

October 26, 2009

Mr. James A. Turi, Manager
Thomas Jefferson Site Office
12000 Jefferson Avenue, Suite 14
Newport News, VA 23606

Subject: NOTICE OF APPLICATION OF CATEGORICAL EXCLUSION CEBAF-002-94 (NEPA CX B1.5), CX-GEN-011 (NEPA B1.3 AND B1.27), CX-GEN-012 (NEPA B1.11, B1.15, AND B1.31) AND UNDER CX-GEN-016 (NEPA B1.27 AND B1.28) TO THE TEST LAB COOLING TOWER PROJECT

Reference: CXA-2009-012

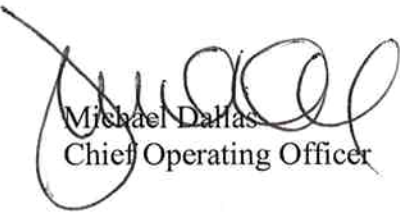
Dear Mr. Turi:

The Test Lab Cooling Tower Project has been reviewed to determine compliance with the National Environmental Policy Act (NEPA).

The existing NEPA Categorical Exclusions (CX) B1.3, B1.5, B1.11, B1.15, B1.27, B1.28, and B1.31 have been applied to this project. A copy of the record of this action is enclosed.

Patty Hunt of your staff has been involved in discussions related to this NEPA activity, and the review has been completed in accordance with the Office of Science Management System NEPA Procedure 4, *Implementing Generic Exclusion Requirements*. Please contact me or Bill Rainey extension 7898 if you have any questions.

Sincerely,


Michael Dallas
Chief Operating Officer

Cc:
R. May
L. Even
W. Rainey
R. Sprouse
P. Hunt, TJSO

NOTICE OF APPLICATION OF CATEGORICAL EXCLUSIONS
CEBAF-005-94, CX-GEN-011, CX-GEN-012, AND CX-GEN-016
TO THE TEST LAB COOLING TOWER PROJECT
(REFERENCE NEPA (CX) B1.3, B1.5, B1.11, B1.15, B1.27, B1.28, and B1.31)

Description of Proposed Effort:

This project involves the construction and installation of a new condenser water system for the Test Lab. The affected site includes a 1,500 SF concrete pad, associated utilities, an access road, and any associated fencing. The new cooling tower replaces the existing cooling tower system that serves the Test Lab. The existing cooling towers and associated pumps will be demolished as part of the project, with asbestos-containing-materials handled under a separate contract.

The tower will serve the Test Lab and the Technology and Engineering Development buildings which are used in support of the 12GeV Upgrade. Energy and water saving features will be integrated into the project where possible. Approximately 25,000 SF of land will be disturbed that includes the utility lines, an access road and identified changes to existing storm water drainage channels.

Impacts to the Environment:

There will be impacts to the environment during construction. Impacts from equipment operations will be similar to on-going activities, including managing the tower to support R&D in the Test Lab. There are no expected negative impacts from the additional storm water flow or from sediments to downstream storm channels.

Number and Title of Applicable Categorical Exclusions

B1.3 Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (e.g., pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed. Custodial services are activities to preserve facility appearance, working conditions, and sanitation, such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal. Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable or a facility to be used for its designated purpose.

Routine maintenance may result in replacement to the extent that replacement is in kind and is not a substantial upgrade or improvement. In kind replacement includes installation of new components to replace outmoded components if the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of major components that significantly extend the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life).

Routine maintenance activities include, but are not limited to:

- (a) Repair of facility equipment, such as lathes, mills, pumps, and presses;
- (b) Door and window repair or replacement;
- (c) Wall, ceiling, or floor repair;
- (d) Reroofing;
- (e) Plumbing, electrical utility, and telephone service repair;
- (f) Routine replacement of high-efficiency particulate air filters;
- (g) Inspection and/or treatment of currently installed utility poles;
- (h) Repair of road embankments;
- (i) Repair or replacement of fire protection sprinkler systems;
- (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing;
- (k) Erosion control and soil stabilization measures (such as reseeded and revegetation);
- (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 5820.2, "Radioactive Waste Management;"
- (m) Repair and maintenance of transmission facilities, including replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, cross arms, insulators, and downed transmission lines, in accordance, where appropriate, with 40 CFR part 761 Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions);
- (n) Routine testing and calibration of facility components, subsystems, or portable equipment (including but not limited to, control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes); and
- (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), including removal of contaminated intact equipment and other materials (other than spent nuclear fuel or special nuclear material in nuclear reactors).

B1.5 Minor improvements to cooling water systems within an existing building or structure if the improvements would not: (1) Create new sources of water or involve new receiving waters; (2) adversely affect water withdrawals or the temperature of discharged water; or (3) increase introductions of or involve new introductions of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products.

B1.11 Installation of fencing, including that for border marking, that will not adversely affect wildlife movements or surface water flow.

B1.15 Siting, construction (or modification), and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; employee health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (including security posts); fire protection; and similar support purposes, but excluding facilities for waste storage activities, except as provided in other parts of this appendix.

B1.27 Activities that are required for the disconnection of utility services such as water, steam, telecommunications, and electrical power after it has been determined that the continued operation of these systems is not needed for safety.

B1.28 Minor activities that are required to place a facility in an environmentally safe condition where there is no proposed use for the facility. These activities would include, but are not limited to, reducing surface contamination, and removing materials, equipment or waste, such as final defueling of a reactor, where there are adequate existing facilities for the treatment, storage, or disposal of the materials, equipment or waste. These activities would not include conditioning, treatment, or processing of spent nuclear fuel, high-level waste, or special nuclear materials.

B1.31 Relocation of machinery and equipment, such as analytical laboratory apparatus, electronic hardware, maintenance equipment, and health and safety equipment, including minor construction necessary for removal and installation, where uses of the relocated items will be similar to their former uses and consistent with the general missions of the receiving structure.

CEBAF-002-94 (NEPA CX B1.5) - original determination date Nov. 15, 1994
CX-GEN-011 (NEPA CX B1.3 and B1.27) - original determination date Oct. 7, 1997
CX-GEN-012 (NEPA B1.11, B1.15, B1.31) - original determination date Oct. 7, 1997
CX-GEN-016 (NEPA B1.27 and B1.28) – original determination date Oct. 7, 1997

Number and Title of Applicable Environmental Assessments/Determinations

DOE/EA-1534, EA for Proposed Upgrades and Improvement Projects at the Thomas Jefferson National Accelerator Facility, Newport News, Virginia, January 2007

DOE – NEPA Analysis for Technology and Engineering Development Facility at the Thomas Jefferson National Accelerator Facility, Newport News, Virginia, May 2009

Reference: CXA-2009-012

Jefferson Lab

• Thomas Jefferson National Accelerator Facility

Exploring the Nature of Matter

Celia Whitlatch

Celia Whitlatch, Project Representative

10/26/09

Date

Debra J. Brand

Debra Brand, Environmental Representative

10/26/09

Date

Mary Logue

Mary Logue, ESH&Q Associate Director

10/26/09

Date