

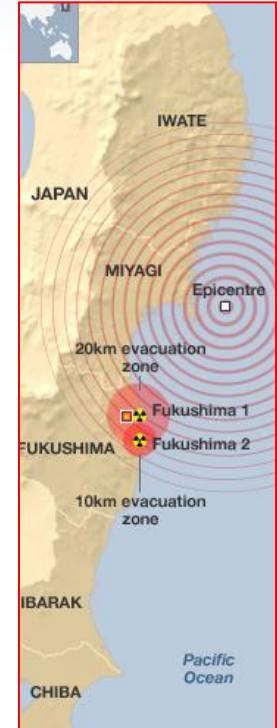
Marine Benchmark Study on the Possible Impact of the Fukushima Radioactive Releases in the Asia-Pacific Region (RAS/7/021)

- 2011 - 2015
- LCC: Mr Ron Szymczak, TRADEWINDS
- 20 participating RCA GPs plus 4 non-RCA PSIDS (Cook Is; Marshall Is; Kiribati; Solomon Is)



Background

- Fukushima Daiichi nuclear power plant accident March 2011.
- 33rd NRM - new project proposed to examine the possible impact of Fukushima radioactive releases on A-P Region.
- Widespread possible transboundary implications engaged all RCA GPs to the project.
- IAEA BoG approved participation by concerned non-GPs of the RCA (PSIDS).



Objectives

- To evaluate the extent and possible impact of the Fukushima releases into the marine environment of the A-P region.
- To support a coordinated approach to gathering field data and the assessment of radiological impact on the marine environment.
- To make scientific assessments of the data to help in the development of national countermeasures and environmental responses.



Expected Outcomes

Through a harmonised regional approach:

- Consolidated radioisotope data in water column, marine biota, marine sediments and suspended matter from all GPs.
- Assessment of the impact of these radioisotopes on the marine environment and risk to people.
- Optimisation and coordination of the available skills and resources in the region.
- Greater understanding of ocean circulation and dispersion environment.



Activities - 2014

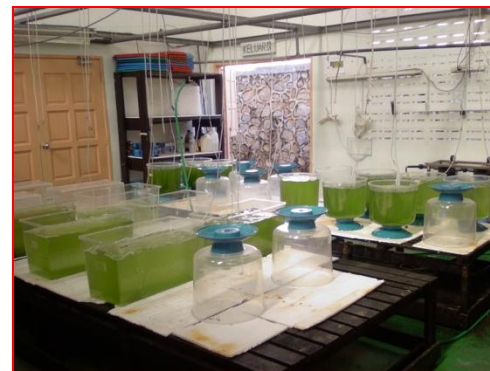
- Annual Project Review Meeting, ROK, July
- RTC on *Monitoring the Radiological Impacts of Nuclear Discharges to Pacific Island Marine Ecosystems*, July, Fiji
- RTC on *Establishment of Transfer Factors and Dose Assessment for Marine Organisms from Contaminants Released from Nuclear Activities*, August, MAL
- Proficiency Test #3 for Cs-134 & 137 and Sr-90 in seawater, April
- Expert missions to CPR, PHI (x2) & RMI



Achievements/Outputs - 2014

Capacity Building

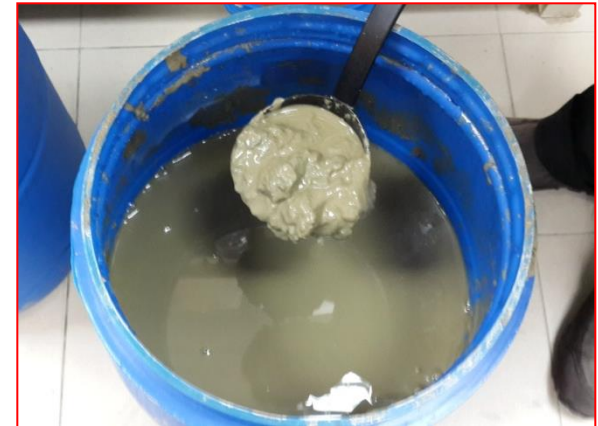
- Establishment/ upgrade of marine radioactivity monitoring programs and radioecology labs
- Increase in radiological impact assessments
- Several PSIDS have collected and submitted samples to IAEA / NAEL for analysis
- Most GPs obtaining government funding for project-related activities and infrastructure
- Bilateral collaborations between RCA GPs



Achievements/Outputs - 2014

Sampling / Analysis Activities

- Sampling programs in 15 countries
- 4 GPs reported new transfer factor values
- 13 GPs - radiological dose/risk analyses
- CPR, IND, INS and MAL - radioecology experiments in newly established/upgraded laboratories



ASPAMARD

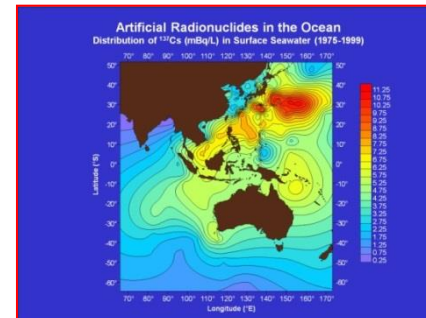
- ASPAMARD Focal Point and Data Coordination Centre in PHI
- Online data submission system
- 4780 data (14 GPs) submitted to ASPAMARD
- 93,998 data from JPN authorities
- ASPAMARD database increased 20-fold since project started
- JPN regularly reports Fukushima seawater/marine biota monitoring data to ASPAMARD
- Proficiency tests used for QA of ASPAMARD
- Data final submission deadline 30 June 2015



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Linkages/ Partnerships

- On-going links - UNSCEAR, ICRP and MODARIA.
- New links:
 - › North Pacific Marine Science Organization (PICES)
 - › WorldFish Centre (CGIAR)
 - › Japan Fisheries Agency
 - › Oregon State University (USA)
 - › Lancaster Environment Centre (UK)
 - › Lawrence Livermore National Laboratory (USA)
- IAEA Environment Laboratories (Monaco) - key institution for cooperation, advice and technical support for project.



Other Achievements/ Outputs - 2014

- Apart from localised contamination around the immediate vicinity of Fukushima, GP's report no radiologically significant levels of Fukushima discharges → pre-Fukushima baseline levels.
- Bilateral cooperation initiated and/or on-going between SRL-MAL, THA-INS, VIE-KAM, AUL-CPR, AUL-PHI, AUL-THA, JPN-THA
- New advances in radiological dose modelling being undertaken by AUL and THA via MODARIA project
- New project proposal submitted for 2016-17 TC cycle

Planned Activities for 2015

- KAM, NZE, FIJ, KIR and SOI have plans to implement a sampling program within the next 12 months
- The Nov 2014 workshop (KAM) to review implementation of QMS program is re-scheduled for May 2015 in PHI
- Expert Meeting/Workshop on *Radiological risk analysis modelling* – INS, 5 Days, originally planned for Q1 2015. Needs to be scheduled.
- Expert Meeting to develop the finalisation of the project (proposed for Monaco, July 2015)
- Final Project Assessment Meeting – JPN Q4 2015

Constraints and Concerns

- Regional project is dropping behind schedule
- Participating country Governments need to approve, release and publish monitoring data
- Limited technical capability in PSIDS, KAM and MYA
- Expert Meeting/Workshop on Radiological Risk Analysis Modelling (INS), originally planned for Q1 2015, may be transferred to new project

Recommendations to NPCs

- **Submit all monitoring data to ASPAMARD by end Q2 2015**
- Complete National Marine Radiological Risk Assessments
- Communicate with stakeholder agencies; public
- Translate RTC training to national level – ensures capacity building and knowledge transfer
- Encourage national laboratories to continue participation in the proficiency test exercises organised as part of QMS

Recommendations to Governments & Institutes

- Financial support, infrastructure, and HR, to the NPT
- Encourage involvement of stakeholder agencies
- Support publication of radioactivity monitoring data in the literature and by submission to ASPAMARD
- Strengthen/ develop co-operation with NPCs in other GPs - sample analysis and knowledge transfer.

Recommendations to Agency

- Increase awareness and support the project within participating GPs and potential donors.
- Support 4th PT exercise for 2015 by IAEA-NAEL, Monaco.
- Continue to provide PSIDSs with radioanalytical services for sample analyses.

Comments and Questions

