



July 2010

Vernal Pools Spring Up at Santa Susana

Every year, as winter turns to spring, the site blossoms with lush, green plant life, vivid-colored wildflowers, and herds of roaming animals, all constant reminders of the site's beauty and importance as a wildlife corridor.

Spring also marks the end of the rainy season and a time when we share our storm water monitoring report — www.boeing.com/aboutus/environment/santa_susana/programs.html. To understand our report, it is helpful to realize that our permit limits are designed to protect sensitive aquatic organisms. As a result, our storm water runoff meets drinking water standards and does not pose a threat to human health.

This season, to meet these limits, we used a number of treatment methods, including removal of soil in large drainages that may be affecting surface water results, water retention during moderate rainfall events, and advanced filtration and chemical treatment. While our latest report shows good results, we did not achieve 100 percent compliance. Instead, our compliance rate was 97 percent.

We remain committed to developing storm water treatment technologies that can meet these stringent water permit limits in ecologically acceptable ways. Since 2004, Boeing has spent more than \$52 million working toward full compliance with permit limits.

We recently entered into a Consent Judgment with the Los Angeles Regional Water Quality Control Board that resolves all permit limit exceedances that we self-reported through the end of December 2009. As part of the agreement, we will pay \$200,000 in fines and fund a \$300,000 Supplemental Environmental Program that will benefit residents of California.

While it's a challenge to meet our strict permit limits, we look forward to our continued work on storm water treatment technologies with the Surface Water Expert Panel and the Los Angeles Regional Board.

Sincerely,



Tom Gallacher
Site Director



Steve Shestak
Director of Remediation



During a recent site visit with representatives from the San Fernando Valley Audubon Society and Santa Susana Mountain Parks Association, attendees observed two vernal pools teeming with fairy shrimp in Area IV, the area administered by the Department of Energy (DOE).

"Vernal pools, such as the sandstone pools at the Santa Susana Field Lab, are part of a unique ecosystem providing habitat for organisms, such as fairy shrimp, that are adapted to survive the wet and dry phases of

temporary pools," remarked biologist Sarah Powell with environmental services firm Padre Associates, Inc.

The temporary pools of water are called vernal pools because vernal means occurring in the spring. The pools, often at their peak depth during spring, are usually devoid of fish. This allows insect species, like fairy shrimp, to thrive and produce some of the most fragile and endangered ecosystems in California.

"I'm constantly amazed at the diversity of wildlife I've seen at the Santa Susana Field Lab. The vernal pools, fairy shrimp, and other endangered and threatened species at the site demonstrate the need to preserve this area for future generations," said John Luker, vice president, Santa Susana Mountain Parks Association.



A vernal pool at Santa Susana provides a thriving habitat for fairy shrimp. (Photos courtesy of John Luker)

Most vernal pools are dry for at least part of the year and fill with the winter rains. Some pools may remain at least partially filled with water over the course of a year but will periodically dry up.



Interim Source Removal Activities – In preparation for this year’s interim source removal activities, Boeing is performing soil sampling and submitting supplemental work plans to the Los Angeles Regional Water Quality Control Board.



Lead Shot Cleanup – Under oversight of the Department of Toxic Substances Control (DTSC), removal of visible lead shot from the rock outcrops on Sage Ranch continues. The lead shot is left over from the Rocketdyne-Atomics International Rifle and Pistol Club, which operated at Sage Ranch from 1972 to 1991.



Groundwater Extraction Treatment System – Groundwater from an extraction well is pumped through the new treatment system using a series of regulatory-approved technologies to remove chemicals.



Storm Water Chemical Treatment System – During the rainy season, in order to meet our stringent permit limits, we collected storm water runoff in holding tanks and treated it with advanced filters and chemicals before release. (Image courtesy of Simi Valley Acorn)

Students Receive Lesson on Santa Susana Cleanup



A group of students from Oak Park who refer to themselves as Teens Against Toxins visited Santa Susana recently for a history lesson and site tour. The students, the majority of whom expressed an interest in environmental science careers, are concerned about environmental issues and the cleanup of Santa Susana. The visit provided them with an opportunity to meet with engineers and environmental scientists from Boeing, NASA, DOE, and DTSC; ask questions about the cleanup process; and learn about current and future cleanup activities.

While at Santa Susana, the students visited the Outfall 8 interim source removal area, drove through the biologically

and culturally rich undeveloped area, walked the site of the former Sodium Reactor Experiment, viewed the chemical surface water treatment system, and drove by rocket engine test stands.

In response to their questions about the flow of storm water, Santa Susana project manager Art Lenox said, “We were able to show the students where storm water drains from the site and inform them that storm water does not flow into their Oak Park community.”

Additionally, students heard about the complex cleanup process and the numerous regulatory-controlled steps that must be completed before the final cleanup plan can be drafted.



Griffith Park Earth Day Cleanup

Volunteers

Earth Day 2010

In observation of the 40th anniversary of Earth Day, thousands of Boeing employees spent the day picking up trash, weeding out invasive plants, and restoring natural habitat.



Los Angeles River Cleanup Day

Boeing volunteers removed waste from the Los Angeles River at the Willow Estuary as part of the Friends of the Los Angeles River Cleanup Day.



Boeing recently released the 2010 Environment Report, which provides information about the environmental footprint of Boeing’s operations in the United States, Australia, and Canada. It also explains actions Boeing is taking to clean up locations affected by past business practices.

To view Boeing’s third annual Environment Report, please visit:

http://www.boeing.com/aboutus/environment/environment_report_10/index.html

Bus Tour

Boeing, NASA, and DOE will host two bus tours for interested community members on Saturday, August 7, 9 a.m. - 12:30 p.m. If you would like to join us, please give us a call at 818-466-8163 or e-mail us at santasusanacommunitytours@boeing.com. Space is limited to 25 attendees per tour, and RSVPs will be taken on a first-come, first-served basis. Once we reach capacity, we will place names on a waiting list for our next bus tour, which will be October 23.



For more information, please visit:

http://www.boeing.com/aboutus/environment/santa_susana

The Boeing Company

5800 Woolsey Canyon Rd.
Canoga Park, CA 91304