IAEA’s activities on Radiation protection for itinerant workers

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TM on Itinerant workers, 21--24 November 2011
Background

• Based on BSS and RS-G1.1
• Safety Report was drafted and finalized in consultants meetings held in 2002
• Draft Safety Report was finalized after review and comments, August, 2003
Background

- Changes of ICRP and BSS
  - ICRP 103 (2007)
  - Revision of BSS
    - Occupational radiation protection in different exposure situations
    - Exposure to lens of the eye - change in limits
    - Radon statement - ICRP
Background

• Harmonization with DS453 Occupational Radiation Protection
  • DPP for DS453 approved by CSS in November 2011
  • Radiation Protection of Itinerant workers is included (Table of contents of DS453)

Chapter 8. PROTECTION OF WORKERS IN CERTAIN CASES

Pregnant workers

Itinerant workers
Background

Persons who regularly carry out work on the site of another employer

- may be exposed to the site operator’s sources
- may take onto the site their own source

itinerant workers
contractors
outside workers
temporary workers
Safety Standards on Occupational Radiation Protection
Issues

- Allocation of management responsibilities
- Assuring competence
- Individual monitoring
- Health surveillance
- Periodic review of contractor arrangements
Objective of Safety Report

- Address the radiation protection issues
- Recommend managerial and practical arrangements
- Provide practical guidance for both the managers of itinerant workers and for managers responsible for the safety aspects related to the use of contractors
- Useful also for regulatory bodies
Scope of the Safety Report

- Applies to different sites and facilities, such as
  - General industry
  - Nuclear power plants
  - Mining and processing of raw materials
  - Oil and Gas facilities
  - Well logging industries
  - Medical facilities, etc
Itinerant workers

- Maintenance workers in the nuclear power industry
- Maintenance and cleaning staff
- Contractors providing special services
- Industrial radiography companies
- Self-employed industrial radiographers, etc.
Situations considered

• The site operator has radiation sources, but not the contractor
• The contractor brings the source onto a site where there is no radiation source
• The site operator and the contractor have radiation sources
Use of radiation by the site operator only

- Optimization of protection
  - Investigation levels, dose constraints
- Access to classified areas
- Local rules and procedures
  - Often imposed contractually
  - More than one language
- Health surveillance
- Individual monitoring
- Records
Use of radiation by the site operator only

Information required by the contractor

- Details of radiological hazards
- Details of any additional training needed, and about who provides it
- Need to wear individual dosimeters
- Details of non-radiological hazards, such as chemicals, dust and heat
Use of radiation by the site operator only

Information required by the site operator

- Details of qualifications of the employee (training, experience, certification)
- Details of the employee’s dose history
- Relevant information on the employee’s fitness for work
Use of radiation by the contractor

The operator must obtain from the contractor:

• Telephone number for emergency
• Name(s) of the radiation protection officer(s)
• Copies of the contractors local rules and procedures
Use of radiation by the contractor

Contractors should comply with

- Placement of barriers
- Posting of warning notices
- Provision of warning signals
- Display of explanatory notices
- Searching the controlled area
- Patrolling the barrier
- Use radiation monitors
- Use of individual monitors
Use of radiation by the site operator and the contractor

All previous applies. In addition, be aware of:
- barriers and signs
- timing of the work
- local rules to be compatible
- special training
- impact on instrumentation
Specific issues in the nuclear industry

Nuclear plant access:

1) the contractor provides information on access authorization form, to be completed by the site operator
2) upon arrival: check doses and fitness
3) specific training?
4) workers skill compatible with task?
5) access to exposed area justified?
6) establish individual dose objective
Specific issues in the nuclear industry

Specific training and procedures:

1) Pre-work review
2) Preliminary procedure for the work
3) Training on a mock-up
4) Feed-back on the training
5) Anticipation of potential breakdowns
6) Improvement of working procedures
7) Final training of operators
Periodic review and corrective actions

Consider:

• changes in the working environment
• legislative changes
• modification to working practices
• adherence to current arrangements
• practicability of current arrangements
• adequacy of emergency plans
• effectiveness in restricting doses
Periodic review and corrective actions

• Inform itinerant workers and their employers
• Review procedures for long-term work periodically
• Review personnel competence (contractor) and performance
  • Take account of lessons learned from encountered problems
A number of useful comments were received. Issues raised:

- Role of the regulatory authority
- How to control an employer who is neither a registrant or a licensee?
- Licensee and contractor from countries with different legislation
• Control of the total dose to the itinerant worker
• Pass book – how to ensure only one per individual?
• Health surveillance – responsibility of the registrant/licensee – provide contractors with similar level
• Will managers who are NOT registrants or licensees read it?