NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE 93-LaRC-4

National Environmental Policy Act; Finding of No Significant Impact; Earth Observing System Data and Information System (EOSDIS) Distributed Active Archive Center (DAAC) at Langley Research Center

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500 - 1508), and NASA's Procedures for Implementing NEPA (14 CFR Subpart 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the proposed construction and operation of the Earth Observing System Data and Information System (EOSDIS) Distributed Active Archive Center (DAAC) and support facilities at the Langley Research Center (LaRC) in the City of Hampton, Virginia. The proposed EOSDIS DAAC at LaRC will be a computational facility, and will process, archive, manage, and distribute data on global radiation budget, aerosols, and tropospheric chemistry.

DATE: Comments in response to this notice must be received in writing within 30 days of January 3, 1994.

ADDRESS: Comments should be addressed to Tricia Romanowski, Environmental Engineer, Environmental Engineering Branch, SSQRD, M/S 429, 5 Hunsaker Loop, NASA/Langley Research Center, Hampton, Virginia 23681.

The Environmental Assessment (EA) prepared for the proposed EOSDIS DAAC at LaRC which supports this FONSI may be reviewed at:

> Hampton Public Library, Main Branch, Reference Department, 4207 Victoria Boulevard, Hampton, Virginia
>
> NASA Headquarters Information Center, Room 1H23, 300 E. Street S.W., Washington, DC

A limited number of copies of the EA are available by contacting Tricia Romanowski, Environmental Engineer, in writing at the address indicated.

FOR FURTHER INFORMATION CONTACT:

Tricia Romanowski, Environmental Engineer, Environmental Engineering Branch, SSQRD, M/S 429, 5 Hunsaker Loop, NASA/Langley Research Center, Hampton, Virginia 23681; Telephone (804) 864-7020.

SUPPLEMENTARY INFORMATION: NASA has reviewed the EA prepared for the proposed EOSDIS DAAC at LaRC, and has determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. The EA is incorporated by reference in this FONSI.

NASA is proposing to construct a new 2-story, 3,445 square meter (m^2) (37,080 square foot (ft^2)) building for the EOSDIS DAAC at LaRC. The proposed DAAC building, which will house computational facilities and office and meeting space, will be located in, and displace part of, the parking area of the existing Langley Central Scientific Computing Complex (Buildings 1268, 1268A, and 1268B) along South Wright Street. A new parking lot is proposed to be constructed in the vicinity of the relocated water tower along North Wright Street, approximately 247 to 457 m (900 to 1,500 ft) to the north of the proposed DAAC building. A new sidewalk will be constructed from the new parking lot, along the existing tennis court, through the picnic area, and tie into the parking lot at the existing crosswalk directly in front of the Building 1268 main entrance. If funding is available, additional parking spaces will be constructed by expanding three existing parking lots at LaRC: the lot along Reid Street east of Langley Boulevard, the lot at Building 1212B, and the lot along Langley Boulevard at Building 1222. Langley Boulevard between Doolittle Road and North Wright Street may be widened 4 feet to the north for a center turning lane, if funding is available. Construction of the proposed action is scheduled to begin in February 1994, and the new DAAC computational facility would be operational in early 1996. The proposed DAAC facility will have 65 to 100 employees.

Three alternatives to the proposed action were considered: the No-Action alternative (i.e., no EOSDIS DAAC for managing atmospheric data), the Existing Facilities alternative (i.e., use available space in the existing Langley Central Scientific Computing Complex), and the Off-Site Leasing alternative (i.e., lease space for the DAAC at an off-site location. The No-Action alternative will not provide the needed DAAC facility for handling global atmospheric data during the 15-year EOS mission life. The Existing Facilities alternative will provide space for the initial prototype version of EOSDIS, but not for the programmed expansions of EOSDIS capabilities over the entire EOS mission life. The Off-Site Leasing alternative will require constructing a new facility which will have generally the same environmental impacts as construction of the proposed DAAC facilities at LaRC, but will preclude the benefits of co-location with the Langley Central Scientific Computing Complex, and will have a significantly higher cost over

the 20-year lease period as compared with the construction cost of on-site DAAC facilities.

The environmental impacts identified as a result of the environmental assessment are as follows. Construction will be performed under a sediment and erosion control plan which will be approved by the Contracting Officer prior to construction. The proposed new parking lot along North Wright Street, which is 2.4 hectares (5.8 acres) in size, will be constructed under a National Pollutant Discharge Elimination System (NPDES) stormwater construction permit from the Virginia Department of Environmental Quality, Water Division. Stormwater from this parking lot will gravity drain to an adjacent marsh area. Stormwater from the proposed DAAC building, the three potential parking lot expansions, and the potential Langley Boulevard widening will be incorporated into the existing LaRC stormwater system. Domestic wastewater from the proposed DAAC building will be discharged to the Hampton Roads Sanitation District under the existing LaRC permit. The DAAC facilities will not produce process wastewater. Discharge of cooling water from semi-annual maintenance of the proposed DAAC building cooling system to the stormwater system will be done under a modification to the LaRC NPDES permit.

Construction of the proposed action will result in minor and temporary fugitive dust emissions which will be controlled by standard construction dust control practices, such as spraying water on disturbed areas. The proposed DAAC building will be powered by electricity from Virginia Power and steam from the existing LaRC steam plant. Construction of the proposed action will produce minor increases in noise levels in the immediate vicinity. Construction noise will attenuate rapidly with distance from the project site, and no off-site noise-sensitive receptors will be impacted by construction noise. Any hazardous waste generated during construction will be disposed in accordance with a hazardous waste disposal plan which will be approved by the Contracting Officer prior to construction. Non-hazardous solid waste will be disposed by burning in the existing LaRC refuse-to-steam plant, or by disposal in an off-site permitted landfill.

The proposed DAAC facilities will be located in a densely developed area of LaRC, and will not be located in any wetlands. No threatened or endangered species or critical habitats will be affected by the proposed action. The proposed DAAC building, proposed new/potentially expanded parking lots, and potentially widened section of Langley Boulevard are located in areas which have been previously disturbed, and are considered to have no cultural resources potential. The proposed sidewalk crosses through the Cloverdale Plantation site, a 17-th century occupation. This area underwent a limited Phase I survey in 1993 for another project, and NASA is coordinating with the Virginia State Historic Preservation Officer (SHPO) regarding an expanded Phase I survey and a Phase II survey, to be performed in early 1994. If the Phase

II survey identifies potentially significant cultural resources, NASA LaRC will not permit construction in the affected area until Federal cultural resources requirements (36 CFR Part 800) are satisfied.

Construction of the proposed parking lot in Area D within the 100-year floodplain will not adversely affect the floodplain, and will not pose a risk to safety or property. There is no practicable alternative which avoids locating the parking lot in the floodplain. The proposed action will be consistent with the enforceable policies of Virginia's Coastal Program. No other potential environmental impacts were identified.

On the basis of the EA for the EOSDIS DAAC at LaRC, and the underlying reference documents, NASA has determined that the environmental impacts associated with this project will not individually or cumulatively have a significant effect on the quality of the environment. Therefore, an Environmental Impact Statement (EIS) is not required. NASA will take no final action or authorize construction activities prior to the expiration of the 30-day comment period.

for Paul F. Holloway
Director
NASA/Langley Research Center

12/13/93
Date

Concurrence:

Billie J. McGarvey
Director, Facilities Engineering Division
NASA Headquarters

12/7/93
Date