



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

Global Nuclear Fuel

Scott P. Murray

Manager, Licensing & Liabilities

3901 Castle Hayne Road
P.O. Box 780
Wilmington, NC 28402
USA

(910) 819-5950
(910) 362-5950
Scott.murray@ge.com

SPM 11-017

May 13, 2011

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Attn: Document Control Desk

Subject: 30-day Report of Event – HF Dermal Exposure

References: 1) NRC License SNM-1097, Docket 70-1113
2) GNF-A Event Report 46749, 4/13/11

Dear Sir or Madam:

In accordance with 10CFR70.50(c)(2), Global Nuclear Fuel – Americas L.L.C. (GNF-A) hereby submits the required written report for the April 13, 2011 event regarding a hydrofluoric (HF) acid dermal exposure. This event was reported within 24 hours by telephone to the NRC Operations Center in accordance with 10 CFR 70 Appendix A (b)(3).

The applicable information required by 10 CFR 70.50(c)(1) was submitted by facsimile on April 13, 2011 and is included as Attachment 1.

Additional information is provided as follows:

Event Details and Safety Significance

At approximately 8:30 am on April 13, a maintenance employee working in the HF recovery facility on a pipe replacement project had some HF penetrate his chemical resistant suit onto the skin of his abdomen. The exposure affected a skin area of less than 100 square centimeters and was not considered life threatening. The employee was immediately placed under a safety shower and onsite emergency response was initiated.

Response personnel applied neutralizing agents (benzalkonium chloride and calcium gluconate) and the employee was taken to the onsite medical clinic. A survey indicated he was not contaminated with any radioactive materials. After an initial evaluation, the employee was subsequently transferred to an offsite medical facility as a precautionary measure. He was examined, released and returned to the work site. The exposure caused a minor chemical burn and no irreversible or other serious, long lasting health effects.

Probable Cause of Event

An investigation team conducted a review and determined the causes of the event included:

- The HF piping had not been adequately flushed and drained
- The chemical resistant suit had not been properly donned and its properties were not fully understood by the user.

May 13, 2011

Page 2

Immediate Corrective Actions Taken

HF pipe replacement work was ceased pending investigation and implementation of additional corrective actions.

Completed April 13, 2011

Near-term Corrective Actions Taken

Prior to restarting the HF recovery facility, the following actions were completed;

The event was reviewed with HF facility workers, including the proper method to don and secure the chemical suits, HF dermal exposure response, and verification of pipe draining before line breaks.

Completed April 20, 2011

HF facility procedures were augmented with additional information on how the chemical suits must be donned and secured.

Completed April 19, 2011

HF flush and drain procedures augmented to increase effectiveness

Completed April 19, 2011

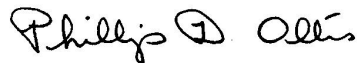
Longer-term Preventive Actions

Revise the integrated safety analysis (ISA) documentation to ensure sufficient items relied on for safety and management measures are identified for HF dermal exposure.

Scheduled complete May 18, 2011

If you have any questions regarding this matter, please contact me at (910) 819-5950.

Sincerely,



for
Scott Murray, Manager
Licensing & Liabilities

Commitments: None

Attachment 1: Event Description

cc:

Nick Baker, NRC NMSS, Washington, DC
Mary Thomas, NRC RII Atlanta

Attachment 1

A maintenance employee was involved in a pipe replacement project in the Hydrogen Fluoride (HF) Building. The employee was leaning on a pipe and received a HF exposure through his PPE onto his abdomen. The employee was immediately placed under a safety shower and on-site emergency response was initiated. EMT's applied calcium gluconate and the employee was transported to on-site medical clinic. The employee was not contaminated with any radioactive material. The employee was later transferred to off-site medical. The employee's abdomen was reddened and had some blistering but exposure is not considered life threatening.

All work in the HF building has been stopped pending the completion of an investigation.

Phillip Ollis, Acting Manager,
Licensing and Liabilities
0929 AM, 4/13/11

Amended (4/13/11 12:26 pm): The employee was released from the hospital with no restrictions. As such, the event classification is being amended to 10 CFR 70.61(c)(4).

Update (4/15/11): As a result of the root cause analysis, additional IROFS are needed and will be declared. Additional reporting for this event to include 10 CFR 70 Appendix A(b)(1) as the GNF ISA did not consider HF dermal exposure as a high consequence event.