

Preface

The Committee on Marking, Rendering Inert, and Licensing of Explosive Materials (see Appendix A) was appointed by the National Research Council to address four basic areas: (a) the viability of adding tracer elements to explosives for the purpose of detection, (b) the viability of adding tracer elements to explosives for the purpose of identification, (c) the feasibility and practicability of rendering inert common chemicals used to manufacture explosive materials, and (d) the feasibility and practicability of imposing controls on certain precursor chemicals used to manufacture explosive materials. (See Appendix B for a detailed statement of task.) As part of these tasks, the committee is also considering risks to human life or safety, utility to law enforcement, effects on the quality and reliability of the explosive materials for their intended lawful use, potential effects on the environment, and the cost-effectiveness of these approaches.

The study focuses on issues in science and technology, with the goal being to frame the issues and furnish a report that provides a clear description of the technical options that exist. The committee's final report of the results of this study will provide advice to officials of the Bureau of Alcohol, Tobacco, and Firearms on which to base recommendations to Congress. It will also clearly set forth any opinions and findings obtained as a result of consultation with other federal, state, and local officials, regulated industry members, and fertilizer research centers. This interim report describes progress to date (March 1997) and summarizes recent workshop presentations concerning current developments and critical issues in "tagging" explosive materials for the purposes of detection or identification. The final report containing the committee's conclusions and recommendations will be published in February 1998.

In its initial meetings, the committee received a number of briefings (see Appendix C) and held subsequent deliberations. These presentations are summarized in this interim report. The reader is cautioned that the committee does not present any conclusions or recommendations in this report, as it believes it is premature to do so at this time.

This study is being conducted by the Board on Chemical Sciences and Technology with technical insights and assistance provided by the National Materials Advisory Board and its staff. The committee acknowledges this support. The committee is also grateful to the many individuals who provided technical information and insights during briefings at the committee's initial meetings. This information represents a sound foundation on which the committee can base its continuing work. The committee continues to solicit input from the scientific community and affected stakeholders on the issues delineated in the committee's charge and to consider other sources of information relevant to this study.

The chair is also particularly grateful to the members of this committee, who worked diligently and effectively on a demanding schedule to produce this interim report.

Marye Anne Fox, *Chair*
Committee on Marking, Rendering Inert,
and Licensing of Explosive Materials