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JUL 20 2010

Michael Montgomery
Assistant Director, Federal Facilities and Site Cleanup Branch
US EPA Region 9
75 Hawthorne Street (SFD-7-3)
San Francisco, CA 94105

Dear Mr. Montgomery:

The Navy received your letter dated July 7, 2010 relaying the U.S. Environmental Protection Agency's (EPA's) non-concurrence with the Navy's protectiveness statement for the Site 28 West Side Aquifers Treatment System (WATS) area in the Navy's *Final Five-Year Review Report, Installation Restoration Sites 1, 2, 22, 26, and 28, Former Naval Air Station Moffett Field, Moffett Field, California*, dated February 12, 2010.

Both the Navy and EPA are in agreement that there are no short term health risks from exposure to vapor intrusion (VI) at Site 28, WATS area. EPA's independent 2009 Five-Year Review finds the remedy at Site 28 "not protective because it does not adequately address potential health risks from long term exposure to TCE and other VOCs through the vapor intrusion pathway." The Navy's protectiveness statement acknowledges EPA's concerns for long term exposure by concluding that to ensure long term protectiveness of the remedy, follow-up actions need to be taken.

For further understanding, the Navy's protectiveness statement was based on the following:

- 1) *EPA's Vapor Intrusion Risk Determination*: EPA has concluded that no immediate or short-term health concern exists from the VI pathway at Site 28, though vapors in indoor air could pose an unacceptable risk of chronic health effects from long term exposure. This conclusion is documented in EPA's June 2009 *Final Supplemental Remedial Investigation for the Vapor Intrusion Pathway, Middlefield-Ellis-Whisman Study Area, Mountain View and Moffett Field, California* and in its July 2009 *Proposed Plan for the Vapor Intrusion Pathway, Middlefield-Ellis-Whisman (MEW) Superfund Study Area, Mountain View and Moffett Field, California*.
- 2) *EPA's Five-Year Review Reports*: In its *Final First Five-Year Review Report for Middlefield-Ellis-Whisman (MEW) Superfund Study Area, Mountain View, California*, dated September 2004; EPA deferred the protectiveness determination

for the VI pathway pending further analysis. In 2009 EPA concluded the remedy “is not protective because it does not adequately address potential health risks from long-term exposure to TCE and other VOCs through the vapor intrusion pathway” and an amendment to the 1989 Record of Decision (ROD) is necessary to address the VI pathway to ensure long-term protectiveness of the remedy. This protectiveness statement is documented in EPA’s *Final Second Five-Year Review Report for Middlefield-Ellis-Whisman (MEW) Superfund Study Area, Mountain View and Moffett Field, California*, dated September 2009. This report further reiterates that “...there is no immediate or short-term concern from the vapor intrusion pathway...”

- 3) *Current Vapor Intrusion Mitigation Measures*: NASA, in its role as the current Federal facility owner and operator, has been addressing the VI exposure pathway since 1999 by conducting VI sampling in applicable buildings and conducting the necessary VI mitigation measures for unacceptable risks. Applicable buildings sampled by NASA overlie the regional contaminated groundwater plumes that are currently occupied and not scheduled for demolition and buildings that will be occupied in the near term. It is Navy’s understanding that buildings NASA has not sampled are unoccupied buildings with no immediate intention to occupy and occupied buildings slated for demolition within the next five years. Thus, based on information provided by NASA the remedy is currently protective, regardless of whether an amendment to the EPA ROD and remedy for VI has been completed.
- 4) *EPA Five Year Review Guidance*: EPA’s *Comprehensive Five Year Review Guidance* states “that even if there is a need to conduct further actions, it does not mean the remedy is not protective.” The guidance states that the remedy should be considered as not protective when the following occur:
 - a. An immediate threat is present (*e.g.* exposure pathways that could result in unacceptable risks are not being controlled);
 - b. Migration of contaminants is uncontrolled and poses an unacceptable risk to human health and the environment;
 - c. Potential or actual exposure is clearly present or there is evidence of exposure (*e.g.*, institutional controls are not in place or not enforced and exposure is occurring); or

- d. The remedy cannot meet a new cleanup level and the previous cleanup level is outside of the risk range.

The basis for EPA's non-concurrence as explained in your July 7, 2010 letter is criterion c. EPA's position that "all" buildings within EPA's Vapor Intrusion Study Area are either sampled or assessed for "current exposure to site contaminants exceeding EPA's indoor air cleanup levels for long-term exposure" before it can deem the remedy protective is not consistent with EPA's *Comprehensive Five Year Review Guidance*.

NASA's decision to not conduct VI sampling in unoccupied buildings and occupied buildings slated for demolition within the next five years is consistent with EPA's long term risk determination, and while there is potential for long term exposure risk, both the Navy and EPA determined that follow-on actions are required. NASA's information further indicated that all EPA requirements for VI sampling had been fulfilled at the time of the Five Year Review.

- 5) *Lack of EPA Vapor Intrusion Guidance*: No current EPA guidance exists on how to address VI issues and protectiveness statements in Five Year Reviews. A recent EPA Office of Inspector General (OIG) report dated December 14, 2009 states lack of final EPA guidance on VI is a problem for protectiveness statements in Five Year Reviews. The OIG report specifically recommends EPA "Issue final vapor intrusion guidance that incorporates information on...how the guidance applies to Superfund Five-Year Reviews." As such, the EPA's non-concurrence determination was issued in an area where no guidance exists on an appropriate manner in which to address it.
- 6) *Precedent*: Because no current guidance exists on how to address VI issues and protectiveness statements in Five Year Reviews, the Navy also relied on precedent in order to develop the protectiveness statement for Site 28. The Navy followed precedent set by the second Five Year Review for the Bremerton Naval Complex, in which VI was identified as an issue that needed to be addressed. The Bremerton Five Year Review concluded with regulatory concurrence that the remedy remained protective in the short term; however, for the remedy to be protective in the long term, follow-up actions needed to be taken which included an evaluation of the vapor inhalation pathway. Further, in 2008, EPA issued its fourth Five-Year Review Report for the McKin Company Superfund Site

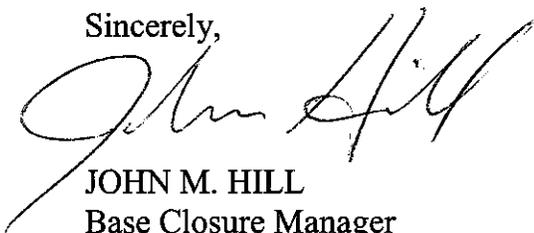
concluding that since no remedy has been selected to address the VI pathway, a protectiveness statement for this pathway cannot be made until further information is obtained. In September 2009 EPA issued an addendum to the fourth Five Year Review Report for the Mckin Company site concluding the remedy is protective in the short term because recent VI sampling results did not constitute a current unacceptable risk. This conclusion was still issued even though EPA recommended additional follow-up VI sampling and analysis prior to the next five-year review. Similar to the Navy's protectiveness statement for Site 28, EPA concluded that to ensure long term protectiveness at the Mckin Company site for the VI pathway, additional actions are required.

- 7) Agreement: Both the Navy and EPA's independent Five-Year Review determinations conclude that no immediate or short term health threat exists from the vapor intrusion pathway at Site 28. The Navy's determination also complements EPA's determination that follow-on actions are necessary to ensure long term protectiveness of the remedy.

Based on EPA documentation, EPA guidance, Navy and EPA precedent, NASA documentation and actions, and the EPA OIG report, the Navy's protectiveness statement for Site 28 is appropriate.

Should you have any questions or need additional information, please contact Ms. Kathy Stewart, BRAC Environmental Coordinator, at (619) 532-0796 or Kathryn.Stewart@navy.mil.

Sincerely,



JOHN M. HILL

Base Closure Manager

By direction of the Director

JUL 20 2010

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