ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

AGENCE POUR L'ÉNERGIE NUCLÉAIRE/NUCLEAR ENERGY AGENCY

RÉFÉRENCE

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Paris, 3rd June 1988

To: Members of ISAG, PAAG and STRIPA

Workshop on Artificial Clay Barriers for High-Level Radioactive Waste Repositories Lund, Sveden, 5-7 October 1988

Please find enclosed the <u>Second Announcement</u> of the above-mentioned Workshop, which is being organized by the Swedish Huclear Fuel and Waste Management Co. (SKB), in co-operation with the OECD Muclear Energy Agency and the Commission of the European Communities.

Sincerely,

L. Channey

Division of Radiation Protection

and Waste Hanagement

Encl. 2nd Announcement

cc. National Delegations to the OECD Hr. Roland PUSCE, Sveden

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TELEGRAMMES NUCLAGENCE PARIS/TELEX 630668/TELEFAX (33-1) 45 24 96 24

SECOND ANNOUNCEMENT

WORKSHOP ON ARTIFICIAL CLAY BARRIERS FOR HIGH LEVEL RADIOACTIVE WASTE REPOSITORIES

Lund, Sweden October 5-7, 1988

ORGANIZED BY
Swedish Nuclear Fuel and Waste Management Co. (SKB)
in co-operation with
OECD Nuclear Energy Agency
and
Commission of European Communities

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GENERAL PROGRAM

The following topics will be considered in separate sessions in addition to a general overwiew of R & D into artificial clay barriers for repositories in crystalline and argillaceous geological media:

I Longevity of clay barriers

- * Chemical and physical stability
- * Conceptual models for performance assessment

II Conductivity of clay barriers

- * Hydraulic conductivity
- * Diffusion of dissolved substances
- * Heat conductivity
- * Conceptual models for performance assessment

III Rheology of clay barriers

- * Shear strength
- * Stress/strain relationships
- * Creep
- * Relevance to engineering design; performance assessment

Each of the topics will cover basic material research, physical and mathematical modelling.

PRELIMINARY AGENDA

Pre-tours

Provided that the number of attendants is sufficient, guided tours to the field test sites at the Stripa mine and the recently completed underground storage for low-and medium wastes at Forsmark will be arranged. The trip starts early

October 3 from central Stockholm to Stripa, where the Buffer Mass Test area, and Shaft and Tunnel plugging test sites, as well as the rock grouting experiment area will be visited. At Forsmark, which will be visited on October 4 on the way back to Stockholm, Arlanda, the rock caverns with waste handling facilities and the exhibition describing the design and function of the clay-based buffers will be demonstrated. The later includes the philosophy of and arrangement for gas release through the barriers.

Sessions in Lund (October 5-7, 1988)

Two introductory half-hour "key" lectures are planned, one being directed to physico/chemical processes that determine the practically important functions of clay barriers, the other being focussed on the longevity of smectitic clays.

Three consecutive sessions which deal with the three major topics will follow on October 5-7, ending with a panel session for summing up and for formulating recommendations for future work.

The tentative approximate time schedule is as follows:

October 5, "Longevity of clay barriers"

09.00 Key lectures
 10.30-12.30 Presentations
 12.30-13.30 Lunch
 13.30-15.00 Presentations

15.30-17.00 Discussions, "workshopping"

October 6, "Conductivity of clay barriers"

09.00 Introduction

10.00-12.30 Presentations

12.30-13.30 Lunch

13.30-15.00 Presentations

15.30-17.00 Discussions, "workshopping"

October 7, "Rheology of clay barriers"

08.30 Introduction
 09.00-12.30 Presentations
 12.30-13.30 Lunch
 13.30-14.30 Discussions

October 7, "Synthesis, recommendations"

15.00-17.00 Panel discussion, attempt to define major research issues and to formulate recommendations.

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Format

The intention is to offer much time for exchange of experience and informal discussions, leaving only 5-10 minutes for each formal presentation and the equivalent amount of time for asking questions and making points in direct connection to each talk. A significant amount of time is reserved for general discussion at the end of each session.

Publication

The written contributions, wich must be in the organizers hand in the form of one original and one copy not later than June 15, 1988, will be collected in a preprint volume, copies of wich will be distributed to the attendants in early September. The authors have a possibility of introducing corrections that may be generated by the discussions so that the "brushed-up" versions can be sent to the organizers for production of the final proceedings. It will appear in the form of a special issue of the Elsevier Publ. Co journal "Engineering Geology" in early 1989. In order to make this possible, the first version of the manuscripts must be prepared for photocopying with no editorial work, and the final version prepared for printing, i.e. with the text mass and figures and tables separated. These latter manuscripts, for which Elsevier instructions to authors

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will be sent later, must be in the hand of the organizers not later than December 1, 1988.

Instructions for preparing the preprint manuscripts

The organization and form of the manuscripts should be in accordance with the attached example. The text, figures and tables must be confined within the 16 x 24 cm space, using the form of headings, literature references and arrangement of a short abstract on a separate first page as in the example.

The figures, which must be glued in to fit the text, should have a high class (no Xerox copies). Photos must be copied to yield "copy-proof" originals.

The maximum number of pages is set at 10. Notice that single spacing must be used.

Attendance

Registration of those who have not already made that, is arranged by sending in the attached form. The adress is:

Clay Thechnology AB Att.: Roland Pusch IDEON Research Centre S-223 70 LUND

Tel.: +46.46 18 25 71

The registration fee is paid by transferring equivalent of 1500 Swedish Crowns to the following bank account:

4.902.131-4 "Clay Workshop"
Lundabygdens Sparbank
Clearing nr 8359-2, Telex Swedbank 19505, Swiftadress:
Swedsess

This fee entitles you to attend the workshop and to get one copy of the preprints and one printed copy of the final proceedings, as well as to be served lunch and coffee all three days.

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For those who like to go on the Stripa/Forsmark trip, the form needs to have your signature for that and an additional 1500 Swedish Crowns transferred to the above-mentioned bank account. Note that accommodation cost is not included. Rooms will be booked, however, at an appropriate hotel, preliminarily the Stadshotellet in Lindesberg for the night October 3-4. Flight connections from Arlanda to Lund are multiple.

<u>Time schedule</u> For the detailed planning of the workshop the abstracts need to be sent in as soon as possible while the complete manuscripts must be delivered not later than June 15.

> A third announcement, giving full details of the arrangements, list of speakers and attendants etc, will be distributed in August.

Lund 1988-04-18

REGISTRATION FORM

concerning

the Workshop on Artificial Clay Barriers for High Level Radioactive Waste Repositories.

	I will take part in t 1988(Fee: 1500 Sk	the workshop in Lund October 5-7, r)
	I will go on the Stripa/Forsmark trip October 3-4, 1988 (Fee: 1500 Skr)	
	_	s not valid until the conference fee (and th cursion attendants) have been paid.
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