

Taggants In Explosives

Issue: Should taggants be mandated in commercial explosives?

Discussion: Taggants can refer to two types of marking technologies. Detection taggants are used to detect explosives before detonation. Identification taggants are intended to be used to trace explosive materials to their source before and after detonation.

The Antiterrorism and Effective Death Penalty Act of 1996 (ATEDPA) requires detection agents for plastic bonded explosives (PBX). These agents enhance the detection of PBX which has historically been used by terrorists around the world. It is possible to add these detection agents to PBX without compromising their intended performance. IME supports the marking of PBX with detection agents. However, identification taggants present a different story.

From time to time, efforts are made to require identification taggants in explosives. The ATEDPA mandated a study of the feasibility of placing identification taggants in industrial explosives. The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) was tasked with this responsibility and The National Academy of Sciences (NAS) was contracted to conduct a third-party examination.

IME has worked closely with both the ATF and NAS to ensure that industry data was available to complete the study. The NAS report, completed and issued in March 1998, concluded:

“At today’s level of threat, it is not appropriate to require commercial explosives to contain identification taggants ... All of the taggant technologies currently available raise concerns about long-range environmental consequences, effectiveness in law enforcement, safety issues, and costs.”

The ATF issued an Interim report in March 1998 and also concluded:

“At this stage of the Study it is clear that ... there are remaining complexities surrounding the issue. Any effort which is to have a measurable impact on the prevention and investigation of bombing incidents must be an integrated one, involving the effective regulation of explosives and explosive materials, the effective enforcement of those regulations, and the effective application of cutting edge technologies.”

IME’s position is consistent with these findings:

- Less than 1 percent of the bombings in the United States involve commercially manufactured high explosives.
- Identification taggants can dangerously increase friction sensitivity when added to the manufacture of high explosives, and their benefit to law enforcement is disputed as taggants may complicate the investigation and prosecution of bombings.
- The substantial costs associated with placing taggants in commercially manufactured high explosives are not justified by the minimal benefits.

Recommendation: Any mandate for the addition of identification taggants must be based on sound science and a cost-benefit analysis. It is not in the best interest of the industry, public, the environment, or law enforcement to mandate identification taggants in commercial explosives at this time.