Received w/Ltr Dated $3/15/90$

Reply to:

1050 E. Flamingo Road

Suite 319

Las Vegas, Nevada 89119

   Tel: (702) 388-6125

   FTS: 598-6125

M E M O R A N D U M

DATE: March 15, 1990

FOR: John J. Linehan, Director, HLPD, Division of High-Level
            Waste Management, M/S 4 H 3

FROM: John W. Gilray, Sr. OR - YMP

SUBJECT: YMP Site Report for the month of February, 1990

     The following report pertains to the QA, waste package and
surface facility activities associated with the Yucca Mountain
Project for the month of February, 1990.

QUALITY ASSURANCE

A.   Activities to Upgrade YMP QA Program

     The YMP managers and staff are continuing their efforts in
developing new and improved hierarchy control documents which
identify and trace flow down requirements from the regulations to
output documents and designs.   The Quality Assurance Requirements
Document (QAR), Revision 3 which replaces NNWSI-88-9 and which
will describe the overall generic QA program requirements
applicable to DOE Hqts, Projects and participants has been
developed and expected to be released in April.

WM-11
102
NH03

Since there are no deletions or dilutions to the previously
NRC accepted 88-9 QA program controls the project believes this
new QAR document does not need NRC review and acceptance prior to
implementation. Also the project has developed a new QA Program
Document (QAPD) which replaces the project QA Plans and Program
Plans. The QAPD will represent the project QA implementing
procedures and will take the place of Project 88-1 and DOE Hqts.
QHPD. This new QAPD will require NRC review and acceptance.

B. YMP QA Organization

The recent consolidation of the YMP QA organization under
the leadership of Don Horton appears to be increasing the
effectiveness of QA program implementation as evidenced by (1)
the improved morale, respect and interaction between the
technical and QA staff within the project and between the project
and the participants, (2) the high priority given to closing out
the large back log of deficiency reports, (3) improving the
consolidation and simplification of procedural controls (i.e., QA
classification of items and activities, software QA program
controls and study plans) and (4) the establishment of a QA
Review Board, a trend analysis program and an independent
allegation program. It is recognized however, that the overall
assessment of these QA program improvements will be determined
through future NRC observations of the projects' audits,
surveillances, and reviews of completed work packages.

Don Horton, Project QA Director has posted two management
positions for the QA Branch Chiefs for Programs and Verifica-
tions. These two positions are presently held by Nancy Voltura
and Jim Blaylock respectively in an acting capacity until the
permanent assignments are announced. Also Don Horton now offi-
cially reports to Dwight Shelor, Acting Director, Office of QA at
DOE Hqts. At present it is uncertain as to what impact or influ-
ence DOE Hqts QA management might have on the project's goals and
objectives for improving QA programs and their implementation.

The SAIC Technical and Management Support Services (T&MSS) who will continue to provide technical, management and QA support to the project is now considered a project participant. As a consequence they are developing their separate QA Program which will eventually be submitted to NRC for review and acceptance. SAIC has recently hired James Harper as QA manager for the SAIC T&MSS organization. James Harper was the QA manager for Florida Power and Light Co. at the St. Lucie Plant and has a sound QA background and experience in commercial nuclear industry. He should be able to provide significant QA input to the overall YMP QA program.

C. USGS QA Organization

While observing the QA surveillance at USGS it was learned that USGS has recently appointed a QA Manager for the USGS YMP activities. I understand the individual appointed has no previous QA background or experience. Due to the significant QA problems USGS has experienced in the recent past and the appointment of an inexperienced QA Manager, the effectiveness of the USGS QA organization to meet QA program requirements is questionable. The YMP and the NRC office will have to monitor the implementation of USGS' QA program closely to determine its acceptability.

D. Surveillances and Audits

◆ The YMP QA organization will be conducting a QA audit of the LANL QA Program the week of March 26 and a QA and technical surveillance of the preparation and review of Study Plans at USGS April 16. I intend to assist Jim Conway of NRC in the observation of this latter surveillance.

◆ The YMP QA organization conducted a QA surveillance of the USGS Software QA Program from February 20 to the 23rd. I assisted Tilak Verma of NRC in the observation of this

surveillance. The purpose of the surveillance was to assess the
implementation of the USGS Software QA Plan SQAP-01 by reviewing
software programs undergoing qualification reviews. The scope of
the surveillance did not include a technical assessment of
software qualification packages. This is expected to be
performed in the future when more software qualification packages
have advanced in the qualification process. Since technical
subjective judgement will be involved in the technical
qualification of some of these programs NRC may want to be
involved in the technical assessment of these software programs
at the next surveillance.

In summary the QA surveillance conducted the week of
February 20 was meaningful and productive. The overall
implementation of the software QA program was found acceptable
recognizing the limited scope of this surveillance, i.e., that
the technical adequacy of the software qualification packages was
not part of the scope of this surveillance.

♦ A surveillance was conducted on the YMP audit and
surveillance activities the week of February 26. No major
deficiencies were identified.

E. QA Classification and Grading of Items and Activities

A YMP Quality Review Board (QRB) has been established to
assure proper and effective management and implementation of the
newly improved classification and grading program which are
described in AP 6.17Q, "Determination of the Importances of Items
and Activities", and AP 5.28Q, "QA Grading", and which satisfies
NUREG 1318. This improved program does away with the three
quality level system and establishes a review process to
determine if an item or activity should or should not come under
the YMP QA program controls. The QRB has successfully conducted
a QA and technical evaluation of a work package using the two
improved procedures and are now preparing training plans and

models to use in training the participants and YMP staff in the
correct implementation of these two procedures. The QRB will
continue to oversee the classification activities and participate
in the final review of work packages relative to the QA
classification and grading. It would seem very beneficial for
NRC to review this overall effort when the new program has
matured, which should be in June or July.

F.   Status of Software QA Plan Development

♦ USGS Plan*   - Approved August 8, 1989
♦ LLNL Plan*   - Approved January 5, 1990
♦ FSN Plan*   - Approved December 20, 1989 + Software
                  Configuration Management procedure FP-80-01
♦ SNL Plan   - Incorporating review comments; approval
                  expected by April, 1990
♦ LANL Plan   - Consultant assisting in developing the plan;
                  YMP expected to receive draft April 2, 1990
♦ H&N Plan   - Draft received by YMP and rewrite is under way
♦ YMPO Plan   - Project is incorporating QA review comments

     Those software QA plans marked with an asterisk (*) are
enclosed for information and possible NRC review and comments.
Since the software QA program will play a very important part in
developing and verifying technical data used to support licensing
information it may be appropriate for NRC to do an indepth review
of the overall software QA program including the individual
software QA program procedures. An informal interchange meeting
between NRC and the YMP may be worthwhile to enable parties to
gain a clearer understanding of the controls applied to software
programs and how these controls are to be implemented.

     G.   Status of Don Brown's Actions Relative to Qualification
           of the H&N Personnel

♦ For background refer to item F in my last report dated
   February 15, 1990.

♦ The U. S. Labor Department has completed its investigation
of whether Don Brown was inappropriately treated as a result
of his audit finding concerning discrepant documentation
pertaining to the qualification of H&N personnel. The Labor
Department concluded that H&N did not unfairly treat Don
Brown as a result of his audit findings. Don Brown has
appealed this Labor Department decision and the case is
presently going through appeals within the Labor Department.

WASTE PACKAGE

The LLNL February monthly status report is enclosed. It is
encouraged that comments and/or questions regarding the contents
of these reports be directed through this office for action and
resolution in order to minimize the impact on the YMP.

The YMP Waste Package Plan previously discussed in my last
monthly report has now been officially released and a copy is
enclosed. LLNL is re-reviewing waste package Study Plans and
Scientific Investigation Plans against the requirement of the
Waste Package Plan and making the necessary revisions to comply
with this plan.

There are no new issues that this office has identified that
have not been brought to management's attention.

cc: With Encs: K. Hooks, J. Bunting, M/S 4 H 3; J. Latz
   Without encs: C. P. Gertz, R. R. Loux, M. Glora, G. Cook,
   D. M. Kunihiro, R. E. Browning, M/S 4 H 3; Dwayne Weigel,
   S. Gagner, M/S 2 G 5; L. Kovach, M/S NI S260; H. Thompson,
   M/S 17-G21, H. Denton, M/S 17 F 2; R. Bernero, M/S 6 A 4;
   K. Stablein, 4 H 3
Enclosures: USGS Software QA Plan for the YMP;   Software QA
Plan, LLNL; Software QA Plan, FSN; LLNL February monthly status
report; YMP Waste Package Plan