

**The IAEA's Programme on
Environmental Modelling for Radiation Safety
(EMRAS II)**

**EMRAS II
Reference Approaches for Human Dose Assessment
Working Group 1
Reference Methodologies for "Controlling Discharges" of Routine Releases
MINUTES
of the 2nd Working Group Meeting
held as part of the Joint EMRAS II Working Group Meetings (WG1 & WG2)
at IAEA Headquarters, Vienna
22–24 September 2009**

IAEA Scientific Secretary	Working Group Leader
Mr Diego Miguel Telleria Assessment & Management of Environmental Releases Unit Waste & Environmental Safety Section (Room B0763) Division of Radiation, Transport & Waste Safety International Atomic Energy Agency (IAEA) Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA Tel: +43 (1) 2600-22679 Fax: +43 (1) 2600-7 Email: D.Telleria@iaea.org	Mr Trevor J. Stocki Research Scientist Radiation Protection Bureau (AL 6302D) Health Canada 775 Brookfield Road K1A 1C1 OTTAWA, ONTARIO CANADA Tel: +1 (613) 941-5175/946-4930 Fax: +1 (613) 960-5604 Email: trevor_stocki@hc-sc.gc.ca

Welcome and Discussions

Diego Telleria and Trevor Stocki opened discussions at the start of the meeting and welcomed the participants. The participants subsequently introduced themselves and commented on their interests related to the activities of WG1. Mr Stocki and Mr Telleria presented the goals of the meeting.

Discussions

Presentations were given by the following countries about their methodologies with respect to controlled discharges: Belarus, Ukraine (given by Mr Stocki, in the absence of the Ukrainian representative), The Netherlands, Brazil, UK (2 presentations), Argentina, Hungary, Sweden, France, Czech Republic, Canada and Poland. Two presentations were also given on applicable computational codes, specifically on PC CREAM (from HPA, UK) and CROM (from CIEMAT, Spain).

These presentations are available for download from the EMRAS II website. They provided a background on each country's methodologies and answered the following questions:

- (1) Nuclear context: what types of facilities does your methodology cover?
- (2) National Organisation: who is the authority in your country? What types of manufactures do you have? Who are the experts?
- (3) Do you use critical group concept? Or the new ICRP version of it?
- (4) What are the regulatory limit values? Are they doses? Are they concentrations? Or other units?
- (5) What modelling approaches do you use? Specifically:
(5a) do you use transfer coefficients? (if so, which ones?).

(5b) what type of atmospheric modelling do you use?

(5c) do you use site specific data?

These presentations naturally facilitated further discussions of the “grid” of questions, which formed the questionnaire. These discussions resulted in a questionnaire which is currently being drafted and will be circulated to other EMRAS II participants in due course.

Discussions of a common technical vocabulary also occurred.

Most importantly, scenarios were chosen for the modellers to model. Priorities have been set for these scenarios and a timeline for the work has also been drafted.

For next meeting

It was uncertain if WG1 needs to meet in January during the next (second) EMRAS II Technical Meeting, being held at IAEA Headquarters in Vienna, from 25 to 29 January 2010. This would be determined as the models are run.

Possible discussions for the next meeting are:

- Results of the models that have been run and discussion about the next set of scenarios.
- A day long discussion of the concept of critical group.
- Assessment of the answers to the questionnaire.

List of Participants	
Name / Email	Organization / Country
Ms Anna Maria Blixt (AnnaMaria.Blixt@vattenfall.com)	Vattenfall Power Consultant AB, Sweden
Mr Patrick Boyer (patrick.boyer@irsn.fr)	Institut de Radioprotection et de Sûreté Nucléaire (IRSN), France
Ms Adriana Raquel Curti (acurti@sede.arn.gov.ar)	Autoridad Regulatoria Nuclear (ARN), Argentina
Ms Dejanira da Costa Lauria (dejanira@ird.gov.br)	Instituto de Radioproteção e Dosimetria (IRD/CNEN), Brazil
Mr Rudie Heling (heling@nrg.eu)	Nuclear Research & Consultancy Group (NRG), Netherlands
Mr Jan Horyna (jan.horyna@subj.cz)	State Office for Nuclear Safety (SÚJB), Czech Republic
Ms Viktoriia Kliaus (vyklaus@gmail.com)	Laboratory of Radiation Safety , Republican Scientific Practical Centre of Hygiene (RSPCH), Belarus
Ms Grazyna Kraiewska (krajewski@clor.waw.pl)	Central Laboratory for Radiological Protection (CLOR), Poland
Mr Pawel Krajewski (gpkrajewski@neostrada.pl)	Central Laboratory for Radiological Protection (CLOR), Poland
Ms Laura Newsome (laura.newsome@environment-agency.gov.uk)	The Environment Agency, UK
Mr Richard S. O'Brien (richard.o'brien@arpansa.gov.au)	Australian Radiation Protection & Nuclear Safety Agency (ARPANSA), Australia
Mr Danyl Pérez-Sánchez (d.perez@ciemat.es)	CIEMAT, Spain
Mr Gerhard Proehl (G.Proehl@iaea.org)	International Atomic Energy Agency
Mr Justin G. Smith (justin.smith@hpa.org.uk)	Health Protection Agency (HPA), UK
Mr Alan Henry Tkaczyk (alan@ut.ee)	University of Tartu, Estonia
Ms Beáta Varga (vargab@oevi.axelero.net)	Hungarian Agricultural Authority, Food & Feed Safety Directorate, Hungary