

## TRIP REPORT

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Meeting Title: IAEA Technical Committee Meeting on “The Scope of Regulatory Control of Radiation Exposure”

Dates: July 23-26, 2001

Other Participants: See attached participants list (Attachment 1)

Scientific Secretaries: Alejandro Bilbao and Dennis Reisenweaver, International Atomic Energy Agency (IAEA)

Purpose: The purpose of this meeting was to convene technical representatives from IAEA Member States with representatives on the Board of Governors to provide recommendations on how to proceed with a policy for defining the scope of the regulatory control of radiation exposure which thereby would implement the General Conference resolution on “Radiological Criteria for Long-Lived Radionuclides in Commodities (Especially Foodstuffs and Wood) GC(44)/RES/15.

### Summary of this “Clearance Levels” Meeting

The meeting was opened by Abel Gonzalez, Director, Division of Radiation Waste Safety, IAEA, who reviewed the history of various concepts by which radioactivity is not regulated, such as exclusion, exemption, clearance. He presented the view that the resolution named above would likely make too many categories. He recommended that the path forward to resolve the resolution would be to review pertinent documents, including the Basic Safety Standards (BSS), and to derive a single set of values for radionuclides that would define the scope of regulations on a concentration basis.

Prior to this meeting the participants were given a review document that detailed the recommendation outlined by Mr. Gonzales (Attachment 2). In the course of the plenary sessions, this recommendation was elaborated by the Chairman, Roger Clarke, and the Secretariat. Delegates sought clarifications and helped to define the following topics for development by working groups:

- The radiological basis for exclusion, exemption, clearance and for international trade in commodities
- inclusion of natural radionuclides

- The desirability of producing a coherent system of radionuclide specific levels of activity and activity concentrations for implementing the radiological protection standards
- The practical implementation of the criteria for international trade in commodities and foodstuffs
- The recognition of the need to allow authorizations for discharges and release of radioactive materials which exceed exempt quantities and concentrations

There was consensus and a recommendation that the numerical value of the order of 10  $\mu$ Sv per year to the critical group should continue to be the major basis for calculating activities and activity concentrations at which protection is considered to be already optimized.

The recommendations of this Technical Committee may be found in paragraph 19. of the Committee's draft report (Attachment 3). In brief the recommendations are:

- Complete the work currently in progress on specifying general clearance levels and activity concentration levels for use in international trade of commodities, particularly foodstuffs and wood.
- Re-examine the bases for exclusion, exemption, clearance and international trade in commodities.
- Address inconsistencies in Safety Series 89, ICRP 60, and the BSS.
- Pursue an objective to establish a coherent system of radionuclide specific levels to define the nominal scope of regulatory standards that could be used to supercede the exemption schedule in the BSS (Schedule I).
- The levels above should be expressed in terms of total activity and activity concentration
- Natural radionuclides should also be included in such levels. A basis for exemption and clearance suggested by the Technical Committee notes combination natural environment and a dose basis (300  $\mu$ Sv per year) appear to give comparable results.

The final form of the report of this Technical Committee Meeting will be available in approximately two weeks, because the IAEA Secretariat must submit the report for formal technical editing. The final form will then be transmitted to the meeting participants via e-mail. Supplemental information on the World Health Organization's Guidelines for drinking water quality referenced in paragraph 16 of Attachment 3. may be found at:

[http://www.who.int/water\\_sanitation\\_health/GDWQ/Radio/radioasp.htm](http://www.who.int/water_sanitation_health/GDWQ/Radio/radioasp.htm)