

August 04, 2006

Mr. Eric Abelquist,
Director, Independent
Environmental Assessment & Verification
Oak Ridge Institute for Science and Education
Post Office Box 117
Oak Ridge, TN 37831

SUBJECT: INDEPENDENT LABORATORY SPECIAL SAMPLE RESULTS

Dear Mr. Abelquist:

Please be advised that the U.S. Nuclear Regulatory Commission (NRC) has been notified by the Department of Energy Radiological & Environmental Sciences Laboratory (RESL), that the special samples, NRC 202-207 analyzed and reported by ORISE were outside the agreed accuracy. The results are summarized on the enclosed table.

The NRC staff recognizes the these special samples were to validate ORISE's laboratory capability to measure certain hard-to-detect radionuclides in a new media. ORISE is directed to stop work on all analysis of Cm-244, Pu-238, Pu-239 and Am-241 in water, until you have completed an investigation and determined the root cause of the failure(s). When you have completed the review of the failures, please notify the NRC - ORISE Technical Project Manager to initiate the RESL blind sample testing for these radionuclides.

Since there are results for Fe-55, Ni-63 and Np-237, that are outside the performance criteria, we also request that ORISE also review these analysis. However, there is no stop work order for these analyses at this time.

The NRC will be conducting the annual audit of ORISE in September 2006. At that time, we will review the status of your evaluation and corrective action(s).

The NRC staff recognizes that these analyses are new protocols that do not reflect the overall ORISE Laboratory performance and therefore all other ORISE laboratory analysis work for the NRC is not affected.

Sincerely,

Bruce A. Watson
ORISE Technical Project Manager
Senior Health Physicist
Special Projects Section
Decommissioning Directorate

Enclosure: ORISE Results - NRC Samples 2002-2007

cc:

NRC:

K. McConnell

A. Persinko

C. Craig

J. Buckley

E. Knox-Davin

M. Miller, J. Kottan, RG I

J. Cameron, W. Snell, RG III

B. Spitzberg, RG IV

ORISE:

S. Kirk

D. Condra

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/RA/

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OFC	DWMEP:PM	DWMEP:SC
NAME	BWatson	APersinko
DATE	07/25/06	08/13/06

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ORISE Results - NRC Samples 2002-2007
RESL 0406-1 thru 0406-6 Special Samples

Radionuclide	Sample Failure Rate
Curium - 244	6 of 6
Plutonium - 239	4 of 6
Plutonium - 238	3 of 6
Americium - 241	2 of 6
Iron - 55	1 of 6
Neptunium - 237	1 of 6
Nickel - 63	1 of 6