizing radiation know their responsibilities and the routines applicable. For that reason the Radiation Protection Organisation is important. The regulations and general advices from the Swedish Radiation Protection Authority are helpful in the work with ALARA. Common sense together with GLP are also tools to use in practising ALARA. Best Available Technique is another part of the practical way to reach ALARA. In fact there are no differences between theory and practice when working with ALARA.