

August 2, 2000

Mr. Robert G. Card  
[ ]  
Kaiser-Hill Company, L.L.C.  
Rocky Flats Environmental Technology Site  
10808 Highway 93, Unit B  
Golden, CO 80403-8200

Subject: Enforcement Letter

Dear Mr. Card:

This letter refers to the Department of Energy's (DOE) evaluation of potential noncompliances with the requirements of 10 CFR 830.120 (Quality Assurance Rule). The potential noncompliances involved inadequate implementation of work controls, specifically failure to perform required combustible gas surveillances. The failure to fully perform the required surveillances was identified by the contractor during a comprehensive Kaiser-Hill (KHLL) Implementation Validation Review (IVR) team verifying implementation of the Basis of Interim Operation (BIO) for Buildings 776 and 777 on August 18, 1999. The surveillance noncompliances were reported into the DOE's Noncompliance Tracking System under report number NTS-RFO--KHLL-FACOPS-1999-0003 on October 21, 1999.

The KHLL IVR team identified that several tanks within Building 776 had not been regularly sampled and purged as required by the Combustible Gas Maintenance Plan (OO-776-274). Operations Order OO-776-274 requires that [chemical] tanks be sampled monthly; however, between October 1997 and June 1999, these tanks were only sampled nine times. Tanks that generate [gas], primarily through the radiolysis of actinide solutions, were required to be sampled and purged quarterly; however, these tanks were only sporadically sampled and purged in 1998 and 1999. Gas analysis data has indicated that National Fire Protection Association guidelines were exceeded on several occasions for the Building 776 tanks. The Site Conduct of Operation Manual, section 2F, requires that the schedule for sampling and purging of the tanks be included in the Limiting Condition of Operation (LCO) tracking system for Building 776. However, this schedule was not entered into the tracking system. Changes were made to the [gas]/[chemical] sampling and purging protocol without proper approval. Specifically, purging of tanks was performed without obtaining a pre-purge sample analysis. This practice failed to collect data needed to perform gas concentration trending.

It is recognized that the deficiencies did not result in an actual [unanticipated] event, but given the failure to monitor gas concentration, the demonstrated increase in gas concentrations that occurred, and the potential for an ignition source, the likelihood of such event is considered credible. Proper conduct of required surveillances forms an administrative barrier to such [unanticipated events] and is important to both worker and public nuclear safety. It is encouraging that a comprehensive assessment effort on the part of KHLL found the problem, however, substantial prior indications of the potential problems had been documented in Defense Nuclear Facility Safety Board (DNFSB) findings, lessons learned from the [Nuclear Material] Finishing Plant [unanticipated event], and similar findings at Rocky Flats Environmental Technology Site (RFETS) (i.e., [ ] gas generation issues at RFETS, Building 707 4-liter bottle venting not performed). DOE recognizes that the subject tanks and piping associated with Building 776 have now been removed, but remains concerned over other tanks and pipes at the site where gas generation may be an issue, and the lack of adequate attention to a potential problem when alerted by DOE and the DNFSB.

DOE has reviewed the February 22, 2000, Causal Analysis and Corrective Action Plan for Inadequacies of the Combustible Gas Maintenance Program in Building 776 and finds that the corrective action plan, based on that root cause analysis, describes a comprehensive set of actions. Considering the self-identification of the problem and the comprehensive actions being taken, it is our judgement that the circumstances of the noncompliances meet the discretionary criteria in DOE's nuclear safety Enforcement Policy. Therefore, the exercise of discretion not to undertake enforcement action at this time is warranted. However, the final decision to refrain from taking an enforcement action is contingent upon the adequacy of implementation and effectiveness of the current corrective actions. However, we will continue to coordinate the review of the status of your corrective actions with the DOE-RFFO Price-Anderson Coordinator.

If you would like to discuss these matters further, please contact Richard Day of my staff at 301-903-8371.

Sincerely,



R. Keith Christopher

Director

Office of Enforcement and Investigation

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