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MEMORANDUM TO: Robert Wright
Repository Projects Branch
Division of Waste Management, NMSS

FROM: Kristin Westbrook
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Geotechnical Branch
Division of Waste Management, NMSS

SUBJECT: PROBLEMS WITH INFORMATION RELEASES FROM DOE/RHO

I have made a partial list of information items on Geology/Geophysics that have an unknown release status (Attachment A). I have been unable to comprehensively determine what information exists and also, I am unable to determine what information has been released. It seems that the inability to determine what information exists and what information has been released could make evaluation of the site description and subsequent plans required to be in DOE's Site Characterization Plan impossible.

In my communications with DOE/RHO, I am usually directed to the accessions list when the subject of information collection or information release comes up. The accessions list is of little or no use in determining the information that exists and is of no use in determining the availability of any of the twenty-nine items listed on Attachment A. The accessions list entries that might be applicable to Geology-Geophysics have no dates, no listing of the total page numbers, and for a great majority of the entries, no description of what the document contains. A list of information needed about geology-geophysics data is included as Attachment B.

These problems need to be addressed. I am available to give clarifications and to discuss the problems in further detail. Please keep me informed as to any progress towards resolution of these problems regardless of whether or not such progress is specific only to the Hanford site.

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Enclosures:
As stated

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ATTACHMENT A

SELECTED ITEMS* ON GEOLOGY-GEOPHYSICS FOR THE HANFORD SITE: UNKNOWN RELEASE STATUS

1. NRC Trip Report, November, 1981 - Seismic Refraction, grid shot over the RRL in FY 1981; Data interpretation in FY 1982 because of budgetary limitations.
2. NRC Trip Report, November, 1981 - Seismic Reflection, program recorded vicinity of RRL, Gable Mountain, Gable Butte and the Columbia River north of Gable Mountain.
3. NRC Trip Report, November, 1981 - Magnetotelluric Data, collected in the third and fourth quarter of FY 1981.
4. NRC Trip Report, November, 1981 - High Altitude Imagery (U-2, Skylab, and Landsat), "A substantial report on the results of this work (along with maps, imagery, and overlays) is in draft form and will be released in early 1982".
5. BWIP Bulletin, January, 1984 - Seismic Reflection, gridded survey planned to more fully characterize: top of basalt; overlying sediments; and structure within the RRL. The emphasis is on the area near the current E.S. site.
6. NRC/DOE Workshop, March, 1984 - Weston Report, Magnetotelluric data from 1981 continues to be assessed by RHO and EMEEX. Data not released.
7. NRC/DOE Workshop, March 1984 - Weston Report, Magnetotelluric, site-specific work planned in FY85 and perhaps FY86.
8. NRC/DOE Workshop, March, 1984 - Weston Report, Gravity Data, Rockwell will collect gravity data at MT stations as well as fill in data along Yakima Ridge - Post FY85 as informally scheduled. An analog area along the S. slope of Saddle Mountains where basalt structures are known to exist will be surveyed for comparison. Gridded gravity and magnetic, RHO will finish survey in FY84 and FY85 including analog area.
9. NRC/DOE Workshop, March, 1984 - Weston Report, Cold Creek Barrier, (geologic structure) Aeromag, groundmag, gravity, stratigraphic.

* The source of each item is provided along with a brief description of the item.

10. NRC/DOE Workshop, March, 1984 - Weston Report, Seismic Reflection by EMEX - Key element in the reprocessing was the development of synthetic seismograms.
11. NRC/DOE Workshop, March, 1984 - Weston Report, Seismic Reflection/Refraction, RRL area - gridded surveys, both refraction and reflection simultaneously planned for FY 84-85; if successful, additional gridded surveys in FY86.
12. NRC/DOE Workshop, March, 1984 - Weston Report, Seismometer network down boreholes. (Network installed in October 1984, data release?).
13. NRC/DOE Workshop, March, 1984 - Weston Report, Compilation of geophysical "anomaly status file".
14. NRC/DOE Workshop, March, 1984 - Weston Report, External Peer Review Group FY85.
15. NRC/DOE Workshop, March, 1984 - NRC Notes,
Two planning documents: Lithologic Characterization Plan and Tectonic Characterization Plan, FY84.
16. NRC/DOE Workshop, March, 1984 - NRC Notes, oil wells as possible magnetotelluric base stations.
17. DOE/RHO - Workshop Presentation, March 1984 - Lithologic studies - Lateral Variation study will be initiated April, 1984.
18. DOE/RHO - Workshop Presentation, March 1984 - Analysis of currently available fracture data is underway; plans for collection of new data are being formulated.
19. DOE/RHO - Workshop Presentation, March 1984 - Work is underway to better characterize interbeds and secondary minerals in flow tops.
20. DOE/RHO - Workshop Presentation, March 1984 - Plans for re-evaluating the preferred candidate are being made.
21. DOE/RHO - Workshop Presentations, March, 1984 - DC-19 , 52-foot-thick zone of diastrophic, vesicular or fractured rock within the dense interior below main vesicular zone. This interpretation is based on geophysical log response.

22. DOE/RHO - Workshop Presentation, March 1984 - In DC-20C, Geophysical logs indicate that low density zones are interspersed with high-density zones where the dense interior of the Rocky Coulee was predicted to occur.
23. DOE/RHO - Workshop Presentation, March 1984 - Revised Basalt Core Logging Procedure; relog core from selected boreholes, log all core from new core holes.
24. DOE/RHO - Workshop Presentation, March 1984 - Seismic Velocity Data from Boreholes Proposed; verification seismic line, additional reflection data in RRL - based on results of verification studies.
25. DOE/RHO - Workshop Presentation, March 1984 - Tectonic Breccia, Analog Study; baseline Mapping of the Analog Area completed, Analysis of field and borehole tectonic fractures and breccias in progress. Quantitative analysis and synthesis of data.
26. DOE/RHO - Workshop Presentation, March 1984, Pomona Flow sampled at 32 sites in the Central Pasco Basin; plans: sample structural rotation at additional sites to confirm and refine findings.
27. DOE/RHO - Workshop Presentation, March 1984 - Magnetotellurics; acquire regional data, detailed surveys on selected structures.
28. Note from Jo Ludwick (RHO) to R. Wright (NRC) 10/84, Rockwell, 1984 - Assessment of Rock Mass Condition in a Candidate Horizon for Nuclear Waste Repository in Basalt, in preparation, Richland. "This document is not yet completed and will not be used as a reference for the Public Draft Environmental Assessment."
29. Report number RHO-BW-ST-19P, 1983 - Geodetic data from the individual surveyed line segments shown in Chapter 6.

ATTACHMENT B

INFORMATION NEEDED FOR
ITEMS IN ATTACHMENT A AND FOR ALL
GEOLOGY/GEOPHYSICS DATA

1. If the information is available, we need the name, author, report number and date of the released document.
2. If the information is not available, we need information such as the following:
 - a) when the information was or will be collected, b) who has collected or will collect the information, c) the location or areal extent of the study, d) whether or not the study is completed, e) what work remains to be completed, f) when remaining work will be completed, and g) what is the expected release date, h) purpose to which the data will be put.
3. Some means to determine, in a comprehensive way, what data on geology/geophysics exists.