



# FieldNOTE

MAY 2015

An Update  
on NASA's  
Cleanup Efforts at  
Santa Susana  
Field Laboratory

## Demolition Proceeds

Demolition projects are a lot like construction projects – but they happen in reverse. Structures that were assembled years ago for rocket engine development and testing are now being disassembled and dismantled as part of NASA's disposition of SSFL. And like any construction site, increased activity requires attention to safe work practices. NASA's approved demolition work plans and worker training ensure that "safety is our priority for the on-site worker, the public and the environment, including cultural resources," said NASA SSFL Project Manager Peter Zorba.



Trucks that carry demolition debris are covered securely, wetted down to suppress dust, and fully inspected for safety before exiting the site. Trucks entering the site are uncovered because they are empty.

In early February, NASA and demolition partners - the U.S. Army Corps of Engineers and demolition contractor Bhate Environmental Associates – began demolition work in the northern part of Area II in the Service Area and the Delta Test Area. Work considered pre-demolition started on the inside of buildings, removing what is referred to as e-waste including lightbulbs, wiring, and mercury-containing light ballasts. When SSFL structures were constructed in the '40s and '50s, asbestos was used in a variety of building materials, which must be removed before demolition. Certified asbestos abatement workers have been removing floor tiles, drywall, and ceiling tiles inside each structure. This process is being supervised by third party asbestos abatement monitors to ensure the proper handling and disposal of these materials. This pre-demolition activity is nearing completion in the Service Area and actual demolition of structures has begun.

With the use of construction equipment and increased site activities there is the potential for soil disturbances. NASA is paying close attention to management of stormwater, dust, and soil erosion during demolition to prevent discharges from the work sites. In February and March work had been confined to the inside of buildings until NASA's Stormwater Pollution Prevention Plan (see stormwater article) had State approval. Protective measures specified in the Plan were required to be in place before exterior work such as asbestos abatement on roofs and siding could begin. "Everything we are doing contributes to the goal of safely removing the structures from the site," said Zorba, "but progress will really show as the walls start to come down." Full demolition is underway and is expected to start slowly and pick over time. Debris consisting primarily of steel and concrete will be generated requiring transport off site. This will result in an increase in the number of trucks traveling to and from the site. (See photo.) Protective measures will be strictly enforced to ensure transported material is securely covered and trucks undergo inspection prior to leaving SSFL property. Updates about site work and demolition debris transport will be posted to the NASA SSFL website <http://ssfl.msfc.nasa.gov/news/demolition-updates.aspx>. NASA expects this first part of demolition to be completed by June. At that time, site preparations will be in full swing in the Delta Area, with expected completion of demolition there in December. ■

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## IN THIS EDITION

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Proceeds

NASA Says  
Let it Rain

Understanding  
Groundwater

GETS  
Improvement

Lori Manes  
Joins the Team





# A Deeper Understanding of Groundwater

The four plumes that are the focus of NASA's groundwater investigation are also referred to as Areas of Impacted Groundwater (AIG):

1 Liquid Oxygen (LOX) Plant

2 ELV/Building 204

3 Coca/Delta

4 Alfa/Bravo

NASA is making good progress with groundwater investigations. Field work is focusing on the source of four groundwater plumes beneath land administered by NASA. (See side bar.) NASA is taking this unique approach of looking at the plumes to fill in the data gaps identified in the Groundwater Remedial Investigation (RI) report, which is part of the overall SSFL site groundwater cleanup process.

## NASA is collecting data to characterize:

the nature and extent of the groundwater contamination source areas

the groundwater flow direction and rate, and

the behavior of groundwater flow with respect to bedrock faults and fractures within the plumes

Field work has been extensive, including the installation of 21 wells and boreholes to “considerably improve our sampling capability,” said NASA SSFL Program Director Allen Elliott, “both in terms of understanding groundwater movement and contaminant characteristics.” Field surveys and mapping projects are also part of NASA’s investigation work. Passive soil vapor surveys help to identify potential contaminant sources areas. Geophysical surveys, performed in the wells, help characterize the types of rocks as well as the faults and fractures present within the rocks. Geologic mapping provides additional details about the rock structure, including the size and location of faults and the angle and direction of the bedrock, which are both essential for developing a better understanding of the groundwater flow system. NASA’s field work will continue through September. ■



## Lori Manes Joins NASA SSFL Community Outreach Team

Lori Manes joined NASA’s SSFL team as Community Outreach Coordinator last November. An alumna of Baylor University and a PhD candidate at Claremont Graduate University, Manes worked ten years supporting public outreach on NASA’s Groundwater Cleanup

Program at its Jet Propulsion Lab in Pasadena. She is pleased to work with “an active community of people genuinely interested and passionate about the cleanup... and in their kids’ and grandkids’ futures.”

Lori began her work at SSFL hosting three tours (once each for community members, the media and NASA personnel). The tours occurred prior to the start of test stand demolition. Manes has since been working to ensure NASA maintains an active community outreach program, which includes a mix of “events, fact sheets, Web content, and a major redesign of the project website.” The revisions will include a document library and photo gallery. She has also initiated a new Communications E-List to which community members and interested parties can subscribe to get real-time updates about NASA cleanup activities at SSFL. “People can subscribe to the E-List via the NASA SSFL website. I am hoping that we can start building up subscribers right away.” Manes is excited about supporting NASA efforts to collect an oral history archive of SSFL that includes interviewing former SSFL workers going back a half a century. “It’s really a privilege to talk to these guys and hear about their experiences working on what at the time was such remarkable innovation.” The project will include a review of thousands of historic photographs and culminate in a documentary-type video that will be posted on the NASA SSFL website in late 2015.

Manes said meeting with a variety of individuals and groups around SSFL is a continuing focus of her work. These include community organizations and regulators such as California’s Department of Toxic Substances Control. During the winter she attended various meetings where she heard multiple opinions and acknowledged, “There is sentiment that it’s taken long to do so much investigation, sampling and data analysis. People understand this was necessary but I think we are all glad to be moving closer to cleanup.” Manes plans to post cleanup photos and updates on the NASA SSFL website and to conduct a few site tours when possible. Manes hopes her activities and outreach program will reinforce NASA’s commitment to ongoing community involvement at SSFL. ■

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