



## Proposed Plan Fact Sheet for Source Area Groundwater Cleanup at NASA Jet Propulsion Laboratory: Next Step in NASA Water Cleanup

### INVITATION TO SUBMIT COMMENTS – ATTEND THE PUBLIC MEETING

You are invited to a public meeting to hear about NASA's Proposed Plan for expanding the cleanup of groundwater located directly beneath the Jet Propulsion Laboratory facility, referred to as the "source area." At the meeting you will be able to offer your views about the proposed cleanup expansion. The meeting will be held from 7 p.m. to 9 p.m. on Wednesday, November 16, 2005, at the Altadena Community Center, 730 E. Altadena Drive, Altadena, California. NASA will prepare and make available a transcript of the meeting. This Proposed Plan is for the source area only. NASA will prepare a separate Proposed Plan for further cleanup of the groundwater off-facility (i.e., outside the Jet Propulsion Laboratory property line). NASA anticipates preparing that Proposed Plan in 2006.

NASA invites public comment on the actions described in this Proposed Plan. The Public Comment period is from November 1, 2005 to December 15, 2005. Written comments may be submitted electronically to [mfellows@nasa.gov](mailto:mfellows@nasa.gov) or by mail to the attention of Merrilee Fellows, NASA Water Cleanup Outreach Manager, NASA Management Office, Jet Propulsion Laboratory, 180-801, 4800 Oak Grove Drive, Pasadena, CA 91109. No specific format for the comments is necessary. All comments must be submitted either electronically by midnight December 15, 2005 or, if comments are posted by mail, the comments must bear a postmark of no later than December 15, 2005.

### FOR MORE INFORMATION...

A copy of the Proposed Plan, which describes the preferred cleanup alternative and the other alternatives studied, can be viewed at our website at <http://jplwater.nasa.gov> or a copy can be mailed to you upon request to the address or email listed in the section above. Other technical documents that support NASA's Proposed Plan and other

information about NASA's groundwater cleanup program at the Jet Propulsion Laboratory may be viewed on our website or may be examined by visiting any of the information repositories at the locations listed below. The public also may call (818) 393-0754 for information.



#### Submit Written Comments

Public Comment Period:  
November 1, 2005 to December 15, 2005. NASA will accept written comments on the Proposed Plan during the public comment period. You may submit your comments electronically to [mfellows@nasa.gov](mailto:mfellows@nasa.gov) or by mail to:

Merrilee Fellows  
NASA Water Cleanup Outreach  
Manager  
NASA Management Office  
Jet Propulsion Laboratory 180-801  
4800 Oak Grove Dr.  
Pasadena, CA 91109

#### Attend the Public Meeting



You are invited to a meeting sponsored by NASA to hear about the Proposed Plan for cleaning up the groundwater at the "source area" directly beneath the Jet Propulsion Laboratory. At the meeting you will be able to state or submit your views about the proposed expansion of the source cleanup. The meeting will be held from 7:00 to 9:00 p.m. on Wednesday, November 16, 2005, at the Altadena Community Center, 730 E. Altadena Drive, Altadena, CA.

#### Location of Information Repositories



**Altadena Public Library**  
600 East Mariposa Ave.  
Altadena, CA 91001  
(626) 798-0833

**Pasadena Central Library**  
285 East Walnut St.  
Pasadena, CA 91101  
(626) 744-4052

**La Cañada Flintridge Public Library**  
4545 Oakwood Ave.  
La Cañada Flintridge, CA 91011  
(818) 790-3330

**JPL Library (JPL On-Site Personnel)**  
Bldg 111, Room 112  
Pasadena, CA  
(818) 354-4200

## SITE BACKGROUND

In the 1940s and 1950s, liquid wastes from materials used at the Jet Propulsion Laboratory were disposed of into seepage pits, a practice common at that time. Some of these chemicals, including perchlorate and chemicals referred to as volatile organic compounds, have been found in groundwater beneath the north-central area of the Jet Propulsion Laboratory and in areas adjacent to the Jet Propulsion Laboratory to

the east and southeast. In 1992 the site was placed on the U.S. Environmental Protection Agency National Priorities List of sites governed by the Comprehensive Environmental Response, Compensation and Liability Act. That Act sets out the federal requirements for investigating and ultimately cleaning up sites.

## WHY CLEANUP ACTION IS NEEDED

The groundwater is several hundred feet below the surface. Studies have concluded that there is no exposure to humans, plants or wildlife from untreated groundwater. This groundwater is not used for

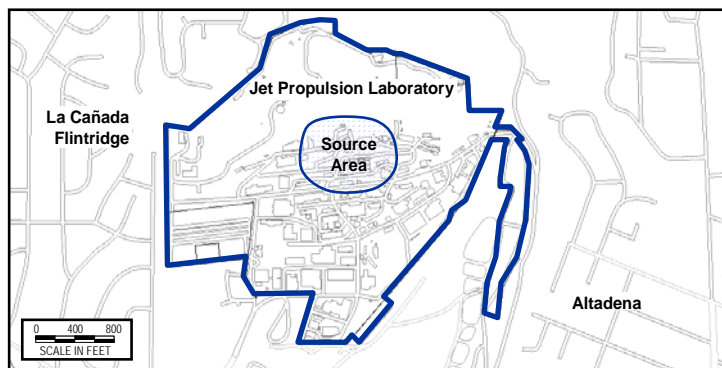
drinking, but because the groundwater flows toward drinking water wells, cleaning the source area helps stop the contribution of chemicals to the aquifer that is ultimately used as a drinking water source.

## CLEANUP ACTION PROPOSED

NASA proposes to expand the existing demonstration groundwater treatment plant located at the Jet Propulsion Laboratory. Expanding the existing system will hasten the cleanup of area groundwater. Since the plant on-site at the Jet Propulsion Laboratory began operating in early 2005, the plant has successfully removed volatile organic compounds and perchlorate from the “source area” groundwater where the majority of the chemicals are located (see accompanying figure).

NASA proposes to expand the existing treatment system to more than double the amount of water being treated, going from a rate of about 150 gallons per minute to a rate of approximately 350 gallons per minute. To remove the chemicals present, the treatment system uses two technologies proven to be effective. The first is called liquid-phase granular

activated carbon that is used to remove volatile organic compounds. The other is called a fluidized bed reactor, which removes perchlorate. Together these technologies permanently remove the chemicals from groundwater.



## CLEANUP GOALS

The goals of NASA's Proposed Plan are to:

- Remove chemicals in source area groundwater and prevent the further spread of the chemicals to groundwater off-facility where existing drinking water wells are located, and

- Improve the effectiveness and efficiency of the final cleanup remedy selected for cleaning up off-facility groundwater.

The system will operate to meet federal and state water quality levels.

## YOUR COMMENTS

NASA studied a number of ways to meet the cleanup goals, and we believe that the proposed plan will protect human health and the environment. Before making a final decision, we want to hear what you think. We encourage you to find out more about the cleanup plan and make your views known. The plan that is finally chosen will be described in an interim

Record of Decision. That document will include a summary of the comments received and a statement on how those comments changed the decision that was reached.