



West Valley
Nuclear Services Company
Incorporated

RESPONSE:
DW:4349

WD:91:0426

P.O. Box 191
West Valley, New York 14171-0191

April 19, 1991

Dave

Mr. T. J. Rowland, Director
West Valley Project Office
U.S. Department of Energy
MS-DOE
P.O. Box 191
West Valley, NY 14171-0191

Dear Mr. Rowland:

Attention: J. A. Yeazel

SUBJECT: Response to comments for 1/22/91 NRC visit to evaluate
Vitrification Project construction.

Reference: Letter DEM:005:91 - 0468:91:08 (DW:91:0218), J. Alan Yeazel to
J. J. Buggy, "Nuclear Regulatory Commission Evaluation of Concrete
Placement Procedures" dated March 26, 1991

January 22 through 24, 1991 Jerry Roth and S. K. Chandary, representatives from NRC Region I, were at West Valley to review the status and adequacy of the civil construction activity ongoing in the Vitrification facility. The results of their review were provided to WVNS by the referenced letter. The review team concluded that the concrete construction activities, "appear to be adequate and the final product should be acceptable". The team was concerned that insufficient attention was being paid to the details surrounding the construction activities to assure that adequate and appropriate records were being captured and maintained.

Coincident with the NRC visit a joint WVNS/DOE audit team was evaluating J. A. Jones in Charlotte, N. C. and on site. The result of this audit confirmed the NRC concerns. WVNS has taken prompt action to require the contractor to correct the programmatic deficiencies found. In addition, WVNS has strengthened its overview and coverage of the J. A. Jones documentation system and is performing more intensive surveillances of the J. A. Jones activities as the contract nears completion. We are satisfied that the NRC concern about lack of attention to detail concerning documentation has been addressed.

Along with the above, WVNS has:

1. Increased the reviews of test and reports generated by J. A. Jones.
2. WVNS QA and J. A. Jones QA meets once every two (2) weeks to status the contract from the QA/QC point of view.
3. One (1) QA Engineer was added to verify documentation for VF-002A.
4. One (1) Inspector has been assigned the task of performing surveillance to the Surveillance Plan.

With regard to the specific items identified on page two of attachment one of the NRC letter, these have been addressed as follows.

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Westinghouse Electric Corporation

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Acceptance of Vibrators: The vibrators used on VF-002A were purchased new for the contract. The frequency was not verified by J. A. Jones or WVNS. However, constant surveillance was and is performed to verify proper consolidation of the concrete. Zones of influence and the pattern of insertion is visually checked during placements. Extensive honeycombing is a sign of poor vibration practice or a poor vibrator. Only small amounts of honeycombing exist, but this is expected. Although ACI does recommend that vibrator frequencies be checked, we are confident that our close overview of concrete placement has assured proper consolidation.


Seven Day Curing: The required post inspections of the concrete were performed by J. A. Jones' ACI Level II Concrete Inspector; however, the documentation and record keeping were unacceptable. The inspector was retrained to the appropriate procedures with the emphasis on correct documentation and attention to detail.

Slump: The basic requirement for the proposed non-plasticized mix is a slump of $2"-4" \pm 1/2"$. This is on the J. A. Jones placement inspection report as the acceptable slump range. However, a superplasticized mix was approved for certain placements which changed the slump acceptance to $6"-10"$. Every inspection report required the mix number to be entered on the report. The mix number then dictates the slump range requirement. J. A. Jones, as of 1/24/91, has lined out and initialed the $2"-4"$ requirement and entered the $6"-10"$ for the superplasticized mix.

Voids in Concrete: We are not certain to which particular concrete surface that the monitor is referring to, however, concrete surfaces are and will be routinely filled per the ACI codes and the specifications. Structural voids are addressed on a case-by-case basis by WVNS Engineering to assure proper rebar coverage and structural integrity. All concrete surfaces scheduled for epoxy coatings, which include those surfaces that will require decontamination, are thoroughly inspected prior to coating activities.

The lessons learned from the NRC and the WVNS/DOE audits have proven invaluable. Attention to detail is now a primary attribute. Recent surveillances have shown the records generated by contractors are exact and correct.

Very truly yours,


D. L. Shugars, Manager
Quality Assurance
West Valley Nuclear Services Co., Inc.

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cc: J. A. Yeazel, DOE-WV Project Office, MS-DOE

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