



Department of Energy

Fermi Area Office
Post Office Box 2000
Batavia, Illinois 60510

RECEIVED

MAY 29 2002

Environment,
Safety & Health Section

MAY 24 2002

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
FERMI NATIONAL ACCELERATOR LABORATORY - "CDF TO D-ZERO
UTILITY CORRIDOR" PROJECT

Reference: Letter, same subject, G. Brown to J. Monhart, dated 05/07/02 (received 5/14).

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 and additional follow-up discussions with Fermilab staff, I have approved
the following project as a categorical exclusion (CX):

Table with 3 columns: Project Name, Approved, CX (s). Row 1: CDF to D-Zero Utility Corridor Project, 05/24/2002, B1.15, B2.5

We support the positive features of this project. These include making safety and
environmental improvements by connecting the D-Zero facility to existing on-site sewer lines;
replacing some propane tanks at remote locations by connecting to natural gas pipelines; and
replacing deteriorated water transfer system components. We also note the efforts involved
during planning for this project to avoid potential impacts to wetlands through alternate
installation methods such as directional drilling.

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,

[Handwritten signature of Jane L. Monhart]

Jane L. Monhart
Area Manager

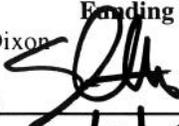
Enclosure: Signed EENF

- cc: M. Witherell, w/o encl.
K. Stanfield, w/o encl.
B. Chrisman, w/o encl.
C. Trimby, w/o encl.
S. Dixon, FESS, w/o encl.
B. Griffing, ESHS, w/encl.
T. Dykhuis, ESHS, w/o encl.

SCANNED
Posted on the Web
Date 9-25-02

## FERMILAB ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Project/Activity CDF to D0 Utility Corridor  
ES&H Tracking Number 01021 Funding Source UIP  
Fermilab Project Manager Steve Dixon

Signature   
Date 5/2/02

Fermilab NEPA Reviewer Teri Dykhuis

Signature Teri L. Dykhuis  
Date 5/2/02

### I. Description of the Proposed Action

This project would extend Domestic Water (DW), Industrial Cooling Water (ICW), low pressure/gravity sanitary sewer, and natural gas from the Collider Detector Facility (CDF) to the D0 Experimental Area (see attached map). Service would also be extended to Site 55 from the new corridor. A permanent pumping station would be constructed just east of Eola Road at the Lake Law "transfer ditch" and piping provided to supply water from Lake Law to the new ICW line. Utilities would be connected to existing service in the vicinity of B0, and buried in an excavated trench. The utility corridor would be accompanied by an asphalt-covered access road, approximately 10 feet wide. The project would also allow cooling water transfers between Lake Law, Main Ring Lake, and Casey's Pond. The project would include installation of a pumping station for the gravity sewer line. This project would take approximately 150 working days, or seven calendar months to complete. A starting date has not yet been determined.

Currently the remote sites at C0, D0 and Site 55 are not connected into the main Fermi Utility System. The purpose of this improvement is to bring domestic water, industrial cooling water, natural gas, and sanitary services to these remote sites. The working population at D0 has increased, making the existing "mound" septic system incapable of properly treating the load currently generated at the facility. Any future development could create a significant health issue. The layout of the new utilities would provide service for any future development located in the area of the utility corridor. Additionally, the project would make water transfer from Lake Law to Main Ring Lake possible, replacing the existing system of temporary pump and piping. The existing water transfer system from Main Ring Lake into Casey pond is badly deteriorated, and this project would be replaced by back feeding ICW from the C4 pump house through the new system to the rest of the laboratory. The access road is paved for ease of maintenance.

The "no action" alternative was rejected because it fails to accomplish the stated purpose and need for the project. It would leave D0, C0 and Site 55 without needed utilities, and force the Laboratory to continue depending on the deteriorated system of temporary pumps and piping to transport ICW from Lake Law to the Casey's Pond system.

### II. Description of the Affected Environment

Utilities would be buried in a trench approximately 9000 feet long. The trench would be approximately 40 feet wide, and result in the excavation of 57,600 cubic yards of soil. This spoil material would be temporarily stockpiled in upland areas in the vicinity of the excavation. This soil would be used to backfill the corridor with the required compaction. Excess spoil would be stockpiled on site or transported off site as appropriate. The area affected by this project is approximately 8 acres.

Two possible utility routings were addressed:

1. Locate all the utilities along the outer edge of the accelerator from B0 to D0, branching to provide service for Site 55.
2. Locate the utilities along the accelerator until C0 is reached; then proceed towards Site 55, cross Eola Road to the east and run southerly to Swenson. The routing then turns to the west and continues along the south side of Swenson Road to serve D0 (see map).

The first option was chosen to avoid wetland disturbances and allow for greater access for future development on both sides of the utility corridor. This path would avoid any creeks, lakes or surface ponding. Locating the utility corridor in remote areas with an access road would minimize interruptions to normal operations at Fermilab and allow the roadways to be kept open for emergency access.

**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 B1.15 and B2.5.

*jc*

**V. DOE/CH-FAO NEPA Coordinator Review**

Concurrence with the recommendation for determination:

NEPA Coordinator reviewer J. P. Cooper

Signature Jonathan P. Cooper

Date 5/24/02

Fermi Area Manager Jane L. Monhart

Signature Jane L. Monhart

Date 5/24/02

**VI. Comments on checked items in section III.**

Excavation-- Excess spoils would be removed from the excavation site and disposed of at the Site 67 stockpile area at the intersection of Eola and Wilson Roads on the Fermilab property. The project would require coverage under the Illinois Storm Water General Permit for Construction Activities and a detailed SWPPP. Elements of the SWPPP would conform to the Illinois Urban Manual. Disturbed soil would be restored and the area re-seeded at the completion of the project. Asphalt removed would be properly disposed offsite. Wetland disturbance would be avoided by using alternate installation methods such as directional boring. All wetlands would be protected as part of the project Storm Water Pollution Prevention Plan (SWPPP).

Radiation Exposures -- Radiological safety personnel would supervise the excavation through areas of possible soil activation within 50' of beamlines. They would also monitor work areas where there is potential for exposure to radiation due to operation of the accelerator with special attention to keeping worker doses ALARA.