

**Global Nuclear Fuel** 

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M170095

April 27, 2017

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

Subject: GNF-A Written Report – Personnel Contamination in Unrestricted Area

References: 1) NRC License SNM-1097, Docket 70-1113 2) NRC Regulation 10 CFR 20.2203

Dear Sir or Madam:

Pursuant to 10 CFR 20.2203(a)(3)(ii), the Global Nuclear Fuel–Americas, LLC (GNF-A) facility in Wilmington, N.C. is submitting a written report for multiple instances of contamination in an unrestricted area.

Additional information is provided as follows:

### **Event Details and Safety Significance**

When workers exit the change rooms in the Fuel Manufacturing Operation (FMO) facility, GNF-A procedures require that the workers undergo a personnel contamination survey for external contamination on their clothing and bodies. By procedure, if a personnel contamination monitor (PCM) alarms, then the individual may decontaminate themselves using the facilities provided in the change rooms. The individual must undergo a second survey through a PCM. If that second PCM survey does not alarm, then the individual may leave.

Contrary to this, over the previous approximately six-month period, a number of workers, on numerous occasions, set off a PCM radiation alarm(s) and exited the change room without a subsequent, documented non-alarming PCM survey. These potentially contaminated workers comprise only a small sub-set of the entire population of radiation workers at FMO.

Due to the number of occasions of no recorded subsequent non-alarming surveys by this subset of workers, GNF-A is conservatively reporting this event pursuant to 10 CFR 20.2203. Based on initial PCM scan information for the potentially contaminated workers in question, the contamination levels are low enough to not present any significant exposure hazard to the workers or the public. USNRC M170095 April 27, 2017 Page 2 of 2

# **Immediate Corrective Actions Taken**

As a result of a preliminary review, surveys were performed where consent was given, of selected potentially contaminated workers' vehicles and the workers' residences. Very low levels of contamination were identified on some articles of clothing and personal items in some of these surveys.

# **Probable Cause of Event**

GNF-A has preliminarily determined that there was a failure to follow the applicable procedure and it will conduct a causal analysis to make a final determination of the cause of this event.

## **Short Term Corrective Actions**

1. GNF-A held briefings with workers to reinforce procedural compliance and to re-state PCM survey and alarm response requirements.

Completed April 4, 2017

2. GNF-A issued additional instructions that require workers to contact their supervisor after a contaminated survey result. (Current procedures already require workers to contact RP after receiving a second PCM alarm.)

Completed April 18, 2017

### **Longer Term Corrective Actions**

1. The proper use of PCM's will be communicated to a broader audience of FMO workers.

Scheduled completion: May 5, 2017

2. Perform an apparent cause analysis, including extent of condition, and identify any additional corrective actions.

Scheduled completion: July 16, 2017

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

Sincerely,

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Scott Murray, Manager Facility Licensing

Attachment: None

cc: NRC Region II Administrator, Atlanta, GA T. Vukovinsky, NRC RII Atlanta. GA T. Naquin, NRC NMSS, Washington, DC SPM 17-015