

**From:** [Steve Mack](#)  
**To:** [RulemakingComments Resource](#)  
**Subject:** [External\_Sender] Arkansas comments on STC-21-032 2 person rule  
**Date:** Thursday, July 01, 2021 3:59:37 PM  
**Attachments:** [Arkansas Comments on STC-21-032.pdf](#)

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Attached are comments on the reinterpretation of the 2 person rule from the State of Arkansas.

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# Arkansas Department of Health

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Governor Asa Hutchinson

José R. Romero, MD, Secretary of Health

Brian C. Anderson, Chief  
State Agreement and Liaison Programs Branch  
Division of Materials Safety, Security, State and Tribal Programs  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: REQUEST FOR COMMENTS ON THE "NOTICE OF INTERPRETATION ON INDUSTRIAL RADIOGRAPHY OPERATIONS AT TEMPORARY JOBSITES AND AN AGREEMENT STATE COMPATIBILITY CATEGORY CHANGE (STC-21-032)

Dear Mr. Anderson,

The State of Arkansas appreciates the opportunity to make the following comments regarding the interpretation of the "two-person rule" and the compatibility. The opportunity to comment serves to strengthen the National Materials Program.

## Compatibility Category Change

The State of Arkansas supports the compatibility change which will allow Radiation Control Programs to continue to establish their own interpretations of the "two-person rule" and to prevent potentially being found incompatible during IMPEP evaluations.

As noted in comments below, the State of Arkansas would support the lower compatibility category since the State of Arkansas does not support the interpretation of the NRC.

## Interpretation of the "two-person rule"

The State of Arkansas does not support the new interpretation of the "two-person rule". The state of Arkansas would like to express the following concerns regarding the reinterpretation of the "two-person rule" requirement in 10 CFR 34.41(a), "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations":

1. The second qualified individual is essential during radiographic operations, in order to, fully control the area and to prevent unauthorized entry into the restricted area. While one qualified individual is operating the camera, he/or she may not be able to maintain constant surveillance of the boundaries.

Procedural operations that may prevent “constant surveillance” by one individual include: timing of exposures, conducting post-exposure survey, and working within a plant setting with multiple walkways.

Industrial Radiography is performed in various types of environments and facilities, so it would be too difficult to specify which work settings would require the “two-person rule”, in order to, maintain constant surveillance of the restricted area and what type of job location would not require “two-persons.”

**10 CFR 34.41 *Conducting Industrial Radiographic Operations*, states in part:**

“The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry.”

The State of Arkansas will continue to interpret the term “immediate assistance” as being by an individual who is maintaining direct surveillance of the restricted area. If the individual is otherwise occupied at the job-site, they cannot offer “immediate assistance.”

**10 CFR 20.1301(a)(2) *Dose Limits for Individual Members of the Public* states in part:**

“The dose in any unrestricted area from external sources . . . does not exceed 0.002 rem (0.02 millisievert) in any one hour.”

**NUREG 1556, Vol. 2, *Consolidated Guidance About Materials Licenses Program-Specific Guidance About Industrial Radiography Licenses*, contains Table 8-2. Surveys Required for Radiographic Operations.**

The first survey indicated in this table is: During the first exposure for each set up of a radiographic device, a survey should be made of the boundary of the restricted area at temporary jobsite to ensure that the radiation levels do not exceed 0.02 mSv [ 2 mrem] in any one hour.

Many, if not, most exposure times for temporary job-site radiography is not of a sufficient time to allow a single individual to perform a confirmatory survey of the boundary during the first exposure or even during successive exposures.

While guidance documents are not regulations, they do offer guidance to licensee to assist them in staying within compliance of the regulations.


2. With the new interpretation, the requirement is met if the second qualified individual “is in sufficiently close proximity to the operation.” The interpretation of “sufficiently close proximity” is very fluid and will result in many questions of “what is considered in close proximity?” Many will ask: “How many feet can they be from the area.”

This interpretation will also place the inspector reviewing this during an inspection in a disadvantageous position with the radiographic personnel when different ideas of what "sufficiently" means.

The State of Arkansas will continue to interpret the "two-person rule" to mean at least two individuals maintaining direct observation of the radiographic operations.

Again, the State of Arkansas appreciates the opportunity to comment.

Sincerely,



Steve E. Mack, Health Physicist  
Radioactive Materials Program  
Radiation Control Section