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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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TO: Mr. Robert E. Browning, Director
FROM: Paul T. Prestholt, Sr. On-Site Licensing Representative
DATE: May 26, 1987
SUBJECT: DOE Weekly Report

Please find enclosed the above-referenced report received in this office, i.e., for week ending May 15, 1987.

nan for PTP

Enclosure

cc: J. J. Linehan
K. Stablein
S. Wastler

WM Record File

102

WM Project 11

Docket No. _____

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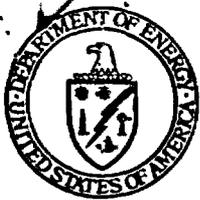
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Department of Energy

Nevada Operations Office

P. O. Box 14100

Las Vegas, NV 89114-4100

MAY 21 1987

Stephen H. Kale, Associate Director, Geologic Repositories, HQ (RW-20) FORS

NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI) PROJECT WEEKLY HIGHLIGHTS
FOR THE WEEK ENDING MAY 15, 1987

I. Critical Items Status

A. Stop-Work Orders

Lawrence Livermore National Laboratory (LLNL)--The status of the five remaining scientific investigation planning (SIP) documents and their associated Quality Assurance Level Assignments (QALAs) requiring Waste Management Project Office (WMPO) approval to rescind the stop-work provisions for these activities has not changed since the last Weekly Highlights Report, May 8, 1987.

SIPs approved by WMPO	5
SIPs in process	5

The WMPO will request a schedule from LLNL identifying dates for submission of the remaining 5 SIPs.

U.S. Geological Survey (USGS)--The four generic conditions identified as conditions for rescinding the stop-work order on technical and scientific activities have been satisfied. Hence, the lifting of the stop-work conditions is now incremental with the WMPO approval of the SIPs and associated QALAs. The status of the SIPs and QALAs is as follows:

SIPs approved by WMPO	3
SIPs submitted to the WMPO for approval	1
SIPs in process for current investigations	34
SIPs in process for future investigations	10

A meeting was held to review approximately ten SIPs that have been submitted.

Nuke leaks feared at cracked NTS mesa

WASHINGTON (UPI) — A Nevada mesa heavily used for 30 years for underground nuclear weapons tests has developed cracks that could produce serious radioactive leaks during future detonations, according to some scientists and critics of the tests.

"I have a concern about future testing at Rainier Mesa because I believe there is a high probability of an accident due to problems with the structural integrity of the mesa," said Rep. Mike Lowry, D-Wash.

"Workers at the test site and the population over a large area could be exposed to nuclear radiation in the event of such an accident."

Lowry, who has been pressing the Energy Department which operates the test site for an explanation of past and potential problems at the mesa, said he questions department assurances that the mesa is safe for future testing.

He said his skepticism is based on evidence of fracturing of upper layers of volcanic rock at the mesa, on credibility problems he has had with the department over the test site, and over activities in his

own state — including its operation of the problem-plagued Hanford nuclear reactor that was shut down earlier this year, and its proposal to put a high-level nuclear waste dump at Hanford.

Jack Evernden, a government geophysicist and seismologist, said his and another scientist's review of the public data concerning Rainier Mesa led them to conclude that repeated nuclear tests have broken the mesa's upper layers of volcanic rock.

Evernden, a leading authority on detection and identification of underground nuclear blasts, said that the fracturing of the mesa's upper layers increases the potential for a serious accident — with radioactive releases to the open air — in future tests.

For safety's sake, he said, the tests should either be conducted deeper in the ground or moved to another location. But, he added, digging deeper costs more "and even nuclear tests don't have unlimited budgets."

The 11-square-mile mesa at the Nevada Test Site is the only location in the United States used to test the effects of nuclear

blasts on complex military-related instrumentation and equipment, including systems related to President Reagan's Strategic Defense Initiative, popularly called "Star Wars."

More than 50 such weapons-effects tests have occurred in a tunnel complex in the mesa since 1957. Other types of tests take place at the bottom of vertical shafts drilled in the desert at the test site.

Both the Energy Department and the Defense Nuclear Agency, which sets up tests at the mesa, deny there is any safety problem at the site. The mesa is located within 30 to 40 miles of such small communities as Hiko, Alamo, Warm Springs and Rachel, and is about 75 miles northwest of Las Vegas.

Critics point especially to a serious accident in the 1984 "Midas Myth" test, and the partial failure of an internal shield system during the 1986 "Mighty Oak" test, as evidence of potentially serious problems at the mesa.

Radiation and heat damage totaling \$32 million was caused to experimental and

diagnostic equipment when a concrete-encased steel door was punctured by the "Mighty Oak" blast, the Energy Department has acknowledged. In "Midas Myth," the ground above the test site caved in and formed a 17-foot crater after the blast, killing one person and injuring 13.

A subsequent Energy Department investigation reported that possible causes of the "Midas Myth" accident included a failure to conduct the test far enough underground and the "compromise of the welded tuff caprock integrity" from repeated nuclear detonations.

Welded tuff caprock is the layer of volcanic rock, "welded" together by nature at the upper levels of the mesa.

When an underground blast occurs at Rainier Mesa, one U.S. Geological Survey official explained, the caprock is lifted slightly into the air and then comes crashing back down. When it crashes, he said, breaking and cracking occur. The blasts themselves do not take place in the caprock, but in lower rock that better absorbs the explosion, he said.

Oregon seeks veto to nuclear dump

WASHINGTON (UPI) — An Oregon congressman said he has introduced legislation to give his state veto power on any move to make the Hanford Nuclear Reservation a national dump site for radioactive material.

"Just yesterday, Oregon voters, by a 3-to-1 margin, said that they oppose a policy that calls for shipping 177,000 truckloads of nuclear wastes across the Pacific

Northwest, for the dumping 77,000 tons of radioactive wastes at Hanford, and for putting politics ahead of scientific merit," Rep. Les AuCoin, D-Ore., said Wednesday.

"To oppose this policy, Oregon must have an official role in the process of selecting a national nuclear waste dump, and this bill does just that, calling for Oregon to be officially designated as an 'affected state' with veto power

over Department of Energy decisions."

AuCoin said his bill was endorsed by the rest of the Oregon House delegation. He said Sen. Mark Hatfield, R-Ore., has introduced similar legislation in the Senate.

AuCoin also charged the DOE's selection of Hanford as one of the three proposed sites for the dump violated the "intent and mandate" of the act.

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B. Site Characterization Plan (SCP)

A decision was made on May 12, 1987 concerning the High Level Findings issues of the SCP. DOE/HQ and NNWSI Project representatives (Sample Overview Committee (SOC) members) agreed that the sections would be written according to the DOE/HQ guidance received on May 1, 1987, but these sections would not be sent to DOE/HQ on May 26. Instead, these sections would be sent under separate cover in June.

The latest list of study plans will be sent to project participants next week for their review. Review of study plans at HQ is to begin May 25. A teleconference was held that include HQ, NNWSI, BWI, and SRPO representatives to discuss the preliminary lists of study plans sent to HQ thus far and the draft addendum to the study plan review procedure issued by HQ.

Summaries of three site programs for Section 8.2 are currently being developed.

A proposed list of intermediate milestones is being developed for sections 8.5.1 through 8.5.4 showing connections between the milestones in 8.3 and the higher level milestones shown on the summary schedule for 8.5. A teleconference was held on May 12 to discuss progress of the section and a meeting was held on May 15 to review the proposed lists.

Approximately 80 percent of the revised SCP text has been submitted for production.

A meeting was held with Sandia National Laboratories' personnel concerning the SCP glossary. The glossary was reviewed to ensure consistency with the Conceptual Design Report.

The HQ review of Chapter 6 took place on May 12 and 13 in Washington, D.C.

Reference verification is continuing.

The revised SCP is scheduled to be submitted to HQ on May 24. It is unlikely that the entire document will be clean copy at that time. Some marked-up text is expected. It has been suggested that a three-week comment resolution meeting may be required at HQ to finish the review.

Review of the Prototype test plans is continuing and detailed comments are being prepared on each plan for submittal to the WMPO. These comments will be used by WMPO in their review of the complete test plan.

C. Core Sample Management

Work continued on the development of procedures for the Sample Management Facility (SMF). The detailed schedule for development of the SMF was modified to reflect the current SMF status.

Specifications for capital equipment were completed and are undergoing internal informal review. These specifications, along with vendor quotes, have been sent to the DOE.

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Stephen H. Kale

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I-A. Project Manager's Concerns

The following concerns have been reported previously on Weekly Highlights reports.

<u>Issue</u>	<u>Status</u>	<u>First Report Date</u>
1. Letter to Knight dated March 25 requests HQ help in obtaining available U.S. Nuclear Regulatory Commission (NRC) information regarding criteria, restrictions, and analyses relating to overflight of licensed facilities by aircraft. (86-958)	Due May 6, 1986 OGR action delayed due to higher priority issues (12/16/87 update).	03/27/86
2. January 20 letter to Stein transmits final version of letter reporting ongoing and planned site characterization activities. Requests approval to provide copies to state of Nevada at January 23 meeting. (87-749)	Due January 22, 1987	01/23/87
3. Letter to Smith dated March 10 requests the reference in the Procurement/ Contracting rules where a discussion of the Interface Agreements can be found. (87-1133)	Due March 26, 1987	04/03/87
4. Letter to Stein dated March 10 requests review and comment on revised background paper for meeting with the NRC. (87-1134)	Due March 11, 1987	04/03/87

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Issue	Status	First Report Date
5. Letter to Marks dated March 23 requests a list and short explanation of C&C items which have been brought up by the affected parties at workshops and meetings. (87-1209)	Due April 13, 1987	04/03/87
6. Letter to Kale dated March 26 requests review of the OGR VBS Revision (OGR/B-4). (87-1234)	Due April 1, 1987	04/03/87
7. Letter to Alexander dated April 10 requests clarification of an error in DOE/HQ letter regarding a Waste Package Performance Assessment meeting. (87-1338)	Due April 24, 1987	04/17/87
8. Letter to Cassella dated April 16 requests assistance in obtaining final signature on NNWSI Project charter. (87-1386)	Due May 7, 1987	04/24/87
9. Letter to Alexander dated April 24 requests (1) copies of the SCP to support a concurrence review of chapters 1-7 and (2) a distribution list for Chapter 8. (87-1439)	Due May 15, 1987	05/01/87
10. Letter to Kale dated April 30 requests expeditious final approval of NNWSI Project Quality Assurance Plan, NVO-196-17, Rev. 5. (87-1477)	Due May 20, 1987	05/08/87

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II. Significant Accomplishments/Information Items

A field trip to Yucca Mountain and vicinity was conducted to examine the structural geology of the area. Participating in the investigation were Exploratory Shaft Test Plan reviewers and representatives of the U.S. Bureau of Reclamation.

Don Vieth addressed the Forum for Southern Nevada News Officials, in Las Vegas on May 12. Dr. Vieth also attended a meeting of the Institute for Shaft Drilling, in Las Vegas on May 14.

Mitchell Kunich and Robert Kaiser attended two town hall meetings in which they addressed concerns relative to the NNWSI Project. One of these town hall meetings was held in Austin, Nevada, on May 13; the other was in Round Mountain, Nevada on May 14.

Holmes & Narver, Inc. (H&N) reported completion of revisions to three Exploratory Shaft Facility (ESF) Special Studies: Surface Site Layout, Environmental Permitting Requirements, and A/E Building. ESF staff also completed a preliminary sketch of emergency evacuation and alarm systems for the Communications Special Study.

NNWSI Project staff visited Battelle Memorial Institute in Columbus, Ohio, for a tour and meeting on records processing and micrographics for the Salt Repository Project.

III. Upcoming Events

	<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Contact</u>
A. <u>Coordinating Group Meetings</u>	None to report			
B. <u>HQ Meetings</u>				
1.	Tuesday, May 26 -Friday, June 5	SCP Review	Washington, DC	U. Clanton, WMPO
C. <u>Internal Project and NV Meetings</u>				
1.	Monday, May 18 -Friday, May 29	SCP Chapter 8.3.1 Workshop	Las Vegas, NV	U. Clanton, WMPO
2.	Tuesday, May 19	DOE/NV Manager's meeting	Las Vegas, NV	B. West, WMPO
3.	Tuesday, May 19	Participant/ Environmental Coordinators meeting	Las Vegas, NV	B. Jankus, WMPO

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<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Contact</u>
4. Tuesday, May 19	SCP Chapter 8.5 Meeting	Las Vegas, NV	U. Clanton, WMPO
5. Tuesday, May 19	Technical Data Base Meeting	Las Vegas, NV	K. Hatch, WMPO
6. Wednesday-Thursday, May 20-21	PM-TPO meeting	Las Vegas, NV	J. Fiore, SAIC
7. Tuesday-Friday, May 26-29	QASC audit of SNL	Albuquerque, NM	J. Blaylock, WMPO
8. Wednesday-Friday May 27-29	Calcite-silica peer review (tentative)	Las Vegas, NV	M. Blanchard, WMPO
9. Tuesday, June 2	Sample Overview Committee meeting	Las Vegas, NV	U. Clanton, WMPO
D. <u>State and Public Interaction</u>			
1. Wednesday-Thursday, May 27-28	First Repository, States, and Indian Tribes meeting	Las Vegas, NV	M. Kunich, WMPO
E. <u>NRC Interaction</u>			
None to report.			
F. <u>Other</u>			
None to report.			

WMPO:WRD-1765


Donald L. Vieth, Director
Waste Management Project Office



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WASHINGTON, D. C. 20555

Reply to:
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TO: Mr. Robert E. Browning, Director
FROM: Paul T. Prestholt, Sr. On-Site Licensing Representative
DATE: May 26, 1987
SUBJECT: Newspaper Articles

Please find enclosed more information that appeared in our local newspaper that is of interest.

PTP:nan