



Department of Energy

Fermi Area Office
Post Office Box 2000
Batavia, Illinois 60510

SEP 17 2002

RECEIVED

SEP 19 2002

Environment,
Safety & Health Section

Mr. Gerald Brown, Associate
Director for Operations Support
Fermilab
P.O. Box 500
Batavia, IL 60510

Dear Mr. Brown:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DETERMINATION AT FERMILAB NATIONAL ACCELERATOR LABORATORY - "RUN IIb CDF DETECTOR PROJECT"

Reference: Letter, same subject, G. Brown to J. Monhart, dated 08/01/02.

I have reviewed the Fermilab Environmental Evaluation Notification Form (EENF) for the subject proposed project transmitted by your referenced letter. Based on the information provided in the EENF, I have approved the following project as a categorical exclusion (CX):

<u>Project Name</u>	<u>Approved</u>	<u>CX (s)</u>
Run IIb CDF Detector Project	09/17/2002	B3.10

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(s) provided in 10 CFR 1021, as amended in 1996.

Sincerely,

Jane L. Monhart
Area Manager

Enclosure:
Signed EENF

- cc: M. Witherell, w/o encl.
- K. Stanfield, w/o encl.
- B. Chrisman, w/o encl.
- C. Trimby, w/o encl.
- P. Lukens, PPD, w/encl.
- B. Griffing, ESHS, w/encl.
- T. Dykhuis, ESHS, w/o encl.

LOGGED IN <input checked="" type="checkbox"/>		
DUE DATE: _____ (copy to tickler)	COMPLETED: _____ (update database)	
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SCANNED
Posted on the Web
Date 9-19-02

FERMILAB ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Project/Activity Title Run IIB CDF Detector Project
ES&H Tracking Number 01024 Funding Source Operating
Fermilab Project Manager Pat Lukens

Signature *Pat Lukens*

Date 3 Sep 02

Fermilab NEPA Reviewer Teri L. Dykhuis

Signature *Teri L. Dykhuis*

Date 9/9/02

I. Description of the Proposed Action

The Rub IIB CDF Detector Project would involve construction of a new silicon detector for the CDF experiment that would increase the instantaneous luminosity and represent an increase in the capability of the detector. The Project would also encompass Calorimeter upgrades as well as improvements to the Data Acquisition and Trigger systems. The project would not include any building or structural modifications to the CDF Assembly Hall or CDF Experimental Hall.

The existing detector has a predicted lifetime of approximately 6 years, making it obsolete by 2006. Radiation damage from Run IIA will render the inner layers of the silicon vertex detector inoperable. This project would be necessary to maintain CDF's ability to continue the search for the Higgs particle.

The "no action" alternative would not fulfill the purpose/need of the proposed activity.

II. Description of the Affected Environment

There are no conventional construction activities (i.e. excavation, building demolition or erection, roofing, etc.) involved with this project.

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

A. Sensitive Resources: Will 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: Will the proposed action involve any of the following regulated substances or activities?

- Excavation
- Noise
- Asbestos
- PCBs
- Chemical storage or use
- Pesticides

- Hazardous, toxic or criteria air emissions
- Liquid effluents
- Underground storage tanks
- Hazardous waste
- Radioactive waste
- Radioactive exposures

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 has reviewed this proposed action and conclude 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 B3.10.

V. DOE/CH-FRMI Group NEPA Coordinator Review

Concurrence with the recommendation for determination:

NEPA Coordinator reviewer J. P. Cooper
 Signature Jonathan P. Cooper
 Date 9/17/02

Fermi Area Manager Jane Monhart
 Signature Jane L. Monhart
 Date 9/17/02

VI. Comments on checked items in section III.

Radioactive Exposures

Radiation exposure to workers will be kept to a minimum by use of Fermilab Radioactive Work Permits (RWP's) filled out by the PPD Radiation Safety Officer. PPD Radiological Control personnel will monitor all work with Class 2 or higher radiation materials.