

From: Zackary Stone (He/Him/His)
Sent: Tuesday, July 11, 2023 12:41 PM
To: Rusty Towell; Lester Towell; Jordan Robison; Tim Head; Alexander Adams; Benjamin Beasley
Cc: Richard Rivera; Edward Helvenston; Michael Wentzel; Greg Oberson (He/Him); Boyce Travis; Zachary Gran; Edward Stutzcage
Subject: ACU MSRR Chapter 11 Audit Question

Dear Dr. Towell,

Below is a question the NRC staff has prepared for Abilene Christian University (ACU) related to the ACU Preliminary Safety Analysis Report, Chapter 11, “Radiation Protection Program and Waste Management.” The NRC staff would like to discuss this question within the scope of the ACU construction permit (CP) application review Audit Plan for Chapters 1, 5, 8, 9 (Except 9.2 and 9.6), 10, 11, 12, 14-18, and General Topics (see audit plan dated 3/2/2023, ML23065A052), and I am providing in advance to facilitate discussion during an audit meeting. We will add this email, with the question, to public ADAMS. If you have any questions, please let Richard, Edward, or I know.

Thank you,

Zackary Stone, Project Manger
Advanced Reactor Licensing Branch 2
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Item #	Question
11.3-1	<p>In PSAR Section 11.3, ACU indicates that the facility is not subject to the requirements of 10 CFR Part 20, Subpart H. The NRC staff notes that 10 CFR Part 20, Subpart H not only includes requirements for respiratory protection but also requirements for process and engineering controls and other controls to control radiation exposure to airborne radioactive material and is applicable to all licensees. Fission products at the facility include noble gases and other radioactive material that could become airborne. In addition, Table 10.2-3 shows that a gas sample release in the Research Bay would exceed 1 DAC (which is the criteria for an airborne radioactivity area, as defined in 10 CFR 20.1003). While respirators may not need to be used, provided that adequate process, engineering controls, or other measures are implemented to control airborne radioactivity, as needed, the requirements of 10 CFR Part 20, Subpart H are applicable.</p> <p>The NRC staff requests that ACU clarify the statement in PSAR Section 11.3.</p>

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