Activities of the IAEA in relation A/64/L18

Resolution Item 97 and 98:
Action for the Safety of Transport of Radioactive Material

The IAEA is pleased to inform you that we expect to announce the completion of the Action Plan for the Safety of Transport of Radioactive Material this year, which has resulted in enhanced dialogue between coastal and shipping states. Significant steps are being taken under the auspices of the IAEA which are delivering the desired aims of the resolution. One area of activity under the action plan is related to problems of shipping radioactive material (or sustainable transport infrastructure), including by sea.

The IAEA, in cooperation with other UN Agencies, including IMO is recording problems of shipping radioactive material by sea. Reports indicate that specific carriers and ports have policies which effectively prohibit the carriage of radioactive material despite the high level of safety afforded by compliance with IAEA Safety Standards. Problems are reaching a level where the sustainability of the maritime transport infrastructure for radioactive material is in doubt in certain areas of the world. These problems are affecting the ability of the IAEA to deliver some programmes, including those of a humanitarian nature.

An examination of the effects of these shipping problems on carbon emissions is proposed for the coming year; however anecdotal evidence suggests that in some cases the removal of difficulties would reduce emissions associated with specific package movements by as much as 50%. The IAEA would request support of the efforts of its International Steering Committee on Denial of Shipments.

GC(52)/RES/9 op14 "....calls upon Member States to facilitate the transport of such radioactive materials when they are carried in compliance with the Agency's Transport Regulations"

Resolution Item 132:
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)

The International Atomic Energy Agency gives advice to the Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter — including inter alia radioactive materials — (the London Convention). In recent years, the activity of the IAEA in this field focused on the definition of a comprehensive system for protection of the environment: this includes the assessment of the radiological impact due to discharges in the sea to humans as well as marine flora and fauna in an explicit manner.

These activities are in line with international trends in this area and the IAEA Plan of Activities on the Protection of the Environment. The approach is going to be applied within regulatory frameworks on derivation of values for exemption and clearance of material with low amounts of radioactivity.

Resolution Item 139:
Safe and Environmentally Sound Recycling of Ships (Collaboration with International Maritime Organization)

The International Atomic Energy Agency cooperates with the International Maritime Organization (IMO) in relation to the development of guidelines on recycling of

ships. Specific devices widely used on ships contain radioactive substances that need to be removed, handled and disposed off carefully in order to prevent contamination of recycled materials or of the environment.

The IAEA has defined and adopted in its Safety Standards 'exemption criteria' and exemption procedures in order to identify levels of radioactive substances that could be considered as 'thresholds' below which the substances could be automatically exempted from any radiological control without further consideration. Additionally, IAEA has advised IMO on the application of safety standards for handling, management and disposal of radioactive waste, should those exemption levels be exceeded.

Resolution Item 115:
Capacity Building related to oceans, climate change and their sustainable development

The IAEA's Marine Environment Laboratories are expanding their activities to support Member States in capacity building for the sustainable development of the oceans and the research capabilities to investigate and adapt to the impacts of climate change on the oceans.

Through its mandate, the Marine Environment Laboratories (MEL) act as a focal point in areas of expertise such as certification of reference materials, marine radioactive and non-radioactive pollution monitoring and assessment, training and methodological development and harmonisation. To continue underpinning developments in Member States, these core areas have expanded during the past decade to include a wide range of radiotracer applications to marine studies, such as climate and environmental change, submarine groundwater discharge, harmful algal blooms (HABs), seafood safety and advanced analytical techniques. MEL provides support to regional networks of laboratories in the following areas of expertise: marine radioecology, marine pollution, advanced analytical techniques, analytical quality support, applications of radiotracer techniques, monitoring and assessment, climate and environmental change, ocean acidification and databases.

Regional and inter-regional training courses that were developed by MEL in collaboration with MSs are devoted to supporting the UNEP Regional Seas Programme. They aim to support MSs through an Inter-Agency effort to implement International Conventions. The areas covered include the applications of ecological risk assessment methodologies to the evaluation of impacts of contaminants on marine organisms of relevance to fisheries, aquaculture and biodiversity as well as QA/QC of trace metals, organochlorine pesticides, PCBs and organotin compounds. These courses are complemented by individual highly specialised and focused training in MEL and MSs laboratories, targeting sampling, radiometric, radiochemical, radioecological and other analytical techniques applied to pollution and climate change studies.

Continued support is being provided to MSs and regional collaborations in the area of analytical data quality through proficiency tests, interlaboratory comparisons and production of new reference materials.

One of the major future impacts on the ocean of increased atmospheric levels of CO_2 is 'ocean acidification'. This 'ocean acidification' is likely to adversely affect many marine organisms, particularly corals and shell builders, such as oysters, mussels, and molluscs. Thus ocean acidification may affect entire marine food webs, impacting natural biodiversity and aquaculture, and the Intergovernmental Panel on

Climate Change (IPCC) has recently highlighted this critical issue during COP 15[1]. The MEL has developed experimental systems using nuclear techniques to help unravel the effects of ocean acidification on commercially important organisms such as fish larvae and molluscs and key species in marine food webs in polar and temperate waters. These laboratory-based technologies are now being transferred to developing MS to support them in their national assessments of ocean acidification impacts and adaptation strategies.

[1] COP 15 : Conference of the Parties, Copenhagen, December 2009