

Los Angeles Regional Water Quality Control Board

June 24, 2015

Mr. Paul Costa
SSFL – Safety, Health & Environmental Affairs
The Boeing Company
Santa Susana Field Laboratory
5800 Woolsey Canyon Road
Canoga Park, CA 91304-1148

ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13383 TO PERFORM A HUMAN HEALTH RISK ASSESSMENT OF SURFACE WATER RUNOFF EXITING THE SANTA SUSANA FIELD LABORATORY VIA THE SOUTHERN OUTFALLS INCLUDING OUTFALLS 001, 002, 008, 009, 011, 016, 019, AND 020; THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY, UNINCORPORATED VENTURA COUNTY, CALIFORNIA – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES) PERMIT NO. CA0001309, CI-6027

Dear Mr. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is the state agency with primary responsibility for the protection of surface and ground water quality for all beneficial uses within major portions of Los Angeles and Ventura County, including the above-referenced site and surrounding area. To accomplish this, the Regional Board issues permits under the National Pollutant Discharge Elimination System (NPDES) as authorized by the federal Clean Water Act. On February 12, 2015, the Regional Board adopted Waste Discharge Requirements (WDRs) and NPDES Permit for The Boeing Company (Boeing), Santa Susana Field Laboratory (SSFL), Order No. R4-2015-0033, NPDES No. CA0001309.

BACKGROUND

The SSFL occupies approximately 2,850 acres and is located at the top of Woolsey Canyon Road in the Simi Hills in Ventura County, California. The SSFL is jointly owned by Boeing and the United States of America. The National Aeronautics and Space Administration (NASA) administers the portion of the property owned by the federal government. The site is divided into four administrative areas (Areas I, II, III, and IV) and undeveloped land areas to both the north and south. The NASA property includes a portion of Area I and all of Area II. Ninety acres of Area IV are leased to the United States Department of Energy (DOE).

Current facility operations are only related to the assessment and cleanup of pollution present in the soil and groundwater. Boeing and its predecessors' operations at the SSFL since approximately 1950 include research, development, assembly, disassembly, and testing of nuclear reactors, rocket engines, and chemical lasers. NASA operations included rocket engine assembly and testing, and propellant and fuel storage and loading. DOE conducted past

operations in research and development of energy related programs, and seismic testing experiments.

NPDES Permit No. CA0001309 has authorized certain discharges from the SSFL site. Historical permits authorized discharges from the groundwater treatment systems utilized onsite, industrial activities, onsite treated wastewater, and storm water runoff. However, recent permits, including Order No. R4-2015-0033, have only authorized discharges of storm water runoff and treated groundwater from the site, as all other industrial activities onsite have ceased.

Boeing has historically violated effluent limitations contained in its NPDES permits issued to the facility by discharging storm water with elevated concentrations of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), toxic equivalents (TEQs), heavy metals (e.g., copper, lead, and cadmium), and other pollutants from Outfalls 001, 002, 008, 009, 011, 018, and 019.

Residents in downstream communities have communicated concerns to the Regional Board regarding the potential risks and hazards associated with contact with the discharges from the SSFL.

REQUIREMENT TO PERFORM A HUMAN HEALTH RISK ASSESSMENT

California Water Code section 13383 provides the Regional Board the authority to require a permittee to monitor and report and provide other information that the Regional Board requires. Pursuant to California Water Code section 13383, Boeing is hereby required to perform and submit a Human Health Risk Assessment (HHRA) of surface water runoff exiting the SSFL via the southern outfalls, including Outfalls 001, 002, 008, 009, 011, 018, 019, and 020, as described in this Order. The Regional Board has determined that a HHRA is required to provide a quantitative assessment of potential risks and hazards associated with contact with discharges from the Boeing SSFL, permitted by NPDES Permit No. CA0001309, to downstream residents and recreational users of Bell Creek and its tributaries.

Pursuant to California Water Code section 13383, Boeing shall develop a HHRA work plan and perform a HHRA of discharges from the SSFL via Outfalls 001, 002, 008, 009, 011, 018, 019, and 020, as follows:

1. By **August 4, 2015**, Boeing shall submit a work plan to the Regional Board detailing the plans to conduct a HHRA of the discharges from the SSFL regulated by NPDES No. CA0001309, including Outfalls 001, 002, 008, 009, 011, 018, 019, and 020. The HHRA Work Plan shall:
 - a. Be developed with input from the SSFL Storm Water Expert Panel.
 - b. Identify the risk assessment guidance and the rationale and assumptions to be used in the HHRA.
 - c. Provide information on the potential for human health exposures to discharges from the SSFL regulated by NPDES Permit No. CA0001309. The Plan shall include the rationale and how an evaluation of potential long-term human health risks to pollutants regulated by NPDES Permit No. CA0001309 will be evaluated. The Plan shall also identify conceptual exposure scenarios to be used that are representative of realistic exposures that may occur immediately downstream of the SSFL property boundary.
 - d. Identify the data to be used, including the locations where the data was or will be collected, and the time period the discharge data was or will be collected from.

2. The Regional Board will provide the public with a 30-day review and comment period on the completed HHRA Work Plan.
3. Boeing shall implement the HHRA Work Plan immediately upon approval by the Regional Board, with input and oversight by the SSFL Storm Water Expert Panel.
4. **Within 180 days of approval by the Regional Board**, Boeing shall submit the complete HHRA to the Regional Board.
5. The HHRA Work Plan and completed HHRA shall be signed by an authorized signatory for Boeing under penalty of perjury.

The Regional Board will review the completed HHRA and determine if additional work is required. When the HHRA is deemed complete by the Regional Board, Boeing, along with the Expert Panel, will present the results of the HHRA to the Regional Board at a public meeting. The HHRA will also be made available to the public via the Boeing website, as well as the Regional Board's website.

CIVIL LIABILITY AND ENFORCEMENT

Pursuant to California Water Code section 13385(a)(3), failure to comply with any requirement of this Order may result in the imposition of administrative civil liability by the Regional Board of up to \$10,000 for each day in which the violation occurs. These civil liabilities may be assessed by the Regional Board beginning with the date on which a violation of this Order first occurred, and without further warning. The Regional Board may also request that the California Attorney General seek judicially imposed civil liabilities of up to \$25,000 for each day in which a violation occurs, and/or injunctive relief, pursuant to California Water Code sections 13385 and 13386. Boeing may also be subject to penalties pursuant to other sections, and other forms of enforcement proceedings, in addition to those described above, if compliance does not timely occur.

RIGHT TO PETITION

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

If you have any questions, please contact Mazhar Ali at (213) 576-6652 or Cassandra Owens at (213) 576-6750.

Sincerely,


Samuel Unger, PE
Executive Officer

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Public Health, Sanitary Engineering Section
California Coastal Commission, South Coast Region
South Coast Air Quality Management District
Water Replenishment District of Southern California
Los Angeles County, Department of Public Works, Waste Management Division
Ms. Leah G. Walker, State Water Resources Control Board, Division of Drinking Water
Mr. Peter Shellenbarger, Heal the Bay
Ms. Liz Crosson, Los Angeles WaterKeeper
Ms. Anna Kheyfets, Natural Resources Defense Council
Mr. Mark Malinowski, Department of Toxic Substances Control
Mr. Roger Paulson, Department of Toxic Substances Control
Mr. Tom Seckington, Department of Toxic Substances Control
Mr. Daniel Cooper, Lawyers for Clean Water
Mr. Pete Zobra, National Aeronautics and Space Administration
Mr. John Jones, United States Department of Energy
Mr. Michael Bubman, c/o Bell Creek Homeowners Association
Mr. Paul Carpenter, Department of Toxic Substances Control
Mr. Thomas Kelly, Environmental Protection Agency, Region 9, (WTR-5)
Ms. Nicole Moutoux, Environmental Protection Agency, Region 9
Mr. William Paznokas, Department Of Fish and Game, Region 5
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Ms. Jeannie Chari
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Mailing List Continued

Ms. Tatiana Guar, LA Waterkeeper
Mr. Matt Hagemann, Soil/Water/Air Protection Enterprise
Dr. Dan Hirsch, Committee to Bridge the Gap
Ms. Heather L. Hoecherl Esq., Director of Science and Policy, Heal the Bay
Ms. Barbara Johnson, Susana Knolls Homeowners, Inc.
Dr. Michael Josselyn, WRA, Inc.
Department of Interior, U.S. Fish and Wildlife Service
California Coastal Commission, South Coast District
Mr. Daniel Maccabee, Brandeis-Bardin Institute
Mr. Sheldon Plotkin, Southern California Federation of Scientists'
Ms. Bunny Raskin
Ms. Chris Rowe
Mr. Adam Salkin
Mr. Mathew Sanders, Paul, Hastings, Janofsky & Walker LLP
Ms. Lorraine Scott
Mr. Tom Skaug, Department of Toxic Substances Control
Dr. Michael Stenstrom, SSFL Stormwater Expert Panel
Ms. Rebecca Tadesse, Branch Chief of Materials Decommissioning, U.S. Nuclear
Regulatory Commission
Mr. Rick Verguitz, Water & Environmental Resources Section, Ventura County Watershed
Protection District
Mr. Mati Waiya, Wishtoyo Foundation
Ms. Christina Walsh, SaveSantaSusana.org
Dr. Daniel Wiseman, West Hills Neighborhood Council-Santa Monica Mountains Area
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California State University, Northridge
City of Los Angeles, Bureau of Engineering, Wastewater Systems Engineering Division
Friends of the Los Angeles River Los Angeles and San Gabriel Rivers Watershed Council
Los Angeles County, Department of Health Services
Los Angeles County, Department of Public Works, Environmental Programs Division
Masry & Vititoe Law Offices
Simi Valley Library
U.S. Army Corps of Engineers
ULARA Watermaster
Ventura County Air Pollution Control District
Ventura County Environmental Health Division
Ventura County Public Works
Water Replenishment District of Southern California
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Mr. Isaac Levy
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Ms. Deena Parry
Ms. Cindi Gortner
Ms. Margery Brown
Rocketdyne Cleanup Coalition
Mr. Ben Carrier