

# JPL Says Area Groundwater Treatment System Completed

With its on-site groundwater major goal in its comprehensive treatment system now operating at environmental cleanup at the Jet its full potential, NASA said in a Propulsion Laboratory (JPL). press release that it has achieved a

According to the press release,

the on-site groundwater treatment system had been removing perchlorate and volatile organic compounds (VOCs) from groundwater since

January 2005 at a rate of about 150 gallons-per-minute (gpm). Two wells were being used to extract groundwater, and two wells re-injected clean, treated water into the aquifer hundreds of feet beneath the surface. NASA added a third extraction well and a third injection well in 2007, increasing the water treatment rate to about 300 gpm. Construction of these new wells has been completed and the treatment system is now operating at full capacity.

The system uses liquid-phase granular activated carbon technology to remove VOCs from the water and a biological technology — a fluidized bed reactor — to remove perchlorate. That combination of technologies was pilot-tested on-site and proven to be effective.

To date, NASA's source-area treatment plant has removed more than 850 pounds of perchlorate and 25 pounds of VOCs from the deep groundwater beneath JPL. The plant's operation is also preventing

chemicals from reaching off-facility groundwater, according to NASA Cleanup Project Manager Steve Slaten.

"What is significant today is that NASA's comprehensive and aggressive treatment strategy is now nearing full execution," Slaten said. "The source area treatment system addresses the area with the highest chemical concentrations, ensuring that groundwater chemicals removed by this treatment will not move off of the JPL facility. A NASA-funded system, operated by the Lincoln Avenue Water Company, is effectively preventing further movement of chemicals and protecting groundwater resources to the south and east.

"Finally, a proposed NASA-funded system that would be built in Pasadena, if approved by the City's permitting process, would provide groundwater cleanup of the area in the middle, roughly halfway between the source and the farthest reaches of the chemicals."