

SEP 21 1993

MEMORANDUM FOR: Ronald L. Ballard, Chief
 Geology and Engineering Branch, HLWM

FROM: Margaret V. Federline, Chief
 Hydrology and systems Performance Branch, HLWM

SUBJECT: REVIEW - ANNOTATED OUTLINE, "ROLE OF COLLOIDS IN THE RELEASE
 OF RADIONUCLIDES FROM VITRIFIED WASTEFORMS AND SPENT FUEL"

The HLHP staff have reviewed the annotated outline "Role of Colloids in the Release of Radionuclides...", submitted to the NRC by CNWRA. As stated in the attached memo dated September 7, 1993, we find the outline generally acceptable. It appears that the author has taken most of our comments made on June 16 into account.

In our opinion, Section Four, "Sorption/Transport/Filtration of Colloids," still needs some work on structure. The geology and geochemistry will be important factors in both the far-field and near-field.

We should ensure that the anticipated scope of the proposed project is clear. A literature review that potentially repeats DOE's review is not necessarily a good use of resources. However, the purposes of the two reports are different. The goal of the NRC/CNWRA report is to identify important aspects of colloid formation and transport that require greater attention by DOE, to help define future IPA work, technical assistance work, research, and to provide a basis for reviewing DOE's future work.

If you have any questions, please contact Virginia Colten-Bradley, 504-3728.

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 Margaret V. Federline, Chief
 Hydrology and Systems Performance Branch, HLWM

Attachment:
 As stated

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Central File	BJYoungblood, HLWM	JJLinehan, HLWM	HLHP r/f
MVFederline, HLHP	RLBallard, HLEN	JHolonich, HLPD	NMSS r/f
CNWRA	LSS	LPDR	ACNW
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SEE PREVIOUS CONCURRENCE

OFC	HLHP*	HLHP*	HLHP	
NAME	VC-Bradley/cj	DJBrooks	MVFederline	
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SUBJECT: REVIEW - ANNOTATED OUTLINE, "ROLE OF COLLOIDS IN THE RELEASE
 OF RADIONUCLIDES FROM VITRIFIED WASTEFORMS AND SPENT FUEL"

The HLHP staff have reviewed ~~the reviewed~~ the annotated outline "Role of Colloids in the Release of Radionuclides...", submitted to the NRC by CNWRA. In general, as stated in the attached memo dated September 7, 1993, we ~~did not find anything that is dramatically wrong with the outline.~~ It appears that the author has taken most of our comments made on June 16 into account.

FIND THE OUTLINE (GENERALLY) ACCEPTABLE

In our opinion, Section Four, "Sorption/Transport/Filtration of Colloids," still needs some work on structure. The geology and geochemistry will be important factors in both the far-field and near-field.

REWORK.

WE SHOULD ENSURE THAT
 We have some concerns about the anticipated scope of the proposed project. A literature review that ~~will~~ potentially repeat ^{everything} that DOE has done is not necessarily a good use of resources. However, the purposes between the two reports should be different. The goal of the NRC/CNWRA report is to identify important aspects of colloid formation, that require greater attention by DOE, and ~~will~~ help define future IPA work, technical assistance work, and research ^{AND TO PROVIDE A BASIS FOR REVIEWING DOE'S WORK. AND TRANSPORT}

DOE'S REVIEW

If you have any questions, please contact Virginia Colten-Bradley, 504-3728.

Margaret V. Federline, Chief
 Hydrology and Systems Performance Branch, HLWM

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