



Los Angeles Regional Water Quality Control Board

November 20, 2017

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

Receipt of Final Human Health Risk Assessment for Surface Water Runoff Exiting the Santa Susana Field Laboratory (SSFL) via the Southern Outfalls, Ventura County, CA (Order Pursuant to California Water Code Section 13383; CA0001309, CI No. 6027)

Dear Mr. Costa:

The Regional Board on June 24, 2015, issued a letter requiring Boeing to perform a Human Health Risk Assessment (HHRA) at Outfalls 001, 002, 008, 009, 011, 018, 019, and 020 under the requirements included in Section 13383 of the California Water Code. California Water Code section 13383 provides the Regional Board the authority to require a permittee to monitor, report, and provide other information that the Regional Board requires. On September 17, 2015, the Boeing Company submitted a HHRA Work Plan for Surface Water Runoff Exiting the SSFL via these outfalls.

The Office of Environmental Health Hazard Assessment (OEHHA) and Regional Board staff reviewed and commented on the HHRA Work Plan submitted. On January 28, 2016, OEHHA and Regional Board comments were submitted to Boeing including directions to revise the Work Plan. On March 31, 2016, Geosyntec Consultants on behalf of Boeing submitted the revised Work Plan incorporating the requested revisions.

In a letter dated April 21, 2016, the Regional Board solicited public comments on the revised HHRA Work Plan. Comments were received from Ms. Christina Walsh, Ms. Christine Rowe, Heal the Bay, and Rocketdyne Cleanup Coalition (Physicians for Social Responsibility-Los Angeles, Southern California Federation of Scientists, Committee to Bridge the Gap, Teens Against Toxins, and the Aerospace Contamination Museum of Education). Regional Board working with OEHHA staff responded to the comments on September 15, 2016, and approved the HHRA Work Plan.

GeoSyntec Consultants on behalf of Boeing submitted on April 28, 2017, a HHRA for Surface Water Outfalls exiting the SSFL via the Southern Outfalls. The document was reviewed by Regional Board and OEHHA staff. On June 28, 2017, comments from OEHHA. The conclusions presented were:

- OEHHA agrees with the human health risk and hazard estimates.
- OEHHA is not fully convinced that potential downstream exposures to aquatic organisms has been adequately evaluated.

To address conclusion 2 above, an addendum to the HHRA was submitted on September 22, 2017 and modified on October 23, 2017. On October 29, 2017, after reviewing the addendum, OEHHA staff in the summary of results noted:

- Geosyntec has rigorously analyzed the projected flows in the various tributaries and show that SSFL's contribution to the total flow at 2 locations is 1% or less.
- Geosyntec multiplied the pollutant concentrations at the outfalls by the appropriate dilution factor to estimate the pollutant concentrations attributable to SSFL at Arroyo Simi at the confluence with Meier Canyon and the Sepulveda Basin. The results (Tables and 8, respectively) were compared to California Toxics Rule Criteria for Human Consumption of Aquatic Organisms.
- Meeting NPDES permit requirements for all surface water discharges from the facility without dilutions should achieve the necessary protection of aquatic life.

This letter documents receipt of the final HHRA that was completed as per the approved HHRA Work Plan dated September 15, 2016. Documents related to the HHRA including the final Report are posted on the Regional Board web site.

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

Sincerely,

Samuel Unger, P.E.

Samuel Unger

Executive Officer

Attachment: Final HHRA Report

cc: Mr. David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)

Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)

Ms. Becky Mitschele, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)

Mr. Kenneth Wong, U.S. Army Corps of Engineers

Mr. Bryant Chesney, NOAA, National Marine Fisheries Service

Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service

Mr. William Paznokas, Department of Fish and Wildlife, Region 5

Department of Public Health, Sanitary Engineering Section

Ms. Teresa Henry, California Coastal Commission, South Coast Region

South Coast Air Quality Management District

Mr. Theodore Johnson, Water Replenishment District of Southern California

Los Angeles County, Department of Public Works, Waste Management Division

Mailing List (continued)

Ms. Sutida Bergguist, State Water Resources Control Board, Division of Drinking Water

Ms. Sara Sikich, Heal the Bay

Mr. Bruce Reznik, Los Angeles WaterKeeper

Ms. Johanna Dryer, 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. Jeffrey Wokurka, Boeing

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

Ms. Mary Meyer, California Department of Fish and Wild Life

Ms. Christine Found-Jackson, California Department of Fish and Wild Life

Environmental Protection Agency, Region 9, Office of Radiation Programs

Ms. Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board NPDES Wastewater Unit, Div. of Water Quality, State Water Resources Control Board

Ms. Jeannie Chan

Mr. David W. Dassler, Boeing

Ms. Elizabeth Crawford

Ms. Nicole Dollen Ventura County Planning Division

Ms. Ginn Doose

Mr. Matt Flagemann, Soil/Water/Air Protection Enterprise

Mr. Dan Hirsch, Committee to Bridge the Gap

Ms. Barbara Johnson, Susana Knolls Homeowners, Inc.

Dr. Michael Josselyn, WRA, Inc.

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

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 Committee

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

Mailing List (continued)

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

Mr. Alec Uzemeck, GAG Chair

Dr. Ronald Ziman

Mr. A. J. Greenstein

Ms. Teresa Jordan

Mr. Wayne Lee

Mr. John Luker

Ms. Carissa Marsh, The Simi Valley Acorn

Ms. Marie Mason

Mr. Jack M. Wallace

Ms. Marge Weems

Ms. Mary Wiesbrock

Mr. Anthony Zepeda

Mr. Cybil Zeppieri

Mr. Lori Zinkan

Ms. Elizabeth Zlotnik

Mr. Peter Weiner, Paul, Hastings, Janofsky & Walker LLP

City Manager, Simi Valley

Mr. Greg Smith

Mr. Richard Mathews

Ms. Caroline Aslanian

Ms. Cristine Peterson

Mr. Isaac Levy

Mr. William Preston Bowling

Ms. Bonnie Klea

Ms. Deena Parry

Ms. Cindi Gortner

Ms. Margery Brown

Rocketdyne Cleanup Coalition

Mr. Ben Carrier

Ms. Rubin Marcia, Department of Toxic Substances Control

Ms. Kamara Sams, Boeing

Ms. Ruth Custance, Geosyntec

Mr. Brandon Streets, Geosyntech

Mr. Jay Strear, American Jewish University

Ms. Deborah Schoch

Mr. Russ Edmonson, Department of Toxic Substances Control

Ms. Susana Lagudis, Los Angeles Regional Water Quality Control Board

Mr. Kip Drabeck, Chatsworth Lake Manor Citizens Committee