

to this event, your investigation concluded that these corrective actions did not fully address the causes and therefore were not fully effective.

In accordance with the General Statement of Enforcement Policy, 10 CFR 820, Appendix A, the violations described in the enclosed PNOV have both been classified as Severity Level III. In making this determination, DOE concluded these violations represented a breakdown in your controls to ensure the use of proper radiological protection by site workers as well as the fact that this event revealed inadequacies in corrective actions to a prior similar event. This breakdown could potentially have resulted in a worker receiving an unplanned exposure. Our review also identified some concerns with your causal analysis further described below. Due to the above factors DOE has chosen not to apply any further enforcement discretion. However, DOE has refrained from issuing a civil penalty because (1) the respirator assignment failure was recognized through your own training related self-assessment (2) no radiological uptakes occurred in this event, (3) access to radiological areas at WPP was immediately suspended until the qualifications of all workers were verified, and (4) of the many thousands of annual respirator uses over the last three years only one individual user was involved in the performance breakdowns.

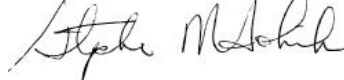
With regard to your causal analysis, it appears that not all of the contributing factors for this event were fully considered or adequately addressed. The causal analysis stated that insufficient information was available to determine the cause(s) related to the issuance of the unauthorized respirator. We do not agree with this conclusion. Your investigation found that the worker was not fully knowledgeable of his responsibilities, and 12 different Qualified Respirator Issuers made errors in verifying the worker's qualifications. In addition, your review found numerous errors in the Respirator Logs related to the actual type of respirator issued. Our review of the summary information from the Respirator Logs, for the worker in this event, identified that over 20 percent of the time an error was made in the log related to the respirator type identified as issued. A supplemental assessment report, Assessment Number 2022826 dated May 6, 2004, was provided to DOE. This report does evaluate the errors discovered in the Respirator Logs more substantively but still fails to address the remaining quality issues identified above. It is our view that your determination of inattention to detail by the individuals does not adequately account for the fact that 12 different Qualified Respirator Issuers, and the person performing the review of the logs, repeatedly made errors over a long period of time. It is likely that this inattention was caused by other factors such as processing large groups of people quickly, noise, or other distractions in the work area. These problems need to be evaluated further to adequately identify the causes of this problem and to implement appropriate corrective actions.

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 NTS. You should enter into the NTS (1) any actions that have been or will be taken to prevent recurrence and (2) the target and completion dates of such actions.

After reviewing your response to the PNOV, including your proposed corrective actions, and your progress in correcting these problems, DOE will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements.

Sincerely,



Stephen M. Sohinki

Director

Office of Price-Anderson Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

cc: R. Warther, DOE OH
M. Reker, OH PAAA Coordinator
B. Taylor, DOE Fernald
D. Riley, Fernald PAAA Coordinator
B. Varchol, FFI PAAA Coordinator
P. Golan, EM-1
L. Vaughan, EM PAAA Coordinator
R. Azzaro, DNFSB
J. Shaw, EH-1
A. Patterson, EH-1
R. Gibbs, EH-6
Docket Clerk, EH-6

PRELIMINARY NOTICE OF VIOLATION

Fluor Fernald, Inc.

EA 2004-07

As a result of the Department of Energy's (DOE) evaluation of occupational radiological protection and quality assurance deficiencies related to the control of respirators at the Waste Pit Project (WPP), violations of DOE nuclear safety requirements have been identified. In accordance with 10 CFR 820, Appendix A, "General Statement of Enforcement Policy," the violations are listed below.

I. Radiological Procedure and ALARA violations

10 CFR 835.104 requires that "written procedures shall be developed and implemented as necessary to ensure compliance with this part, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skill of the individuals exposed to those hazards."

10 CFR 835.1001 requires that "Measures shall be taken to maintain radiation exposure in controlled areas ALARA through physical design features and administrative control."

- A. Fluor Environmental Management Project procedure, SH-0017 *Respirator Issuance* dated August 30, 2001, requires in Section 7.1 the respirator wearer to "verify from the Fit Test Card (FS-F-2591) and the pink training card that your current individual qualifications for the respirator protection prescribed by the written instructions in Sec. 7.1.1 have been met," and in Section 7.1.8 "Ensure that the respirator facepiece is the correct type, manufacturer, model, and size as indicated on Fit Test Card, (FS-F-2591)."

Contrary to this procedure, on 66 separate occasions between April 10 and November 4, 2003, a worker selected and used a respirator type, SurvivAir 4000, which he was not qualified to use because he did not have the required fit test. His Fit Test Card did not identify that he was qualified to use this respirator. This event was reported into the Noncompliance Tracking System (NTS-OH-FN-FFI-FEMP-2003-0005) on November 24, 2003.

- B. Fluor Environmental Management Project procedure, SH-0017 dated August 30, 2001, "Respirator Issuance" requires in Section 7.2.3 the Qualified Respirator Issuer to "compare manufacturer, model, type, and size of

respirator faceplate to wearer's current qualifications as listed on the FEMP Fit Test Card (FS-F-2591)."

Contrary to this procedure, on 66 separate occasions between April 10 and November 4, 2003, 12 separate Radiological Control Technicians (RCT), who were Qualified Respirator Issuers, failed to verify that a worker had selected the correct respirator, which he was qualified to use based upon the worker's Fluor Environmental Management Project (FEMP) Fit Test Card.

- C. Fluor Environmental Management Project procedure, SH-0017 dated August 30, 2001, "Respirator Issuance" requires in Section 7.3.3 the Qualified Respirator Issuer "if recording issuance using the Respirator Issue Log, Form FS-F-4144, Then complete the following steps:." Step 7.3.3.6 requires that "a yes/no entry to record is the respirator manufacturer, model, and size one that the wearer is qualified to wear," and step 7.3.3.9 requires "if a full-face respirator, then record the appropriate manufacturer and model by circling the code."

Contrary to this procedure, between April 10 and November 4, 2003, 12 Qualified Respirator Issuers filled out the Respirator Issue Log indicating a type of respirator that was not consistent with the respirator type actually used. A limited review of the Respirator Issue Logs for this period identified errors in the log related to an incorrect respirator were made in approximately 20 percent of the log entries.

Collectively, these violations constitute a Severity Level III problem. No civil penalty.

II. Quality Improvement Deficiencies

10 CFR 830.122(c) "Quality Improvement" requires that contractors "(1) Establish and implement processes to detect and prevent quality problems, (2) Identify, control, and correct items, services, and processes that do not meet established requirements, (3) Identify the causes of problems and work to prevent recurrence as part of correcting the problem."

Contrary to the above requirements, processes to identify, correct, and prevent recurrence of this problem were not effective. The specific deficiencies with the quality improvement processes include the following:

- A. The deficiency occurred multiple times, on 66 separate occasions, during the period from April 10 through November 4, 2003, without detection. Twelve separate Qualified Respirator Issuers approved the workers use of a respirator for which he was not qualified during this period.

- B. The Respirator Logs for the period April 10 through November 4, 2003, contained numerous errors in listing the respirator type issued for the worker involved in this event. The logs were reviewed and signed by a reviewer, but no review for accuracy of the log entries was performed.
- C. A similar event was identified in July 2000, reported in NTS-OH-FN-FEMP-2000-0003, in which a worker used an unauthorized respirator 92 times between December 1999 and June 2000 without detection. In this event the worker received minor unplanned uptakes. The FFI investigation of the current event determined that the prior corrective actions were not effective.

Collectively, these violations constitute a Severity Level III problem. No civil penalty.

Pursuant to the provisions of 10 CFR 820.24, Fluor Fernald Inc. is hereby required within 30 days of the date of the Preliminary Notice of Violation to submit a written statement or explanation to one of the following addresses:

(if sent by U.S. Postal Service):

Director, Office of Price-Anderson Enforcement
Attention: Office of the Docketing Clerk
EH-6, 270 Corporate Square Building
U.S. Department of Energy
1000 Independence Avenue, SW
Washington DC 20585-0270

(if sent by overnight carrier):

Director, Office of Price-Anderson Enforcement
Attention: Office of the Docketing Clerk
EH-6, 270 Corporate Square Building
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874-1290

A copy should also be sent to the Manager, DOE Ohio Operations Office. 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 in this PNOV which you believe are not correct, and (3) the reasons for the violations if admitted, or if denied, the basis for denial. Corrective actions that have been or will be taken to avoid future violations should be delineated with target and completion dates in OE's Noncompliance Tracking System. In the event the violations set forth in the Preliminary Notice of Violation are admitted, this PNOV will constitute a Final Order in compliance with the requirements of 10 CFR 820.24.



Stephen M. Sohinki
Director
Office of Price-Anderson Enforcement

Dated at Washington, DC
this 9th day of August 2004