



2016 YEAR in REVIEW

NASA SANTA SUSANA FIELD LABORATORY

NASA administers 451.2 acres in two areas of the 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. This Year in Review is intended to present highlights from the work accomplished at SSFL over the past year as NASA moves closer to our goal of a cleanup that protects human health and the environment.

DEMOLITION

NASA continued to make progress with Phase 2 demolition in preparation for future cleanup operations. Phase 2 consists of the removal of obsolete buildings and infrastructure outside of the historic test areas that are not essential for current or future cleanup operations. A total of 11 potable water storage tanks in the Skyline Area were removed, as well as the Coca/Delta Fuel Farm and the former Sewage Treatment Plant (STP). In addition, hundreds of feet of obsolete pipelines, inactive power lines, transformers, and utility poles were demolished. Careful planning and attention to detail guided demolition activities every step of the way. Demolition debris was tested to ensure safe and proper disposal. Then, after each structure or object was dismantled and removed, the area was stabilized with hydroseed. The hydroseed is a specialized mix of Santa Susana native plants applied to promote re-vegetation and minimize potential for erosion, dust migration, and stormwater runoff. Demolition activities generated over 2,000 tons of concrete, nearly 1,500 tons of asphalt, and roughly 1,000 tons of steel.



Fully understanding groundwater conditions at SSFL is a critical part of cleanup. In 2016 NASA met an important milestone by completing fieldwork to investigate and characterize groundwater and fill in data gaps from earlier investigations. Along with information gathered through treatability studies conducted in coordination with Boeing and the Department of Energy (DOE), the groundwater investigations are helping NASA identify the most effective groundwater remedies and develop a final cleanup plan. The groundwater characterization process will conclude with a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) report, which will be submitted to the California Department of Toxic Substances Control (DTSC). A combined RFI is required for all three responsible parties (NASA, Boeing, and DOE) and NASA continues to work closely with all parties to finalize the full report. NASA expects the site-wide RFI report to be completed and submitted to DTSC later this Spring.

GROUNDWATER

With the completion of soil characterization and treatability studies in 2016, NASA took significant steps toward developing an effective soil cleanup strategy. The culmination of NASA's soil characterization efforts is a Final Soil Data Summary Report, which summarizes the nature of chemicals in the soils, and the vertical and horizontal extent of soil contamination at 16 sites within NASA-administered areas. In conjunction with results of soil treatability studies evaluating the effectiveness of treatment technologies, the Final Soil Data Summary report will play an integral role in the selection of effective remediation strategies for soil, and lays the groundwork for the development of the Soil Remedial Action Implementation Plans (SRAIP). These plans will include the remedial design and describe the methods that will be used to address the impacted soil in NASA-administered areas at SSFL. NASA has been addressing DTSC's comments on its draft report and anticipates submittal of the Final Data Summary report to DTSC in early 2017.

SOIL

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STORMWATER

NASA removed concrete surfaces in the Service Area to help increase stormwater flow into and through the subsurface soil, reducing stormwater runoff. In total, two acres of concrete and asphalt were removed in the Service Area, including the Building 2201 concrete foundation and a portion of the Building 2203 foundation. After the construction materials were removed, the entire two acres was hydroseeded with a SSFL-specific native seed mixture developed by the independent SSFL Surface Water Expert Panel. The use of hydroseed encourages vegetation growth in the area and protects exposed soils from erosion by water and wind. In addition, straw wattles were installed across the entire two-acre area to reduce transport of sediment and reduce the potential for erosion. Finally, sandbag berms were placed in strategic areas around the perimeter of the area to keep sediment from leaving the area. NASA also made annual preparations for the winter rainy season. In addition to the stormwater control measures already in place, including a stormwater filtration system and various erosion and sediment controls, NASA has staged materials such as wattles, sandbags, gravel, and rip-rap throughout Area II so they are ready to be placed as needed during rain events this winter.



NASA is committed to maintaining two-way communication with neighbors, the community and other stakeholders to keep them informed of our progress with demolition and overall cleanup efforts at SSFL. NASA's goal is to be responsive to community inquiries and to provide timely and accurate information about NASA plans and progress toward cleanup at SSFL. To that end, NASA maintained frequent contact with neighbors, community groups and other interested parties. Several news updates were posted to the NASA SSFL cleanup website. Editions of FieldNOTE, the online newsletter about NASA cleanup efforts at SSFL, were published in April, July, and December. NASA continued to build and maintain its NASA SSFL Communications E-List that notifies subscribers of project updates. In addition, NASA co-hosted informa-

tional site visits for some of SSFL's closest neighbors living along Woolsey Canyon Road as well as a group of students from an Environmental Science class at Apollo High School in Simi Valley. We look forward to another year of communicating with the public in 2017.

FOR MORE INFORMATION

Visit <https://ssfl.msfc.nasa.gov> or contact:

Lori Manes

NASA SSFL Community Outreach Coordinator

Phone (818) 806-8834 **Email** lori.manes@nasa.gov

Subscribe to the NASA SSFL Communications E-List at <http://go.nasa.gov/1NCtSIK>

OUTREACH