Press Office
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Fact Sheet

PLANNING GUIDANCE FOR PROTECTION AND RECOVERY FOLLOWING RADIOLOGICAL DISPERSAL DEVICE AND IMPROVISED NUCLEAR DEVICE INCIDENTS

The *Planning Guidance for Protection and Recovery Following Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents*, formerly titled *Application of Protective Action Guides to Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents*, was initially published for interim use and comment on Jan. 3, 2006. The Department of Homeland Security (DHS) recently released the final version of the guidelines.

The guidance provides state, local, tribal, territorial and federal emergency response personnel and decision-makers with information to protect their communities from the harmful effects of radiation following a Radiological Dispersion Device (RDD) or an Improvised Nuclear Device (IND) incident.

An RDD poses a threat to public health and safety through the malicious spread of radioactive material by some means of dispersion. The mode of dispersal typically conceived as an RDD is an explosive device coupled with radioactive material. The explosion adds an immediate threat to human life and property. Other means of dispersal, both passive and active, may be employed.

An IND is an illicit nuclear weapon bought, stolen, or otherwise originating from a nuclear State, or a weapon fabricated by a terrorist group from illegally obtained fissile nuclear weapons material that produces a nuclear explosion. The nuclear yield achieved by an IND produces extreme heat, powerful shockwaves, and prompt radiation that would be acutely lethal for a significant distance. It also produces radioactive fallout, which may spread and deposit over very large areas.

This guidance outlines the projected dose of radiation to an individual exposed to radioactive material resulting from RDD/IND incident, and recommends specific protective action to reduce or avoid that dose. This guidance helps responders assess their risks as they make safety decisions during emergency operations. It also provides a decision-making framework – referred to as “site-specific optimization” – for reaching a consensus on the desired level of cleanup that meets state and local needs including, above all, the protection of public health and welfare.

Site-specific optimization is a flexible and scalable approach in which a variety of dose and risk benchmarks identified from federal, state, local and other authoritative sources such as national and international advisory organizations may be considered for the specific incident site in order to establish appropriate cleanup options.

State, local, tribal, territorial and federal responders and decision makers will be able to use this guide to make informed decisions, with sufficient information, about what is best for their community. This cleanup guidance does not change or supersede any existing standards or cleanup programs.

This guidance makes use of recommendations previously published by the U.S. Environmental Protection Agency (EPA), in consultation with other federal agencies. EPA recommendations have been used by local and state officials since the 1970s to respond to incidents involving the release of radioactive material from a nuclear power plant or other similar nuclear or radiological incident (see the *Manual of Protective Actions Guides and Protective Actions for Nuclear Incidents*, revised 1992).

However, an RDD scenario exercise in Seattle, Washington, in May 2003 (TOPOFF-2) pointed to the need to specifically address the response to an RDD/IND attack. In particular, the need for a unique, flexible and incident-specific approach to immediate response and long-term recovery efforts was recognized. In response, the Homeland Security Secretary tasked a federal interagency working group to develop this guidance. The Homeland Security Act of 2002 provided the Secretary with the authority for coordinating this activity as well as the mission to prepare the nation to respond to chemical, biological, radiological and nuclear threats. Mandates to coordinate national preparedness are further spelled out in Homeland Security Presidential Directives (HSPDs) 5 and 8.

The departments and agencies that participated in the working group were the Departments of Homeland Security, Commerce, Defense, Energy, Labor, the Environmental Protection Agency, Health and Human Services, and the Nuclear Regulatory Commission.

This guidance considers the application of existing U.S. EPA radiation dose levels for the early and intermediate phases of a response to an RDD or IND incident. It also provides local, state and federal officials with a decision-making framework, or a “site-specific optimization” process, for long-term cleanup allowing for a remediation plan appropriate to the size and complexity of the specific incident. The protective action guides were based on the following criteria to:

- preventing acute health effects,
- reducing the risk of long-term health effects,
- balancing protection with other important factors that affect the public welfare, and
- ensuring actions taken result in more benefit than harm.

The working group recognizes that this guidance has limited applicability to an IND incident. These guidelines apply equally to RDD and IND incidents, but the guidance was not written to provide specific recommendations for a nuclear detonation. Rather, it considers the applicability

of existing guidance to RDD and IND incidents. The guidance does not consider very high doses or dose rate zones expected following an IND detonation and other complicating factors that can significantly affect life-saving outcomes, such as severely damaged infrastructure, loss of communications, water pressure, and electricity, and the prevalence of fire and other secondary hazards. A follow-on federal effort is underway to address the unique aspects of emergency response to an IND.

Scientifically sound recommendations for state, local, tribal, territorial and federal responders and decision makers are a critical component of post-IND life-saving activities, including implementing protective orders, safe shelter-in-place options, evacuation implementation, safe responder entry and operations, urban search and rescue and victim extraction. This guidance should be used until IND guidance is developed.

In developing the guidance, the federal government drew from institutional knowledge contained in existing programs such as U.S. EPA's Superfund program, NRC's standards for decontamination and decommissioning to terminate a plant license, and other national and international recommendations to create this guidance to be useful in planning the cleanup and recovery efforts following an RDD/IND incident. This guidance further allows the consideration and incorporation, as appropriate, of approaches from any or all of the existing programs. It is flexible to address the broad range of situations that can occur under various RDD/IND scenarios, and the unique circumstances that may occur in terrorist attacks.

Copies of both the interim and final guidance, as well as related material, are available in the public docket at www.regulations.gov .

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