



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

JUN 21 2012

Michael D. Holland  
Site Manager  
U.S. Department of Energy  
Brookhaven Site Office  
Office of Science  
P.O. Box 5000  
Upton, NY 11973

Jack R. Craig  
U.S. Department of Energy  
Office of Environmental Management  
Consolidated Business Center (EMCBC)  
250 E. 5th Street, Suite 500  
Cincinnati, OH 45202

Re: Transmittal of Signed Explanation of Significant Differences (ESD) for Area of Concern 9, Brookhaven Graphite Research Reactor (BGRR), Brookhaven National Laboratory, Upton, New York

Dear Mr. Holland and Mr. Craig:

Enclosed are copies of the signed Explanation of Significant Differences for the BGRR, Area of Concern 9, at Brookhaven National Labs, Upton, New York. Based on our review of this report, the U.S. Environmental Protection Agency (USEPA) concurs with the Explanation of Significant Differences. Please be aware, however, that USEPA does not consider the fact that the change in the remedy will result in a reduction in radioactive waste volume requiring off-site disposal and thus a commensurate reduction in the cost of the project as a justification in the support of this proposed ESD. These facts were not considered dispositive in our evaluation of the appropriateness of the proposed ESD.

The Explanation of Significant Differences calls for changes in the removal scope for the BGRR biological shield. Per the remedy selected for the BGRR in the 2005 Record of Decision (ROD), the biological shield wall which includes the inner and outer steel walls and concrete structure was originally intended to be removed to 3 feet below the floor level of the BGRR. The biological shield will now only be removed to floor level. Additionally, a steel plate which supported the graphite pile will be left in place. These changes do not fundamentally alter the effectiveness of the remedy selected in the 2005 BGRR ROD.

If you have any questions regarding the subject of this letter, please contact me or have your staff contact Jessica Mollin, EPA Project Manager, at (212) 637-3921.

Sincerely,



*fo* Walter E. Mugdan, Director  
Emergency and Remedial Response Division

cc: A. Carpenter, USEPA  
J. Malleck, USEPA  
J. Mollin, USEPA  
B. Howe, USDOE  
J. Sattler, USDOE  
T. Kneitel, USDOE  
J. Harrington, NYSDEC  
C. Ng, NYSDEC  
J. Swartout, NYSDEC  
C. Costello, NYSDOH  
S. Karpinski, NYSDOH  
A. Rapiejko, SCDHS