



START

Department of Energy

Richland Field Office

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Mr. Paul T. Day
Hanford Project Manager
U.S. Environmental Protection Agency
Region 10
712 Swift Boulevard, Suite 5
Richland, Washington 99352



Mr. David B. Jansen, P.E.
Hanford Project Manager
State of Washington
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Messrs. Day and Jansen:

GROUT STATUS REPORT FOR WASHINGTON STATE DEPARTMENT OF ECOLOGY

Attached is the Grout Status Report on the Hanford Grout Disposal Program for the months of March through June.

Please direct any questions that you may have to Lori Huffman of my staff, on (509) 376-0104.

Sincerely,

Steven H. Wisness
Steven H. Wisness
Hanford Project Manager

TPD:RC

Attachment

- cc w/att:
- D. Duncan, EPA
- J. Witcek, Ecology
- J. L. Epstein, WHC
- D. W. Lindsey, WHC
- T. Veneziano, WHC



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GROUT STATUS REPORT FOR WASHINGTON STATE DEPARTMENT OF ECOLOGY

MARCH - JUNE 1992

EXECUTIVE SUMMARY

The Hanford Grout Disposal Program (HGDP) is currently planning a 1993 Grout Facilities restart. Efforts associated with completion and approval of the Performance Assessment (PA), Final Safety Analysis Report (FSAR), Grout Facilities physical upgrades/modifications, Operational Readiness Review (ORR) and the finalization of grout formulation are required for initiating disposal of the first one million gallons from Hanford's double-shell tanks (partial M-01-01A). The M-01-01A and subsequent milestones are in jeopardy, this has been confirmed after evaluating the resource loaded integrated schedule. Formal discussions with regulators to discuss schedule impacts and a predecisional draft report on grout alternatives have begun. A Tri-Party Agreement change request is being drafted for submittal to the regulators (Washington Department of Ecology (WDOE) and Environmental Protection Agency (EPA)). The proposed delay is associated with the uncertainty associated with the petition before the Nuclear Regulatory Commission (NRC) challenging the definition of certain Double-Shell tank wastes as incidental wastes, the magnitude and complexity of the rewrite/rework of the PA based on U.S. Department of Energy-Headquarters (DOE-HQ) Performance Assessment Peer Review Panel's (PRP) comments, and the heat of hydration issue resulting in the need to pour the grout campaigns in lifts.

PERFORMANCE ASSESSMENT

Activities such as reanalyzing intruder scenarios, defining exposure scenarios, overall writing improvements etc. are part of the continuing efforts involved with rewriting the PA in order to address the PRP's comments. An estimate of all future waste feeds to the Grout Treatment Facility has been completed. This estimate was presented to the WHC Performance Assessment Steering Panel. The PA will be available for DOE review in March 1993.

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SCHEDULE

The resource loaded integrated schedule has been under development for several months. The schedule confirms that revision and approval of the PA is the critical path activity behind the proposed one year delay, assuming no adverse impacts from the NRC petition resolution. A Tri-Party Agreement change request is being drafted for submittal to the regulators (WDOE and EPA). The proposed delay and modifications within the change request stem from: the uncertainty associated with the petition before the NRC challenging the definition of certain Double-Shell tank wastes as incidental wastes; the required rewrite of the Performance Assessment for grout to address the concerns raised by the DOE-HQ Performance Assessment Peer Review Panel; and the on-going problems associated with the heat of hydration of the grout resulting in the need to pour the grout campaigns in lifts.

A meeting was held with regulators on June 9, 1992 to discuss the status of the Grout Disposal Program. The regulators were advised of schedule difficulties which are being driven by the PA and other technical uncertainties.

FINAL SAFETY ANALYSIS REPORT

The FSAR was presented to the WHC Tank Waste Disposal subcouncil for review and comment. The WHC approved FSAR is currently planned to be submitted to RL July 1992.

OPERATIONAL READINESS REVIEW

The ORR activities have been rescheduled to FY 1993 based on the proposed October 1993 start-up schedule.

GROUT FORMULATION

Technical exchange meetings were held with representatives from Oak Ridge National Laboratory, Pacific Northwest Laboratory and Westinghouse Hanford Company to discuss various ongoing formulation activities.

The grout pilot-scale test pour is complete. It consisted of a dry blend containing 20 percent type II portland cement, 66 percent fly ash, and 14 percent attapulgite clay mixed at a ratio of 8.7 pounds of dry blend per gallon of the tank 106-AN simulated waste.

A draft document entitled, "Test Plan to Determine the Effects of Curing Time and Curing Temperature on Properties of Double-Shell Tank Waste Grouts," was reviewed by Grout Technology and comments have been returned to Pacific Northwest Laboratory.

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PART B PERMIT APPLICATION

The WHC President has certified the permit application. Upon review and certification by the U.S. Department of Energy-Richland (RL) manager, the permit application will be submitted to WDOE and EPA on July 26, 1992.

VAULTS 102-105 (Project B-714)

Placement of excess water and grout feed piping installation continues.

The air leak tests on the vaults have been performed and were found satisfactory.

Vault construction is three months behind schedule, no impact to the Tri-Party Agreement milestone M-01-01A is forecasted.

Placement of the diffusion barrier material is complete.

WHC is issuing details/comments to enable completion of the closure cover design.

PORTABLE INSTRUMENT HOUSE (PIH)

The PIH #1 modification work is approximately 80 percent complete. Remaining work is pending inspection and arrival of parts.

VAULTS 106-109 (Project W-125)

DOE-RL comments on the definitive design of project W-125 have been resolved with WHC. Completion of definitive design and the award of contract for the excavation and barrier placement has been placed on hold due to technical uncertainties (PA, etc.).

VAULT VENTILATION SYSTEM (EXHAUSTER)

The exhauster design for vaults 102 and 103 is 50 percent complete. All WHC oversight organizations (Quality Assurance and Safety) have completed review of design drawings, control diagrams, and specifications.

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MISCELLANEOUS

Work is continuing toward resolution of Ecology's concern regarding hydrogen generation associated with waste from 106-AN. This issue will be covered at the July 23 Unit Manager Meeting and resolved with subsequent working meetings with Ecology.

The forecast of waste generation of hazardous material/waste handling for the grout facility is complete.

Work continues on the Tank Integrity Assessment. Testing of the excess water line for integrity has been completed. Installation of cathodic protection is pending the establishment of adequate power supply.

The C-2 analysis (NEPA documentation) was submitted to RL for review.

A draft of the U.S. Army Corp of Engineers' plan, "Waterways Experiment Station Quality Assurance Plan" for cold cap placement has been distributed for review and comment.

Development of the Grout specific Lock and Tag training course development has been completed. Twelve operators have attended the new course. Work is continuing on the exam portions for Grout Processing Facility Control Room Operator Certification packages. The Dry Materials Facility Certification Manual has been assembled for signature.

A meeting with the NRC will be held in Richland on July 16, 1992 to discuss the status of DOE's plans relating to the classification and disposal of the Hanford double-shell tank wastes. The NRC and DOE have invited attendees from the States of Washington and Oregon as well as the Yakima Indian Nation, EPA, and HEAL to this meeting.

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