NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) RECORD OF CATEGORICAL EXCLUSION DETERMINATION

A. Brief Description of Proposed Action:

The proposed action covers a proof-of principle Coherent Electron Cooling (CeC) experiment which will be located within the Relativistic Heavy Ion Collider (RHIC) tunnel at Brookhaven National Laboratory. Electrons produce will be accelerated to a maximum energy of 21.8 MeV. The goal of the experiment is to demonstrate longitudinal cooling which is a decrease in energy spread in CEC mode.

Number and Title of the Categorical Exclusion Being Applied:

B3.10 Particle Accelerators

B. Regulatory Requirements in 10 CFR 1021.410 (b): (See full text in regulation.)

A. The proposed action fits within a class of actions that is listed in Appendix A or B to Subpart D.

For classes of actions listed in Appendix B, the following conditions are integral elements; i.e., to fit within a class, the proposal must not:

- A. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety and health, including DOE and/or Executive Orders;
- B. Require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities;
- C. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or
- D. Adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)).
- B. There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and
- C. The proposal is not "connected" to other actions with potentially significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

C. Determination:

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1A), I have determined that the proposed action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

3/13/12

Signature

NEPA Compliance Officer, Brookhaven Site Office

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