



U.S. Department of Energy

**Office of River Protection**

P.O. Box 450  
Richland, Washington 99352

AUG 05 2004

04-TOD-057

United States Nuclear Regulatory Commission  
Headquarters Operations Officer  
Document Control Room  
Washington, DC 20555

Dear Sir:

FOLLOW-UP REVISION TO COURTESY NOTIFICATION OF A POTENTIAL TITLE 10 CODE OF FEDERAL REGULATION (CFR) PART 21 SAFETY HAZARD WITH RADēCO PORTABLE AIR SAMPLER MODEL H-809VI, SERIAL NUMBER 8499

Reference: ORP letter from J. H. Swailes to U.S. Nuclear Regulatory Commission, "Courtesy Notification of a Potential title 10 Code of Federal Regulation (CFR) Part 21 Safety Hazard with RADēCO Portable Air Sampler Model H-809VI, serial Number 8499," 04-TOD-054, dated July 30, 2004,

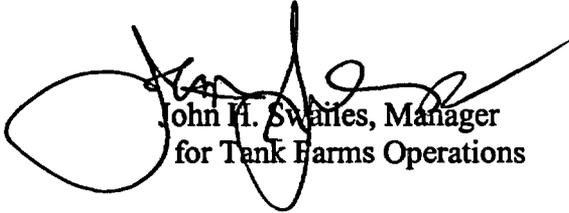
The Department of Energy (DOE), Office of River Protection (ORP) in Richland, Washington submitted a courtesy notification of a potential safety issue with RADēCO, portable air sampler, model H-809VI to the Nuclear Regulatory Commission in the referenced letter. Per 10 CFR § 21.21, Notification of Failure to Comply or Existence of a Defect and its Evaluation, section (4), the information in the attachment to this letter was submitted.

Since the submittal of the referenced letter it was determined that:

- Item (viii) of the report **SHOULD NOT** have included the RADēCO H-810 series samplers since there **WAS NOT** a potential problem identified with the RADēCO H-810 series samplers.
- The H-809IV samplers, at our site, are mainly used in an outdoor environment.
- A final part 21 report will be issued on the H-809VI sampler after an independent outside electrical characteristics (UL) review is completed and reviewed by appropriate levels of technical and management personnel.

If you have any questions, you may call me, or your staff may contact Michael J. Royack, Tank Farm Operations, (509) 376-4420.

Sincerely,



John H. Swailes, Manager  
for Tank Farms Operations

TOD:MJR

Attachment

cc: See page 2

IE20

U.S. Nuclear Regulatory Commission  
04-TOD-057

-2-

AUG 05 2004

cc w/attach:

E. S. Aromi, CH2M HILL

J. A. McDonald, CH2M HILL

R. C. Robinson, CH2M HILL

CH2M Correspondence Control

F. Lucci, RADēCO

Per 10 CFR § 21.21, Notification of Failure to Comply or Existence of a Defect and its Evaluation, section (4) the following information is being provided.

- (i) U.S. Department of Energy  
Office of River Protection,  
John H. Swailes, Project Manager  
Tank Farms Operations  
P.O. Box 450  
Richland, Washington 99354-1874
- (ii) DOE-ORP Tank Farm Operations identified a potential electrical shock safety issue with RADēCO, portable air sampler model H-809VI, serial number 8499.  
RADēCO, LLC  
509 Norwich Ave.  
Taftville, Connecticut 06380  
Phone: (860) 823-1220, Fax (860) 823-1521
- (iii) Ametek Electric manufactured the blower assembly P/N 119414-00 for this unit.
- (iv) Measurable voltage (117-120VAC) at the sample holder was confirmed by electricians. Internal inspection of the air sampler unit found no physical indication of internal short, e.g., burn marks, compromised insulation, etc. However, the slip ring providing the ground path to rotating parts provided only intermittent contact, resulting in intermittent isolation from ground. The sample holder body is isolated from the grounded external case, but is connected to internal components. The only potential sample holder body path to ground by design is through the holder jamb nut to the case, however, the case is painted with a durable non-conductive coating. This creates an insulating layer between the jamb nut and the case, preventing electrical contact. Consequently, if a short to the sample holder body occurs, there is no ground path until one is provided, such as a grounded person contacting it.
- (v) The date of the electrical shock was July 15, 2004.
- (vi) Several of these samplers are in use at DOE-ORP Tank Farms. These items have been isolated.
- (vii) See (vi).
- (viii) Facilities should check sample holders on the RADēCO H-809 and H-810 series samplers to assure proper grounding and no voltage on the sample holder. Repairs should be made in accordance with the "Procedure for Grounding Head Adpater Nut on AC Powered H-809 Air Samplers," included in the attachment.