



2012 YEAR in REVIEW

NASA administers 451.2 acres in two areas of Santa Susana Field Laboratory (SSFL) used historically for the research, development, and testing of rocket engines associated with programs such as Apollo and the Space Shuttle. NASA is committed to a cleanup of these areas to a level protective of public health and the environment. NASA continued environmental investigations and cleanup at SSFL in 2012 and we remain committed to ongoing communication with the public.

NASA SANTA SUSANA FIELD LABORATORY

Soil Investigation Roundtable Meetings and Tours

Soil investigations – required under the December 2010 Administrative Order on Consent (AOC) that defines the characterization and cleanup of soils at NASA-administered sites at SSFL – are being implemented through a series of six Field Sampling Plans (FSPs). The site has been divided into five “FSP areas” and a sixth FSP is planned to cover any data gaps. Draft FSPs outlining proposed soil sampling work in each area were posted on the Department of Toxic Substances Control (DTSC) website for public review and comment. Each Draft FSP was developed in conjunction with a public technical roundtable meeting and a tour hosted by DTSC and NASA. These were opportunities for community members to learn more about soil sampling and the work planned in each FSP area. Two meetings took place in 2012. In January we discussed and visited the Area II Landfill, the Liquid Oxygen Plant, and the Expendable Launch Vehicle Area. In March, we looked at the Coca Test Stand Area, Former Delta Test Stand Area, and the R-2 Pond Area. As part of this FSP process, over 1,300 soil and soil vapor samples have been collected and analyzed to date. Results from FSP sampling efforts will be included in the Final Chemical Data Summary Report, expected to be completed in 2014.

Soil Removal Continues

NASA continued working to protect surface water quality during 2012 by removing contaminated soil as part of the Interim Source Removal Action (ISRA). ISRA Phase II work that began in 2010 near a former incinerator and related ash pile and continued in 2011 was completed in 2012. Approximately 1,429 cubic yards of soil were removed between 2010 and 2011. In 2012, NASA disposed of nearly 3,600 cubic yards of non-hazardous soil at the Waste Management Landfill in Lancaster. Soil removal near Expendable Launch Vehicle Area ELV-1C began in December 2012. ISRA is being conducted at SSFL under the direction of the Los Angeles Regional Water Quality Control Board.

Site-Wide Groundwater Investigation Report Update

In 2012, NASA, Boeing, and the U.S. Department of Energy (DOE) developed work plans to address comments received in December 2011 from DTSC on the Draft Site-Wide Groundwater Remedial Investigation (RI) Report. The RI Report had been submitted to DTSC in 2009 and made available for public comment by DTSC in August 2011. Work plans address how characterization work will be carried out to further investigate seeps, faults, source zone areas, and to refine groundwater flow models. This past fall, Groundwater Technical Meetings presented progress made on groundwater investigations and work planned in response to DTSC comments. The September meeting began with Dr. David McWhorter of the SSFL Groundwater Advisory Panel presenting highlights from the summer 2011 “Groundwater University” education sessions.

This was followed by DTSC SSFL Groundwater Project Manager Tom Seckington summarizing comments received on the Draft RI report, and describing the Data Gap Sampling and Analysis Plan (SAP) and additional work plans under development. An October Technical Meeting focused on the further seeps investigation at SSFL with a presentation by Dr. John Cherry, another member of the Groundwater Advisory Panel. Preceding that meeting, the public was invited to participate in a field trip – attended by 20 community members – to help people become familiar with the subject area. During the field trip, members of the Groundwater Advisory Panel and some Boeing staff gave first-hand explanations of geologic features and demonstrated some of the technology used to monitor and sample seeps.

Stormwater Maintenance Best Management Practices

In 2012, NASA collaborated with the Stormwater Expert Panel to develop and implement temporary Best Management Practices (BMPs) with two main goals: improving stormwater quality and minimizing National Pollutant Discharge Elimination System (NPDES) exceedances at Boeing's Outfall 009. In October, NASA revised its BMP designs to address Stormwater Expert Panel priorities and recommendations based on 2011 stormwater data. The BMP design will effectively capture, control, and mitigate surface water runoff in the vicinity of the helipad and Service Area Road. NASA continues to work in partnership with the Stormwater Expert Panel and the Los Angeles Regional Water Quality Control Board, and BMP implementation is planned for spring 2013.

Groundwater Treatment Units Demolition and Closure

In November, NASA received Closure Certification from DTSC for three Hazardous Waste Management Units maintained by NASA in Area II of SSFL. To achieve closure, we completed demolition of the Bravo Groundwater Treatment Unit (GWTU), the Delta GWTU, and the RD-09 GWTU near the former Area II sewage treatment plant, including the associated pipelines between the groundwater extraction wells and the GWTUs. Prior to any demolition or field work related to GWTU closure, we performed biological and cultural resource monitoring in the GWTU areas, and conducted bio-sensitivity training to instruct the field crew how to identify and address endangered plant species in the vicinity of the demolition areas. During field work, equipment at the GWTUs was removed by Boeing (the equipment belonged to them), and the concrete pads were demolished. Based on soil sample results after demolition, no further action was warranted. DTSC acknowledged the units as closed and issued the associated Closure Certification under the Resources Conservation and Recovery Act (RCRA).

Environmental Impact Statement

NASA is developing an Environmental Impact Statement (EIS) to evaluate the potential impacts and mitigation associated with proposed action to conduct soil cleanup and demolition on land we administer at SSFL. In March, NASA held an informal Informational Meeting to provide updates to the public on the results of surveys and other data NASA is compiling to prepare the draft EIS. In July, NASA received comments from Senator Boxer and the Council on Environmental Quality regarding the evaluation of alternatives for NASA's EIS. As a result, NASA has chosen to streamline its review in the Draft EIS and analyze only the alternatives of (a) cleanup to background and (b) a "no-action" alternative. This revision in approach was announced on the SSFL website (see <http://go.nasa.gov/Pu4uM2>). Release of the Draft EIS is expected in 2013.

National Historic Preservation Act Section 106 Consultation

NASA is integrating the “Section 106” consultation requirements of the National Historic Preservation Act (NHPA) with a National Environmental Policy Act (NEPA) review process. Our goal, and the statutory requirement, is for the responsible management of cultural resources on land administered by NASA at SSFL. Consulting parties in this process include representatives from the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), Native American Tribes, and other interested parties. In March and November, NASA hosted Section 106 consultation meetings to discuss proposed soil cleanup and demolition activity. Consulting parties were given a tour of the Alfa, Bravo, and Coca Historic Districts. Discussions at these meetings explored the potential impacts to the historic properties and what might be done to mitigate adverse effects. Section 106 consultation continues and the process will be documented in the EIS.

Community Outreach and SSFL Community Bus Tours

Our commitment to community outreach continued throughout the year. We posted several updates to the SSFL Cleanup website (<http://ssfl.msfc.nasa.gov>). We responded to inquiries from various press outlets and occasionally used social media such as Twitter to communicate cleanup progress. Boeing, DOE and NASA sponsored several bus tours during the year. NASA also offered occasional site visits for specific reasons, for example, participation in the Field Sampling Plans and Groundwater Technical Public Meetings tours. NASA assisted in two birding expeditions this year hosted by Boeing at SSFL in April and September. We continued to maintain frequent contact during the year with a variety of community groups and always look forward to hearing from interested stakeholders.

FieldNOTE: The Online Update

This past year, we replaced a printed newsletter with an online version called FieldNOTE. The May edition featured information on Field Sampling Plans detailing steps taken in the process for the characterization and cleanup of soils at SSFL. You may view that FieldNOTE at <http://go.nasa.gov/LtjCEi>. The January 2013 edition provides summaries of plant, animal and habitat surveys conducted on NASA-administered land. This new edition at <http://go.nasa.gov/XHIOxW> includes audio links to owl and bird calls recorded during birding events in September.

DTSC Public Involvement

NASA supports DTSC efforts to communicate with the public. We actively participated at a DTSC “Open House” in May, and we were involved at DTSC-hosted technical roundtables such as those held in the summer regarding soil sample background values and lookup tables.

Our 2012 Year in Review is intended to present highlights from the work we accomplished at SSFL over the past year. More details are available on the SSFL Cleanup website at <http://ssfl.msfc.nasa.gov>.

For information, contact

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