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## CHAPTER 9

### NUCLEAR PROLIFERATION

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#### A. General Information

This chapter provides guidance for determining if historical records containing DOE NSI, pertaining to nuclear proliferation are to be declassified or have their classification retained beyond 25 years in accordance with the provisions of E.O. 12958. ***Documents containing RD and FRD are not addressed by this document and retain present classification.***

Detection of proliferation involves detection of activities related to: the acquisition of plutonium or highly enriched uranium; nuclear weapons research and development; or nuclear weapons manufacturing. Information regarding detection technologies selected for use, as well as the vulnerabilities of such technologies, could be exploited by a proliferator to more effectively conceal its nuclear weapons related activities and, therefore, requires protection.

Proliferation studies, analyses, or evaluations may contain information about or evaluations of the potential operability of a particular weapon design (including references to articles in the open literature) by persons who have or have had access to classified weapon design information. Such information could lend credibility to otherwise speculative information and could provide assistance to proliferators in their development of nuclear weapons.

#### B. Broad Guidance

Some details of proliferation detection technologies, systems, and components are based on weapon designs and are, therefore, protected as RD or FRD.

Basic research and development in proliferation detection technologies, systems, or components, is unclassified. Information about proliferation detection systems or components such as weaknesses,

shortcomings, detection limits or deficiencies, which would be of assistance to a proliferator attempting to establish a clandestine nuclear weapon capability shall have their classification retained. Similarly, methods that could successfully disguise or conceal proliferation activities shall have their classification retained.

DOE proliferation studies, analyses, or evaluations that reveal nuclear weapon design information or which confirm or deny the viability of weapon design concepts found in the open literature would provide significant assistance to a proliferator and shall have their classification retained. Similarly, information on techniques for producing special nuclear materials which might be easily concealed by a proliferator shall have its classification retained.

Historical records, 25 years or older, containing DOE/NNSA nuclear proliferation NSI not covered by the specific guidance below are unclassified. This does not include records containing information classified by statute such as RD and FRD (AEA of 1954, as amended). These records shall be handled, protected, classified, downgraded, and declassified in accordance with the provisions of the AEA and regulations issued under that Act. Reviewers who are not authorized by DOE/NNSA to classify or declassify such documents should not attempt final determinations. Refer to appendix A for information on identifying and handling documents containing potential RD/FRD. In all cases where there is a question concerning the sensitivity of the information, it should be referred to the DOE HQ classification office for a classification determination.

**Topics describing information likely to contain or closely related to RD or FRD are marked "(potential for RD/FRD)".**

**C. Topics**

**9.0 NUCLEAR PROLIFERATION**

9.1 Chemical separation technology specifically directed toward clandestine reprocessing efforts or bypassing sound engineering practice to enhance such efforts

*NOTE:* Declassify when officially released by the U.S. Government.

**Retain  
Classification  
(potential for  
RD/FRD)  
[25X2; EV]**

9.2 Nuclear weapons proliferation detection technologies

*NOTE:* Declassify when technology (as opposed to equipment) is no longer in use and official disclosure of the technology and its use have been made.

9.2.1 Names, descriptive titles, or designs of proliferation detection technologies, components, or systems, if not revelatory of an ongoing classified U.S. nonproliferation objective, classified capability, or employment

**U**

9.2.2 The above identified as part of a specific U.S. Government nonproliferation negotiation with elaboration of a negotiation strategy or position

**Retain  
Classification  
[25X2; EV]**

9.2.2A System capabilities, limitations, exploitable weaknesses, shortcomings, or deficiencies of specific proliferation detection components or systems (e.g., seismic, satellite, hydrophonic, etc.) components, if technology (including individual component or complete systems) are still in use or continue in development

**Retain  
Classification  
[25X2; EV]**

9.2.3 Weaknesses, shortcomings, or deficiencies of specific proliferation detection components or systems, if components or systems are no longer in use

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9.3 Proliferation studies, analyses or evaluations

*NOTE:* Declassify when specific method is no longer useful. Currently, no classified detection avoidance schemes have been declassified.

9.3.1 Statements or evaluations by a person who has (or has had) access to classified weapon information, or by Government supported contractor, regarding weapon design technology or the potential operability of a nuclear explosive

**Retain  
Classification  
(potential for  
RD/FRD)  
[25X2; EV]**

9.3.2 Information which provides useful insights for successful pursuit of a program for the separation of practical quantities of SNM, or a program for fabricating a nuclear weapon

**Retain  
Classification  
(potential for  
RD/FRD)  
[25X2; EV]**

9.3.3 Concealment of proliferation preparations/activities

9.3.3.1 Government evaluation of methods of concealing the telltale signs of proliferation activities whenever such evaluations reveal methods which could successfully disguise such signs

**Retain  
Classification  
[25X2; EV]**

9.3.3.2 Theoretical discussions of concealment of proliferation activities

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9.3.3.3 Description of technology used to reduce the effects of nuclear activities on the environment

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