

FINAL

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

National Environmental Policy Act; Construction and Operation of a New Engineering Directorate Complex, Shipping & Receiving Facility, and Child Development Center at George C. Marshall Space Flight Center

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Parts 1500 through 1508), and NASA's regulations (14 CFR Part 1216, Subpart 1216.3), and based on the analyses in the Environmental Assessment (EA), the National Aeronautics and Space Administration (NASA) has made a Finding of No Significant Impact (FONSI) with respect to the Proposed Action. The action involves the construction and operation of a new Engineering Directorate (ED) Complex, Shipping & Receiving (S&R) Facility, and Child Development Center (CDC) at NASA's George C. Marshall Space Flight Center (MSFC) to replace their existing counterparts, which no longer meet the requirements of their occupants.

DATE: December 2003

ADDRESSES: No public comments were received on the draft EA during the public review period conducted November 5, 2003, through December 4, 2003. Following the public review period, the Final EA was prepared.

To receive a copy of the Final EA, contact Mr. Allen Elliot, Deputy Manager, Environmental Engineering Department, NASA Marshall Space Flight Center, AD10, Marshall Space Flight Center, Alabama 35812, Phone: (256) 544-0662, Email: Allen.Elliott@nasa.gov

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SUPPLEMENTAL INFORMATION:

A new ED Complex is needed to consolidate engineering personnel and laboratories located in several old buildings that are separated by considerable distances. Because of past relocations, engineering staff has become geographically isolated from testing areas and other departments that work closely with them. In addition, some of the buildings that engineering staff currently occupy, such as Buildings 4666 and 4712, contribute greatly to the MSFC maintenance backlog.

A new S&R Facility is needed because the existing facility (Building 4471) cannot be modified due to the production of chemical munitions at the site during World War II. Environmental testing of the existing structure is scheduled for 2005 through 2007, which will necessitate evacuation of the facility. The ongoing need for a consolidated and centralized S&R Facility will require a replacement building by 2005.

A new CDC is needed because the existing facility (Building 4494) is 60 years old. A new facility would require less energy and maintenance, thereby reducing operational costs for MSFC.

On the basis of the findings of the alternatives analysis conducted for the EA, renovation or expansion of the existing facilities is not considered a reasonable alternative to the Proposed Action, because of the age, energy consumption, and maintenance requirements, and the fact that the building occupants have outgrown them. All of the alternative construction sites that were evaluated have been determined to be inadequate with respect to the siting criteria used. As a result, the preferred alternative is to construct and operate new facilities to replace their existing counterparts at the locations proposed.

The preferred alternative of constructing and operating the new facilities at the proposed sites and the no-action alternative of maintaining existing conditions have been evaluated in the EA with respect to numerous environmental, physical, and socioeconomic resources. Under the no-action alternative, new facilities would not replace their existing counterparts, which do not meet the requirements of their occupants. The potential effects of the preferred and no-action alternatives are summarized in Table 1.

TABLE 1
Summary of Potential Effects of Preferred Alternative and No-action Alternative

Resource	Preferred Alternative	No-action Alternative
Land Use	Existing land use designations of sites would not change. The ED Complex would make the land use of the site more representative of its existing designation.	No effect because the new facilities would not be constructed.
Air Quality	Based on the conducted air conformity analysis, no significant impact to air quality. Estimated emissions of ozone precursors and particulate matter meet <i>de minimis</i> requirements. The new heating and air conditioning systems will be cleaner and more energy-efficient than the systems currently used at the existing facilities.	No effect because the new facilities would not be constructed.
Noise	Short-term increase in noise levels during construction. Based on the EPA estimates of noise dissipation, noise levels during construction would be within or below the residential acceptable range in nearest residential communities. Noise levels generated during operation of the new facilities would be below the residential acceptable range in these communities.	No effect because the new facilities would not be constructed.
Topography, Geology, and Soils	Minor impacts on existing topography and soils during site clearing and grading. Erosion controls would be implemented during construction. No impacts would occur during operation of facilities.	No effect because the new facilities would not be constructed.
Surface Water	No impact because no surface waters are located at proposed construction sites.	No effect because the new facilities would not be constructed.
Groundwater	Small quantity of groundwater would be removed during caisson work for ED Complex. Impact would be temporary and minor.	No effect because the new facilities would not be constructed.
Floodplains	Portions of S&R Facility and CDC are located within the 100-year floodplain. Significant impacts to local drainage and flood attenuation are not expected because floodplain displacement is minor and periodic enlargement and improvement of nearby drainageways have significantly reduced the flooding potential of these areas. ED Complex site is not located within the 100-year floodplain.	No effect because the new facilities would not be constructed.
Vegetation	No significant impacts at any of the sites. ED Complex and S&R Facility are entirely mowed grass. Fewer than 20 common trees would be removed at CDC site. New trees are planned to be replanted after construction.	No effect because the new facilities would not be constructed.

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Resource	Preferred Alternative	No-action Alternative
Wetlands	No impacts during construction or operation of facilities because there are no wetlands at sites.	No effect because the new facilities would not be constructed.
Wildlife	No significant impacts because sites do not provide much habitat. Common urbanized wildlife may be temporarily disturbed.	No effect because the new facilities would not be constructed.
Protected Species and Habitats	No impacts to protected species because sites do not provide suitable habitat for any protected species. None of the sites are in the vicinity of ecologically sensitive areas.	No effect because the new facilities would not be constructed.
Cultural Resources	No impacts because no structures exist at the sites and no cultural resources have been identified during surveys.	No effect because the new facilities would not be constructed.
Demographics	No impact because there would be no net increase or decrease in personnel.	No effect because the new facilities would not be constructed.
Regional Employment and Economic Activity	Short-term, temporary increase in economic activity resulting from construction and construction-related activities.	No effect because the new facilities would not be constructed.
Income	No impact because there would be no net increase or decrease in personnel.	No effect because the new facilities would not be constructed.
Housing	No impact because there would be no net increase or decrease in personnel.	No effect because the new facilities would not be constructed.
Schools	No impact because there would be no net increase or decrease in personnel.	No effect because the new facilities would not be constructed.
Medical Facilities	No impact because there would be no net increase or decrease in personnel or demand for medical services.	No effect because the new facilities would not be constructed.
Security and Fire Protection	Slight impact during construction and initial phases of operations because of the three additional new buildings. Impact should be negated when the existing buildings are vacated, mothballed, or demolished.	No effect because the new facilities would not be constructed.
Recreation	ED Complex would temporarily affect onsite athletic field. The athletic field is planned to be relocated adjacent to newly constructed Wellness Center.	No effect because the new facilities would not be constructed.

TABLE 1
Summary of Potential Effects of Preferred Alternative and No-action Alternative

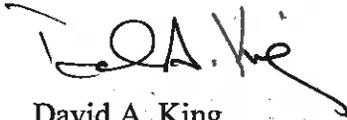
Resource	Preferred Alternative	No-action Alternative
Protection of Children and Environmental Justice	Construction or operation of the facility would not result in significant impacts to noise, air quality, groundwater, surface water, or hazardous/toxic materials and wastes that would negatively affect children, minorities, or low-income groups.	No effect because the new facilities would not be constructed.
Utilities	Minor positive impact during operation of facilities because the new facilities would be more energy-efficient.	The existing S&R Facility and CDC would continue to be located in old, maintenance-intensive, energy-inefficient buildings, which no longer meet the needs of the occupants.
Transportation	Minor temporary increase in traffic during construction. No long-term increase in traffic because no net increase or decrease in personnel would occur.	No effect because the new facilities would not be constructed.
Hazardous and Toxic Materials and Wastes	<p>Underlying groundwater plumes at ED Complex and S&R Facility are not expected to be directly affected or caused to migrate laterally toward construction area during construction. Based on findings of indoor vapor intrusion modeling conducted for ED Complex and S&R Facility, construction and operation of facilities are not expected to pose significant contamination-related health hazards to construction workers or future occupants of the facility.</p> <p>Based on analyses of onsite soil samples and a risk assessment, construction and operation of the CDC at the proposed site are not expected to pose significant contamination-related health hazards to construction workers or future occupants of the facility.</p> <p>Proposed site for the new S&R Facility is located within a part of MSFC classified as a Potential Ordnance Area. As a result, an ordnance sweep will be conducted for the entire site before the commencement of any construction activity. Any ordnance that is identified will be appropriately removed and disposed.</p>	The existing S&R Facility and CDC would continue to be located in old, maintenance-intensive, energy-inefficient buildings, which no longer meet the needs of the occupants. Continued operation of S&R Facility would hinder environmental testing scheduled to start in 2005.

Notes:

ED = Engineering Directorate
EPA = U.S. Environmental Protection Agency
S&R = Shipping & Receiving
CDC = Child Development Center
MSFC = Marshall Space Flight Center

Because the construction and operation of the new facilities at the proposed locations are not expected to result in any significant impacts, specific mitigation measures are not required. Best management practices would be implemented during construction to minimize fugitive dust and control erosion. There are no indications that implementation of the preferred alternative would violate any federal, state, or local environmental laws or regulations, including the National Environmental Policy Act or the Council on Environmental Quality regulations.

After careful review of the EA, NASA has determined that the construction of the new ED Complex, S&R Facility, and CDC at the proposed locations would not generate significant controversy, or have a significant impact on the quality of the human or natural environment. This analysis fulfills the requirements of the National Environmental Policy Act and Council on Environmental Quality regulations. An Environmental Impact Statement will not be prepared, and NASA is issuing this Finding of No Significant Impact.



David A. King
Director
George C. Marshall Space Flight Center
National Aeronautics and Space Administration

Date Issued: December 2003

CONCURRENCE SHEET

1. DATE:

12/10/03

1a. CAITS CONTROL NO.:

03-DA01-0774

2. SUBJECT (Or brief description):
No significant findings to projects on MSFC.

3. ADDRESSED TO: DA01/Dave King

4. NAME OF ORIGINATING DIVISION OR OFFICE AND PHONE NO.:

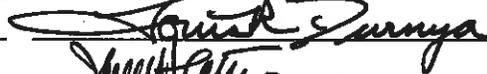
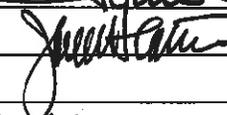
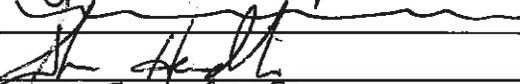
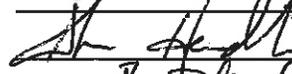
#195 Sms 12/16/03

AD10/Allen Elliott 544-4246

5. APPROVAL OF DIRECTOR, CHIEF OR AUTHORIZED REPRESENTATIVE:


SIGNATURE AND DATE

6. CONCURRENCES:

<u>DIVISION OR OFFICE</u>	<u>SIGNATURE OF DIRECTOR, CHIEF AUTHORIZED REPRESENTATIVE</u>	<u>DATE</u>
AD10/Allen Elliott		12/10/03
LS01/ Bill Hicks L.R. Duanya		12/12/03
AD01/Jim Carter		12/15/03
DE01/Axel Roth		12/19/03
DA01/Dave King		
CD50/Shar Hendrick		12/16/03
DD01/Rex Gevedon		12.22.03

7. REMARKS / COMMENTS:

Briefing Note:

In accordance with the National Environmental Policy Act (NEPA) and NPG 8580.1, Implementing NEPA and Executive Order 12114, the Environmental Engineering Department has conducted an Environmental Assessment (EA) of the proposed construction and operation of a new Engineering Directorate Complex, Shipping and Receiving Facility, and Child Development Center at MSFC. The information documented in the EA has resulted in the conclusion that the construction and operation of these new facilities would not have a significant impact on the quality of the human health or the environment. The attached Finding of No Significant Impact (FONSI) is the final decision document in this process and requires the Center Director's signature. Prior to Mr. King's signature your concurrence is requested.