

FINAL

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

National Environmental Policy Act; Demolition of Test Stand 4696 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 demolition of Test Stand (TS) 4696 at NASA's George C. Marshall Space Flight Center (MSFC).

DATE: July 2011

ADDRESSES: A 30-day public review was held from September 20, 2009 through October 19, 2009 to solicit public comments on the Draft EA. The Draft EA was also coordinated with federal, state, and local entities through letter correspondence. All comments received, and MSFC's responses to the received comments, which include how they have been addressed, are included in the Final EA.

To receive a copy of the Final EA, contact AS10/Mr. Dan Adams, Manager, Environmental Engineering and Occupational Health Office, NASA Marshall Space Flight Center, AL 35812, phone: (256) 544-1614, e-mail: Dan.Adams@nasa.gov.

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SUPPLEMENTAL INFORMATION:

The purpose of the Proposed Action is to comply with NASA's decision to dispose of facilities that have no programmatic requirements beyond 2012, in accordance with the Agency's facility revitalization program, which was initiated in 2008. The disposal of TS

4696 and other facilities that have met the criteria for disposal is needed to allow NASA to operate its overall infrastructure more cost effectively within a constrained budget. TS 4696, currently referred to as the Hydrogen Engine Test Facility, was constructed in 1962 to conduct static firing testing of the F-1 engine, which was used to power the Saturn V booster vehicle that launched the three-man Apollo capsule to land a man on the moon. TS 4696 has been mothballed since 1995 and has been determined to have no NASA programmatic requirements beyond 2012. TS 4696 was approved for demolition by the NASA Headquarters Facilities Engineering Division on May 1, 2009.

Under the Proposed Action, TS 4696 would be demolished by a private demolition contractor. All of the steel frame structure of the facility, including that which is below the road level, would be removed under the Proposed Action. The concrete towers of the facility would be taken down to road level as would the rectangular structure on the eastern side of the facility, the first floor of which is above the road level. The portions of the towers below the road level and the basement of the rectangular structure would be emptied of their contents and left empty or filled with gravel up to the road level. The metal components of the facility would be sold to a metal recycler. The concrete and other non-metallic components of the facility would be properly disposed of as appropriate. Two groundwater dewatering sumps exist at the TS 4696 site. At present, only one sump has an operating pump. Under the Proposed Action, the sump pump that is operating at the site would be deactivated. The sump that contains this pump as well as the other sump at the site would be plugged with concrete or some other suitable sealant. Both ends of the underground cableway tunnel that extends from the terminal room in the basement of the facility to Building 4674 (West Test Area Control Facility) would be sealed with concrete or by some other suitable means.

Partial demolition of TS 4696 would not meet the intent of NASA's facility revitalization program, would not eliminate general maintenance costs, and would not be logistically practicable. Therefore, there are no reasonable action alternatives other than the Proposed Action. The No-Action Alternative is to maintain existing conditions, i.e., not to demolish TS 4696. Under the No-Action Alternative, TS 4696 would remain mothballed.

Demolition activities would have overall minor impacts on air quality, noise levels, wildlife, public and occupational health and safety, solid waste, traffic flow, and hazardous materials and wastes. Air emissions and increased noise and traffic levels would be limited to the demolition period and would return to current levels after the demolition work is completed. Fugitive dust would be controlled and minimized by implementing appropriate best management practices. Potential impacts on wildlife would be limited to noise disturbance during the demolition period and the potential for incidental animal mortality occurring during demolition is considered to be very low. To minimize the potential for accidents and exposure to lead-based paint, polychlorinated biphenyls, and asbestos-containing materials, workers would wear and use appropriate protective equipment and would follow all applicable Occupational Safety and Health Administration standards and procedures. Prior to any demolition work, the MSFC Safety Office and the demolition contractor would confirm that there is no residual fuel or any other substance of concern within any utility lines that still exist at the TS 4696 site, and that the lines are suitable for demolition. After TS 4696 is demolished, the current level of site security, which includes access control at the perimeter of the West Test Area and security patrols of the area, would continue to be provided for the site. TS 4696 is located within the boundaries of Operational

Unit (OU) 1, which covers the Test Area of MSFC under NASA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program. Pond MSFC-004, which borders the southwestern side TS 4696, is a CERCLA site. Because TS 4696 is located within the boundaries of OU 1, demolition of the facility would require a CERCLA Site Access Checklist. Demolition of TS 4696 would occur entirely within the existing footprint of the facility and, therefore, would have no direct impacts on Pond MSFC-004. Precautions would be taken to prevent any disturbance to the liner of the pond. Deactivating the sump pump that is operating at the site would eliminate the discharge of groundwater via PVC pipe into Pond MSFC-004. After TS 4696 is demolished, groundwater could potentially seep into the facility footprint, e.g., through cracks in the foundation. Depending on the amount that seeps in, groundwater could potentially accumulate in parts of the facility footprint and also could potentially gravity flow into Pond MSFC-004. Sealing both ends of the tunnel that extends from TS 4696 to Building 4674 would prevent intrusion of any contaminated groundwater (and associated vapors) that could potentially seep into the facility footprint after the facility is demolished. Sealing the tunnel would also prevent human entry at both ends of the tunnel. Management of hazardous materials during demolition would be conducted in coordination with the MSFC Environmental Engineering and Occupational Health Office and in accordance with all local, state, and federal laws and regulations, as well as with all applicable MSFC management plans and pollution prevention measures. Hazardous wastes generated during demolition and abatement would be disposed of at licensed hazardous waste disposal facilities. TS 4696 is eligible for listing in the National Register of Historic Places; therefore, its demolition would have a major impact on cultural resources. Under a Memorandum of Agreement (MOA) between NASA, the Alabama State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP), SHPO and ACHP conditionally approve the proposed demolition of TS 4696 provided that NASA meets the mitigation requirements and other stipulations outlined in the MOA. NASA will meet the mitigation requirements and all other stipulations outlined in the final signed MOA for the proposed demolition of TS 4696. The impact that the Proposed Action would have on cultural resources would be reduced to below a significant level by the mitigation that would be provided under the MOA between NASA, SHPO, and ACHP. Demolition of TS 4696 would decrease energy consumption at the site as the facility's lighting, fire alarm system, and operating sump pump would be eliminated. Demolition work would have a minor, short-term, positive impact on the local economy. The Proposed Action would also allow NASA to eliminate the costs associated with maintaining TS 4696 in a mothballed state and, therefore, would have a positive impact on NASA's finances and overall mission. Adverse cumulative impacts would not result from the interaction of the Proposed Action with other past, present and reasonably foreseeable actions at MSFC or in the surrounding area.

Under the No-Action Alternative, NASA would continue to incur costs associated with maintaining TS 4696 in a mothballed state. Therefore, the No-Action Alternative would negatively impact NASA's ability to operate its overall infrastructure more cost effectively within a constrained budget.

After careful review of the EA, NASA has determined that the Proposed Action (Preferred Alternative) 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.

Robert M. Lightfoot
Director
George C. Marshall Space Flight Center
National Aeronautics and Space Administration

Date Issued: July 2011