Department of Energy
Fermi Site Office
Post Office Box 2000
Batavia, Illinois 60510

JUL 21 2010

Dr. Bruce Chrisman
Chief Operating Officer
Fermilab
P.O. Box 500
Batavia, IL 60510

Dear Dr. Chrisman:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DETERMINATION AT FERMI NATIONAL ACCELERATOR LABORATORY (FERMILAB) – NEA/NEB/NS8 PROJECT

Reference: Letter, B. Chrisman to M. Bollinger, dated July 15, 2010, Subject: National Environmental Policy Act (NEPA) Environmental Evaluation Notification Form (EENF) for the NEA/NEB/NS8 Project

I have reviewed the Fermilab EENF for the NEA/NEB/NS8 Project. Based on the information provided in the EENF, I have approved the following categorical exclusion (CX):

Project Name	Approved	CX
NEA/NEB/NS8 Project	7/16/2010	B1.23

I am returning a signed copy of the EENF for your records. No further NEPA review is required. This project falls under a categorical exclusion provided in 10 CFR 1021, as amended in November 1997.

Sincerely,

Dale Greene for
Mark E. Bollinger
Acting Site Manager

Enclosure:
As Stated

cc: P. Oddone, w/o encl.
Y.-K. Kim, w/o encl.
N. Grossman, w/encl.
T. Dykhuis, w/encl.

FERMILAB ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Project/Activity Title: NEA/NEB/NS8 Deactivation and Decommissioning (D&D)
ES&H Tracking Number: 01089
Funding Source: American Recovery and Reinvestment Act
Fermilab Environmental Officer (submitted PIF): Angela Sands (X3701)
Fermilab Project Lead: Karen Kephart (X6625)

I hereby certify via my signature that every effort would be made throughout this project to comply with the commitments made in this document and to pursue cost-effective pollution prevention opportunities. Pollution prevention (source reduction and other practices that eliminate or reduce the creation of pollutants) is recognized as a good business practice which would enhance site operations thereby enabling Fermilab to accomplish its mission, achieve environmental compliance, reduce risks to health and the environment, and prevent or minimize future DOE legacy wastes.

Fermilab Project Lead: Karen Kephart

Signature K.M. Kephart

Date 07/12/10

Fermilab NEPA Reviewer: Teri L. Dykhuis

Signature Martha Michels for Teri Dykhuis

Date 7-16-10

I. Description of the Proposed Action and Need

Purpose and Need:
The NEA/NEB structures (which previously housed fixed target experiments) and NS8 (which previously housed equipment racks containing electronics that supported the fixed target beamline), are no longer needed but contain components that can be reused elsewhere at the lab. Therefore, it is proposed to D&D and dismantle them. In particular, the thirty two (32) G-sized shielding blocks that are incorporated into the roof of NEA and NEB are needed for upcoming projects (cave extension at New Muon (NM) Lab, test cave for the Drell-Yan Seaquest [E906] experiment at NM4, telemanipulator cave at C0, and additional caves in the Meson Detector Building). Removal of these structures would also give the lab space credit for future construction.

Purchasing new G blocks for the above projects would cost $64K (much more than the estimated $10K cost of obtaining them from NEA/NEB) and unnecessarily consume the energy and natural resources needed to fabricate them.

Proposed Action:
Approximately 700 cubic yards of rock from the roof of NEB and approximately 70 cubic yards of from the roof of NEA would be removed and transported to stockpile. All shield blocks at NEA/NEB would be removed and transported to the AD-designated sites. Magnets and collimator would be removed and stored at the railhead. All metals (i.e. copper, stainless steel, magnet support stands, doors and door frames) would be removed, surveyed, staged and reused as needed. Power and communication cables would also be removed and staged for reuse. The tunnel section that comprises the two side walls and roof of NS8 would be removed to the railhead for storage/later reuse. The cinder block that comprises the front and back walls would be recycled with other construction debris from the lab. The metal door and frame would be taken to the railhead for storage pending lifting of the moratorium on scrap metal

recycling. The concrete slabs of each building would remain in place; the conduit within the slabs would remain and be capped.

II. Description of the Affected Environment

Removal of approximately 700 cubic yards of rock from the roof of NEB, and approximately 70 cubic yards of rock from the roof of NEA and transport to stockpile. Removal of all shield block at NEA/NEB and transport to the designated AD site(s).

III. Potential Environmental Effects (Provide comments for each checked item and where clarification is necessary.)

A. Sensitive Resources: Would the proposed action result in changes and/or disturbances to any of the following resources?

- ☐ Threatened or endangered species
- ☐ Other protected species
- ☐ Wetland/Floodplains
- ☐ Archaeological or historical resources
- ☐ Non-attainment areas

B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated substances or activities?

- ☒ Clearing or Excavation
- ☒ Demolition or decommissioning
- ☐ Asbestos removal
- ☐ PCBs
- ☐ Chemical use or storage
- ☐ Pesticides
- ☐ Air emissions
- ☐ Liquid effluents
- ☐ Underground storage tanks
- ☒ Hazardous or other regulated waste (including radioactive or mixed)
- ☐ Radioactive exposures or radioactive emissions
- ☐ Radioactivation of soil or groundwater

C. Other relevant Disclosures

- ☐ Threatened violation of ES&H permit requirements
- ☐ Siting/construction/major modification of waste recovery or TSD facilities
- ☐ Disturbance of pre-existing contamination
- ☐ New or modified permits
- ☐ Public controversy
- ☐ Action/involvement of another federal agency
- ☐ Public utilities/services
- ☐ Depletion of a non-renewable resource

IV. NEPA Recommendation

Fermilab staff have reviewed this proposed action and concluded that the appropriate level of NEPA determination is a Categorical Exclusion. The conclusion is based on the proposed action meeting the applicable requirements in DOE's NEPA Implementation Procedures, 10 CFR 1021, Subpart D,

Appendix B1.23 which states: "Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces)."

V. DOE/CH-FAO NEPA Coordinator Review

Concurrence with the recommendation for determination:

NEPA Coordinator Reviewer, U.S. DOE FSO: Rick Hersemann

Signature Rick Hersemann

Date 7/16/10

Acting Fermi Site Office Manager: Mark Bollinger for

Signature Robert Greene

Date 7/20/2010

VI. Comments on checked items in section III

Clearing or Excavation
Remove approximately 700 cubic yards of rock from the roof of NEB, and approximately 70 cubic yards of rock from the roof of NEA and transport to stockpile.

Demolition or decommissioning
G-blocks would be reused at other locations. Rock/gravel would be stockpiled and reused as needed. Concrete slabs would remain in place. Metals from this location fall under the DOE metals moratorium; metals that can be reused would be salvaged, remaining metals would be staged in storage. Cables, copper and magnet support stands would be dismantled and staged for reuse.

Hazardous or other regulated waste
Some shield blocks contain lead wool between blocks. Lead wool would be removed and staged as Group 2 material.