

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105



MAY 0.8 2019

Robert J. Fenton Regional Administrator Federal Emergency Management Agency Region IX 1111 Broadway, Suite 1200 Oakland, CA 94607-4052

RE: Proposed Removal of Soils and Abatement of Threats, Camp Fire Debris Removal

Dear Mr. Fenton:

Your office inquired into EPA's thoughts on the proposed debris removal for the Camp Fire response and the removal of three to six inches of residual soil incidental to debris removal. Principally, you inquired whether, in EPA's experience, the removal of three to six inches of soil beneath the debris is an operationally feasible approach to conservatively ensure abatement of any immediate threat to the public from the debris. EPA believes that removal of three to six inches of soil beneath the debris should be sufficient to abate the immediate threats.

When addressing above-ground materials such as debris at the Camp Fire response, EPA typically would remove no more soil than necessary as incidental to achieving the removal objectives (here, abating immediate threats to the public at large). In EPA's experience, removal of debris, ash, and an additional three to six inches of soil underlying the debris will necessarily abate threats from the debris. This supposes a well-planned response that controls fugitive dust emissions and re-deposition of debris, including ash. The three to six inches of soil removed incidental to removal of surficial debris is reasonable overage under the circumstances and is technologically feasible to control. Given the completion of the Phase I hazardous materials removal, and the additional removal of ash and incidental soil, it can be assumed that any further contamination occurred independently of the Camp Fire.

If you have any questions, you may contact me directly at 415-972-3843 or by email at Manzanilla. Enrique@epa.gov.

Sincerely

Enrique Manzanilla, Director

Superfund Divison