

May 19, 2000

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

EA-2000-05

Subject: Preliminary Notice of Violation and Imposition of Civil Penalty - \$41,250
(NTS-RFO--KHLL-779OPS-1999-0002)

Dear Mr. Card:

This letter refers to the Department of Energy's (DOE) evaluation of the facts and circumstances concerning an event, which occurred on February 2, 1999, in Building 779 at the Rocky Flats Environmental Technology Site. During this event, which involved glovebox decontamination and decommissioning (D&D) activities, a worker received an unplanned, uncontrolled radiological uptake of [] radioactive material. As a result of this event, a 10 CFR 835 (Occupational Radiation Protection Rule) radiological exposure limit of 50 rems to the tissue or any organ for a general worker was exceeded. Specifically, the worker was assigned an organ dose of 65 rems.

The Office of Enforcement and Investigation (EH-Enforcement) initiated an investigation of this event on July 19, 1999, and conducted an onsite review on April 18, 2000. Subsequent to the onsite review, EH-Enforcement offered an enforcement conference to Kaiser-Hill Company, LLC (KHLL); however, KHLL declined the conference. An Investigation Summary Report is enclosed.

Based on DOE's investigative results, DOE has concluded that violations of 10 CFR 835 likely occurred. The enclosed Preliminary Notice of Violation (PNOV) describes violations that involve exceeding a 10 CFR 835 exposure limit and failing to apply a combination of design features and administrative control procedures to limit a worker's radiological exposure. In performing D&D activities, KHLL management failed to recognize a change in the work scope and thus failed to re-evaluate the hazards and apply appropriate controls. Informal safe work practices had been identified; however, these were inconsistently implemented and were not utilized at the time of the incident. Additionally, management failed to stop or limit work when he and a second D&D worker had to depart the work area, leaving only a single D&D worker and a radiological control technician in the room. The single D&D worker continued size

reduction activities using a port-a-band saw which resulted in his accidentally cutting his finger. The cut was contaminated with radioactive [material], and an uptake of radioactive material occurred resulting in the overexposure.

In accordance with the "General Statement of Enforcement Policy," 10 CFR 820, Appendix A, the violations described in the enclosed PNOV have been classified as a Severity Level II problem. In determining the severity level of these violations, DOE considered the magnitude of the exposure and the failure to properly analyze and implement appropriate work controls.

In response to these violations, I am issuing the enclosed PNOV and Imposition of Civil Penalty in the amount of \$41,250. The base civil penalty for a Severity Level II violation is \$55,000. DOE has considered the adjustment factors in the Enforcement Policy and has concluded that only partial mitigation of the base civil penalty is warranted. The noncompliances were identified as a result of a self-disclosing event; additionally, KHLL's implementation of some corrective actions has been protracted and limited in scope. Partial mitigation is based upon KHLL's evaluation and implementation of new engineered approaches to minimize workers' hands-on methods during D&D activities.

You are required to respond to this letter and follow the instructions specified in the enclosed PNOV when preparing your response. Your response should document any additional specific actions taken to date. Corrective actions will be tracked in the Noncompliance Tracking System (NTS). You should enter into the NTS (1) any additional actions you plan to prevent recurrence and (2) the target completion dates of such actions. After reviewing your response to the PNOV, including your proposed corrective actions entered into the NTS, in addition to the results of future assessments or inspections, DOE will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements.

Sincerely,



David Michaels, PhD, MPH
Assistant Secretary
Environment, Safety and Health

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Enclosures:
Preliminary Notice of Violation
Investigation Summary Report

cc: B. Costner, S-1
M. Zacchero, EH-1
S. Carey, EH-1
K. Christopher, EH-10
S. Adamovitz, EH-10
T. Weadock, EH-10
D. Stadler, EH-2
F. Russo, EH-23
N. Goldenberg, EH-3
J. Fitzgerald, EH-5
C. Huntoon, EM-1
L. Vaughan, EM-10
P. Golan, RFFO
M. Weis, RFFO
L. Bressler, DOE-RFFO PAAA Coordinator
F. Casella, KHLL Contractor Coordinator
R. Azzaro, DNFSB
D. Thompson, DNFSB
Docket Clerk, EH-10

**PRELIMINARY NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY**

Kaiser-Hill Company, LLC
Rocky Flats Environmental Technology Site

EA 2000-05

As a result of a Department of Energy's (DOE) evaluation of activities which occurred on February 2, 1999, in Building 779 of the Rocky Flats Environmental Technology Site, violations of DOE requirements were identified. In accordance with the "General Statement of Enforcement Policy," 10 CFR 820, Appendix A, DOE proposes to impose civil penalties pursuant to Section 234A of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282a, and 10 CFR 820. The violations are described below.

- I. 10 CFR 835.202(a)(2) requires that the occupational exposure to general employees resulting from DOE activities be controlled so that the sum of the deep dose equivalent (DDE) for external exposures and the committed dose equivalent (CDE) to any organ or tissue does not exceed the annual limit of 50 rems.

Contrary to the above, the occupational exposure to a Kaiser-Hill Company, LLC (KHLL) general employee was not controlled during 1999 so that the annual limit of 50 rems was exceeded for the sum of the DDE and the CDE. On February 2, 1999, a KHLL general employee received a [radioactive material] uptake which resulted in a CDE determined by KHLL to be 65 rems.

- II. 10 CFR 835.1003(a) requires that during routine operations, the combination of design features and administrative control procedures shall provide that (2) the anticipated magnitude of the CDE to any organ or tissue, plus any DDE from external exposures, shall not exceed 50 rems in a year and (3) exposure levels are as low as reasonably achievable (ALARA).

Contrary to the above, the combination of the KHLL's design features and administrative control procedures did not provide the necessary controls to limit a general employee's radiological exposure. On February 2, 1999, during size reduction activities being conducted in Glovebox 955 in Building 779 Room 133, a KHLL general employee received a [radioactive material] contaminated laceration on his index finger. The general employee's radioactively contaminated laceration resulted in a [radioactive material] uptake and a CDE of 65 rems.

Collectively, these violations constitute a Severity Level II problem.

Civil Penalty - \$41,250

Pursuant to the provisions of 10 CFR 820.24, Kaiser-Hill Company, LLC is hereby

required within 30 days of the date of this Preliminary Notice of Violation (PNOV) and Proposed Imposition of Civil Penalty, to submit a written statement or explanation to the Director, Office of Enforcement and Investigation, Attention: Office of the Docketing Clerk, EH-10, P.O. Box 2225, Germantown, MD 20874-2225. Copies should also be sent to the Manager, DOE Rocky Flats Field Office, and to the Cognizant DOE Secretarial Offices for the facilities that are the subject of this Notice. This reply should be clearly marked as a "Reply to a Preliminary Notice of Violation" and should include the following for each violation: (1) admission or denial of the alleged violations; (2) any facts set forth which are not correct; and (3) the reasons for the violations if admitted, or if denied, the basis for the denial. Corrective actions that have been or will be taken to avoid further violations will be delineated with target and completion dates in DOE's Noncompliance Tracking System. In the event the violations set forth in this PNOV are admitted, this Notice will constitute a Final Notice of Violation in compliance with the requirements of 10 CFR 820.25.

Any request for remission or mitigation of the civil penalty must be accompanied by a substantive justification demonstrating extenuating circumstances or other reasons why the assessed penalty should not be paid in full. Within 30 days after issuance of this Notice and Civil Penalty, unless the violations are denied, or remission or mitigation is requested, Kaiser-Hill Company, LLC shall pay the civil penalty of \$41,250 imposed under Section 234A of the Act by check, draft, or money order payable to the Treasurer of the United States (Account 891099) mailed to the Director, Office of Enforcement and Investigation, Attention: Office of the Docketing Clerk at the above address. Should Kaiser-Hill Company, LLC fail to answer within the time specified, the contractor will be issued an order imposing the civil penalty.

If requesting mitigation of the proposed civil penalty, Kaiser-Hill Company, LLC should address the adjustment factors described in Section VIII of 10 CFR 820, Appendix A.



David Michaels, PhD, MPH
Assistant Secretary
Environment, Safety and Health

Dated at Washington, DC,
this 19th day of May, 2000