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The CSTs are activated through a state's emergency response network.

25. SCIENTIFIC SUPPORT OF TERRORIST ACTIONS BY COMMERCIAL GREY AREA LITERATURE (14)

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The publication of the Al-Qaeda handbook and time and time again notes of the possibility for getting special scientific knowledge from the internet have decreased the attention for an other important source of scientific support for terrorist education and/or actions. This is the commercial available and distributed grey area literature provided by a huge amount of (book) sellers and publishing houses. Most of this literature (hardcopies and CDs) with dangerous subject matter is published in the US and may be ordered fast and with low costs using the internet. This kind of support for real and potential terrorists stands strongly in contradiction to the official policy and the "unconditional" war against terrorism.

With the presented poster the above described problem should be a little bit put in the focus of the CBMTS community and so to the authorities, too.

By means of selected examples from different branches, such as Narcotics, Explosives, unusual Killing Methods, special Poisons / Toxins and, last not least, CW agents inclusive application methods and devices the highly charged situation is tried to shown.

26. TOXIC EFFECTS OF PERACETIC ACID USED AS A CHEMICAL WEAPON DURING WORKERS RIOTS (9)

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Peracetic acid (PAA) is a mixture of acetic acid and hydrogen peroxide, often used as antimicrobial agent on food processing equipment. It may explosively decompose on shock, friction or concussion. PAA is a strong oxidant, corrosive to the eyes, skin, respiratory and digestive tract. Depending on concentration, contact may cause severe burns of the skin or the eyes, and inhalation may cause lung edema. We report toxic effects of PAA used as a chemical weapon in workers riots.

Group of workers attacked the security guards in beverage plant, throwing out beer bottles filled with PAA. Bottles exploded, producing irritant mists and fumes, and splashing some of the guards with acid. After about 20 minutes of exposure in the closed space, 30 persons were transported to the emergency room; 22 of them were transferred to the hospital. After the initial treatment, 10 patients were admitted for further treatment. The symptoms of exposure included burning sensation and pain of the eyes, throat and skin, cough and shortness of breath. Effects on the eyes included redness and corneal erosions. Pulmonary disturbances were prolonged expiration and wheezing by auscultation, and hypoxemia. Skin burns were ranged as grade I-III. Treatment included rinse of eyes and skin, systemic therapy with corticosteroids, beta adrenergic drugs and theophylline. Surgical treatment was necessary in grade III skin burns.

A variety of common industrial chemicals may be misused as a chemical weapon. We point out the hazards of serious toxic effects of PAA if used in riots or terrorists attacks.

Key words: Peracetic Acid, Toxic Effects, Misuse Hazards

27. REMOTE DETECTION AND TOXICITY OF ILLEGAL RADIOACTIVE MATERIALS AND UNITS IN UZBEKISTAN (1)

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Uzbekistan is a checkpoint for transportation between Russia and some Asian countries, such as Iran, Pakistan, Afghanistan and Tajikistan that might be attractive destinations for those smuggling nuclear materials or weapons. Currently there are over 200 border crossing points. Most of them have equipped with monitors able to reliably detect nuclear materials. Uzbekistan also has substantial radioactive ore mining, and these monitors also allow the Customs Service to maintain safe conditions for their inspectors as well as for population of Uzbekistan and its neighbors. But it is very important to detect radioactive materials inland, their location and travel. This task cannot be solved by using stationary detectors which are used at border crossing points.

New method, electronic scheme and software for remote detection, location and travel of radioactive sources were developed. The operation principle lies in detection of radiation by 6 detectors situated in a leaden cylindrical shield collimating gamma-radiation in 6 directions. Besides the detection system contains 6 amplifiers, 6 counters and JPS-system connected with computer. The detection system is transported by car. Field tests of the detection system have shown that the detection limit is $5 \times 10^6$ Bq and $4 \times 10^5$ Bq for Co$^{60}$ and Cs$^{137}$ respectively when the radioactive sources distance is 400 m.

Key words: remote detection, illegal nuclear materials

28. DEMONSTRATION EXERCISE OF A VALIDATED SAMPLE COLLECTION METHOD FOR POWDERS SUSPECTED OF BEING BIOLOGICAL AGENTS IN GEORGIA 2006 (5)

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