UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 6, 2009

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Alice C. Williams
U.S. Department of Energy
National Nuclear Security Administration
Livermore Site Office
Lawrence Livermore National Laboratory
P.O. Box 808, L-293
Livermore, CA 94551-0808

Re: Stipulated Penalties for Violations of the CERCLA Section 120 Federal Facility Agreement (FFA) at Lawrence Livermore National Laboratory (LLNL), Livermore Site

Dear Ms. Williams:

This letter notifies the United States Department of Energy (DOE) of penalties for violations of the LLNL Livermore Site FFA, signed in 1988 by DOE, the United States Environmental Protection Agency (EPA), the California Department of Health Services, Toxic Substances Control Division, and the California Regional Water Quality Control Board, San Francisco Bay Region. In accordance with Section XXXIII of the FFA, the EPA hereby assesses a stipulated penalty against DOE for DOE's failure to comply with provisions of the FFA relating to the final remedial action selected in the Site Record of Decision (ROD), dated July 15, 1992.

DOE's failure to operate numerous groundwater and soil vapor treatment facilities and associated wells, which form an integral part of the remedial action at the Site, violates several provisions of the FFA, as discussed herein. While systems are shutdown, Site contamination is spreading laterally and vertically, resulting in a larger volume of contaminated groundwater to be restored, and increasing timeframes for completing the remedial action. Indeed, it appears that the recent failure of a large treatment unit on the perimeter of the Site has resulted in a loss of plume control off-site, where it may spread beneath adjacent local neighborhoods. In short, the shutdown of facilities has undermined the effectiveness of the remedial action identified in the ROD. DOE's

failure to restart the treatment systems is unacceptable, creates a risk to public health and the environment, and violates the FFA.

Background

The history of the shutdown of the treatment systems is well known to both EPA and DOE, and has been recounted in several letters between the agencies.[1] After learning in January 2008 that it had not received the funding DOE requested for the operation, maintenance and optimization of the remedy in fiscal year 2008, DOE, in February, began shutting down treatment facilities critical to the operation of the Site remedial action. DOE also laid off employees involved with and knowledgeable of the implementation, operation and maintenance of the remedy. Since February, additional systems have failed and have not been repaired by DOE. Other systems shutdown before February have not been repaired and restarted. Despite the risk of contamination migrating within the Site and off-site, DOE did not request from Congress a reprogramming of funds until late June 2008; Congress approved this request in July 2008.

DOE has indicated that 28 groundwater and soil vapor treatment facilities and associated wells that form an integral part of the selected remedial action at the Site either have been shutdown by DOE, or have failed, and only one has been repaired. According to the November quarterly extraction well data, the mass of contamination being removed from the Site has fallen by more than 80 percent since the first quarter of 2008, and the concentration of contaminants in some areas of the Site has increased more than tenfold.

Although DOE received adequate funding in July 2008 to operate the entire remedial action, DOE indicated in a December 19, 2008 letter to Senator Barbara Boxer, Chair of the Senate Committee on Environment and Public Works, that it could take until the end of fiscal year 2011 to restart all of the treatment systems at the Site.

Violations

DOE's decision not to restart treatment systems immediately, despite having the funds to do so, demonstrates the failure to take necessary actions to fully effectuate the terms of the FFA. Two of the central purposes of the FFA are the implementation of the selected final remedial action in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the continued operation and

[1] March 18, 2008 letter from EPA's Michael M. Montgomery to DOE's Camille Yuan-Soo Hoo; April 2, 2008 letter from C. Yuan-Soo Hoo to M. Montgomery; May 14, 2008 letter from M. Mongtomery to C. Yuan-Soo Hoo; May 29, 2008 letter from C. Yuan-Soo Hoo to M. Montgomery; June 17, 2008 letter from EPA Regional Administrator Wayne Nastri to DOE/ National Nuclear Security Administration Administrator Thomas D'Agostino; July 25, 2008 letter from T. D'Agostino to W. Nastri; September 25, 2008 letter from W. Nastri to T. D'Agostino; November 10, 2008 letter from T. D'Agostino to W. Nastri.

maintenance of such remedial action. FFA §§ III.B.3 and 4. The shutdown of the facilities and wells contravenes these central purposes.

More specifically, DOE's ongoing failure to restart groundwater and soil vapor treatment facilities and associated wells violates Section I of the FFA, under which DOE must "take all necessary actions in order to fully effectuate the terms of [the FFA], including undertaking response actions ... in accordance with CERCLA."

DOE's failure also violates Section VIII.C of the FFA, under which DOE is required to "implement the remedial action(s) in accordance with ... the Remedial Action Implementation Plan," a Primary Document under the FFA. The Remedial Action Implementation Plan (RAIP) requires that "substantive, continuous, physical remedial action" must be implemented pursuant to CERCLA, and specifically requires implementation of "continuous, full-time operation" of treatment facilities. RAIP p.46.

DOE has demonstrated a lack of diligence in restarting shuttered systems since funds to operate and maintain the remedial action were reprogrammed in July 2008. Since receiving full funding for fiscal year 2008, there actually has been an *increase* in the number of treatment systems shutdown at the Site.[2] DOE's decision to undertake a detailed evaluation prior to restarting the facilities, rather than prioritize the restart of the treatment systems and *then* evaluate and optimize systems, also demonstrates a failure to effectuate the terms of the FFA. DOE's demonstrated lack of progress in implementing the remedial action, despite having the funding to do so, clearly amounts to a failure under the FFA.

EPA also notes that, in DOE's December 19, 2008 letter to Senator Boxer, DOE states that four treatment facilities (TF 5475-1, TF 5475-3, VTF 5475, and TF 518 North) were shut down "due to the high cost to dispose of mixed waste (tritium and solvents) on granular activated carbon." This remedy was selected by DOE and EPA with the concurrence of the California State agencies, pursuant to the CERCLA process, under which alternative remedies are evaluated against nine criteria, one of which is cost. DOE further states that "[t]his treatment process is being reviewed to look for ways to eliminate/minimize generation of this type of waste and to find a more economical method to manage existing waste. Until this is resolved, th[ese] facilit[ies] will remain shut down." DOE cannot shut down and fail to restart a CERCLA remedy based on a unilateral determination that it is too costly, and leave it shuttered while reevaluating the remedy.

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[2] In December, we were notified that, although one more system was brought online, three more failed and have not been repaired.

Penalties

Under Section XXXIII of the FFA, a stipulated penalty may be assessed in an amount up to $5,000 for the first week (or part thereof), and up to $10,000 for each additional week (or part thereof) for each failure to comply with a term or condition of the FFA that relates to an interim or final remedial action. The factors considered in determining the amount include the nature, circumstances, extent and gravity of the violation, and DOE's past history of such violations and degree of culpability. For the reasons discussed herein, EPA is assessing a penalty of **$105,000** for DOE's violations of the FFA occurring between July 21, 2008 (the date DOE's reprogramming request was approved by Congress) and September 30, 2008, the end of fiscal year 2008. This penalty amount consists of $5,000 for the first week in violation, and $10,000 for each subsequent week or part thereof.

In addition, EPA is assessing a stipulated penalty against DOE for the period from October 1, 2008 through the present. Because the violations of the FFA are ongoing, this penalty amount will continue to accrue at $10,000 per week until DOE fully restarts the shuttered treatment facilities and associated wells at the Site. After such event, EPA will notify DOE in writing as to the amount of the stipulated penalty for this time period.

EPA notes that DOE began shutting down and/or ceasing to repair treatment facilities in February 2008. Well before that date, DOE did not ensure that its funding request was conveyed to Congress in a way so as to confirm that Congress understood that cleanup was transferred from DOE's Office of Environmental Management to DOE's National Nuclear Security Administration (NNSA). We believe this was a necessary step to ensure adequate funding for the remedial action. In addition, the fact that it took DOE nearly six months to request a reprogramming of funds from Congress demonstrates a lack of diligence in DOE's agency-wide efforts to obtain timely funding to meet its cleanup obligations under the FFA. However, in recognition of the challenges presented by the funding shortfall, EPA is not assessing penalties for the time period prior to July 21, 2008.

Pursuant to Section XXXIII.B. of the FFA, DOE has 15 days from its receipt of this notice to invoke dispute resolution. If DOE does not invoke dispute resolution by that date, then the penalty of $105,000, payable to the Hazardous Substances Response Trust Fund, shall be due within 30 days from DOE's receipt of this letter.

DOE may invoke dispute resolution only on the question of whether the violation did in fact occur. The amount of the penalty is not subject to dispute resolution. However, DOE may identify any mitigating factors that it would ask EPA to take into consideration regarding the penalty assessment within 15 days of receipt of this letter.

EPA will be available to informally discuss and meet with you to address your questions within the 15-day timeframe provided above.

If you have any questions concerning this matter, please contact me at (415) 972-3438, or have your staff contact Kathy Setian at (415) 972-3180. Any legal questions should be directed to Steve Berninger at (415) 972-3909.

Sincerely,

Michael M. Montgomery
Assistant Director, Superfund Division

cc: Ms. Agnes Farres, Regional Water Quality Control Board
Mr. Jacino Soto, California Department of Toxic Substances Control