

**National Environmental Policy Act (NEPA); National
Aeronautics and Space Administration (NASA)/
Jet Propulsion Laboratory (JPL)**

NOTICE: National Environmental Policy Act; Construction of the In-Situ Instrumentation Laboratory at the Jet Propulsion Laboratory.

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact.

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions on NEPA (40 CFR Parts 1500-1508), and NASA policy and procedures (14CFR Part 1216, Subpart 1216.3), NASA-JPL has made a finding of no significant impact (FONSI) with respect to the proposed construction of the In-Situ Instrumentation Laboratory at the Jet Propulsion Laboratory (JPL) located at 4800 Oak Grove Drive, Pasadena, California, 91109. NASA/JPL proposes the construction of the two story In-Situ Instrumentation building of approximately 1,200 square meters

(12917 sq. feet). The proposed facility will provide much needed laboratory space for microsystem testing and integration. In addition, the project will construct new class 100,000 clean rooms and a flight materials and parts storage area. Two buildings will be demolished (buildings 78 and 113) both of which are out dated and obsolete, and a new retaining wall will be required.

DATE: Comments on this FONSI must be provided in writing to NASA on or before thirty days following the first publication of this FONSI in a local paper..

ADDRESSES: Please address all comments to:

JPL Public Affairs Office

4800 Oak Grove Drive, M/S 186-131

Pasadena, CA 91109

The Environmental Assessment (EA) for the proposed construction of the In-Situ Instrumentation Laboratory which supports this FONSI may be reviewed at the following locations:

- (a) NASA Headquarters Library, Room 1J20, 300 E. Street, SW, Washington, DC 20546.
- (b) JPL, Visitors Lobby, Building 249, 4800 Oak Grove Drive, Pasadena, CA 91109 (818) 354-5179

- (c) Altadena Public Library - 600 East Mariposa, Altadena, CA 91001
- (d) Pasadena Public Library - 285 East Walnut, Pasadena, CA 91101
- (e) Glendale Public Library, Montrose-Crescenta Branch - 2465 Honolulu Avenue, Montrose 91020

A limited number of copies of the EA are available , on a first request basis, by contacting the JPL Public Affairs Office at the address or telephone number contained herein.

POINT OF CONTACT: Mr. Peter Robles

4800 Oak Grove Drive ,M/S 180-801

Pasadena, CA 91109

626-393-2920

SUPPLEMENTARY INFORMATION:

NASA has reviewed the EA prepared for the construction of the In-Situ Instrumentation Laboratory at JPL and determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. JPL-NASA hereby incorporates the EA by reference in this FONSI.

The purpose of the proposed facility is to provide the much needed laboratory space for the sensor testing, qualification, instrument integration and system testing of the sensors fabricated at JPL. Currently, space sensor fabrication and development is taking place in JPL's Mircodevices Laboratory (MDL) to meet NASA's need. Existing facilities at MDL cannot accommodate the required laboratory space to do the flight hardware testing and integration due to the phenomenal growth it has experienced as a technology innovator and

provider of sensors for flight instruments. The proposed In-Situ Instrumentation Laboratory will provide this needed capability. It will ultimately link the technology developments from MDL into flight instruments for In-Situ Exploration which will then be integrated into microspacecraft through a new center of excellence being planned: CISM - Center for Integrated Space Microsystems. These three NASA centers of excellence being planned (MDL, In-Situ Instrumentation Laboratory and CISM) need to be located in close proximity to optimize the close interactions which their work will entail.

The proposed construction at JPL necessary to complete the project includes: (1) demolition of buildings 78 and 113; (2) construction of a retaining wall; (3) construction of the proposed new structure.

As an alternative, the rehabilitation and addition to the current facilities was considered. In the rehabilitation scenario, existing as well as future programmatic needs would be met. However, this option would exacerbate maintenance and utilities problems with additional costs for these services for the added square footage. Moreover, this alternative would not provide material environmental benefit as compared to the proposed project. NASA also considered the "no action" alternative. The no action alternative would not satisfy JPL's demonstrated needs.

In consideration of the proposed action, the impacts to the human environment were divided into short-term and long-term impacts. The short term impacts during the construction phase, would last 18 months. The long-term or operational impacts would last the lifetime of the building and result from the

operation of the proposed project. The EA evaluated the environmental consequences of both the construction and operational phases including, but not limited to earth resources, air resources, biotic resource, hazardous waste management, water resources, natural and cultural resources, noise, and aesthetics.

Overall cumulative impacts resulting from various individual impacts to the human environment are not anticipated to be substantial. Neither construction nor operational impacts will have a substantial affect on earth resources at JPL. Any hazardous materials encountered during excavation will be cleared and disposed of in accordance with the Federal Facilities Agreement (FFA).

Construction of the Proposed Action would temporarily increase airborne particulates from the earth moving activities, which would not be significant because proper wetting practices would be utilized. Normal construction practices controlling surface water drainage from wetting practices would occur. Although construction equipment would generate a temporary increase in internal combustion emissions, such as carbon monoxide, it would be of such short duration as to not substantially affect the human environment.

Operational activities are not expected to affect water resources. Surface drainage will not be altered since most of the area is currently covered by buildings and asphalt. Although surface soils would be exposed to potential erosion and runoff during construction activities, surface drainage will be maintained and is not expected to substantially impact surface runoff into the Arroyo Seco.

Construction noise is not considered a significant impact since it is not long term and would be within applicable regulations . Standard noise abatement equipment and practices required of all construction activities will reduce noise to normally acceptable levels. Operational activities will not increase current noise levels.

Neither construction nor operational activities would substantially affect biotic resources. JPL is surrounded by a fence which prohibits most wildlife from freely entering the facility and the location of the proposed activity is in a moderate pedestrian and vehicular traffic area, away from existing wildlife areas.

The existing location of the proposed project is occupied by buildings 78 and 113 and has very little landscaping. Previous activities have long since removed all indigenous flora. The locations east and west of the proposed site consists of an asphalt covered parking area. Construction activities will remove three large Eucalyptus trees which are in between the two aforementioned buildings. Operational activities will have no affect on biotic resources.

Cultural Resources (i.e.: National Historic Landmarks) would not be impacted during the construction or operational phase.

The most valuable aesthetic resource at JPL is the natural vista. The facility stands out against the natural vista but JPL design has made efforts in maintaining the natural resources of the foothills.

Construction activities will present a short term affect on the natural vista. Operational impacts will not substantially affect the natural vista. The current

vista should improve since the five story tower of building 113 is going to be demolished and the modern two story laboratory is going to be erected.

Construction activities will not substantially impact hazardous waste generation. The demolition of the two buildings may present a lead paint and asbestos concern. If the paint is found to contain lead and is in poor condition, abatement procedures will take place generating lead paint waste. Additionally, non-RCRA hazardous waste may be generated in the form of fluorescent light tubes and lighting ballasts. Operational activities will generate small amounts of hazardous waste. The proposed laboratory will be an integration and testing facility, it is anticipated that small amounts of hazardous waste will be generated.

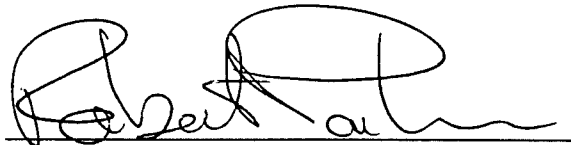
Construction activities would be local and would not impact potential wetland areas beyond the proposed project site. Operational activities would not release wastewater into the stormdrain system or airborne chemicals into the environment. Thus, neither construction or operational activities at the proposed site would impact any potential wetland areas in the Arroyo Seco.

JPL has assessed its vulnerability to flooding due to a 100 year and 50 year maximum rainfall. Studies by the City of Pasadena have determined that the maximum flood plain elevation is 1075 feet with the spillway gates of the Devils Gate Dam open. The Devils Gate Dam lies about one mile south of JPL in the Arroyo Seco. The 1075 foot elevation exists only at the very southern end of the West Arroyo parking area where there are no permanent facilities, either existing or planned. The elevation of the proposed In-Situ Instrumentation laboratory is approximately 1150 feet. The proposed facility would not be considered a JPL

“critical action” facility as defined in guidance for Executive Order 11988, Flood Plain Management. There would be no possibility of inundation by floods at the proposed project site.

There are no Environmental Justice concerns.

Based on the Environmental Assessment and the underlying reference documents, NASA had determined that the proposed construction and operation of the In-Situ Instrumentation Laboratory at the Jet Propulsion Laboratory will not individually or cumulatively have a significant effect on the quality of the human environment. The preparation of an Environmental Impact Statement is not warranted. NASA will take no final action prior to the expiration of the 30-day comment period.

A handwritten signature in black ink, appearing to read "Robert A. Parker", written over a horizontal line.

Robert A. Parker
Director
NASA Management Office
4800 Oak Grove Drive, M/S 180-801
Pasadena, CA 91109