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CROWS LANDING
SSIC NO. 5090.3.A



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Secretary for
Environmental Protection

Department of Toxic Substances Control

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Arnold Schwarzenegger
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May 26, 2009

Mr. Jim Sullivan
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Base Realignment and Closure Office West
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FINAL HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT (HHERA) FOR GROUNDWATER ASSOCIATED WITH AN OFF-SITE AGRICULTURAL SUPPLY WELL

Dear Mr. Sullivan:

Thank you for the opportunity to review the above-referenced final report as well as the Navy's response to comments on the draft document. The HHERA was produced to support a decision of possible implementation of a Time Critical Removal Action to reduce potential agricultural worker exposure to carbon tetrachloride (CCl_4) contamination via agricultural practices supported by an off-site well. The irrigation well is owned privately by Mr. Escobar, located east of the facility, and is used for irrigation of an almond tree orchard. The groundwater is not used for drinking water purposes.

The CCl_4 plume originates at the Crows Landing Facility (Facility) and pumping of the agricultural well has drawn CCl_4 into the adjacent property. To date, the highest concentration of CCl_4 detected in the irrigation well has been 1.8 micrograms per liter ($\mu\text{g/L}$) in September 2008. The concentrations at off-site deep-zone groundwater monitoring well 17-MW-42(D), located 380 feet northwest of the irrigation well, were 19 $\mu\text{g/L}$. The monitoring well is located between the Facility boundary and the irrigation well. The HHERA back-calculated a threshold risk-based concentration of 35 $\mu\text{g/L}$ which is protective of cancer and non-cancer health hazards to agricultural workers.

Based on the presence of CCl_4 in the off-site agricultural and monitoring wells, the Navy intends to conduct monthly groundwater monitoring during the agricultural irrigation season and quarterly monitoring the remainder of the year. To address the presence of CCl_4 in groundwater, the Navy proposes to install a treatment system that will be

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implemented if CCl_4 concentrations reach 35 ug/L at monitoring well 17-MW-42(D). Given the monitoring and agricultural well locations, and the low CCl_4 concentrations detected to date, the Department of Toxic Substances Control (DTSC) supports the installation of a groundwater treatment system on Mr. Escobar's property. DTSC also finds the on-going groundwater monitoring activities, as well the proposed groundwater treatment system, will be protective of human health and the environment.

If you have any questions regarding this letter, please contact me at (916) 255-3603 or fdonofri@dtsc.ca.gov.

Sincerely,



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