# Brand, Javier

From: Sent:

To:

Barkley, Richard Tuesday, November 24, 2009 7:48 PM White, John; Nimitz, Ronald; Brand, Javier Response to Questions from Chairman Klein.doc Response to Questions from Chairman Klein.doc

Subject:

Attachments:

See how this looks - I need to turn it in around noon on Wednesday.

## Response to Questions from Chairman Klein's Office

### Question #1:

For the dose received by the contaminated individuals, was it internal, external or both?

## Response:

The radiation doses quoted in the Chairman's talking points were the estimated internal exposure due to the uptake based on whole body count results. Since the external contamination was fairly low level and quickly removed, the external radiation exposure from this contamination would have been almost immeasurable. The individuals' external radiation exposure was recorded by their dosimetry, and will be read in the future. Portable dose rate meters worn by health physicists and workers in the area did not record significant accumulated dose from this event.

### Question #2:

With respect to the source, I would have expected a contaminated system that was being opened to have had some kind of low pressure barrier or filter system around it rather than just being open t the surroundings. Can you provide more detail on this aspect?

#### Response:

There were multiple openings/cuttings/grinding operations ongoing at the time of the event, all of which had some type of contamination enclosure or foreign material exclusion (FME) barrier in place. However, several things had to occur at once for this event to transpire. For example, two of the portable filter units in operation at the time either lost power, or were not functioning as designed, allowing the pressure barrier to be lost. Secondary, the containment air purge system was started about 20 minutes before the event, slowly drawing down the pressure inside the containment. The combination of these factors contributed to the contamination in the open piping systems going airborne.

Region I Contact: John White (610/337-5114)