

October 31, 2005

MEMORANDUM TO: John N. Hannon, Chief  
Plant Systems Branch  
Division of Systems Safety and Analysis  
Office of Nuclear Reactor Regulations

FROM: Michele G. Evans, Chief **/RA/**  
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Division of Engineering Technology  
Office of Nuclear Regulatory Research

SUBJECT: TRANSMITTAL OF INTEGRATED CHEMICAL EFFECTS TEST  
PROJECT: TEST #3 DATA REPORT AND APPENDICES

The attached subject Integrated Chemical Effects Test (ICET) test #3 data report is provided to support regulatory activities associated with GL2004-02. This data report provides the experimental results associated with ICET test #3. Results include a description of the test observations and process control parameters. The report also describes the results of post-test analysis on the sample coupons, fiberglass insulation samples, water chemistry, and precipitated solids. The attached appendices contain a more comprehensive set of the analyses conducted on these products.

Similar data reports will be provided for subsequent ICET tests 4 and 5. All test information will also be summarized in a NUREG/CR summary report that will be prepared once the individual test data reports have been provided. It is intended that the attached report and appendices be placed on the GSI-191 website and used to inform the public about current findings related to the ICET project.

Attachments:

1. Integrated Chemical Effects Test Project: Test #3 Data Report
2. Preface to Appendices
3. SEM and ESEM/EDS Data for Test #3 Day-4 Fiberglass in Low-Flow Zone
4. ESEM/EDS and SEM/EDS Data for Test #3 Day-15 Fiberglass in High-Flow Zones
5. ESEM/EDS and SEM/EDS Data for Test #3 Day-15 Fiberglass in Low-Flow Zones
6. ESEM/EDS Data for Test #3 Day-30 Fiberglass in High-Flow Zones
7. ESEM Data for Test #3 Day-30 Fiberglass in Low-Flow Zones
8. ESEM/EDS Data for Test #3 Day-30 Drain Collar Fiberglass
9. SEM/EDS and ESEM/EDS Data for Test #3 Day-30 Birdcage Fiberglass
10. ESEM and SEM/EDS Data for Test #3 Day-30 Corrosion Products
11. SEM/EDS Data for Test #3 Day-30 Aluminum Coupons
12. SEM/EDS Data for Test #3 Day-30 Copper Coupons

Attachments (cont.):

13. SEM/EDS Data for Test #3 Day-30 Galvanized Steel Coupons
14. SEM/EDS Data for Test #3 Day-30 Steel Coupons
15. SEM/EDS Data for Test #3 Day-30 Flow Meter
16. SEM/EDS and ESEM/EDS Data for Test #3 Day-30 Gel
17. SEM/EDS and ESEM/EDS Data for Test #3 Day-30 Cal-sil
18. ESEM/EDS Data for Test #3 Day-30 Sediment
19. TEM Data for Test #3 Solution Samples
20. UV Absorbance Spectrum – Day-30 Solution Samples
21. ICET Test #3: Pre-Test, Test, and Post-Test Project Instructions

## Attachments (cont.):

13. SEM/EDS Data for Test #3 Day-30 Galvanized Steel Coupons
14. SEM/EDS Data for Test #3 Day-30 Steel Coupons
15. SEM/EDS Data for Test #3 Day-30 Flow Meter
16. SEM/EDS and ESEM/EDS Data for Test #3 Day-30 Gel
17. SEM/EDS and ESEM/EDS Data for Test #3 Day-30 Cal-sil
18. ESEM/EDS Data for Test #3 Day-30 Sediment
19. TEM Data for Test #3 Solution Samples
20. UV Absorbance Spectrum – Day-30 Solution Samples
21. ICET Test #3: Pre-Test, Test, and Post-Test Project Instructions

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