

QUESTION 5:

Does NRC believe there may be a need for a NRC requirement for safeguards on tritium, given the fact that it is a key component of modern nuclear weapons? If not, why not? If so, what form should these safeguards take?

ANSWER:

In 1981, the NRC assessed the need for routine reporting requirements for tritium and concluded that they were not necessary. These reporting requirements were then eliminated after a formal rulemaking action. More recently, an assessment was made relative to whether tritium should be considered special nuclear material and safeguarded accordingly. As noted in our March 30, 1989 response to the Honorable Philip Sharp, NRC has determined that no specific safeguards measures are necessary since tritium can only undergo fusion under very extreme temperatures and pressures, such as those created in the detonation of a fission bomb. Reliable safeguards on special nuclear materials that could be utilized to construct a fission device make the safeguarding of tritium unnecessary. The staff, however, will review the DOE findings upon completion of their investigation as they may relate to NRC responsibilities regarding tritium.

6910240113 890829  
PDR COMMS NRCC  
CORRESPONDENCE PDR