



Arkansas Department of Health

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Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

November 15, 2019

Kevin Williams, Deputy Director
Division of Materials Safety, Security, State and Tribal Programs
Office of Nuclear Material Safety And Safeguards
U.S. Nuclear Regulatory Commission
T8-E18
Washington, D.C. 20555-0001

Dear Mr. Williams:

The Arkansas Department of Health, in an effort to promote innovation, improvement, and regulatory change, is seeking the compatibility review of the enclosed standard licensing conditions for portable and fixed gauge licensees. We believe that adoption of these legally binding requirements satisfies the compatibility, health and safety categories established in the Office of Nuclear Material Safety and Safeguards (NMSS) Procedure SA-200.

The following are issues that we would like the NRC to review:

1. The following are the current license conditions being used by the state of Arkansas regarding the sealed sources and source holders for Troxler Model 3400 series:

7. Radioactive material (Element and mass number)	8. Chemical and/or physical form	9. Maximum radioactivity and/or quantity of material which licensee may possess at any one time
A. Americium-241: Beryllium	A. Sealed Source (Troxler Drawing Number A-102451; or AEA Technology/QSA, Inc. Model Number AMNV.997 or Isotope Products Lab Model Number 3021, or 3027, or AML.NO2	A. 748 MilliCuries total. No Single source to exceed 44 millicuries.
B. Cesium-137	B. Sealed Source (Troxler Drawing Number A-102112; or AEA Technology/QSA, Inc. Model Number CDCW5556 or Isotope Products Lab Model Number HEG-137)	B. 153 milliCuries total. No Single source to exceed 9 milliCuries.

10. Authorized Use:

A. & B. To be used in Troxler Electronics Laboratories, Inc. Model 3400 Series source holders for moisture and density measurements.

It is the opinion of the Arkansas Program, that these conditions appear to be prescriptive because possession and use is limited by the Sealed Source and Device Registry source drawing number. This becomes confusing to licensees and creates unnecessary documentation in the license. Once the manufacturer has assembled the device, neither the licensee or regulatory program, has any means of determining which sealed source was placed in the device.

NRC regulation 10 CFR 30.32(g)(1)(i) request applicants to identify the source or the device by manufacturer and model number. Most applicants for the use of portable or fixed gauges only use the model number of the device to identify what is to be licensed.

In lieu of the tedious and prescriptive license condition above, the Arkansas Program proposes the following standard licensing condition.

Proposed Standard License Conditions:

7. Radioactive material (Element and mass number)	8. Chemical and/or physical form	9. Maximum radioactivity and/or quantity of material which licensee may possess at any one time
A. Americium-241: Beryllium	A. Sealed Source (As identified in Sealed Source Device Registry No. NC-0646-D-130-S)	A. 44 milliCuries total. No single source to exceed 44 milliCuries.
B. Cesium-137	B. Sealed Source (As identified in Sealed Source Device Registry No. NC-0646-D-130-S)	B. 9 milliCuries total. No Single source to exceed 9 milliCuries.

10. Authorized Use:

A. & B. To be used in Troxler Electronic Laboratories, Inc. Model 3400 Series Surface Moisture-Density Gauges identified in Sealed Source Device Registry No. NC-0646-D-130-S.

It is our opinion that these License Conditions appear to be cleaner and simpler for the regulator and licensee. It would also limit the possibility of multiple license amendments when possessing multiple gauge models of the 3400 Series. We believe that Compatibility is not compromised when using these license conditions.

If you have any questions, please feel free to contact me or Chris Talley of my staff at 501-661-2173 or jared.thompon@arkansas.gov.

Sincerely,



Jared W. Thompson, Program Manager
Radioactive Materials Program

cc: Michelle Beardsley, USNRC
Randy Erickson, USNRC Region IV
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