“Issues related with NORM”

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Issues IRPA NORM TG can help

- Different regulators involved: effective interaction, working collaboratively
- Raise awareness in industries about NORM in a positive way. Feed back from industries.
- Regulatory framework: Need of reasonable and effective regulation. National/prevailing circumstances
- How to apply a practical / graded / flexible approach in NORM regulation.
- Characterization of NORM activities: practical advice, good practices.
- Waste management. Circular economy. Good practices.

Issue

DS 500 *Application of the Concept of Clearance* Treatment of radionuclides of natural origin for materials coming for practices: suggest the basis for clearance a dose of the order of 10 μSv in a year and not 1 Bq/g.

- Clearance clue process in the minimization of waste.
- Circular economy approach waste management.
- Values from exclusion concept: recognition the cost of exercising regulatory control and the net benefit to be gained by doing so,
- Great confusion that could be caused to Stakeholders by creating different set of values for the same radionuclides.
- Exemption of bulk amounts of material considered on a case by case basis using a dose criterion of the order of 1 mSv in a year.
- Continued regulatory control of material would yield benefit? Is this reasonable?

Issue

Radon Dose Coefficients

- Historically calculated using the dose conversion convention. (ICRP 65)
- ICRP recommends a nominal risk coefficient of $5x10^{-4}$ per WLM.
- ICRP 137 Part 3: biokinetic and dosimetric models, resulting in an increase in effective dose per unit exposure of a factor of two and even more in the cases of specific cases. (10 mSv per WLM)
- UNSCEAR review: due to the uncertainties from both dosimetric and epidemiological: there is no reason to change the established dose conversion factor. (5.7 mSv per WLM)
- Need of clarification in order to apply the most appropriate radiation protection requirements to the control of radon gas exposure.

Thank you!

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