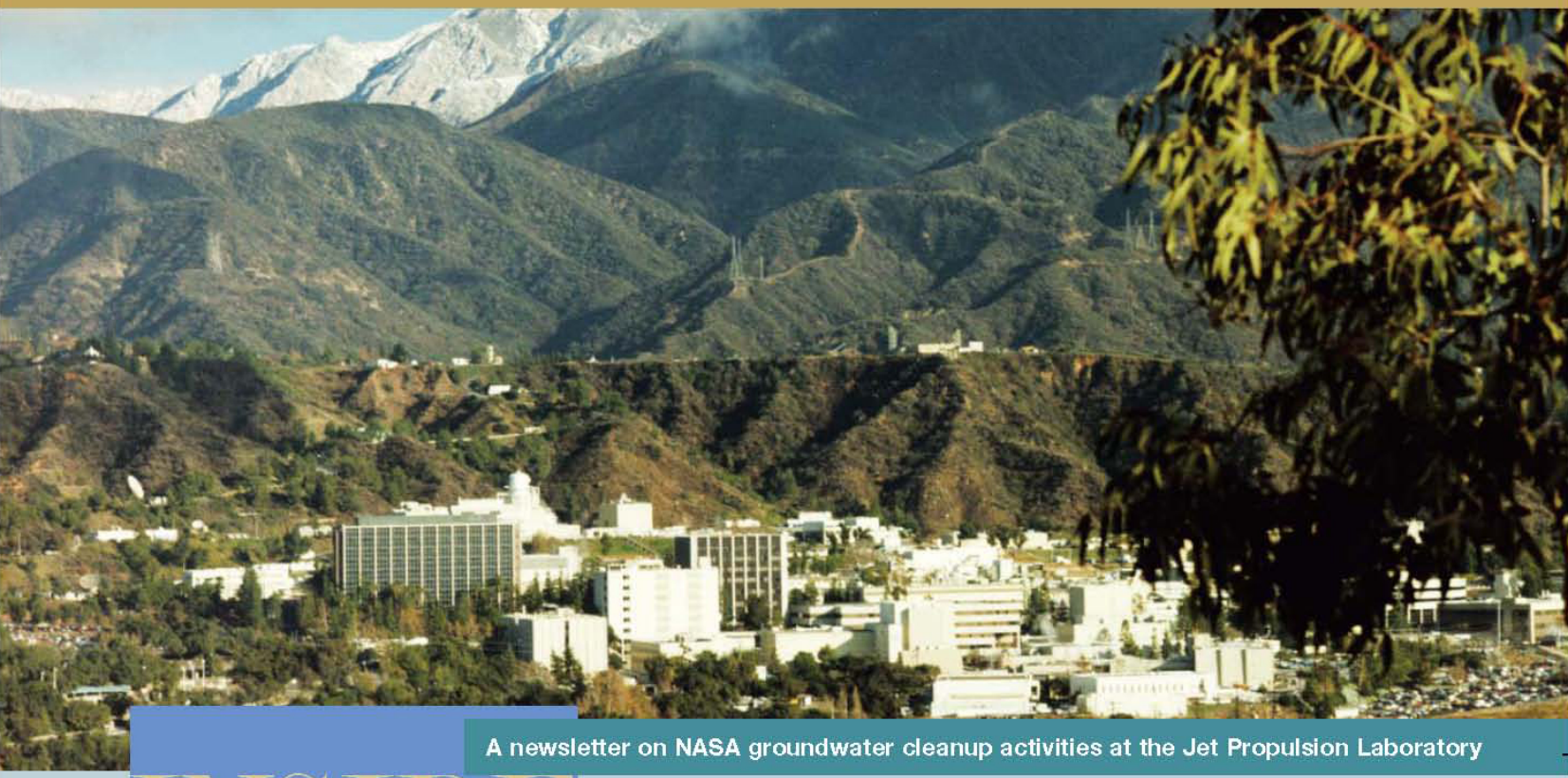
BILINGUAL NEWSLETTER DECEMBER 2007

GROUNDWATER CLEANUP UPDATE

National Aeronautics and Space Administration



A newsletter on NASA groundwater cleanup activities at the Jet Propulsion Laboratory

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Boletín Bilingüe Diciembre de 2007

Staff Meets the Public

For the fourth consecutive year, NASA's groundwater cleanup program staffed a booth during the annual Jet Propulsion Laboratory Open House weekend in May. Nearly 30,000 people attended the Open House, and about 5,000 came by the cleanup program's booth to talk, to view a series of displays related to the cleanup, or to take home flyers and fact sheets on the project.

Visitors to the booth offered almost entirely positive comments, according to Merrilee Fellows, NASA Manager for Community Involvement. "About 50 people thanked us," said Fellows. "They said things like, 'It's great that you got this (the groundwater cleanup) started.'"

Many Spanish-speaking visitors attended the Open House and visited the cleanup project's booth. Charter buses full of young students from Tijuana and Mexicali came to the Open House. "They, their teachers and parents seemed very interested in our environmental activities," said Fellows. On-hand during one of the days was Myrna Gutierrez, who advises the multicultural aspects of NASA's program. Gutierrez, who is a Spanish speaker, was thrilled at the interest. Throughout the day she talked to the Spanish-speaking visitors and answered all of their questions about the water cleanup (see photo page six). "Kids were leaning across the table to listen to her, almost shoving their parents aside," Fellows said.

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NASA Cleanup Project Manager Steve Slaten, left, and Lewis Mitani of the U.S. EPA Region 9 Office in San Francisco review NASA cleanup plans during a recent visit by Mitani to JPL

Regulatory Oversight an Integral Part of Cleanup Effort

While NASA takes the lead for environmental investigations and cleanup activities associated with the Jet Propulsion Laboratory, its work is closely overseen by U.S. and California State regulatory agencies, including the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB), Los Angeles Region. The regulatory agencies' roles are spelled out in a Federal Facilities Agreement (FFA) with NASA (see sidebar). Negotiation of the FFA followed the 1992 designation of the site under the Superfund law -- the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Under CERCLA, NASA must follow certain federal and state regulations and requirements for conducting specific site investigations to define the extent of chemicals and to perform environmental cleanup. In 1986, the Superfund Amendments and Reauthorization Act (SARA) required federal facilities, such as those operated by NASA, to comply with CERCLA.

Remedial project managers from the EPA, DTSC, and RWQCB meet frequently with NASA managers to review remedial investigation and cleanup activities as well as plans for future work at the site.

Federal Facilities Agreement Specifies Roles for NASA & Regulatory Agencies

At federal facilities, such as at the NASA Jet Propulsion Laboratory (JPL), a formal agreement is signed by the federal agency that owns or manages the facility for that owner/manager to take the lead on the cleanup of a CERCLA site. This document is called a Federal Facilities Agreement (FFA), and its purpose is to ensure that environmental impacts associated with past releases are addressed in accordance with regulations and statutes.

Also, the FFA sets the procedural framework for selecting appropriate cleanup activities, and it facilitates cooperation and exchange of information among the lead, regulatory, and other agencies involved.

The FFA governing NASA's groundwater cleanup may be viewed from a link on the project's home page: http://jplwater.nasa.gov.

Links to each of the regulatory agencies may be found on the NASA groundwater cleanup Web site at: http://jplwater.nasa.gov. The public may direct comments and questions to the agencies as follows:

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75 Hawthorne St., San Francisco, CA 94105
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Web site http://www.epa.gov/region09/

Mr. Michel Iskarous
California Department of Toxic Substances Control (DTSC)
Southern California Cleanup Operations, Glendale Office
1011 North Grandview Avenue, Glendale, CA 91201
Tel. (818) 551-2857 **E-mail** Mlskarou@dtsc.ca.gov
Web site http://www.dtsc.ca.gov

Mr. Mohammad Zaidi
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Los Angeles Region
320 West 4th St., Los Angeles, CA 90013
Tel. (213) 576-6732 **E-mail** mzaidi@waterboards.ca.gov
Web site http://www.swrcb.ca.gov/rwqcb4/

NASA PROPOSAL IS APPROVED

In another major milestone in NASA's groundwater cleanup project, the federal and state regulators that oversee NASA's cleanup have approved a NASA Interim Record of Decision (ROD) that calls for NASA funding of a groundwater treatment plant at a site owned by the City of Pasadena at 2696 Windsor Avenue in Pasadena. The facility will be designed to treat water from targeted City of Pasadena drinking water wells in and near the Arroyo Seco. Also approved was continued NASA funding of an existing groundwater treatment plant near two operational Lincoln Avenue Water Company production wells in Altadena.

NASA Responds to Public Comments

As part of its decision document, NASA prepared a "responsiveness summary" summarizing public comments on its proposed plan for the treatment plant as well as NASA's response to those comments. Among issues addressed in comments were the location of the plant and the noise and visual impact it would have on the neighborhood. To respond to these concerns, NASA will fund many efforts to reduce noise, traffic and dust during plant construction and improve the aesthetics at the facility, including landscaping. In addition, the City's Request for Proposals to build the plant included criteria that considered the prospective vendor's ability to reduce impacts to the nearby community and enable the treatment facility to blend into the site's surroundings.

City of Pasadena Can Now Move Forward

Approval of the ROD allows the City of Pasadena to proceed with the permitting process to construct and operate the plant. The City is required by its ordinances to go through several permitting processes, some of which include public review, before the plant becomes operational. A fact sheet on the public input process being followed was prepared by NASA and may be viewed from a link on the project's Web site: http://jplwater.nasa.gov.

FOR ADDITIONAL INFORMATION ON THE PERMITTING PROCESS, THE PUBLIC MAY CONTACT

Lanny Woo
City of Pasadena Planning and Development Department, at (626) 744-6776.

NASA-Funded LAWC Treatment Plant Meeting Groundwater Cleanup Goals

"It's a win-win situation for the Lincoln Avenue Water Company (LAWC) and for NASA," said LAWC General Manager Robert Hayward of the three-year-old NASA-funded groundwater treatment plant that his company operates in Altadena. The LAWC plant might also be viewed as a figurative window into the future for Pasadena and Altadena residents. They are awaiting permitting reviews regarding construction of a facility with greater capacity near the Windsor Reservoir that would be operated by the City of Pasadena.

The LAWC groundwater treatment plant had been removing volatile organic compounds (VOCs) from groundwater for about a decade when a perchlorate removal system was added to that existing system in July 2004. By the end of July 2007, the plant had removed 305 pounds of perchlorate, 34.6 pounds of carbon tetrachloride, and 62.5 pounds of trichloroethylene from the groundwater. NASA continues to fund the plant's operation in a working relationship Hayward termed "outstanding from the start." Hayward noted that the plant is successfully meeting two goals set before its construction: "to treat the water using the best technology available" and "to contain the chemicals" that had moved from the nearby Jet Propulsion Laboratory (JPL) source area. The plant is located at the LAWC Olive Street reservoir at the outer edge of the area where the groundwater chemicals had moved. NASA monitoring wells nearby confirm that the 2,000 gallons of water per minute being extracted from the aquifer and treated at the plant have indeed contained the spread of chemicals.

According to NASA Remedial Project Manager Steve Slaten, "NASA monitoring well data indicate the plant is working effectively. Target chemicals in the NASA monitoring well nearest the LAWC plant have decreased since the LAWC plant operation began. The next monitoring well further southeast of the plant has not had any detections of target chemicals since operation began. These data indicate that there is containment, thanks in large part to the LAWC treatment plant."

The Pasadena plant, which NASA will also fund, would be located at roughly the center of the area where chemicals are located in groundwater hundreds of feet below the surface. It would have a 7,000 gallons-per-minute (gpm) treatment capacity, three-and-a-half times that of the LAWC facility, and would use the same technologies – liquid-phase granular activated carbon (LGAC) to remove VOCs and an ion exchange process, similar to a water softening system, to remove perchlorate.

The success at the LAWC treatment plant speaks well of two technologies and two organizations working together to clean up the environment. It is indeed a window into the future, as the area awaits the next steps in the NASA groundwater cleanup project.

Lewis Mitani of the U.S. EPA Region 9 Office, left, visits with Lincoln Avenue Water Company (LAWC) General Manager Robert Hayward at the NASA-funded groundwater treatment plant that LAWC operates.

NOVEDADES ACERCA DE LAS ACTIVIDADES DE LIMPIEZA DEL AGUA SUBTERRÁNEA

DICIEMBRE DE 2007

Día de Visita Abierta al Público Auspiciado por la NASA en JPL:

Este es el cuarto año que los miembros del programa de limpieza del agua subterránea de la NASA participaron con un puesto de información el día de Visita Abierta al Público en el Jet Propulsion Laboratory. Casi 30,000 personas asistieron y unas 5,000 visitaron el puesto de información para aprender más acerca del proyecto de limpieza del agua subterránea de la NASA.

También asistieron muchos estudiantes de Tijuana y Mexicali que viajaron en camiones alquilados. "Los estudiantes, sus maestros y sus padres parecían muy interesados en nuestras actividades medioambientales," dijo Merrilee Fellows, NASA Manager for Community Involvement. Myrna Gutierrez, una consultora con el programa de la NASA, habló con los visitantes de habla hispana y les contestó sus preguntas acerca del proyecto. "Los niños se recostaban en la mesa para poder escucharla mejor, y a la vez parecía que empujaban a sus padres al costado," dijo Fellows.

"En los últimos años, los latinos han demostrado más interés en asuntos medioambientales," dijo Gutierrez, "y ese interés se vió reflejado en el tipo de preguntas que hicieron acerca de la limpieza del agua."

"Nuestra participación en este evento es parte de nuestro compromiso de mantener a la comunidad informada de nuestros programas medioambientales," dijo Fellows.

Los Miembros del Programa de Limpieza del Agua Subterránea de la NASA hablan con el público en el puesto de información durante el día anual de Visita Abierta al Público en JPL el mayo pasado.

Agencias Reguladoras Supervisan las Actividades de Limpieza

Aunque la NASA se ha hecho completamente responsable de las investigaciones medioambientales y las actividades de limpieza asociadas al Jet Propulsion Laboratory, su trabajo está supervisado de cerca por las agencias reguladoras del gobierno de los E.E.U.U y del Estado de California. Estas agencias incluyen a la Agencia de Protección Medioambiental de los EEUU (EPA), el Departamento de Control de Substancias Tóxicas de California (DTSC) y la Junta Directiva Regional de Calidad y Control de Agua (RWQCB) de la Región de los Angeles.

Cada tres meses, los gerentes encargados de vigilar las acciones correctivas del proyecto por parte de EPA, DTSC y RWQCB se reúnen con los gerentes de la NASA, tanto para revisar las actividades de investigación correctiva y de limpieza, como para planear el trabajo que se hará en el lugar en el futuro.

Las responsabilidades de las agencias reguladoras están explicadas en un Acuerdo de las Organizaciones Federales (FFA) establecido entre la NASA y EPA.

Para leer este acuerdo en inglés, encontrar los vínculos a cada una de las agencias reguladoras o dirigir comentarios y preguntas a estas agencias visite la página web: http://jplwater.nasa.gov.

información

Para más información en español llame a

Gabriel Romero
NASA JPL
Teléfono:
(818) 354-8709

La Planta de Tratamiento de LAWC Financiada por la NASA Cumple con las Metas de Limpieza del Agua Subterránea

"La planta de Lincoln Avenue Water Company (LAWC) está trabajando efectivamente de acuerdo a datos provenientes de un pozo de monitoreo de agua de la NASA," dijo Steve Slaten, el gerente del Proyecto de Reparación de la NASA. "La cantidad de compuestos químicos que esperábamos remover del pozo de monitoreo de la NASA, el más cercano a la planta de LAWC, ha disminuido desde que comenzó la operación. El siguiente pozo de monitoreo que está al sureste de la planta no ha detectado ninguno de los compuestos químicos buscados desde que comenzaron las operaciones. Esto nos indica que se ha logrado contener la propagación de los compuestos químicos en gran parte debido a la planta de tratamiento de LAWC."

"Esta situación es de ganancia para ambas partes, Lincoln Avenue Water Company (LAWC) y la NASA" dijo Robert Hayward, el Gerente General de LAWC en sus comentarios acerca de la planta de tratamiento de agua subterránea operada desde hace tres años por su empresa en Altadena y financiada por la NASA.

La planta de tratamiento de agua subterránea de LAWC había estado removiendo los compuestos orgánicos volátiles (VOCs) del agua subterránea por casi una década, cuando en julio del 2004 se le agregó al sistema existente un sistema para remover el perclorato.

La planta está localizada en el reservoir de LAWC, en Olive Street, en la parte de afuera del área donde los compuestos químicos se habían desplazado en el agua subterránea. El éxito de la planta de tratamiento muestra lo bien que se complementan las dos tecnologías y lo bien que trabajan las dos organizaciones para limpiar el medioambiente.

EL RINCÓN VERDE

Protegiendo a los Árboles

De acuerdo al Worldwatch Institute, EE. UU. es el consumidor más grande de papel en el mundo. Es por eso que la NASA está imprimiendo este boletín en papel reciclado, crudo o libre de cloro. Este papel es 100% papel de desecho usado por el consumidor. No se han cortado más árboles para crear este papel, y gracias a este reciclaje se han tirado menos productos de papel en los basureros.

Usted nos puede ayudar a ahorrar más papel si en el futuro decide recibir las copias de este boletín por correo electrónico. Pero si no desea recibir este boletín de ninguna forma, por favor comuníquenos su decisión de terminar la suscripción. Para hacernos llegar sus deseos le pedimos que nos envíe un correo electrónico a: watercleanup@nmo.jpl.nasa.gov o llame a Gabriel Romero al (818) 354-8709.

Tendremos más información acerca de los esfuerzos de protección del medioambiente que está realizando la NASA en este espacio del boletín en ediciones futuras. EE. UU. es una abreaviatura no representa siglas.

HA SIDO APROBADO EL PLAN DE LA NASA

Los reguladores del gobierno que supervisan el programa de limpieza de la NASA aprobaron el Documento de Decisión (ROD), un documento que propone como la NASA financiará la construcción de una planta de tratamiento de agua subterránea en 2696 Windsor, Pasadena, un sitio perteneciente a la Ciudad de Pasadena. La planta tratará el agua subterránea proveniente de cuatro pozos cerrados de agua potable de la Ciudad de Pasadena localizados adentro y cerca del Arroyo Seco. También se aprobó que la NASA continúe el financiamiento de una planta de tratamiento de agua subterránea ya existente en Altadena, ubicada cerca de dos pozos de producción de Lincoln Avenue Water Company que están en pleno funcionamiento.

Respuesta de la NASA a los Comentarios Públicos

La NASA preparó un resumen de los comentarios públicos y respondió a ellos con la publicación de un documento. Entre los asuntos mencionados se destacaron el sitio de la planta, el ruido y el impacto visual de la planta en la comunidad vecina. Para responder a estas preocupaciones, la NASA financiará varias actividades que ayudarán a reducir el tráfico, el ruido y el polvo durante la construcción de la planta y a mejorar la estética de la planta y el paisaje en el área. El "Pedido de Propuestas" para construir la planta originado por la Ciudad, también incluye en su criterio de selección la habilidad del contratista para reducir los impactos en las comunidades vecinas y para armonizar la planta con sus alrededores.

La Ciudad de Pasadena puede proceder

con el proceso de otorgar licencias para la construcción y operación de la planta. La Ciudad, de acuerdo a sus propios reglamentos, debe cumplir con una serie de pasos relacionados al proceso de obtención de permisos antes de comenzar la operación de la planta. Algunos de estos pasos incluyen exámenes públicos.

PARA PREGUNTAS ACERCA DEL PROCESO DE OTORGAR Y APROBAR LICENCIAS:

Tony Estrada
(626) 744-3838
testrada@cityofpasadena.net

Jet Propulsion Laboratory
NASA MANAGEMENT OFFICE
4800 Oak Grove Drive
Pasadena, CA 91109

Detailed information on NASA's cleanup can be found at http://jplwater.nasa.gov or at NASA Information Repositories located at the

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

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

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

Comments to or questions of NASA regarding its cleanup activities may be directed to:

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NASA contractor and multicultural consultant Myrna Gutierrez talks with visitors to the NASA groundwater cleanup booth at the annual JPL Open House in May.

STAFF MEETS THE PUBLIC
Continued from Page One

"There has been a steep increase in interest in environmental issues in the Latino community," Gutierrez said, "and that was reflected in the kinds of questions our Spanish-speaking visitors were asking about the water cleanup. Teachers from Mexico were especially interested."

NASA remains committed to its outreach program through events like the annual JPL Open House. "Our participation in the Open House is an important and gratifying element in the groundwater cleanup project's effort to reach out and inform the community and engage in conversations about our environmental programs," said Fellows.

THE GREEN CORNER

Saving Trees

According to the Worldwatch Institute, the U.S. is the largest consumer of paper in the world. With this in mind, NASA is now printing this newsletter on unbleached, chlorine-free, 100 percent post consumer waste (PCW) recycled paper. No trees are cut down for making this paper, and less paper product ends up in landfills.

You can help us save even more paper by choosing to receive future copies of this newsletter via email. Also, if you no longer wish to receive this newsletter in any form please let us know by choosing to unsubscribe. Just let us know your wishes by sending an email message to watercleanup@nmo.jpl.nasa.gov.

We'll have more information on NASA's environmental efforts in this space in future editions of our Groundwater Cleanup Update.

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