

Point Paper

6 March 2015

Subject: Department of Defense Explosives Safety Board (DDESB) Approval Process

1. Facts:

a. Consistent with peacetime, contingency, or wartime operational requirements and corresponding DoD military munitions requirements, it is DoD policy to:

(1) Provide the maximum possible protection to people and property from the potential damaging effects of DoD military munitions (explosive and chemical).

(2) Minimize exposures consistent with safe and efficient operations (i.e., expose the minimum number of people for the minimum time to the minimum amount of explosives or chemical agents).

b. The DDESB's role in the review of systems used by the Services for demilitarization or other purposes is defined by DoD policy (among others, DoD 6055.9E, "Explosives Safety Management and the DoD Explosives Safety Board" 19 August 2005).

c. The DDESB's role is limited to validating that:

(1) Personal protection criteria are met; and

(2) A system may be used instead of 100-percent independent dual inspections or other DDESB-approved procedures to determine whether the material remaining after processing (e.g., demilitarization) may be:

(a) Documented as safe prior to its transfer within or release from DoD control; or

(b) May only be transferred to a qualified receiver (an entity capable of safely storing, handling, and processing military munitions for further processing).

d. Upon request of a DoD Military Service, the DDESB will review and may approve a system (technology) for use by DoD for storing or processing military munitions. Contained detonation chambers, like the T10 and T30, are examples of DDESB-approved systems for demilitarization. DDESB approval times vary depending on the technical complexity of the system, the adequacy of test data provided, or completion of validation tests that may be required.

(1) Prior to approval, the DDESB reviews technical data and test results for the system.

(2) The DDESB's approval sets specific net explosives weight (NEW) limits for or types of munitions to be processed by the system. The NEW is the maximum amount of explosives that may be present in the system at any given time. It is not a throughput value. The DDESB's approval also establishes specific Explosives Safety Quantity-Distance criteria for the system's use.

e. Once the DDESB approves a system, it may be used (within the constraints of the approval) by DoD at any location. However, locations where the system will be used with DoD military munitions also require a separate explosives safety quantity distance (ESQD) site plan prepared by the responsible activity and submitted to a Service's explosives safety center or office for review and approval and then submitted by the Services explosives safety center or office to the DDESB for its independent review and approval.

f. ESQD represents the quantity (NEW) of explosive material and distance separation relationships that provide defined levels of protection. The relationships are based on levels of risk considered acceptable for specific exposures. These distances, which are tabulated in applicable DDESB-approved quantity distance tables, do not provide absolute safety or protection. Greater distances than those in the QD tables should be used if practical.

g. A DDESB-approved site plan only addresses explosives safety. The DDESB approval of a site plan involves validation of appropriate ESQD criteria as part of the approval package. Review and approval times vary anywhere from one week to over a year depending on the complexity of the site plan. Longer review times are typically associated with protective (highly-specialized) construction associated with a facility in which a system is to be used. DDESB-approved protective construction may be used to reduce the ESQD requirement and in some cases may be used instead of applying ESQD provided it provides equivalent personnel protection.

h. Test plans and on-site technical visits and assessments, if required, often contribute to longer review times.

i. DDESB reviews focus only on explosives safety, to include the protection of DoD personnel, contractors, and the public from the risks posed by DoD military munitions. The scope of DDESB reviews, which is delineated by DoD policy, does not include the system's throughput capacity, economic aspects, or environmental impacts.

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