













Standards for Personal Protective Gear for First Responders

Standards for Radiation and Nuclear Detection Equipment

Manufacturer	Part number	Brief Description	Meets NIOSH Chemical, Biological, Radiological and Nuclear (CBRN) Standard for Open-Circuit Self-Contained Breathing Apparatus (December 2001).	Meets NIOSH Standard for Chemical, Biological, Radiological, and Nuclear (CBRN) Full Face piece Air Purifying Respirator (APR).	Meets NIOSH Standard for Chemical, Biological, Radiological, and Nuclear (CBRN) Air-Purifying Escape Respirator and CBRN Self-Contained Escape Respirator.	Meets NFPA 1951, Standard on Protective Ensemble for USAR Operations.	Meets NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services.	Meets NFPA 1991, Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies.	Meets NFPA 1994, Standard on Protective Ensembles for Chemical/Biological Terrorism Incidents.	Meets NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations.	Meets ANSI N42.32: Performance Criteria for Alarming Personal Radiation Detectors.	Meets ANSI N42.33: Radiation Detection Instrumentation	Meets ANSI N42.34: Performance Criteria for Hand-Held Instruments for the Detection and Identification of Radionuclides.	Meets ANSI N42.35: Evaluation and Performance of Radiation Detection Portal Monitors	Other Standard/Certification	Other Standard/Certification
<b>4. Interoperable Communications Equipment -</b>																
Equipment and systems providing connectivity and electrical interoperability between local and interagency organizations to coordinate CBRNE response operations. When utilizing ODP program funds in the category of Interoperable Communications Equipment to build, upgrade, enhance, or replace communications systems, grantees and sub-grantees should develop a comprehensive interoperable communications plan																
4.1 Land Mobile, Two-Way In-Suit Communications (secure, hands free, fully duplex, optional), including air-to-ground capability (as required)																
	1															
	2															
	3															
4.2 Personnel Alert Safety System (PASS) - (location and physiological monitoring systems optional)																
	1															
	2															
	3															
4.3 Personnel Accountability Systems																
	1															
	2															
	3															
4.4 Portable Meteorological Station (monitors temperature, wind speed, wind direction and barometric pressure at a minimum)																
<b>5. Detection Equipment -</b> Equipment to sample, detect, identify, quantify, and monitor for chemical, biological, radiological/nuclear, and explosive agents throughout designated areas or at specific points, including equipment necessary to enhance laboratory detection capabilities																
<b>Chemical</b>																
5.1 M-8 Detection Paper for chemical agent identification																
	1															
	2															
	3															
5.2 M-9 Detection Paper (roll) for chemical agent (military grade) detection																
	1															
	2															
	3															
5.3 M-256 Detection Kit for Chemical Agent (weapons grade—blister: CX/HD/L; blood: AC/CK; and nerve: GB/VX) detection																
	1															
	2															
	3															
5.4 M-256 Training Kit																
	1															
	2															
	3															
5.5 M-18 Series Chemical Agent Detector Kit for surface/vapor chemical agent analysis																
	1															
	2															
	3															
5.6 Hazard Categorizing (HAZCAT) Kits																





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1 BNC Corp.	935-1B; 935-2B; 935-3B	The SAM 935 utilizes advanced gamma-spectroscopy technology and a proprietary Quadratic Compression Algorithm (QCC) within the system's firmware to accurately and reliably identify isotopes within 1 second. This technique insures minimal false alarms and confidence levels above 97% even when users are detecting and identifying weak sources below background levels of intensity.														
2 BNC Corp.	951	The nukeALERT 951 is the essential radiation detector to disclose the presence and intensity level of gamma radiation for nontechnical personnel. It's small, rugged, watertight and more sensitive than commonly used first responder radiation meters. Enhanced sensitivity is especially important when one is dealing with concealed radioactive material, where the radiation levels may vary based on distance and shielding.														
3																
<b>6. Decontamination Equipment</b> - Equipment and material used to clean, remediate, remove or mitigate chemical and biological contamination:																
<b>Chemical</b>																
6.1 Decontamination system for individual and mass application with environmental controls, water heating system, showers, lighting, and transportation (trailer)																
1																
2																
3																
6.2 Decon Litters/roller systems																
1																
2																
3																
6.3 Extraction Litters, rollable																
1																
2																
3																
6.4 Runoff Containment Bladder(s), decontamination shower waste collection with intrinsically safe evacuation pumps, hoses, connectors, scrub brushes, nozzles																
1																
2																
3																
6.5 Spill Containment Devices																



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	2 BNC Corp.	907	The palmRAD 907 detects and measures alpha, beta, gamma and x-ray radiation using a 2-inch pancake GM detector with high sensitivity to beta and alpha sources. The easy-to-read digital display shows readings in your choice of mR/hr, CPM, CPS, or mSv/hr. The instrument automatically compensates for GM tube dead time which is the time after a single event that the tube is incapable of detecting a second event.														
	3 BNC Corp.	935-1B; 935-2B; 935-3B	The SAM 935 utilizes advanced gamma-spectroscopy technology and a proprietary Quadratic Compression Algorithm (QCC) within the system's firmware to accurately and reliably identify isotopes within 1 second. This technique insures minimal false alarms and confidence levels above 97% even when users are detecting and identifying weak sources below background levels of intensity.														
7.6 Nuclear	4 BNC Corp.	951	The nukeALERT 951 is the essential radiation detector to disclose the presence and intensity level of gamma radiation for nontechnical personnel. It's small, rugged, watertight and more sensitive than commonly used first responder radiation meters. Enhanced sensitivity is especially important when one is dealing with concealed radioactive material, where the radiation levels may vary based on distance and shielding.														

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	1 BNC Corp.	904	The palmRAD 904 nuclear radiation meter provides multiple monitoring and surveying options in an easy-to-use handheld device. It measures alpha, beta, gamma and x-ray radiation which can be displayed in rates and total counts. The user can switch between mR/hr, cpm and total counts.														
	2 BNC Corp.	907	The palmRAD 907 detects and measures alpha, beta, gamma and x-ray radiation using a 2-inch pancake GM detector with high sensitivity to beta and alpha sources. The easy-to-read digital display shows readings in your choice of mR/hr, CPM, CPS, or mSv/hr. The instrument automatically compensates for GM tube dead time which is the time after a single event that the tube is incapable of detecting a second event.														
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