



NCV & WVP Workforce Study

OMB Control Number (1910-5160) | Expiration Date (2/28/2026)

Dear Colleague,

The Oak Ridge Institute for Science and Education (ORISE) is currently conducting a workforce study on behalf of National Nuclear Security Administration (NNSA) within the U.S. Department of Energy (DOE), in coordination with DOE national laboratories and facilities.

This study will collect data in support of the NNSA's Office of Nuclear Verification Arms Control Advancement Initiatives, including the Next Generation Arms Control Experts (Next Gen ACE) campaign. The data will help establish a baseline understanding of the skills and capabilities needed to meet Nuclear Compliance Verification and Warhead Verification Program missions. The data you supply will be used to inform future Next Gen ACE trainings and professional development opportunities for monitoring and verification experts.

As part of this study, ORISE has developed this workforce survey. You have been invited to participate in this study because you have been identified as a: 1) Nuclear Compliance Verification (NCV) specialist or supporting professional and/or 2) Warhead Verification Program (WVP) specialist or supporting professional. Your participation is completely voluntary. The results of this study will be provided to NA-243 staff as an electronic report. The data collected will be stored for comparison with future workforce studies.

Your identity will not be made available to ORISE or DOE. Your laboratory/facility has assigned you a unique ID number so that ORISE representatives who are collating the survey responses will not know who the individual respondents are. ORISE will prepare a report with data in aggregate form for DOE representatives, with no link to the individual ID number for each respondent.

To further protect your identity, the survey does not include a contact email to send questions directly to ORISE or DOE NNSA. If you have questions about the survey, please send them to the individual from whom you received the survey invitation. This person will contact ORISE, redacting your identity, if they are not able to answer your question directly.

This survey has been reviewed by the Central DOE Institutional Review Board (CDOEIRB) and determined to be an information request only and not human subjects research. If you have any questions or concerns about the study, please contact the CDOEIRB at: CDOEIRB@ornl.gov or 865-574-4359.

Paperwork Reduction Act Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15-45 minutes per respondent, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Enterprise Policy Development & Implementation Office, IM-22, Information Collection Management Program (1910-5160), U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC 20585; and to the Office of Management and Budget (OMB), OIRA, Paperwork Reduction Project (1910-5160), Washington, DC 20503.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number.

Submission of this data is voluntary.

The invitation email that you received included this link to access the survey. To begin your response, you will need to enter the unique ID number provided to you in the invitation email. Once you begin your response, you will be able to save your answers and resume at a later date only if you are using the same computer and cookies are enabled on that computer. Otherwise, you will not be able to retrieve your information to resume the survey.

The survey will be available until [XXXXXX]. Completing the survey should take 15-45 minutes, depending on whether you are working as a specialist or supporting professional in NCV and/or WVP. Thank you for your participation and your time.

(Your ID number was included in the invitation email you received with the link to this survey.)

ID Number:

(Your ID number was included in the invitation email you received with the link to this survey.)



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What is your official job title?

What is your occupational specialty?

What is your subfield occupational specialty?

(e.g., radiochemistry, nuclear physics, actinide processing, safeguards, sensors and embedded systems)

☐ Not applicable

What is your primary work activity?

(e.g., research, development, design, assessments, deployment planning, instrumentation, chain of custody development, data analysis)

Provide the following information for the degrees and / or certificates you have earned, starting with the most recent.

(If you have earned more than four degrees, list those that are most relevant to your current job.)

☐ Not applicable

	Degree type	Degree year	Degree field	Minor/Areas of Concentration (Including foreign languages and cultural or area studies.)
Most recent				
2nd Most recent				
3rd Most recent				
4th Most recent				

Specify your "other degree / certificate field(s)":

0 / 4000

Age:

- ☐ 24 or younger
☐ 25-34
☐ 35-44
☐ 45-54
☐ 55-59
☐ 60-64
☐ 65 and older



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The following questions ask about your experience and training specifically related to nuclear compliance verification and warhead verification.

Are you a nuclear compliance verification and/or warhead verification specialist or supporting staff?

(If you work as both a specialist and support staff in one of the two programs, select specialist for that program.)

	Specialist	Supporting staff	Not Applicable
Nuclear Compliance Verification	☐	☐	☐
Warhead Verification Program	☐	☐	☐

Describe your work experience and field of specialty as a Nuclear Compliance Verification specialist.

(Include experience in the field or with international organizations, such as New START BCC, OPCW, CTBTO, IAEA, etc.)

List completed training that is relevant to your work as a Nuclear Compliance Verification specialist.

(Include formal training at DOE National Labs, international organizations, or other forums, such as New START BCC, OPCW, CTBTO, IAEA, etc. If no training to list, check "Not applicable.")

☐ Not applicable

Course name	Year	Provider	Description

Identify the core capabilities needed to perform your work as a Nuclear Compliance Verification specialist.

Definitions for "How Acquired"

On-the-job in your facility - your work activities at your facility

On-the-job deployed in field - activities that include deployment in real world scenarios at domestic and foreign sites and facilities

Formal Education/Training - acquired from academic institutions and other organizations offering professional training courses (includes exercises at domestic and foreign sites and facilities)

	Importance			Level of Competency				How Acquired (check all that apply)			
	Not important	Moderately important	Very important	No experience with this competency	Some awareness of this competency, requires significant supervision	Moderate experience with this competency, requires some supervision	Demonstrated ability to perform the complex activities of this competency, requires no supervision	No experience	On-the-job in your facility	On-the-job deployed in field	Formal Education/Training (including exercises)
Containment and surveillance (chain of custody)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Development and on-site use of non-destructive analysis (NDA), monitoring, verifiable disablement, and	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Importance			Level of Competency				How Acquired (check all that apply)			
	Not important	Moderately important	Very important	No experience with this competency	Some awareness of this competency, requires significant supervision	Moderate experience with this competency, requires some supervision	Demonstrated ability to perform the complex activities of this competency, requires no supervision	No experience	On-the-job in your facility	On-the-job deployed in field	Formal Education/Training (including exercises)
analysis tools											
Inventory / mass balance / process assessment / observables and signatures	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Lithium enrichment, processing, and fabrication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Nuclear weapon and/or nuclear device testing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Plutonium production and research reactors	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Plutonium reprocessing, metallurgy, and fabrication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Radiological, explosives, underground, and industrial safety	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sampling and destructive analysis	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tritium and heavy water production and processing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Uranium mining, milling, conversion, enrichment, metallurgy, and fabrication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

List any additional core capabilities you need to perform your work as a **Nuclear Compliance Verification specialist** and your level of competency with these.

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Describe your work experience and field of specialty as a **Nuclear Compliance Verification support staff member**.

(Include experience in the field or with international organizations, such as New START BCC, OPCW, CTBTO, IAEA, etc.)

List completed training that is relevant to your work as a **Nuclear Compliance Verification support staff member**.

(Include formal training at DOE National Labs, international organizations, or other forums, such as New START BCC, OPCW, CTBTO, IAEA, etc. If no training to list, check "Not applicable.")

☐ Not applicable

Course name	Year	Provider	Description

Course name	Year	Provider	Description

Describe your work experience and field of specialty as a Warhead Verification Program specialist.

(Include experience in the field or with international organizations, such as New START BCC, OPCW, CTBTO, IAEA, etc.)

List completed formal training that is relevant to your work as a Warhead Verification Program specialist.

(Include formal training at DOE National Labs, international organizations, or other forums, such as New START BCC, OPCW, CTBTO, IAEA, etc. If no training to list, check "Not applicable.")

☐ Not applicable

Course name	Year	Provider	Description

Identify the core capabilities needed to perform your work as a Warhead Verification Program specialist.

Definitions for "How Acquired"

On-the-job in your facility - your work activities at your facility

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Analytical chemistry and forensic science	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Authentication of equipment and data	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Chain of custody	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Data analytics and predictive modeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Destructive analysis (e.g., mass spectrometry, spectroscopic methods)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Development of monitoring and analysis tools and systems	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Development of novel / advanced analysis and detection capabilities	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Non-destructive analysis (e.g.,	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Importance			Competency				How Acquired (check all that apply)			
	Not important	Moderately important	Very important	No experience with this competency	Some awareness of this competency, requires significant supervision	Moderate experience with this competency, requires some supervision	Demonstrated ability to perform the complex activities of this competency, requires no supervision	No experience	On-the-job in your facility	On-the-job deployed in field	Formal Education/Training (including exercises)
gamma / neutron detection)											
Nuclear Test Site monitoring, including sample collection and analysis	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Radionuclide detection and analysis	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Seismic monitoring and analysis	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Software and video authentication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Technical support/assessment for treaties (New START BCC / CTBTO / OPCW)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

List any additional core capabilities you need to perform your work as a **Warhead Verification Program specialist** and your level of competency with these.

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Describe your work experience and field of specialty as a Warhead Verification Program support staff member.

(Include experience in the field or with international organizations, such as New START BCC, OPCW, CTBTO, IAEA, etc.)

List completed training that is relevant to your work as a Warhead Verification Program support staff member.

(Include formal training at DOE National Labs, international organizations, or other forums, such as New START BCC, OPCW, CTBTO, IAEA, etc. If no training to list, check "Not applicable.")

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