
Los Angeles Regional Water Quality Control Board

May 25, 2017

Ms. Carol Devier-Heeney
DLA Installation Support – Energy
8725 John J. Klingman Road
Fort Belvoir, VA 22060

Mr. Steve Defibaugh
Kinder Morgan Energy Partners
1100 Town and Country Road
Orange, CA 92868

SUBJECT: REQUIREMENT FOR REVISED HUMAN HEALTH RISK ASSESSMENT FOR NO FURTHER ACTION DETERMINATION FOR SHALLOW SOIL AT THE EASTERN 15-ACRE PARCEL

CASE/SITE: DEFENSE FUEL SUPPORT POINT NORWALK, 15306 NORWALK BOULEVARD, NORWALK, CALIFORNIA (SCP NO. 0286A/B, SITE ID NO. 16638 AND 204DM00)

Dear Ms. Devier-Heeney and Mr. Defibaugh:

The California Regional Water Quality Control Board (Regional Board), Los Angeles Region, is the public agency with primary responsibility for the protection of ground and surface water quality for all beneficial uses within major portions of the Los Angeles and Ventura counties. On February 2, 2017, the Regional Board staff requested that you respond to the Office of Environmental Health Hazard Assessment (OEHHA) comments (OEHHA Memorandum dated November 18, 2016) on the following reports:

- *Human Health Risk Assessment, DLA-Energy Responsible Area of Eastern Portion for the former Defense Fuel Support Point Norwalk*, dated May 31, 2016, prepared by The Source Group, Inc. (SGI)
- *Results of Additional Soil and Soil Vapor Sampling and Human Health Risk Assessment to Support Shallow Soil Closure for the Eastern 15-Acre Parcel of Defense Fuel Support Point Norwalk*, dated June 28, 2016, prepared by CH2M

On March 27, 2017, we received a technical document titled *Revised Human Health Risk Assessment for No Further Action Determination for Shallow Soil at the Eastern 15-Acre Parcel*, prepared by SGI and CH2M. OEHHA reviewed the technical document and provided the May 1, 2017, Memorandum (copy attached) to the Regional Board. Based on the OEHHA comments, a revised human health risk assessment is warranted to include considerations for offsite residential exposure, calculated cumulative risks, and hazards for the updated 2017 investigation. Submit the revised human health risk assessment for shallow soil at the eastern 15-acre parcel of the Site to this Regional Board no later than June 15, 2017.

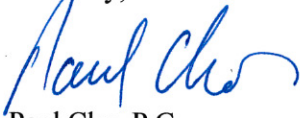
Ms. Devier-Heeney
Mr. Steve Defibaugh

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If you have any questions, please contact me at (213) 576-6721 or paul.cho@waterboards.ca.gov.

Sincerely,



Paul Cho, P.G.
Site Cleanup Unit V

Attachment OEHHA Memorandum dated May 1, 2017

cc: See Mail List

Office of Environmental Health Hazard Assessment

Lauren Zeise, Ph.D., Director

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Edmund G. Brown Jr.
Governor

Matthew Rodriguez
Secretary for
Environmental Protection

MEMORANDUM

TO: Paul Cho
Engineering Geologist
Site Cleanup Unit V

FROM: Nathalie Pham, Ph.D. *N.P.*
Staff Toxicologist
Integrated Risk Assessment Branch
Office of Environmental Health Hazard Assessment

DATE: May 1, 2017

SUBJECT: Revised HUMAN HEALTH RISK ASSESSMENT – DLA – NFA for Eastern
15-Acre Parcel Facility, Defense Fuel Support Point Norwalk, 15306
Norwalk Boulevard, Norwalk, CA

R4-15-077

OEHHA # 880422-01

Document reviewed

- Revised Human Health Risk Assessment, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Commerce, CA dated March 27, 2017 by DLA and CH2M.

History

- In memos dated July 18 and August 2, 2016, OEHHA reviewed the human health risk assessment report for the site Defense Fuel Support Norwalk.
- In memos dated November 18, OEHHA provided responses to comments by CH2M and DLA.

Scope of the Review

- An accurate human health assessment depends on adequate site characterization and the ability to capture all potential exposures. It must identify whether soil and soil gas data were screened with appropriate cleanup goals and whether any residual contamination poses a risk to human receptors. Samples must be handled in a manner to prevent loss prior to analysis and must be analyzed by appropriate methods for toxic chemicals likely to be at the site.

California Environmental Protection Agency

Sacramento: (916) 324-7572 Oakland: (510) 622-3200

www.oehha.ca.gov

- This document is a revised version of a previously submitted human health risk assessment. Data for the additional 2017 investigation is added to this revised report.

Conceptual Site Model (CSM)

- The remedial plans were developed assuming future industrial/commercial use.
- Primary sources for contamination for the Site were related to former operations (ASTs, a truck loading area, and associated piping and facilities), and subsequent releases to on-site soil.
- Evaluation of the off-site residential exposure is recommended. There are houses directly across the street from the Site.

Chemicals of Potential Concern

- COPCs for this Site are VOCs, TPH, and metals.

General Comments

- Four additional soil vapor probes and soil borings were added onto the Site investigation in February 2017. Detections at these locations were under screening levels.
- Residential screening levels were also employed in the review. All 2017 detections were below residential screening levels. The application of residential screening levels is not overly conservative given that there are residential house located off-site directly across from the Site.
- The following regulatory levels were used for screening at the Site: SFRWQCB ESLs, DTSC SLs, USEPA RSLs
 - ESLs are typically only applicable for SF region sites.

Human Health Risk Assessment

- Exposure point concentrations (EPCs) for soil and soil gas were below the human health screening levels
- Appendix F of this report provides the risk characterization. However, only tables with calculations from the 2016 data were included.
 - Using the 2016 data, risk and hazard characterization for soil vapor were 2×10^{-6} and 9×10^{-2} , respectively.
 - This was above the *de minimis* target cancer risk threshold. OEHHA conducted several point calculations and supports these values.
 - Adding risks from soil exposure would increase this cumulative risk.
 - Although the 2017 data included more up to date information and a more extended assessment, tables for the 2017 calculated risks and hazards were not included in Appendix F. Therefore OEHHA could not confirm these cumulative risks and hazards.

Conclusions

- OEHHA agrees that the 2017 detections were below screening levels.
- Of the cancer risks and hazards provided, OEHHA confirms that the cumulative risk for the 2016 investigation was above the residential target risk threshold, but below that for the commercial workers.
 - Considerations for off-site residential exposure are recommended.
 - OEHHA could not confirm the calculated cumulative risks and hazards for the updated 2017 investigation because these were not provided.

Please do not hesitate to contact me at (916) 327-7338 or by e-mail at Nathalie.Pham@oehha.ca.gov, if you have any questions related to this review.

Memo reviewed by

Hristo Hristov

Hristo Hristov, MD, PhD
Staff Toxicologist

References

DTSC, 2011. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). Department of Toxic Substances Control, California Environmental Protection Agency, October, 2011.

US EPA, 1996. Soil Screening Guidance: User's Guide. Office of Solid Waste and Emergency Response, July 1996.

SFRWQCB, 2016. Environmental Screening Levels Workbook. SF Bay Regional Water Quality Control Board, California Environmental Protection Agency, February 2016.