From: Janine Katanic
Sent: Friday, July 18, 2008 2:47 PM
To: 'James Miller'; Clint Lingren
Cc: Anthony Gaines; Jack Whitten; Art Howell
Subject: Philotechnics decon reports of Sabia facility

Mr. Miller:

I have completed my review of the final decontamination reports for Bays 3 and 4. There are a few items that I was curious about that were either not addressed or not adequately addressed in the reports. I am hoping that you can provide additional information regarding these items. I believe that you will be able to answer some of the questions yourself and other questions might require input from your decontamination contractor Philotechnics.

As another note, you might recall that Mr. Len Wert relocated another NRC office and that Mr. Chuck Cain was acting as the Division Director until Mr. Art Howell could report for duty. Mr. Howell is now in place and is the Director, Division of Nuclear Materials Safety. Mr. Cain has resumed his duties as Deputy Director, Division of Nuclear Materials Safety. Accordingly, any documents that you were requested to transmit to Mr. Wert or Mr. Cain should now be addressed to Mr. Howell.

1. I have several questions/comments regarding the correction of the survey results to account to other sources of radiation (fixed gauges with gamma sources).

1.a. In the May 27, 2008, report for Bay 3, please elaborate on the method used to make corrections to the survey results. In particular, on page 13, the report notes that "portable shielding was placed around the probe head in areas where radiation levels were significantly elevated…" Can the type and amount of portable shielding used around the probe head be described? It is unclear as to how this was done and this information will aid in my understanding of how the correction was performed.

1.b. In the May 27, 2008, report for Bay 3, on page 13, there is a fragment sentence, and I would like to know what the rest of the sentence is supposed to say. It says "If the location failed without the shielding, a correction" A correction what? What was the correction factor and how was it applied?

1.c. In the May 27, 2008, report for Bay 3, on page 13, it is noted that adjustments were made to results from survey units 4 and 5. Were adjustments made to the results for the entire survey unit or to selected measurements within the survey unit?

1.d. In the May 7, 2008, report for Bay 4, a correction is described for the survey results. It notes on page 13 that the correction factor was applied to 10 static measurements which are supposed to be indicated by asterisks in Appendix F. I have reviewed Appendix F for Bay 4 and maybe I'm missing something, but none of the results in my copy have any asterisks. Which measurements were adjusted?

1.e. Both the May 27, 2008, report for Bay 3 and the May 7, 2008, report for Bay 4 both indicate that "knowing that contamination was due to a ruptured source, there is only a small probability there would be fixed contamination at any given location without also having removable contamination." This assumption was used to justify the correction of certain

survey readings that were taken in the proximity of other sources of radiation (gamma gauges). However, while the probability may be small, it is not a zero probability. For example, a highly porous surface could reasonably have only fixed contamination and an absence of removable contamination. For the survey results that were adjusted in both bays, please describe the type of surface.

2. The May 7, 2008, report for Bay 4 (the lesser of the contaminated bays) describes on page 15 that removal of some of the overhead ductwork needed to be removed to meet the release criteria. However, the May 27, 2008, report for Bay 3 (the bay where the source was breached) does not specifically discuss the ductwork or HVAC unit in this bay. What were the results from the ductwork and HVAC unit in Bay 3? It seems unlikely that the ductwork needed to be removed from Bay 4 and not from Bay 3.

3. The Bay 4 report notes measurements taken at the sink (and the location of the sink is indicated on the exploded survey map). However, the Bay 3 report does not provide measurements for the sink (and there was a sink in both bays). Also if memory serves me right, one of the bays had a floor drain, although it purportedly went to nowhere, surely the drain was surveyed. Can you provide the results for all sinks, traps, and floor drains in both bays?

4. Both reports discuss the free release of materials and equipment. Although the reports provide an overall summary statement regarding free release, it would be helpful to see how many and what type of items were capable of being released, how many and what type of items were deconned and released, and how many and what type of items could not be released. Meaning, instead of a narrative summary, can the free release data be provided?

5. Neither report discusses the status of the rad waste that was generated from the decon process. What happened to the rad waste? Is it on site? Was it disposed of? If so, when? If it was disposed of, are there any copies of manifests or disposal certifications, etc.? If removed from your site for disposal, what was the total volume of waste removed?

6. Neither report discusses the encapsulation of the breached Sr-90 source. From my recollection, the source was to be placed into a 55 gal drum with concrete. When was the source encapsulated? How was this done? Are there any photos of this process? Any photos of the source prior to encapsulation? Was the encapsulated source disposed of? If so, when did this occur and are there any copies of manifests or disposal certifications, etc.?

7. Likewise, are there any additional photos of the workbench where the source was breached? I seem to recall that Philotechnics or Sabia personnel were going to provide additional photos of the Sr-90 gauge/gauge frame/workbench, etc. If these photos are available, they could aid in our understanding of the event.

Thank you in advance for your response.
Janine

Janine F. Katanic, PhD
Health Physicist
US NRC Region IV
office 817-860-8151
fax 817-860-8188
note new email: **Janine.Katanic@nrc.gov**

E-mail Properties

Mail Envelope Properties ()

Subject: Philotechnics decon reports of Sabia facility
Sent Date: 07/18/2008 10:16:09 AM
Received Date: 07/18/2008 2:47:00 PM
From: Janine Katanic

Created By: Janine.Katanic@nrc.gov

Recipients:
Jmiller@sabiainc.com ('James Miller')
Tracking Status: None
clingren@sabiainc.com (Clint Lingren)
Tracking Status: None
Anthony.Gaines@nrc.gov (Anthony Gaines)
Tracking Status: None
Jack.Whitten@nrc.gov (Jack Whitten)
Tracking Status: None
Art.Howell@nrc.gov (Art Howell)
Tracking Status: None
RobertoJ.Torres@nrc.gov (Roberto J Torres)
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	17337	07/18/2008

Options
Expiration Date:
Priority: olImportanceNormal
ReplyRequested: False
Return Notification: False

Sensitivity: olNormal
Recipients received: