

RADON AT THE WORKPLACE: HOW TO IDENTIFY AND HOW TO ELIMINATE A POTENTIAL RADIOLOGICAL RISK

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Summary

The author is engaged in optimizing methods for radon measurement and quality assurance since 1986. Based on experience and activities in Europe and USA he will address the following issues:

- Potential sources of radon (soil, water, building structure, industrial raw materials)
- Mechanisms of migration in the soil
- Entry paths into the building
- Passive screening methods
- Active monitoring techniques
- The influence of climatic parameters
- Natural ventilation, stack effect and air-conditioning
- Short-term versus long-term observation (dynamics of radon)
- The role of radon progeny and the unattached fraction
- Guidelines for the evaluation of exposure and risk
- Action levels proposed by different institutions
- Selected examples: Mines, radwaste storage, municipal water supplies, special industries
- Techniques for mitigation
- Verification and quality assurance