



Taggant Technology for Post-blast Explosives Identification

Position: The National Mining Association is opposed to mandating identification taggants in explosives because it is unproven technology. Countries which have a long history of terrorism – Israel, Ireland, Germany, Japan, and Great Britain – have not adopted a taggant program and do not intend to do so.

Background: Isotopic technology is a molecular marking system involving the replacement of a hydrogen atom from a molecule of the liquid or gas with a uniquely identifiable deuterated isotope.

The National Research Council (NRC), commissioned to study taggants in explosives following the 1995 Oklahoma City bombing, stated in its 1998 report on *Containing the Threat from Illegal Bombings*, that none of the proposed isotopic taggants has proven blast survivability or has been shown to be amenable to standard collection and analysis procedures. Concerning all taggant technologies, the report concludes, “**identification tagging of explosives should not be required at the present time.**” The report went on to conclude that, “the costs of a tagging program do not currently appear to be justified...”

The Bureau of Alcohol, Tobacco and Firearms (BATF) in its 1998 Interim report, *Marking, Rendering Inert and Licensing of Explosives Materials*, found nothing to refute the NRC finding that, “the information currently available about nearly all of the taggant concepts (particulate, isotopic, and biological) is inadequate to evaluate their effectiveness in real operational or economic terms.” Subsequently, the BATF examined and rejected isotopic taggants as a viable identification technology, citing extensive explosive tests of the technology in Israel.

Issue: The Federal Bureau of Investigation’s (FBI) long-standing position on identification taggants in commercial explosives is that,

- Cross-contamination of taggants at crime scenes with those existing from the legitimate use of explosives could negatively impact criminal investigations and prosecutions.
- The available technologies cannot support the requirements of an identification-tagging program.
- Crime Statistics show that less than two percent of criminal bombings involve commercial explosives and, thus, the vast majority of cases would not be affected by taggants.
- Identification taggants would not serve as a significant deterrent to the criminally motivated.
- Resources are better directed at preventive technologies, rather than investigative tools of limited or negative value.

Impact: As the primary consumer of explosive products in the United States, the mining industry strongly opposes unnecessary mandates to federal explosives law regarding taggant technology. Mandating this unproven technology would have a severe and negative economic impact on the industry.