N145. NRPB Opts For "Constraints"

The UK National Radiological Protection Board has published its proposals for meeting the latest ICRP recommendations. A consultative document, 'Board Advice Following Publication of the 1990 Recommendations of ICRP,' invites comments, by 31 March, prior to the NRPB finalizing its advice to government.

The new document broadly follows the ICRP framework, with the NRPB coming down particularly in favor of the distinction between "practices" (which add radiation exposure or risk) and "intervention" (which reduces exposure or risk). NRPB has also built on the concept of "constraints" introduced by ICRP. A constraint is defined as "a criterion applied to a single source of radiation exposure or risk in order to ensure that dose or risk limits are not exceeded". NRPB believes that constraints are a potentially powerful tool, which will give far greater control of radiation exposure in the occupational, medical, and public fields, bringing in areas which have previously been impossible to regulate due to limitations of operating to actual limits.

Actual dose limits will follow the Euratom directive which is currently being revised. In the meantime, however, NRPB proposes a maximum constraint on effective dose for workers of 15 mSv/y averaged over five consecutive years, with no more than 20 mSv in a single year, to be received at a moderately uniform rate of exposure. This, says the Board, has a particular relevance to pregnancy by restricting both parents' pre-conception doses. After pregnancy is declared, additional constraints should be applied to the mother.

Taken From: "NRPB Opts for Constraints," Nuclear Engineering International, November 1991, p. 8.