11th EAN Workshop on "ALARA and Waste Management"

CONCLUSIONS AND RECOMMENDATIONS

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EAN WORKSHOPS

Objectives

- Exchange feedback ③
 - Within sectors
 - Learn from different sectors
- Aid the implementation of ALARA in practice
- Identify problems that need further research and developments
- Provide recommendations

Issues from the 11th Workshop

Oral Presentations



Session 1 Introduction and scene setting

- New European and IAEA BSS
- Waste should be considered when justifying the practice, but
 - Pre-existing waste
 - National Authorities have a responsibility to provide Plans and Facilities for waste
- NORM
 - Need better communication between producers, authorities and waste companies

Session 2 Stakeholder Involvement

- Need clear objectives and scope
- Give options not decisions?
- Engagement ≠ Agreement
 - Not easier decisions (harder, longer?)
 - But <u>better</u> decisions?
- PSA @ PSE?
 - Numbers are not the answer!
- Workers are stakeholders

Session 3 Application of the ALARA principle

- Need to re-state where ALARA is (and is not) required
 - Re-use and recycling
 - Clearance? Decontamination?
 - BAT, BPM, BPEO?
- How to apply a "judgemental" approach to dose distributions?
- Do the "numbers" distract from the process?

Session 4(a) ALARA in non-nuclear sectors

- Doses from discharges can be close to (different) dose constraints
- Lack of environmental monitoring
- Where is the PSE?
- Dose assessment but where is ALARA?
- Where are the ALARA options?

Session 4(b) ALARA in the Nuclear Sector

- ALARA culture and procedures are more mature
 - Lessons for other sectors
 - Encourage exchange
- Radioactivity doesn't disappear!
 - Need to be clear about the reasons for treatment/transfer of activity, and the overall impact

RECOMMENDATIONS Proposals



Summary of proposed recommendations

Rec.	Subject
1	Stakeholder involvement
2	The "broader approach"
3	Harmonisation
4	International guidance
5	Practical examples
6	ALARA and non -nuclear waste
7+	Others?

1. Stakeholder involvement (WG2, WG5)

The importance of engaging different stakeholders was underlined during the workshop, even though this does not always guarantee success. This is particularly important in terms of the siting of new facilities/processes involving radioactive waste management.

Recommendations for stakeholder involvement/PSE are being developed by the RP societies. It is recommended that Regulatory Authorities take actions to implement these recommendations once they have been endorsed by IRPA.

2. The "broader approach" (WG1, WG2)

It is recommended that operators aim to assess the totality of the waste management process – including operations such as transport, storage, treatment and disposal, etc. This should ideally include a consideration of radiological and nonradiological risks.

It is also recommended that Regulatory Authorities recognise and encourage this approach (how?).

3. Harmonisation (WG1, WG3)

It is recommended that efforts be made to improve harmonisation in respect of:

- the requirements for transport of radioactive waste, and other regulations (IAEA, EC?)
- National clearance levels (Regulatory Authorities)
- Terminology (ICRP, IAEA)

4. International Guidance (WG1, WG2, WG3, WG4, WG5)

It is recommended that international bodies (EC, IAEA, NEA?) produce guidance to help clarify the interface between the ALARA principle and the various waste management principles/processes, e.g.: re-use and recycling • waste treatment BAT(NEEC), BPM clearance, etc.

5. Practical examples (WG2, WG4, WG5)

It is recommended that international bodies (EC, IAEA, NEA?) in producing guidance, include practical examples of the application of ALARA to radioactive waste management. In particular, examples of the following are required:

- re-use and recycling
- the management of hospital waste
- the management of NORM waste
- deriving specific clearance levels

6. ALARA and non-nuclear waste management (WG6!)

Estimated doses from discharges from research and medical establishments, calculated from the use of models, can be close to (or exceed) dose constraints.

Efforts to acquire more realistic data should be encouraged, including studies that involve environmental monitoring to better establish the transfer of radionuclides and the resulting doses to persons.

(Recommendation To? Regulatory Bodies? EC research?)

Other recommendations?

- Long term dose/safety targets for repositories
- Controlled re-use
- Traceability issues
- Treatment of collective dose
- Retrieval/Future BAT
- Guidance for regulators (ALARA verification)
- Regulators as educators!
- ALARA Network for Waste Management
- ALARA and Dilute and Disperse

Where is ALARA?

🔆 Alara Beach

It extendes almost two km. from Alara creek to Karaburun Bay. It has a sandy beach. It is well organized and there is a small island in the bay.



It is recommended that EAN conduct further research into this location.