

OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

P.O. Box 2008
Oak Ridge, TN 37831-6198
Phone: (865)576-5748
Fax: (865) 576-6616
Internet: skipperdd@ornl.gov

Date: May 15, 2001

To: S. B. Kennedy

c/att: G. E. Anderson, K. J. Beierschmitt, F. E. Bertrand, K. M. Downer, J. A. Hall - RC

From: D. D. Skipper, 4500N, MS-6198 *Henry E Anderson for P.D. Skipper*

Subject: **Approved Categorical Exclusion (CX) for Research and Development Activities Conducted by ORNL Physics Division (2901X)**

Attached is a copy of the approved CX for the subject project. This CX (often referred to as a generic CX when written to cover a variety of actions) is not intended to circumvent the internal National Environmental Policy Act (NEPA) process, therefore proposed actions must still undergo reviews to determine the appropriate level of impact analysis (i.e., CX, Environmental Assessment, or Environmental Impact Statement). If a proposed action is planned and is covered by the approved CX, documentation of the internal review must be (1) maintained in the project file at the division, (2) retained by the ORNL NEPA Coordinator, and (3) submitted to DOE ORO site personnel and to the DOE ORO NEPA Compliance Officer.

It is the responsibility of the ORNL NEPA Coordinator to transmit appropriate internal documentation supporting the use of the CX to DOE ORO site and field offices. Please contact James Hall, the ORNL NEPA Coordinator (576-4211) for assistance, training, and in the preparation of internal NEPA-supporting documentation.

DDS:JAH:qjb

Attachments

Log No. 16061Date Received APR 19 2001File Code 457.3.2

Date: February 26, 2001

To: D. R. Allen, DOE-ORO

From: W. M. Belvin, DOE-ORO

Subject: **Contract DE-AC05-00OR22725, National Environmental Policy Act (NEPA) Categorical Exclusion (CX) for Research and Development Activities Conducted by ORNL Physics Division (2901X)**

The DOE Oak Ridge Operations Office (ORO) proposes to conduct small-scale basic research and development activities within the Physics Division. The Physics Division is involved in research that include experimental and theoretical nuclear physics as well as experimental and theoretical atomic physics. In addition, the Division is involved in data compilation and evaluation. The proposed actions would take place at existing facilities at ORNL and at existing structures and facilities on the DOE Oak Ridge Reservation.

Research and development activities within the Physics Division would include but not be limited to the following: (1) conducting experimental research in nuclear astrophysics, materials science, nuclear reaction spectroscopy, nuclear structure, and neutron-induced reactions; (2) conducting research with stable multiply-charged ion beams in atomic and molecular physics; (3) conducting research on improving and characterizing the photon source of the Oak Ridge Electron Linear Accelerator (ORELA); (4) designing, fabricating, and testing positive ion and negative ion sources for use with particle accelerators; (5) designing, preparing, and testing systems for transporting radioactive species in rapidly-flowing gas streams; (6) designing, developing, fabricating, and operating gas-target systems for nuclear physics experiments; (7) conducting research on material properties to support development of target and ion sources for producing ion-beams; (8) measuring diffusion rates of various elements in solids to optimize efficiency for production of radioactive ion beams; (9) designing, fabricating, and testing low density carbon fiber and other refractory target materials for producing radioactive ion beams; (10) designing, developing, fabricating, testing, and installing electronic and detector systems, beam/reaction product transport devices and their associated electronics; (11) designing, procuring, and testing new power supplies to improve reliability and efficiency of accelerators; (12) conducting research with the ORELA positron source; (13) investigating the production, release, and transport of radioactive species produced by electron and photon-induced reactions; (14) studying beam cooling mechanisms to reduce energy spread and emittance of accelerated particle beams; (15) conducting research with the ORNL Reflecting Ion Beam Electrostatic Trap; (16) designing, fabricating, and installing computers, computer networks, and computer control systems and equipment for research in nuclear and atomic physics; (17) designing, preparing, testing, and using computer software for data acquisition, analysis, display, and evaluation; (18) conducting computational theoretical studies and calculations; and (19) compiling, evaluating, and disseminating atomic and nuclear data.

No new permits or modifications to existing permits would be required for the proposed actions. In addition, the proposed actions would take place in previously developed areas and would not disturb sensitive resources.

Any wastes generated during research and development activities would be appropriately characterized and disposed of at existing permitted/approved waste storage, treatment, or disposal facilities. The proposed actions would be evaluated by the Pollution Prevention or other responsible personnel for action options

This project would pose no threat of significant individual or cumulative environmental effects. The described actions would not be part of an ongoing Environmental Assessment or Environmental Impact Statement. No extraordinary circumstances would be related to these actions, and the proposal would not be connected to other actions with potentially significant impacts.

These actions are covered under DOE-ORO Cultural Resources Programmatic Agreement at Section III.A.1. The applicable categorical exclusions (CXs) are A.9 and B.3.6 as listed in DOE NEPA Implementing Procedures, 10 CFR 1021, Subpart D, Appendix B.

The above description accurately describes the proposed actions, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed actions be categorically excluded from further NEPA review and documentation.

William Mark Belvin 4/4/01
W. Mark Belvin Date
DOE-ORO Program Manager

Based on my review and the recommendation of the DOE-ORO Program Manager, I have determined that the proposed actions are categorically excluded from further NEPA review and documentation.

David R. Allen 3/1/01
David R. Allen Date
DOE-ORO Office NEPA Compliance Officer

Notification:
W. M. Belvin, ER-11
J. A. Hall, 6026-C, MS-6395