



Department of Energy

Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393
December 27, 2006

DOE/EA 1571

FINDING OF NO SIGNIFICANT IMPACT ENVIRONMENTAL ASSESSMENT

For

The Ohio State University, Ohio 4-H Center with Green Building Technologies

AGENCY: Department of Energy, Golden Field Office

ACTION: Finding of No Significant Impact

SUMMARY: The US Department of Energy (DOE) conducted an Environmental Assessment (EA) that analyzed the potential environmental impacts associated with the construction and operation of the Ohio State University (OSU) 4-H Center with Green Building Technologies in Franklin County, Ohio. Based on action by the U.S. Congress, DOE has funding available to support the construction phase of two features within the Ohio 4-H Center designed for energy efficiency: 1) A hybrid geothermal/cooling tower heating, ventilating, and cooling (HVAC) system, and, 2) the use of recycled structural steel members.

For the purposes of the EA, DOE established baseline environmental conditions at the project site and conducted the public scoping process in July and August 2006. OSU commenced construction in September 2006 at risk of federal funding while DOE continued to evaluate the potential environmental impacts against the pre-construction baseline conditions. DOE's decision to reimburse a portion of the project construction costs is contingent upon completion of this EA and Finding of No Significant Impact.

The Ohio 4-H Center is located on the OSU Columbus, Ohio campus northwest of the intersection of Fred Taylor Drive and West Lane Avenue. The legal description of the project site is City of Columbus tax parcel identification number 010062731. The Ohio 4-H Center will be the first "green" building on the OSU campus and include energy efficient technologies including a hybrid geothermal system for heating and cooling and a structural system incorporating a recycled steel manufacturing process to produce structural steel members. The vertical geothermal heat exchanger will consist of a series of 72-80 boreholes, each 5 inches in diameter and approximately 280 feet deep. When complete, the Ohio 4-H Center will include office facilities for 20-25 employees of the Ohio State Extension 4-H program, provide space for public users participating in in-service training, and serve as a training resource for other youth organizations as well as a location for OSU Extension programming. The north end of the structure will have a 5-story office tower constructed over a full basement. The central and southern portions of the structure will be a single-story, slab-on-grade building. A small section of the building will have a second story to house mechanical equipment. The project site area encompasses 5.6 acres (2.26 hectares). To date, all excavation, site utilities and the primary electric duct bank have been completed, concrete footings for the multi-purpose rooms, east wing



and tower have been poured, the interior underground plumbing is completed in the east wing and multi-purpose rooms, and 66 of the 72 geothermal boreholes have been drilled.

In accordance with applicable regulations and policies, DOE sent scoping letters to potentially interested agencies, including the Ohio Historic Preservation Office, Ohio Environmental Protection Agency, United States Fish and Wildlife Service, Ohio Department of Natural Resources, and the Franklin County Department of Development. The scoping letters described the Proposed Action and requested assistance in identifying potential issues that should be evaluated in the EA. Comments received by DOE regarding the scoping letter indicated that this project would not have any impact on historical or cultural resources, sensitive or endangered species or their habitat, unique ecological or geological resources, wilderness areas, wildlife refuges, or critical habitat. The Ohio Department of Natural Resources indicated that based on the surrounding sub-surface conditions, there is potential to encounter paleokarst (caverns and solution-widened fractures) while drilling the geothermal wells. The Ohio 4-H Center project engineers developed a mitigation strategy, should they encounter paleokarst during drilling, which to date they have not.

DOE transmitted letters to potentially interested agencies, organizations, and individuals announcing the availability of the Draft EA and inviting comments. Additionally, DOE published a legal notice in the Columbus Dispatch and made copies of the Draft EA available in two Columbus area public libraries. DOE received no comments with regards to the Proposed Action or the Draft EA.

All discussions and findings related to the project site and Proposed Action are contained in the Final EA. The Final EA is hereby incorporated by reference.

THE FINAL EA IS AVAILABLE IN THE DOE GOLDEN FIELD OFFICE ONLINE READING ROOM AT: http://www.eere.energy.gov/golden/reading_room.aspx COPIES OF THE FINAL EA ARE ALSO AVAILABLE FROM:

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FOR FURTHER INFORMATION ON THE DOE NEPA PROCESS CONTACT:

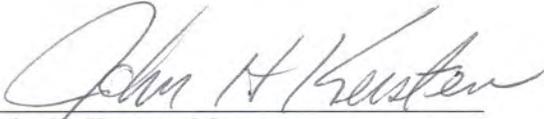
Office of NEPA Policy and Assistance
U.S. Department of Energy
1000 Independence Avenue, S. W.
Washington, D.C. 20585
202-586-4600 or 800-472-2756

DETERMINATION:

Based on the information presented in the Final EA, DOE determines that providing funding in support of two construction elements of the Ohio 4-H Center in Franklin County, Ohio would not constitute a major federal action significantly affecting the quality of the human environment, as

defined by the National Environmental Policy Act. Therefore, the preparation of an Environmental Impact Statement is not required, and DOE is issuing this Finding of No Significant Impact.

Issued in Golden, Colorado this 28th day of December, 2006.

A handwritten signature in cursive script, reading "John H. Kersten". The signature is written in black ink and is positioned above a horizontal line.

John H. Kersten, Manager
Golden Field Office