

EMRAS

Environmental Modelling for Radiation Safety

Working Group 4

Model validation for radionuclide
transport in the aquatic system
“Watershed-River” and in estuaries

Meetings

- Working Group on Watershed-Rivers-Estuaries, 1st Annual Meeting, Vienna; 1-5 September 2003
- Joint meeting EMRAS/EVANET-HYDRA 5-7 May 2004, IAEA, Vienna International Centre, Vienna, Austria

Priorities

- Important radionuclides other than Cs and Sr
- Coastal areas
- Extreme events
- Physical factors dealing with remobilisation
- Biological factors dealing with migration
- Modelling countermeasures
- Contribution to the revision of the IAEA-TRS report 364

Activities

- Model presentations
- Model exercises
- Assessment of results
- Conclusions: model performances, model usefulness

Scenarios

Scenario	Scenario developer	Models	Priority	Status
Floodplain (Chernobyl)	Typhoon (Russia)- IMMSP (Ukraine)	University of Sevilla (Spain), ENEA (Italy), MOIRA (Studsvik, Sweden)	Extreme events. Modelling countermeasures. Factors dealing with remobilisation	Exercise concluded; Report in progress
Tritium in river Loire	EDF (France)	? BLIND TEST	Radionuclides other than Cs and Sr	Blind test. Results to be discussed
Contamination of Dnieper estuary	IMMSP (Ukraine)	University of Uppsala (Sweden) University of Sevilla (Spain)	Coastal areas	Scenario description Preliminary results
Contamination of river Techa	Typhoon (Russia)	To be decided	Radionuclide other than Cs and Sr (Pu)	Scenario description

Further activities

- Contribution to TRS report 364:
document draft
- Assessment of state-of-the-art models
for predicting the behaviour of
radionuclides in coastal areas

Aims of the meeting

- Discussion of the model results
- Identification of new issues and priorities
- Planning future activities

Aims of the present meeting

- Discussion of the results from the model exercises
- Identification of new issues and priorities
- Planning future work