High Activity Radioactive Source Detection and Response

Exercise Description
Following a scenario briefing specific to the teams and objectives, this exercise involves personnel detecting radiation levels high enough to reach turn-back levels for attention and control. The goal is to manage personnel safety due to a potential high radiological source or sources, control the area, determine the general location of the source(s), identify the source(s), and establish a recovery plan if needed. A turn-back level is preset for the exercise to protect personnel and to eliminate the need for personnel dosimetry. The exercise is conducted within a large warehouse/venue with multiple entry points and rooms with a high-activity source present and exposed for detection and location.

Exercise Tasks and Topics
The following tasks and topics can be addressed or tailored to the customer’s needs with training objectives:

> Securing a facility of interest and developing a team plan for a survey and facility search
> The impacts of higher-than-expected background radiation readings in and near the facility
> Turn-back controls in face of high radiation rates at the provided exercise rate
> The use of proper terminology for rates and units
> The use of radiological instrumentation knowledge skills to perform isotopic identification of the source(s)
> Determining any potential threat assessment of the source(s)
> Incident Command and chain-of-command controls according to team requirements
> Locating and identifying additional sources in the facility, if applicable

Other tasks and topics may be addressed as requested based on the team’s protocols and procedures, and may include Reachback communications.
Completion
An evaluation report/assessment will be provided for each team's performance against the objectives.

Target Audience/Discipline
Secondary screeners such as law enforcement, EMS, fire services, HazMat or other personnel that may provide support services during prevention and deterrence of radiological/nuclear detection and interdiction operations

Location
A selected facility at the Savannah River Site (SRS) and the Savannah River National Laboratory (SRNL) in Aiken, SC; Federal Law Enforcement Training Center (FLETC) in Charleston, SC; or a designated venue at the customer’s location

Compliance

Enrollment Information
Duration: 1-2 days, dependent on team numbers and objectives
Format: Presentations, hands-on demonstrations, and evaluated exercises
Prerequisites: None
Contact: CBRNE_Training@srnl.doe.gov

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