

The United States Department of Energy
has completed a Five-Year Review
for the Brookhaven National Laboratory Site
Upton, New York

(To be issued in Newsday on December 21, 2011)

The U.S. Department of Energy has completed a Five-Year Review for the Brookhaven National Laboratory (BNL) site, as required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This review serves to ensure that the implementation and performance of the selected cleanup remedies continue to be effective in protecting human health and the environment. The U.S. Environmental Protection Agency concurs with the protectiveness determinations as reported within this Five-Year Review. This is the second site-wide Five-Year Review of all the remediation work performed at the BNL site. This includes remediation of groundwater contamination on and off of BNL property, excavation and disposal of contaminated soils and river sediments, removal of above- and below-ground storage tanks, capping of landfills, decommissioning activities and long-term surveillance and maintenance at the former Brookhaven Graphite Research Reactor (BGRR) and High Flux Beam Reactor (HFBR). Land-use restrictions and institutional controls are in place to ensure that any residual contamination left in place is not dispersed and does not adversely affect human health or the environment. Information on the selected remedies at BNL as well as the status of remediation activities at the site is available on the BNL website <http://www.bnl.gov/gpg/>.

Following the completion of data review and an evaluation of the performance and protectiveness of the remedies, a report summarizing the results was prepared. This report concluded that the remedies were implemented in accordance with the Records of Decision (RODs) and the two Operable Unit (OU) III Explanations of Significant Differences (ESDs). The soil cleanup levels were met and the groundwater pump and treat systems have been functioning as intended by the RODs. In some cases, additional groundwater extraction wells have been added and soil excavation completed to help ensure that the groundwater cleanup goals will be met. The cleanup performed continues to meet the remedial action objectives identified in each ROD.

Long-term protectiveness of the Peconic River remedy will be verified by continued monitoring of the sediment, surface water, and fish, and by completing the revegetation in the areas remediated during the winter of 2010/2011. In addition to annual reporting of the analytical results, the effectiveness of the remedy in meeting the cleanup and restoration objectives will be evaluated during the third site-wide Five-Year Review in 2016.

For the OU I soil excavation remedies, the work was performed in accordance with the ROD, applicable design documents, and Remedial Action Work Plans. The soil cleanup levels were met for these areas. The remaining work for the BGRR and HFBR will be implemented in accordance with the RODs. The remedies are expected to be protective upon completion of the cleanup actions for the BGRR and HFBR, attainment of soil cleanup goals once excavation is complete, and the attainment of groundwater cleanup goals.

A comprehensive sitewide protectiveness determination covering all the OUs and the reactors (BGRR and HFBR) must be reserved at this time because:

- Work is not complete for the BGRR bioshield and final engineered cap.
- Work is not complete for the HFBR stack and Building 802 demolition.

Notwithstanding the above, the U.S. Environmental Protection Agency concurs that the remedies selected and implemented to date, as reported in this Five-Year Review, are protective of human health and the environment.

The Five-Year Review Report can be viewed at the following repositories and on the BNL website <http://www.bnl.gov/gpg/>

BNL Research Library
Building 477A
Upton, NY
(631) 344-3483

Stony Brook University Library
Melville Library Special Collections and University Archives
Room E-2320
Stony Brook, New York 11794
(631) 632-7119

U.S. EPA, Region II Library
290 Broadway
New York, NY
(212) 637-4296

The third BNL Five-Year Review to be conducted in 2016 will include all OUs, the BGRR, HFBR, and the g-2 Tritium Plume, the Brookhaven Linac Isotope Producer, and the Underground Storage Tanks (USTs). A comprehensive site-wide protectiveness determination will be included at that time.

If there is a need for further information regarding this Five-Year Review, please send an email to tellDOE@bnl.gov, fax to (631) 344-3444, or write to:

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Attn: Five-Year Review
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If there are any questions, please call John Carter, Director of Community Affairs for DOE's Brookhaven Site Office, at (631) 344-5195.