extended to 1 Sv/h with a Geiger Mueller counting tube. The sensitivity amounts to max. 20000 cps (referred to 1 μSv/h for Cs-137).
The NBR®- technique is well-proven and tested for:
- tracking hidden radiation sources, even such ones with low activity or which are shielded,
- detection of artificial radiation portions in the range of the natural background,
- reliably measuring the ambient equivalent dose rate in the range of the natural background,
- fast detection of artificial radioactivity out of helicopters and vehicles.

Key words: NBR Technology, mobile detection, tracking artificial gamma radiation, hidden sources

Will not be presented

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36. SEVESO II DIRECTIVE IN PREVENTION AND MITIGATION OF CONSEQUENCES OF CHEMICAL TERORISM, (SAFETY MANAGEMENT SYSTEMS IN HAZARDOUS INSTALLATIONS)

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Mayor accidents caused by hazardous substances are great threat to public. The consequences are often very severe with great number of injured people or even deaths and a great material damage. Statistic data shows that the main cause of accidents in hazardous installations is "human factor", including the possibility of terrorist attack, or classic military operations.
In order to ensure effective chemical safety, the actions should be taken by industry, public authorities, communities and other stakeholders to prevent industrial accidents. Safety should be an integral part of the business activities of an enterprise, and all hazardous installations should strive to reach the ultimate goal of zero incidents. Safety management systems (SMS) should include appropriate technology and processes, as well as establishing an effective organisational structure.
To mitigate consequences of accidents, emergency planning, land-use planning and risk communication is necessary. Adequate response in the event of accident should limit adverse consequences to health, environment and property. Follow-up actions are needed to learn from the accidents and other unexpected events, in order to reduce future incidents.
In this paper the author will discus the implementing of SEVESO II directive in obtaining two main goals: major accident prevention and mitigation of consequences for men and environment in case of possible terrorist actions or military activities. Some Croatian experiences in implementing of UNEP APELL Programme, and its connection with SEVESO II directive will be shown.

Key Words/ Phrases: major accidents, risk, safety, SEVESO II

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37. EPIGENETIC PERTURBATIONS IN THE PATHOGENESIS OF MUSTARD TOXICITY; HYPOTHESIS AND PRELIMINARY RESULTS

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Introduction
The pathogenesis of sulfur mustard (SM) toxicity is not fully understood, although it is related to reactive oxygen and nitrogen species, oxidative stress, DNA damage, poly (ADP-ribose) polymerase activation within the affected cell. We, therefore, made an attempt whether epigenetic aberrations may contribute to pathogenesis of SM poisoning in rats' lung.

Material and Methods
A total of 40 male SD rats were divided into 4 groups. Group 1 served as control and given 2 ml saline, three groups received single dose of mechlorethamine (MEC) (3.5 mg/kg subcutaneously) with the same time intervals. Group 2 received MEC only; group 3 received histone deacetylase (HDAC) inhibitor (Trichostatine A) (1 mg/kg) and group 4 received DNA methyl transferase (DNMT) inhibitor (5-Azacytidine) (0.02 mg/kg), intraperitoneally.