



## **institute of makers of explosives**

### **EXPLOSIVES PRECURSOR CHEMICAL REGULATION**

**Issue:** Should DHS regulate explosives precursor chemicals to deter misappropriation for criminal or terrorist purposes?

**Overview:** The supply chain of commercial explosives products is closely regulated by the Federal Government. However, with the exception of ammonium nitrate (AN), DHS has not proposed controls to prevent the misappropriation of explosive precursor chemicals used for the manufacture of homemade explosives (HME) and improvised explosive devices (IED).

**Discussion:** Efforts to control the commerce of AN, one precursor chemical, may create a security gap. The 2017 National Academy of Sciences' (NAS) report on Reducing the Threat of Improvised Explosive Device Attacks<sup>1</sup> by Restricting Access to Chemical Explosive Precursors made clear that focusing on security of a single precursor will not stem nefarious actors from accessing potentially harmful and destructive materials. Instead, those who wish to cause harm will use one of the many other easily available precursor chemicals to achieve their goals.

The NAS report identified the need for a comprehensive approach to precursor security that restricts access to a wider universe of chemicals and issued several recommendations to government and the private-sector to accomplish this:

- Prioritize Precursor chemicals, considering multi-chemical rather than single-chemical strategies
- Focus on retail level transactions, including the harmonization of oversight of the sale and use of commercially available kits that contain precursor chemicals with a focus on e-commerce
- Analyze control strategies, including comprehensive analysis by the Department of Homeland Security (DHS) of the specific provisions and voluntary mechanisms in place to restrict access to precursor chemicals by malicious actors
- The Federal Government should support voluntary measures and activities that contribute to restricting access to precursor chemicals by malicious actors

NAS also identified a series of steps that could aid in limiting access to precursor chemicals, including standardization of explosive incident data collection, the substitution of precursor chemicals in commercial products, and standardization of regulatory thresholds.

Simply stated, a program based on the regulation of a single chemical and not executed in concert with industry will not serve as a deterrent but only move malicious actors to enlist the use of other readily accessible materials towards their ends. DHS must continue their efforts to regulate precursor chemicals, enlisting the information and recommendations found in the NAS study to achieve the desired security results.

**Recommendations:** Before DHS is given authority to impose supply chain controls on precursor chemicals, including AN, the agency should:

- Use the National Academy of Sciences' report to identify precursors that have been used in HMEs and IEDs.
- Prioritize those chemicals that have a history of use in the United States, that are commercially available, and that are easily processed into HMEs/IEDs.
- Review other federal agencies' regulations to see if security gaps exist and to learn from these regulatory approaches.
- Apply this information towards a comprehensive approach to precursor chemical security.
- Work with effected stakeholders to ensure that the approach is cost-beneficial.

---

<sup>1</sup> Consensus Study Report: Reducing the Threat of Improvised Explosive Device Attacks by Restricting Access to Explosive Precursor Chemicals, National Academy of Sciences, 2017.  
*March 2018*