

# WG3: Reference Models for “Waste Disposal”

## Progress at 29 January 2010

### Meeting objectives:

- Exchange of information: update on biosphere aspects of radioactive waste repository performance assessments and identification of critical issues identified in most recent research and assessment.
- Review, improve and then approve the WG work plan.

### Participants:

Helmholtz Zentrum (Germany), Belarus Centre for Hygiene, CIEMAT (Spain), SKB (Sweden), POSIVA (Finland), SSM (Sweden), STUK (Finland), KINS (Korean), SCK-CEN (Belgium), BfS (Germany)

# WG3: Presentations made:

- Reprise of BIOMOSA, BIOCLIM and BIOPROTA
- Dynamic and site specific assessments
- Regional analogue modelling approaches
- Preliminary results of analogue modelling
- Addressing future human use of land
- Regulatory perspective

# WG3: Sub-group tasks to address environmental change

- SG1 Regional analogue approach

Using present conditions from different climate classes to apply to a generic model

- SG2 Soil-plant systems

Exploring how environmental change affects processes and parameters

- SG3 Dynamic modelling at a specific site

Using system modelling on climate and landscape change

- SG4 Demonstrating compliance with protection objectives

Implications in different stages of repository development, taking environmental change into account

# WG3, outline of work plan

1. Site specific system description
2. Identify processes and parameters potentially affected by environmental change
3. Evaluate how/if these processes and parameters are represented
4. Assess how changes in relevant processes and parameters affect model results
5. Identify processes and parameters of general importance in the context of environmental change
6. Identify and describe characteristics that depend on the geosphere assessment
7. Describe and evaluate the overall methodology for site specific assessments
8. Integrate and synthesise results with other groups and formulate recommendations

# WG3: Programme 2010

- Sub-group activities according to work plan (to be updated)
- WG meeting October, Munich
- Draft report to 2011 (3<sup>rd</sup>) EMRAS II Technical Meeting
  
- Inviting wider participation