



# CERTIFICATE OF ACCREDITATION

**The ANSI National Accreditation Board**

Hereby attests that

**Radiation Safety & Control Services, Inc.**  
**93 Ledge Road**  
**Seabrook, NH 03874**

Fulfills the requirements of

**ISO/IEC 17025:2017**

In the field of

**CALIBRATION**

This certificate is valid only when accompanied by a current scope of accreditation document.  
The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

Jason Stine, Vice President

Expiry Date: 19 September 2026

Certificate Number: AC-2079



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory  
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### Radiation Safety & Control Services, Inc.

93 Ledge Road  
Seabrook, NH 03874

Christofer Krueger 603-474-6722  
Email: crkrueger@radsafety.com Website: www.radsafety.com

### CALIBRATION

ISO/IEC 17025 Accreditation Granted: **19 September 2024**

Certificate Number: **AC-2079** Certificate Expiry Date: **19 September 2026**

#### Ionizing Radiation

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Ionizing Radiation Exposure Rate, Dose Rate	(100 $\mu$ to 1.6) R/hr (100 $\mu$ to 1.6) rem/hr 1 $\mu$ Sv/hr to 16 mSv/hr	6 % of reading	Comparison to Cs-137 Beam Source ANSI N323AB-2013 ANSI N322-1997
Integrated Exposure and Integrated Dose	Up to 16 R, 16 rem or 160 mSv	6 % of reading	
Ionizing Radiation Exposure Rate, Dose Rate	(1 m to 20 k) R/hr (1 m to 20 k) rem/hr (10 $\mu$ to 200) Sv/hr	2.7 % of reading	Comparison to Cs-137 Box Source ANSI N323AB-2013 ANSI N322-1997
Integrated Exposure and Integrated Dose	Up to 200 kR, 200 krem or 2 kSv	2.7 % of reading	
Neutron Ionizing Radiation Dose Rate	(6 to 120) mrem/hr	9.2 % of reading	Comparison to Plutonium-Beryllium Source, HAWK TEPC ANSI N323AB-2013, ICRP 26
Neutron Ionizing Radiation Dose Rate	(7 to 200) mrem/hr	9.4 % of reading	Comparison to Plutonium-Beryllium Source, HAWK TEPC ANSI N323AB-2013, ICRP 60
Dose Rate, Exposure Rate-Electrical Simulation	10 $\mu$ R/hr to 10 R/hr	3.4 % of reading	Comparison to Ludlum Model 500 Pulsing Station

## Ionizing Radiation

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Count Rate Instruments- Electrical Simulation	(1 to $9.99 \times 10^6$ ) cpm	3.4 % of reading	Comparison to Ludlum Model 500 Pulsing Station
Alpha Detection	(0 to 1) Efficiency	10 % of reading	Comparison to Alpha Standard Source-(2.2 to $5.9 \times 10^4$ ) dpm
Beta Detection	(0 to 1) Efficiency	10 % of reading	Comparison to Beta Standard Source-(2.8 to $4.4 \times 10^5$ ) dpm
Gamma Detection	(0 to 1) Efficiency	10 % of reading	Comparison to Gamma Standard Source-( $4.4 \times 10^3$ to $1.7 \times 10^6$ ) dpm
Radiation protection — Sealed radioactive sources — Leakage Test Alpha Sources Beta Sources	( $1 \times 10^6$ to 1) $\mu\text{Ci}$	25 % of reading 44 % of reading	Comparison to Tennelec LB5100 Low Background Alpha/Beta Counting System

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ( $k=2$ ), corresponding to a confidence level of approximately 95%.

### Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.



Jason Stine, Vice President