

Los Angeles Regional Water Quality Control Board

January 28, 2016

Mr. Paul Costa
Manager, Environmental Operations and Compliance
Santa Susana Field Laboratory
The Boeing Company
5800 Woolsey Canyon Road
Canoga Park, CA 91304-1148

Dear Mr. Costa:

Subject: Comments on Human Health Risk Assessment (HHRA) Work Plan for Surface Water Runoff exiting the Santa Susana Field Laboratory (SSFL) via the Southern Outfalls

The Office of Environmental Health Hazard Assessment (OEHHA) and Los Angeles Regional Water Quality Control Board (Regional Board) staff have reviewed your August 4, 2015, Work Plan submitted on your behalf by Geosyntech consultants with input from the SSFL Surface Water Expert Panel.

OEHHA's November 25, 2015, comment memorandum is attached. Regional Board staff concurs with the comments submitted by OEHHA and offers the following additional comments:

1. Page 6, Section 2.1, Data Evaluation.
The data sets must be of sufficient size to perform the statistics. If beginning in 2011, as stipulated in the plan does not result in a minimum of five data points, then data from previous years must be included. There should be a minimum of five monitoring results for all pollutants, including radionuclides to conduct statistical analysis for evaluation of potential chronic health risks.
2. Page 7, Section 2.1, last paragraph.
The last paragraph indicates that dioxin data will be evaluated consistent with Standard Risk Assessment Methodology (SRAM) for toxicity equivalents (TEQs). Is the SRAM consistent with the dioxin TEQs as specified in the State Implementation Policy (SIP)? If not, any differences must be addressed in the HHRA.

Please review the comments and prepare a revised HHRA Work Plan incorporating responses to the comments and submit to the Regional Board by March 31, 2016.

Mr. Paul Costa
Santa Susana Field Laboratory
The Boeing Company

January 28, 2016

If you have any questions, please contact Ms. 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.
Executive Officer

Enclosures

cc: Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. John Jones, United States Department of Energy
Mr. Pete Zebra, National Aeronautics and Space Administration
Dr. James C. Carlisle, Office of Environment Health Hazard Assessment
Mr. Jon Jones, Surface Water Expert Panel
Dr. Michael Stenstrom, Surface Water Expert Panel
Dr. Mike Josselyn, Surface Water Expert Panel
Dr. Robert Pitt, Surface Water Expert Panel
Dr. Robert Gearheart, Surface Water Expert Panel
Ms. Frances McChesney, Office of Chief Counsel, State Water Resources Control Board
Ms. Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
Mr. Randy Dean, CH2M Hill
Mr. Alexander Fischl, MWH
Ms. Lisa Miller, Haley & Aldrich

Office of Environmental Health Hazard Assessment



Matthew Rodriguez
Secretary for
Environmental Protection

Lauren Zeise, Ph.D., Acting Director
Headquarters • 1001 I Street • Sacramento, California 95814
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010
Oakland Office • Mailing Address: 1515 Clay Street, 16th Floor • Oakland, California 94612



Edmund G. Brown Jr.
Governor

MEMORANDUM

TO: Mazhar Ali
Water Resources Control Engineer
Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

FROM: James C. Carlisle, D.V.M., M.Sc.,
Staff Toxicologist
Air, Community, and Environmental Research Branch

DATE: November 25, 2015

SUBJECT: REVISED HUMAN HEALTH RISK ASSESSMENT WORK PLAN FOR
SURFACE WATER RUNOFF, SANTA SUSANA FIELD LABORATORY,
CANOGA PARK, CALIFORNIA
SWRCB# (R4-15-024) OEHHA #880392-00

Document reviewed

- Draft Human Health Risk Assessment (HHRA) Work Plan for Surface Water Outfalls, Santa Susana Field Laboratory, Ventura County CA, prepared by Geosyntec Consultants (cover memo dated September 17, 2015)
- June 24, 2015, 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

Site Characterization

- An adequate sampling strategy, sample handling, and sample analysis are prerequisites for an accurate characterization of the site contamination.

Conceptual site model

- Geosyntec proposes to evaluate potential exposures to future recreators via incidental ingestion of, and dermal contact with, outfall water and the inhalation pathway.

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.

- The work-plan does not consider ingestion of fish and aquatic plants to be complete pathways. OEHHA recommends further examination of this issue, since there may be fish and/or aquatic plants further down-stream. Further examination may include documentation of the lack of aquatic receptors and/or pollutant concentrations moving off-site.

Chemicals of potential concern (COPCs)

- A constituent will be selected as a COPC if it has been detected at least once in the samples collected from the outfall discharges for the relevant date ranges. OEHHA agrees with this COPC selection.

Exposure Point Concentrations

- The phrase “alternative approaches may be used” in the last sentence is too vague for OEHHA to endorse. The usual approach when a 95UCL cannot be calculated is to use the maximum.

Environmental data

- OEHHA agrees in concept that data collected and used in the HHRA should represent future conditions. However, being unfamiliar with the history of this site, OEHHA cannot endorse specific dates or ranges thereof for inclusion in the HHRA.

Conclusions

- OEHHA has no concerns regarding the Work-plan, other than those identified above.
- However, OEHHA cannot guarantee that the HHRA developed according to the work-plan will be acceptable, since some aspects are described only in general terms. For example phrases like “alternative approaches may be used” are in the work-plan.

Peer reviewed by

Regina Linville, Ph.D.
Staff Toxicologist