




UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 2, 1999

MEMORANDUM TO: C. William Reamer, Chief  
High-Level Waste and Performance  
Assessment Branch, DWM/NMSS

THROUGH: Newton K. Stablein, Section Leader  
Projects and Engineering Section  
High-Level Waste and Performance  
Assessment Branch, DWM/NMSS

FROM: Mysore S. Nataraja   
Projects and Engineering Section  
High-Level Waste and Performance  
Assessment Branch, DWM/NMSS

SUBJECT: TRIP REPORT DECOVALEX III WORKSHOP

I attended the international workshop on DECOVALEX III (third phase of DEvelopment of COupled models and their VALidation against EXperiments project) at Las Vegas, Nevada on October 5-7, 1999, which included a working committee meeting (on 10/6/99) and a visit to the Yucca Mountain site (on 10/7/99). Representatives from twelve funding organizations attended the workshop and the working committee meeting and most of them also visited the Yucca Mountain site. The workshop was hosted by the United States Department of Energy (DOE). This trip report summarizes the important aspects of the workshop and the working committee meeting.

Task 1 of DECOVALEX III consists of modeling a Full-scale Engineered Barriers EXperiment (FEBEX) that will be conducted at the underground laboratory in Switzerland. A number of participating agencies have shown interest in modeling the test including the U.S. participants, DOE and NRC.

Task 2 consists of modeling the DOE drift-scale heater test. DOE presented the background information to all the participants of the DECOVALEX project and invited them to model the test and compare the results with actual measurements. Although most participating organizations have shown a high degree of interest in getting involved in modeling the different aspects of the DOE drift-scale heater test, only *Empresa Nacional de Residuos Radioactivos*, (ENRESA) of Spain will be modeling all aspects of the test in addition to the NRC-CNWRA research team.

NH03

Task 3 consists of modeling Bench Mark Tests (BMTs). Three BMTs are being considered, namely, re-saturation, homogenization and glaciation. Because of little direct benefit to the U.S. high-level waste program and limited resources available, NRC-CNWRA research team decided not to actively participate in modeling the BMTs.

Task 4 consists of integration of various tasks and discussing ways to apply the results to performance assessments. NRC-CNWRA research team has decided to get involved in this task as appropriate over the period of the project.

The details of scope and schedules of work for the fiscal year 2000 will be discussed in the next workshop and working committee meeting to be held at Barcelona, Spain between December 13-17, 1999.

If you have any questions on the contents of this trip report, I am available for further discussion with you. I intend to keep the RDTME KTI and other affected KTI team members informed of future developments on the DECOVALEX project.

CONTACT: Mysore Nataraja, HLWB/DWM/NMSS  
(301) 415-6695

<u>DISTRIBUTION:</u>	File Center	NMSS r/f	HLWB r/f	JGreeves	JHolonich
DBrooks	KMcConnell	CWReamer	CPaperiello	JDunnLee/IP	WBelke
CGlenn	WPatrick	AChowdhury	SHsiung	JLinehan	DDeMarco
JPohle	JBradbury	PJustus	JTrapp	TMcCartin	NColeman
BLeslie	JDavis	JFirth	BStiltenpole		

DOCUMENT NAME: S:\DWM\HLWB\msn\D-III-11.wpd

OFC	HLWB	HLWB				
NAME	MNataraja/vm	NKStablein				
DATE	11/2/99	11/2/99				

OFFICIAL RECORD COPY

Task 3 consists of modeling Bench Mark Tests (BMTs). Three BMTs are being considered, namely, re-saturation, homogenization and glaciation. Because of little direct benefit to the U.S. high-level waste program and limited resources available, NRC-CNWRA research team decided not to actively participate in modeling the BMTs.

Task 4 consists of integration of various tasks and discussing ways to apply the results to performance assessments. NRC-CNWRA research team has decided to get involved in this task as appropriate over the period of the project.

The details of scope and schedules of work for the fiscal year 2000 will be discussed in the next workshop and working committee meeting to be held at Barcelona, Spain between December 13-17, 1999.

If you have any questions on the contents of this trip report, I am available for further discussion with you. I intend to keep the RDTME KTI and other affected KTI team members informed of future developments on the DECOVALEX project.

CONTACT: Mysore Nataraja, HLWB/DWM/NMSS  
(301) 415-6695

<b>DISTRIBUTION:</b>	File Center	NMSS r/f	HLWB r/f	JGreeves	JHolonich
DBrooks	KMcConnell	CWReamer	CPaperiello	JDunnLee/IP	WBelke
CGlenn	WPatrick	ACHowdhury	SHsiung	JLinehan	DDeMarco
JPohle	JBradbury	PJustus	JTrapp	TMcCartin	NColeman
BLeslie	JDavis	JFirth	BStiltenpole		

\* SEE PREVIOUS CONCURRENCE  
DOCUMENT NAME: S:\DWM\HLWB\msn\D-III-11.wpd

<b>OFC</b>	HLWB*		HLWB*				
<b>NAME</b>	MNataraja/vm		NKStablein				
<b>DATE</b>	11/02/99		11/02/99				

OFFICIAL RECORD COPY

This document should ~~not~~ be made available to the PUBLIC

*Raj* 11/3/99  
(Initials) (Date)