EA-1143; Environmental Evaluation Notification Form and FONSI for University of Nebraska Medical Center: Lied Transplant Center

Table of Contents

I. Description of Proposed Action:

The DOE proposes to authorize the University of Nebraska Medical Center (UNMC) to proceed with the design, construction and equipping of the proposed Lied Transplant Center facility. House Report No. 103-672 accompanying the FY 1995 Energy and Water Development Appropriations Act indicated that $5,000,000 had been included in DOE's FY 1995 appropriation to assist the University of Nebraska Medical Center with construction of a transplant center. A grant was executed with the University on August 4, 1995, and grant funds are available to the University for the limited purpose of performing preliminary studies, including analysis necessary to satisfy National Environmental Policy Act (NEPA) activities.

The proposed facility would bring clinical and research spaces together in one facility creating a link between research and transplant-related care. This link would allow the implementation of a new system of care called Cooperative Care, in which the patient and care partner become part of the care team. The Cooperative Care model focuses on patients' needs and results in higher patient satisfaction and quality of care. The model also reduces costs and responds directly to the demands of health care reform.

The facility would house the patient cooperative care rooms, transplant- related research, transplant treatment areas, and education space for patients, family and health care professionals. The transplant programs served by this facility would be bone marrow, liver, pancreas, kidney, small bowel, heart and islet cell.

The Transplant Center does not currently exist in a single location on the UNMC campus. Some of the programs which comprise the Transplant Center would be new, while others currently exist but are scattered across the campus. The Cooperative Care rooms do not currently exist: patients are housed in either University House rooms or inpatient units. The research space dedicated to transplantation is limited. The educational/hospitality space in support of the Cooperative Care program does not currently exist. Offices and workstation space for the Transplant Teams are currently scattered in multiple locations through the Medical Center. The existing Cancer Center is inadequate in size and design, unable to meet the expanding demands of the department. The Cancer Center would be relocated and combined into the Patient Care Center component of the Transplant Center. The level of staffing in the new facility is estimated to increase by 31.3 employees over the present levels. Half of these individuals will be necessary for environmental services and house keeping.

The new facility would be approximately 207,000 gross square feet with 11 levels above grade and 2 1/2 levels at and below grade. The levels at and below grade would be for arrival of patient vehicles, loading dock and parking. Level 2 would accommodate office and education space with connection to the hospital ancillary services by an existing tunnel. Level 3 would provide for clinics and treatment space for transplant patients and cancer center outpatients. Also at level three would be connections to the hospital's food and nutrition areas. Levels 4 and 6 would contain 22 cooperative care patient rooms, and Levels 6 and 7 would contain 22 university house rooms, which will accommodate pre- and post-transplant patients and their families. Levels 8 through 10 would be for transplant related research and their associated offices. Level 11 would be a half level and accommodate mechanical support for the facility.

The proposed action would include demolition of Conkling Hall, which has been used as ad hoc office space for over twenty years. Relocation of the 30,000 gross square footage of space elsewhere on campus would be part of this project.

II. Description of Affected Environment:

The University of Nebraska Medical Center is a 71.5 acre campus located within the heart of the city of Omaha. The proposed site on campus is presently occupied by a 4-story 1922 nursing dorm (Conkling Hall) currently being used by Student Services mainly for miscellaneous office functions. The proposed site of the project is on the north side of Emile Street between 42nd and 43rd Streets on the UNMC campus.

III. Potential Environmental Effects:

(Attach explanation for each "yes" response, and "no" responses if additional information is available and could be significant in the decision making process.)

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

Yes/No

Threatened/Endangered Species and/or Critical Habitats	No
Other Protected Species (e.g. Burros, Migratory Birds)	No
Wetlands	No
Archaeological/Historic Resources	No
Prime, Unique or Important Farmland	No
Non-Attainment Areas	No
Class I Air Quality Control Region	No
Special Sources of Groundwater (e.g. Sole Source Aquifer)	No
Navigable Air Space	No
Coastal Zones	No
Areas w/Special National Designation (e.g. National Forests, Parks, Trails)	No
Floodplain	No

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

Yes/No

Clearing or Excavation (indicate if greater than 5 acres)	No
Dredge or Fill (under Clean Water Act section 404; indicate if greater than 10 acres)	No
Noise (in excess of regulations)	No
Asbestos Removal	Yes

PCBs	Yes
Import, Manufacture or Processing of Toxic Substances	No
Chemical Storage/Use	Yes
Pesticide Use	No
Hazardous, Toxic, or Criteria Pollutant Air Emissions	Yes
Liquid Effluent	Yes
Underground Injection	No
Hazardous Waste	Yes
Underground Storage Tanks	No
Radioactive (AEA) Mixed Waste	Yes
Radioactive Waste	Yes
Radiation Exposures	Yes

C. Other Relevant Disclosures. Will the proposed action involve the following?

Yes/No

A threatened violation of ES&H regulations/permit requirements	No
Siting/Construction/Major Modification of Waste Recovery, or TSD Facilities	No
Disturbance of Pre-existing Contamination	No
New or Modified Federal/State Permits	No
Public controversy (e.g. Environmental Justice Executive Order 12898consideration and other related public issues.)	No
Action/involvement of Another Federal Agency (e.g. license, funding, approval)	No
Action of a State Agency in a State with NEPA-type law. (Does the State Environmental Quality Review Act Apply?)	No
Public Utilities/Services	No
Depletion of a Non-Renewable Resource	No

D. Cumulative Impacts

Cumulative impacts are defined as "the environmental impact of the action when added to other past, present and reasonably foreseeable future actions... individually minor but collectively significant..." per 40 CFR 1508.7. Cumulative impacts have been considered in relation to the impact of the proposed project relative to the Medical Center and to the campus. No significant net increase in effluents emmissions and waste generation due to new improved design and equipment and relocation of existing activities is expected.

E. Other Risks

Users of the existing facilities are not exposed to significant health and safety hazards. Moreover, design and construction standards for modern laboratory, research and hospital buildings would improve the health/safety conditions while minimizing impact on the environment. Examples of such improvements include: improved chemical

handling facilities (e.g., storage, ventilation and spill isolation); improved fire safety materials and systems; improved structural integrity (with reduced risk of failure due to high winds, earthquakes, etc.); and improved research facilities and equipment that dramatically reduce the potential for spill or release of chemicals thereby reducing the environmental impacts.

Included as an attachment is an accident history at UNMC for the last eight years. Most accidents involved spills of some kind and minimal damage to persons or equipment.

F. No Action Alternative

The impact on the University of Nebraska Medical Center would be significant if the project were not to go forward. Presently the UNMC hospital is one of the top ten institutions in Bone Marrow and Liver Transplantation. Because of the ever increasing pressures of the health care environment it is necessary to constantly seek out new methods of delivering care which allow for patients to have improved outcomes at a reduced cost. The Lied Transplant Center allows this to occur for several reasons: First of all the cooperative care model of patient care allows the patient to have a care partner who stays in the room with the patient which provides for more efficient staffing and gives constant observation of the patient in a residential environment. Second the inclusion of transplant research labs within the same facility is a more efficient model for delivering the research from the lab to the bedside. Without this new and innovative facility in which to deliver transplant care UNMC will likely be priced out of the transplant marketplace. Because the revenue from the transplant programs sustain many programs which have a less favorable bottom line the overall impact to the way the UNMC campus meets its mission of education, research and patient care would also be seriously jeopardized.

The impact to the city and state of not going forward with the project would be a significant long term economic impact. Presently 75% of the patients who receive transplants at UNMC are from out of state. The positive economic impact to the state has been estimated at almost 600 million dollars. If the project were not to go forward, the ability to continue to compete with other national players in transplantation would be seriously eroded leading to an eventual decline in UNMC's patient census.

Impact to the environment of not going forward with the project would be negligible. UNMC would be forced to continue to treat patients in the same outmoded methods of patient care within its existing outdated facilities. All other elements would remain the same in terms of present environmental relationships.

Potential Environmental Effects

The following information is being provided to supplement the Environmental Evaluation Notification Form with regard to the proposed Lied Transplant Center at the University of Nebraska Medical Center. Several topics under the heading Potential Environmental Effects are expanded upon in this attachment.

A. Sensitive Resources

Attached as addenda to this assessment are letters from various agencies with regard to potential environmental effects associated with the construction of the proposed project. A summary of these letters follows:

1. A letter from the Nebraska Game and Parks Commission indicates that the project will have no effect on endangered or threatened species.

3. A letter from the Department of the Army, Corps of Engineers states that no wetlands will be affected by the project.

4. A letter from the State Historic Preservation Office indicates that the building to be demolition prior to construction, Conkling Hall, is not a historic building.

B. Regulated Substances/Activities

16. Asbestos Removal: For the Conkling Hall facility to be demolished, an asbestos inventory had to be done within

the facility. Because it is a concrete structure, only small quantities of asbestos are present in the building (it is primarily located in floor tile and pipe corner insulation). This will be removed by licensed asbestos removal experts according to approved regulations prior to demolition. The requirement for a licensed removal expert will be stipulated in the building specifications as part of the general contractor's responsibilities.

17. PCBs: Some of the light ballasts in Conkling Hall may contain PCBs. The Radiation and Chemical Safety Department at UNMC will determine if the ballasts contain PCBs. Any light ballast which may contain PCBs will be removed from Conkling Hall prior to demolition and disposed of in accordance with applicable federal, state and local regulations. Ballasts containing PCBs will be transported by SET, the company that transports hazardous wastes generated by UNMC, to Great Lakes Environmental Services, Inc. which specializes in PCB disposal (EPA ID #MID087478574).

19. Chemical Storage/Use: Research and operational activities may involve the use of some substances found in 29 CFR 1910.1000 and/or 40 CFR 355. Improved chemical handling facilities (e.g., storage, ventilation and spill isolation) are included in the current design and construction practice for modern laboratory and research buildings. Appropriate measures will be taken to protect personnel, the public and the environment including proper ventilation, storage, personal protective equipment, emergency procedures, contingency plans (if needed) and reporting to the Local Emergency Planning Committee (if needed). Existing procedures for Hazardous Waste Classification and Storage and Non-Waste Chemical Storage exist in the UNMC Chemical Safety Manual. This manual outlines the procedures that are currently being followed on the campus and will be used when the Lied Transplant Center is constructed.

21. Air Emissions: The air emissions from this facility are classified as "Insignificant Activities" per the Nebraska Department of Environmental Quality, Air Quality Section (see Item 32 below). These laboratory and R&D activities are defined in Title 129, Chapter 7, Section 006.03. Due to this classification, there are no emission controls required.

22. Liquid Effluent: The new facility will use sewer system and other utilities currently servicing the campus; therefore, the proposed action will involve discharge into publicly-owned treatment works.

24. Hazardous Waste, 26. Radioactive AEA Mixed Waste, 27. Radioactive Waste: Research activities may generate hazardous, radioactive and mixed wastes. These wastes will be managed in accordance with:

a. the UNMC Broadscope Radioactive Material License issued by State of Nebraska;

b. the Environmental Protection Agency large quantity generator regulations (EPA # NED 000809475) and;

c. the State of Nebraska Department of Environmental Quality rules and regulations governing hazardous waste management.

The University does not anticipate a net increase in the quantities of wastes generated. Radioactive, hazardous and mixed wastes are and have been managed under the director of the Vice Chancellor for Academic Affairs. The Director of Chemical and Radiation Safety reports directly to the Vice Chancellor. In addition, UNMC maintains Chemical Safety and Radiation Safety Committees which recommend policies and procedures to the Chancellor. UNMC also maintains a fully qualified and equipped spill response team to respond to emergency conditions. There have been no waste management incidents which have threatened human health or the environment.

28. Radiation Exposures: Research and operational activities may involve exposure to radiation. UNMC has established a personnel monitoring program which is outlined in the UNMC Radiation Safety Manual. This includes monitoring of both internal and external radiation exposures.

Administrative exposure limits follow State of Nebraska, Division of Radiological Health regulations. Personnel requiring monitoring are automatically enrolled in the ALARA program which provides an early indication of exposures that are above normal. If an ALARA action level is exceeded, an investigation and corrective action are initiated. The ALARA limits are set at less than 10% of the annual limit.

31. Disturbance of Pre-existing Contamination: The only known "pre-existing contamination" is the possibility of PCBs in the Conkling Hall facility which is to be demolished before construction of the Lied Transplant Center. This was previously discussed in number 17, PCBs.

32. New or Modified Federal/State Permits: An air construction permit is not required for this facility because any potential emissions do not equal or exceed the regulatory levels as established in Title 129, Chapter 17, or in the air regulations of the City of Omaha. The facility is not considered a major air emission source. The source of heat for this building will be steam as supplied from the Central Utility Plant.

DOE/EA-1143

IV. Section D Determination:

Is the project/activity appropriate for a determination by the OM under Subpart D of the DOE NEPA Regulations for compliance with NEPA?

No

A. DOE-CH NEPA Coordinator Review:

DOE-CH NEPA Coordinator Reviewer: Patrice Brewington

Signature: Date:

B. DOE CH NCO NEPA Review:

NCO Concurrence with Proposed Class of Action Recommended

CX EA EIS

Category

DOE CH NCO Reviewer:

Signature: Date:

Determination Not Within Section D or Authority Not Delegated:

EA

DOE Recommendation:

CH NCO: W. Sedgefield White Signature:

Date:

CH LGL: Vicki Prouty Signature:

Date:

CH SES: Michael Flannigan Signature:

Date:

CH TAS: John P. Kennedy Signature:

Date:

CH Office Mgr: Cherri Langenfeld Signature:

Date: