

Department of Energy Washington, DC 20585

April 24, 2001

Ms. M.P. Delozier
[]
CH2M Hill Hanford Group, Inc.
MSIN: H6-08
2440 Stevens Center
Richland, WA 99352

Subject: Enforcement Letter

Dear Ms. Delozier:

This letter refers to a recent investigation by the Department of Energy (DOE), regarding potential noncompliances with the requirements of 10 CFR 830, "Nuclear Safety Management," occurring at the Hanford Tank Farms. The investigation reviewed three issues that were reported into the Noncompliance Tracking System (NTS) by CH2M Hill Hanford Group, Inc.

Two of the NTS reports involve the failure to perform the Technical Safety Requirement (TSR) for [] gas monitoring. The initial potential noncompliance occurred in January 2000, in which a Zip Cord was installed in a catch tank without first monitoring for [] gases. The corrective actions associated with this event were verified and validated in August 2000. The second related NTS report identified two additional failures to perform required [] gas monitoring in January 2001, both involving work on a contaminated Liquid Observation Well. These failures to adhere to established TSRs call into question the effectiveness of the quality improvement processes in place at the Tank Farms. Of particular concern is the adequacy of your processes used to identify the causes of these potential noncompliances and the identification and implementation of the corrective actions you have taken to prevent recurrence.

The third NTS report involved the failure to enter a Limiting Condition for Operation (LCO) associated with a Tank Farm ventilation system failure. The ventilation system involves both a Continuous Air Monitor (CAM) and a Differential Pressure (DP) Interlock System, at least one of which is required to be operational. In October 15, 2000, the CAM was inoperable for a short period of time. On November 17, 2000, it was discovered that the DP Interlock System had been inoperable since September 19, 2001, due to a valve being installed incorrectly. Your actions taken to identify and report the failure to enter the LCO are commendable. However, concerns exist on the inability to detect the valve misalignment problem prior to November 17th. Discussions with members of your staff indicated that there were similar problems with misalignment with this type of valve and during an operational test of this DP Interlock System, two

valves were discovered to be misaligned, but an additional misaligned valve was undetected. Once the DP Interlock System was placed into operation, required DP checks were performed on the system and recorded on "round sheets." A review of the "round sheets" for the two-month period prior to problem identification clearly indicates an anomaly with the DP readings across the second stage of the High Efficiency Particulate Air Filter. This failure to identify the valve misalignment again points to deficiencies in the quality improvement processes at the Tank Farms. In addition, this event calls into question the training and qualifications of those personnel responsible for performing DP surveillances of Tank Farms DP Interlock systems.

An inspection report entitled, "Modification of Hanford Tank Farm Ventilation System Controls," issued in December 2000 by the Office of Oversight, indicates your intent to designate the CAMs as a non-safety class system. This action places an increased nuclear safety burden on the DP Interlock System. As such, it would be expected issues such as those described above would be addressed in an expedited and rigorous manner.

It is recognized that the events described above did not lead to any adverse safety consequences to the public, worker or environment. However, given the safety significance of the systems involved in these events, the Office of Price-Anderson Enforcement (OE) is increasingly vigilant with regard to potential noncompliances of this type.

OE in conjunction the DOE Office of River Protection has concluded that violation of 10 CFR 830 did occur with respect to quality improvement work processes and worker training. However, DOE has also concluded that CH2M Hill has been proactively identifying and reporting these types of potential violations. CH2M Hill needs to recognize that many issues still need to be resolved and addressed and that continued focus and improvement on nuclear safety is critical. Of particular importance is that CH2M Hill enhance its processes by which it (1) determines causes of events, (2) identifies and implements corrective actions and (3) trains and qualifies workers performing nuclear safety related work. Based upon these considerations, I have decided to defer enforcement action at this time. However, I will reevaluate these issues in another 90 days to determine if CH2M Hill is making progress as expected by DOE.

Please contact Mr. Richard Day of my staff at (301) 903-8371 if you desire to discuss this matter further.

Sincerely,

R. Keith Christopher R. Keith Christopher

Director

Office of Price-Anderson Enforcement

- cc: S. Cary, EH-1
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 - R. Day, OE
 - D. Stadler, EH-2
 - F. Russo, EH-3
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Docket Clerk, OE