


Enclosed is the agenda for the NRC visit to the Department's Basalt Waste Isolation Project in Richland, Washington from September 22-24, 1981. We are pleased to be able to provide this briefing for you. We would appreciate receiving copies of your draft and final trip reports, as provided in the past.

Please contact Carl Newton of this office or Dave Squires of our Richland office if any questions arise.

Enclosure
cc: F. Arsenault
Division of Health, Siting and Environment

Sincerely,


September 22-24, 1981
ATYENDEES (Tentative)

| NRC | YE-PB | OOE |
| :---: | :---: | :---: |
| J. Martin | A. Lindsay |  |
| M. Knapp | \$. Ritchie | R. Goranson |
| M. Bell | B. Schmidt | D. Squires |
| J. Greeves | D. Watson | R. Nelson |
| P. Prestholdt |  |  |
| plus w15 NRC consultants | . |  |
| Rockrell | ONI |  |
| ; (TBD) | M. Glora |  |

September 22. 1981 - Federal [luilding - Room G53

| 10:000 | Welcome and Introduction | R. B. Goranson/ <br> L. R. Fitch |
| :---: | :---: | :---: |
| 10:10a | Overview of BHIP Activities | R. A. Deju |
| $\begin{gathered} 10: 40 \mathrm{a} \\ \text { to } \end{gathered}$ | Waste Packatge, General Discussion to Cover the Following Topics: | M. J. Smith |
|  | 1. Solubilities of radionuclide-bearing phases in the BWIP waste/water/rock systems: | : |

2. Mineralogy of fractures; likely phase transformations of the fracture filling minerals under anticipated repository conditions: and the effect these changes will have on pemeatility and sorption
3. Sorptive propertics and sorptive capacity (Kd) of secondary mineral phases that line fractures
4. Petrologital and mineralogical characterization of the Untanum flow; this requires access to cores, core logs, thin sections, photographs and reports
5. Water chemistry data for the Grande Ronde
"Agenda for NRC Visit (Page 2)

Repository - ESTF and Conceptual Design - General
H. B. Dietz

Discussion to Cover the Following Tobics:

1. Exploratory Shaft Test Facility (ESTF)
a. Current version of the design for the ESTF
b. Location of the ESTF and the options to collocate the ESTF with the planned geologic repository or to locate the ESTF away/apart from the planned repository
c. Construction methods, shaft sinking methods and hydrologic testing around the shaft
d. Parameters, tests, and procedures planned for the ESTF: the correlation of the planned tests etc. With the design of the ESTF; and the application of the test results to the planned design of the repository
e. Correlation of genlogic and hydrologic investigations at the site with the planned test facility, in particular, development of stress measurements and plans for hydrofracturing
2. Near-Surface Test Facility (NSTF)
a. Bases for the correlation of the NSTF test results with the geologic conditions at the planned repository depth and with the development of the repository design
3. Borehole and Shaft Sealing Investigations
4. Conceptual Design -
a: Report on Functional Design Criteria (RHO-BWI-CD-38. Rev. 3)
b. Interface of the site investigations and design of the repository
c. Current version of the concept design

2:30p Break
2:45p Site - Geolony, llydrology, Geophysics - Remote
D. J. Brown
to
5:00p

Sensing - General Discussion to Cover the following Topics

1. Hydrology and Geolagy
a. Groundwater modeling: history of model development, present status, interpretation of the flow field, interactions between and within hydrologic units, use of curvi-7inear cross sections.
b. Values of parameters for gruundwater modeling: methods of selection, sensitivity analyses.
c. Water budget for deep aquifers, including effects of inter-basinal flow.
d. Groundwater flow field: current version, current interpretation, effect of structural features such
$\therefore$ as anticlines.
e. Elevations of the water table along the Pasco Basin boundary (as shown in Plate III-9, RIIO-BWI-ST-5).
f. Passible hydraulic connections between hydrologic units and upper aquifers, e.g.. Columbia River paleochannel.
g. Strucutral control of the Columbia River within the site.
h. Hydrologic testing history for each well that provides data for groundwater modeling.
i. The NRC would like to obtain a copy of the following logs for each wel. 1 that penetrates the Wanapum:
o Lithologic, fncluding drillers comments, notes on lost circufation, etc.

- Resistivity

0 S.P.
o. Neutron - epithermal neutron

- Sonic

0. Birdwell 3-D or formation density.
1. Geophysics
a. Reviel the seismic reflection program for the Cold Creek syncline, Gable Butte and Gablé Mountain.
b. NRC would like to obtain selected copies of deep and shallow scismic sections of the above.

3: Remote Sensing
A. Geologic remote sensing data and produres for Rockwell discussed in RHO-8WI-3A-13, page 14, lu:t paragraph. including imatery, interpretive overlas, products and reports

September 23, 1981-8:00a Mect in Federal Buflding - Room 353
8:10a Leave for NSTF, Tour the Facility
B. C. K. Moravek

1:00p Return to Federal Building-Room Tbl
Break up'into groups as follows:

Group II Modeling
R. E. Gephart

Gr̈oüp JII. : Design (ESTF, NHRB) .......
H. B. Dietz

Group IV Geachemistry (Visit Core Lab if Pcosible)
Group $V$ Licensing
M. J. Smith
L. R. Fitch

September 24, 1981
8:004
Individual groups continue with the addition :f 2 now groups fonmed from.existing Groups I-V.

Group V1 Quality Assurance
H. F. Nicol

Group VII Geophysič-5
T. A. Curran

12:30p Lunch

1:30p All return to Federal Building: Room G53; fogeneral discussion. All sessions completed :y 5:00p.
the BNIP person heading each group will be responsibie or arranging a meeting-place for that group.

