



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 18, 2020

EA-20-015

Dr. Richard Thomas, MG, USA (ret.)
University President
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814

SUBJECT: CHILLED WORK ENVIRONMENT FOR RAISING CONCERNS AT THE ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE

Dear Dr. Thomas:

This letter is in reference to the Nuclear Regulatory Commission (NRC)'s concerns about the safety-conscious work environment (SCWE) at the Armed Forces Radiobiology Research Institute (AFRRI). The NRC has concluded that AFRRI staff members are hesitant to raise nuclear safety concerns or regulatory issues to upper management at AFRRI because of their belief that staff have been retaliated against by upper management for raising these concerns. Furthermore, management has not been effective in assuring employees that they may raise safety or regulatory issues without fear of retaliation. AFRRI has both a Research and Test Reactor (RTR) license and materials licenses. The NRC is concerned that this issue has impacted employees performing regulated activities authorized by both the RTR and material licenses.

The NRC's Policy Statement entitled, "Freedom of Employees in the Nuclear Industry to Raise Safety Concerns without Fear of Retaliation" (Volume 61 of the Federal Register, page 24336; May 14, 1996), and the NRC Regulatory Issue Summary (RIS) 05-018, "Guidance for Establishing and Maintaining a Safety-Conscious Work Environment," dated August 25, 2005, describes the NRC expectations in this area. A SCWE is, in part, one in which employees are encouraged and feel free to raise safety concerns without fear of retaliation or discrimination. In contrast, a "chilled work environment" is defined in the nuclear industry as a work environment where the willingness of a group of employees to report safety or regulatory concerns is inhibited.

The NRC initially identified this issue during an RTR inspection conducted August 14-15, 2018 (NRC Inspection Report No. 05000170/2018450, ADAMS¹ Accession No. ML18260A111). In response to the inspection findings on November 26, 2018, AFRRI provided NRC with an AFRRI document dated November 9, 2018, titled "Establishment of Safety Conscious Work Environment (SCWE) Program and plan of action for implementation." This document provided a SCWE Policy statement and training materials. The NRC's review of these documents noted that they did not include training or coaching for upper managers, which made it unlikely that the training would be effective. During a phone conference on December 18, 2018 with the Institute Director, the NRC provided this feedback to AFRRI. However, the licensee reported that they had already completed the training and did not respond with any additional corrective actions.

¹ Publicly-available documents can be found in the NRC's Agencywide Documents Access and Management System (ADAMS), located at <https://www.nrc.gov/reading-rm/adams.html>.

The NRC conducted a follow-up inspection on April 9-11, 2019 (ADAMS Accession No. ML20052F052). The purpose of the follow-up inspection was to assess the corrective actions implemented to address (1) the weaknesses in AFRRRI's SCWE identified in the August 2018 inspection; (2) AFRRRI staff's current knowledge of methods to raise safety concerns within AFRRRI; (3) AFRRRI staff's current willingness to raise safety concerns to their management without fear of retaliation; and (4) AFRRRI staff's current perception of management's support of a healthy SCWE at AFRRRI. Based on the results of the April 2019 inspection, the NRC inspectors observed that AFRRRI staff members continue to be hesitant to raise nuclear safety concerns or regulatory issues to upper management at AFRRRI due to fear of retaliation. The NRC also noted that the AFRRRI University Inspector General (IG) serves as an avenue for AFRRRI staff members to raise concerns. The NRC determined, however, that past investigations by the IG have contributed to the staff's reluctance to raise concerns, in that, AFRRRI staff reported that they believe the IG investigations were initiated and/or actions taken, in part, because the individual raised safety or regulatory compliance concerns. As you are aware, the inspectors briefed both the Institute Director and the University President regarding these observations.

During the April 2019 inspection, AFRRRI informed the NRC that they engaged a contractor to conduct a safety culture assessment during the summer of 2019. The contractor's assessment consisted of an anonymous survey that was emailed to all AFRRRI employees and one-on-one interviews with four (4) employees who were selected by the AFRRRI Radiation Sciences Department Head. NRC SCWE inspectors who performed the August 2018 and April 2019 inspections at AFRRRI reviewed the contractor's PowerPoint presentation and report and asked follow-up questions. NRC staff determined that the population of AFRRRI employees that responded to the survey and/or were interviewed was not large enough to be representative (only 40 percent of the population responded to the survey and/or were interviewed). NRC staff also noted that AFRRRI did not inform the contractor of the NRC inspection report until after the survey and most of the interviews had been completed. This means that the survey did not directly address nuclear safety, or the issues identified in the NRC's inspection report. Instead, the assessment asked questions about occupational health and safety. Therefore, the contractor's assessment does not provide the objective evidence that would allow NRC to conclude that the environment for raising concerns is improving or is no longer chilled.

The NRC staff is concerned that effective corrective actions have not been taken to address the chilled work environment, identified almost 2 years ago. The NRC recognizes that the University has, as of December 12, 2019, appointed a new temporary Institute Director; however, the reason for the new appointment was not attributed to this issue, nor has the new Director received SCWE training or benefited from any lessons learned due to AFRRRI's inadequate assessment of the chilled environment and its root cause. Therefore, it is vital to assess the work environment at the site and address unresolved conflicts.

The NRC requests that AFRRRI fully evaluate the environment for raising concerns and determine actions necessary to ensure the employees are free and feel free to raise safety concerns and regulatory issues without fear of retaliation. We request that your evaluation be conducted by an organization independent of the groups being surveyed as well as experienced in performing nuclear SCWE assessments. As guidance, you may consider referring to the NRC Regulatory Issue Summary 2005-18, "Guidance for Establishing and Maintaining a Safety Conscious Work Environment" (ADAMS Accession No. ML052220239), which was written to facilitate licensees to develop and maintain a work environment conducive to raising concerns.

In your response, please provide the results of the evaluation and advise the NRC of those actions taken or planned to address this problem. Corrective actions provided to the NRC should include plans for (1) notifying the workforce of the NRC identification of a chilled work environment, as described in this letter; (2) further evaluating the health of the SCWE; and (3) the metrics you intend to monitor to determine the effectiveness of your actions and ensure a SCWE at the facility. Please respond in writing to the NRC within 60 days of the date of this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response will be made available to the public. Therefore, your response should not, to the extent possible, include any personal privacy, propriety, or safeguards information so that it can be made available to the public. If personal privacy information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the personal privacy-related information and a redacted copy of your response that deletes the personal privacy-related information. Identify the particular portions of the response in question which, if disclosed, would create an unwarranted invasion of personal privacy, identify the individual whose privacy would be invaded in each instance, describe the nature of the privacy invasion, and indicate why, considering the public interest in the matter, the invasion of privacy is unwarranted. If you request withholding on any other grounds, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information).

After reviewing your response, the NRC will determine whether any further action is necessary. Please contact Mrs. Dori Willis at 301-287-9423 or by email at Dori.Willis@nrc.gov if you have any questions. We appreciate your cooperation.

Sincerely,

(R/A by Brian Smith)

Brian Smith, Deputy Director
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-170
License No. R-84, 19-08330-02, and 19-08330-03

cc:

Director, Maryland Office of Planning
301 West Preston Street
Baltimore, MD 21201

Montgomery County Executive
101 Monroe Street, 2nd Floor
Rockville, MD 20850

Dr. R. Thomas

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Environmental Program Manager III
Radiological Health Program
Air & Radiation Management Adm.
Maryland Dept of the Environment
1800 Washington Blvd., Suite 750
Baltimore, MD 21230-1724

Director
Air & Radiation Management Adm.
Maryland Dept of the Environment
1800 Washington Blvd., Suite 710
Baltimore, MD 21230

Test, Research and Training
Reactor Newsletter
Attention: Amber Johnson
Department of Materials Science and Engineering
University of Maryland
4418 Stadium Drive
College Park, MD 20742-2115

Manager
Nuclear Programs
Maryland Department of Natural Resources
Tawes B-3
Annapolis, MD 21401

Mr. Walter Dale Tomlinson
Reactor Facility Director
Armed Forces Radiobiology
Research Institute
4555 South Palmer Road, Building 42
Bethesda, MD 20889-5648

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