

## Conference Call – Containment Liner Corrosion

Thursday, July 30, 2009 1:00pm

### Participants

#### FENOC

Pete Sena  
Tom Lentz

Cliff Custer  
Dr. D. Gary Harlow

Jim Hester

David Jenkins

#### NRC

Kent Howard  
Lloyd Subin

Maurice Heath  
Kamal Manoly

Paul Kaufmann  
Emmanuel Sayoc

Allen Hiser  
Bennett Brady

### Discussion

- NRC (AH) The purpose of this phone call is to clarify the language in FENOC letter L-09-205 regarding containment liner sampling. Please define "UT-accessible."
- FENOC (CC) There are two parts to the definition, the first from ASME Section 11, Subsection IWE (Section 1231), with the added restrictions (based on the physical dimensions of the UT probe) of requiring a minimum of six inches perpendicular (stand-off) to the surface of the line, and a minimum of three inches lateral clearance from any interference.
- NRC (AH) Ok. Let me ask the region, is this something you would want to have specified, or stipulated in procedure?
- NRC (PK) As far as the ASME code requirements, they may want to add it to their own procedure.
- FENOC (PS) For clarification, we can be explicit in referencing the ASME code in our NDE procedure.
- NRC (AH) Everyone here agrees that seems to be a reasonable definition.  
Question #2 – Define "cross-section" of containment liner.
- FENOC (CC) For our methodology, we would divide containment vertically into sections, then divide by elevations. The sectors would (mostly) be rectangular.
- NRC () Ok
- NRC (AH) Question #3 – Define "sampling frame."
- FENOC (CC) Sampling frame is the UT-accessible surface area. The area we consider to be eligible for sampling. It is the same as the "population."
- NRC (AH) Ok. It is merely the use of statistical terminology/interpretation.  
Question #4 – regarding the random selection of locations. You state in the letter that you will randomly select sectors, then you will randomly select locations. The selection of locations will be random. Is that correct?
- FENOC (CC) Yes.
- NRC (AH) Will the process you use provide 95/95 confidence level?
- FENOC (CC) Yes, it will provide 95/95 confidence level.
- NRC (AH) Very good.
- NRC (KM) What about areas you can't get to, will they be included within the sectors?
- FENOC (CC) Yes, they are included with the sector.
- NRC (AH) When you define the sectors, and then weight the sectors for the randomness, would you extract the inaccessible areas for sector weighting?
- FENOC (CC) It is not our intention to extract the inaccessible areas before weighting the sectors.
- NRC (AH) We are wrestling with the incongruity between the letter and your verbal explanation today. Let me describe two scenarios.

Scenario 1 – You divide the containment into sectors without consideration for accessibility or weighting based on accessibility. You randomly select sectors that have been weighted by area. You then randomly select from the accessible area in a selected sector.

Scenario 2 – (as per your letter) You weight the sectors based on their UT-accessible area. Then randomly select sectors. Then randomly select locations in the chosen sectors.

Which are you going to do? Scenario 1 or Scenario 2?

- FENOC (CC) Divide into sectors, weight the sectors based on area (only), randomly select sectors, then randomly select locations.
- FENOC (PS) There is no bias to/for any sector.
- NRC (AH) With no bias, other than weighted for surface area?
- FENOC (CC) Once the sector is identified, we randomly pick location with the sector. If that location is inaccessible, we would pick another random location.
- NRC (AH) Suppose one sector is only 10% accessible, and another sector is 100% accessible. My interpretation is that one sector is biased.
- FENOC (GH) You want us to weight the sectors based on accessibility first?
- NRC (AH) We just want to understand your proposal.
- FENOC (CC) Once again, we would divide containment into sectors.  
Weight the sectors based on area only.  
Randomly select sectors.  
Randomly select locations within the sectors – if inaccessible, pick another random location within the sector.
- NRC (AH) It is not statistically appropriate to weight the sectors without considering the inaccessible areas.
- FENOC (PS) We have a calculation from Dr. Harlow. It states that in order to get the 95/95 confidence level we only have to do 52 samples.
- FENOC (GH) That's assuming equal probability of getting those sights.
- FENOC (PS) We are going above and beyond the call, doing more than 52 samples.
- FENOC (GH) If one sector has 100 sq. ft. accessible and another sector has 10 sq. ft. accessible, you cannot weight them the same.
- NRC (AH) The letter implies you are consistent with 95/95. Your words today conflict with that, regarding the weighting of the sectors. It is unlikely that all the sectors have the same amount of inaccessibility.
- FENOC (CC) We understand your point. We agree to consider the inaccessible areas at the beginning and weight sectors based on accessible areas.
- NRC (AH) I think we are done.
- NRC (KH) There is no need to submit anything. This was all just clarification.
- NRC (AH) I defer to Paul Kaufman in the Region. Do we want anything specified or stated in writing, to enhance your inspections capabilities.
- NRC (PK) No. Nothing is required in writing. As long as they have it in their procedures. That is what we go by when we do the inspections.
- NRC (KH) You owe us nothing. This was just for clarification and we understand.
- NRC (PK) The Region agrees.

End of Call

Action items – None