

ANS Issues Clarification on ANSI/ANS-8.3-1986, "Criticality Accident Alarm System."

(*Nuclear News*, September 1998)

Inquiry:

"1) Does the standard require that if a dose at an occupied location exterior to the facility requiring evacuation could exceed 12 rad, that audio and/or visual signals be installed on the exterior of the facility to alert personnel of the need for evacuation?

2) Does the standard recommend that if a dose at an occupied location exterior to the facility requiring evacuation could exceed 12 rad, that audio and/or visual signal be installed on the exterior of the facility to alert personnel of the need for evacuation?

3) If the standard requires audio/visual signal installation in areas outside facilities, where the dose could exceed 12 rad, do these signals need to comply with Section 4.4.3 and/or 4.4.4?

4) Does the standard require audio/visual signal installation in areas outside facilities where the dose could exceed 12 rad?

5) Does the standard recommend audio/visual signal installation in areas outside facilities where the dose could exceed 12 rad?

6) Is it the intent of the standard that audio/visual signals be installed to ensure personnel are evacuated from any area where the dose could exceed 12 rad?"

Response:

The following are responses to the above questions:

Section 4.4.1 states: "The alarm signal shall be for immediate evacuation purposes only and of sufficient volume and coverage to be heard in all areas that are to be evacuated."

The standard does not attempt to define the area that is to be evacuated, which is considered a management responsibility and outside the scope of this standard.

Section 4.2.2 states: "A criticality alarm system is not required by the standard where the maximum foreseeable absorbed dose in free air will not exceed 12 rad."

The only use of the value 12 rad is to define areas not required by the standard to have an alarm system. This is not intended to define areas to be evacuated.

Thus, the response to all questions submitted in the request for clarification is that the questions are not germane to the standard. After management has defined the area to be evacuated, the standard will then provide guidance.