

**This document provides examples of the scientifically-supported conclusions and opinions that may be contained in Department of Justice reports and testimony. These examples are not intended to be all inclusive and may be dependent upon the precedent set by the judge or locality in which a testimony is provided. Further, these examples are not intended to serve as precedent for other forensic laboratories and do not imply that statements by other forensic laboratories are incorrect, indefensible, or erroneous. This document is not intended to, does not, and may not be relied upon to create any rights, substantive or procedural, enforceable by law by any party in any matter, civil or criminal, nor does it place any limitation on otherwise lawful investigative and litigative prerogatives of the Department.**

**DEPARTMENT OF JUSTICE  
PROPOSED UNIFORM LANGUAGE FOR TESTIMONY AND REPORTS  
FOR THE FORENSIC EXPLOSIVES AND HAZARDOUS DEVICES DISCIPLINE**

**Purpose and Scope**

If adopted, this document will apply to Department of Justice personnel who perform forensic examinations and/or provide expert witness testimony regarding the forensic examination of explosives and hazardous devices. This document does not imply that statements made or language used by Department personnel that differed from these proposed statements were incorrect, indefensible, or erroneous.

This document provides the acceptable range of opinions expressed in both laboratory reports and during expert witness testimony while acknowledging that this document cannot address every variable in every examination.

**Statements for Explosives and Hazardous Devices Examinations Laboratory Reports and/or Expert Testimony**

**Component Recognition**

1. An examiner may report and/or state that a component of an improvised explosive device (IED) has been recognized if the examiner has assigned general attributes, or class characteristics, to that item. The characteristics of the components that predicate recognition must be documented in the laboratory notes.

**Component Identification**

2. An examiner may report and/or state that a component of an IED has been identified as a specific commercial product if the examiner has determined the potential commercial or manufacturing sources of the component from a forensic examination of the item. The characteristics of the components that predicate identification must be documented in the laboratory notes.

### **Confirmed Component Source**

3. An examiner may report and/or state that the commercial or manufacturing source of a component has been definitively determined or confirmed if the source of the component has been corroborated through direct correspondence with the distributor or manufacturer. Such correspondence must be documented in the laboratory notes or communications log.

### **Company Identifications**

4. An examiner may report and/or state the company that is assigned a particular trademark, barcode, Underwriters Laboratory (UL) listing code, etc., by reference to an appropriate, reliable source. The source of the information must be documented in the laboratory notes.

### **IED Component Associations**

5. An examiner may report and/or state that an association has been made between multiple IEDs or IED components based on their visual and/or physical properties and construction materials and characteristics. These comparisons are limited to the construction and class characteristics of the IEDs and components, and, as such, are not individualizing. The characteristics that predicate associations must be documented in the laboratory notes.

### **Inconclusive Component Recognition or Identification**

6. An examiner may report and/or state that an inconclusive result has been reached if the determination has been made that there is insufficient quality and/or quantity of corresponding information such that the examiner is unable to recognize or identify a component.

### **IED and IED Component Exclusions**

7. An examiner may report and/or state that an exclusion has been made if the determination that the construction/class characteristics of two or more IEDs or IED components are not the same because there is sufficient quality and/or quantity of information in disagreement. The characteristics that predicate exclusions must be documented in the laboratory notes.

### **IED Determination**

8. An examiner may report and/or state that the components present in the evidence are those of a complete or partial IED. If a partial IED is present, the examiner must report and/or state what components are missing. An examiner may also report and/or state how the missing components can be procured and the availability of such components in the marketplace.

### **Destructive Device Determination**

9. An examiner may report and/or state that the components present in the evidence are those of a destructive device since this term is commonly utilized within the explosives and hazardous devices discipline to refer to an IED or homemade bomb.<sup>1</sup>

### **IED Function Determination**

10. An examiner may report and/or state how the components present in the evidence could be logically combined to make a functioning IED. An examiner may also report and/or state how a missing component of the IED could be logically combined to manufacture a complete IED, as well as the ease or difficulty involved in such a process.

### **IED Associations**

11. An examiner may report and/or state that an association has been made between multiple IEDs based on their visual and/or physical properties and construction characteristics. These comparisons are limited to the construction materials and characteristics of the IEDs and, as such, are not individualizing. The characteristics that predicate associations must be documented in the laboratory notes.

### **Production Processes**

12. An examiner may report and/or state the production process used to manufacture an explosives-related item when the physical characteristics present on the item permit such an inference and the examiner has an understanding of the production process.

### **Damage and/or Injury from Explosives and IEDS**

13. An examiner may report and/or state that the explosion of an IED or explosive could cause damage to the surroundings, personal injury, or death.

### **General Observations of Explosive Damage**

14. An examiner may report and/or state that the damage observed on evidence is consistent with the damage from a low or high explosive.<sup>2</sup> The damage characteristics must be documented in the laboratory notes.

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<sup>1</sup> 26 U.S.C. § 5845(f) and 18 U.S.C. § 921(a)(4), 2013

<sup>2</sup> A low explosive is an energetic material designed to rapidly burn, or deflagrate. A high explosive is an energetic material designed to detonate.

### **Extensive Damage to IED Components Caused by an Explosion**

15. If the examiner has determined that the explosion and/or fire resulting from the functioning of an IED caused extensive damage, such as severe fragmentation, charring, or alterations to the IED components, the examiner may not report, state, or imply that a conclusive determination of the exact construction characteristics and functionality of the IED was made. However, the examiner may report and/or state the most logical construction characteristics and functioning mechanism of the IED if the forensic examinations permit such an inference.

### **Extensive Damage to IED Components Caused by a Render Safe Procedure**

16. If the examiner has determined that the explosion and/or fire resulting from a render safe procedure has caused extensive damage, such as severe fragmentation, charring, or alterations to the IED components, the examiner may not report, state, or imply that a conclusive determination of the exact construction characteristics and functionality of the IED was made. However, the examiner may report and/or state the most logical construction characteristics and functioning mechanism of the IED if the forensic examinations permit such an inference.

### **Identification of Chemical Substances and Explosives**

17. An examiner may report and/or state the identification of a particular chemical substance or explosive only if the examiner qualifies the statement by referencing that the analysis was performed by an explosives chemistry examiner. Typically, for purposes of testimony, the explosives chemistry examiner is called to testify before the explosives and hazardous devices examiner to provide this foundation.

### **Statements Not Approved For Explosives and Hazardous Devices Examination Testimony and/or Laboratory Reports**

#### **Production Sources Based on Component Markings**

1. An examiner may not report and/or state that a particular company was the definitive source of an item based solely on the markings present on it.

#### **Conclusive Identifications from Partial Markings on Components**

2. An examiner may not report and/or state that a conclusive identification of an item was made when the examiner has determined that there exist absences or alterations of specific manufacturer or other unique markings on items of evidence that do not permit such a conclusion. If required, the examiner could confirm the commercial or manufacturing source of the component through direct communications with the distributor or manufacturer. Such communications must be documented in the laboratory notes or communication log.

### **Exclusion of All Other Sources**

3. An examiner may not report and/or state that an item originated from a commercial source to the exclusion of all other sources unless the component's distributor or commercial manufacturer has confirmed this.

### **Analytical Methodologies for Chemical Substances and Explosives Identification**

4. An examiner may not report and/or state the analytical methodologies utilized by explosives chemistry examiners to identify a particular chemical substance or explosive unless specifically directed to do so by the court. Under this direction, the examiner must make clear to the court that he/she is not a trained chemist, may not be able to properly identify or explain the analytical methodologies utilized, and that the chemical analysis was performed by an explosives chemistry examiner.

### **Conclusive Determination of Explosive from Damage Observations Only**

5. An examiner may not report and/or state a conclusive determination as to the exact chemical composition of an explosive based only on the observed damage to components or the environment. For example, the following statements are not allowed:

### **Conclusive Determination of Explosive Characteristics from Damage Observations Only**

6. An examiner may not report and/or state a conclusive determination as to the exact explosive characteristics of an explosive based only on the observed damage to components or the environment.

### **Legal Destructive Device Determination**

7. An examiner may not report and/or state that the components present in the evidence are those of a destructive device *as specifically defined in the legal statutes* since this determination is not one of forensic science and is within the purview of the jury.

### **Weapon of Mass Destruction Determination**

8. An examiner may not report and/or state that an IED or the components thereof constitute a "weapon of mass destruction" (WMD) since this is not a term utilized in the explosives and hazardous devices discipline.<sup>3</sup> If the court requests that the examiner opine on this matter, the examiner must make clear that the term WMD does not have a technical definition in the discipline, and may provide clarification to the court as to the destructive potential of the IED.

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<sup>3</sup> The legal definition of a weapon of mass destruction can be found at 18 U.S.C. § 2332(a) (c), 2013.

## **Calculations Pertaining to Evidence**

9. An examiner may not report or testify to the results of calculations pertaining to evidence that is presented for the first time to the examiner in the courtroom. The examiner will respectfully decline to perform such calculations on the grounds that such work requires technical verification. However, the examiner may provide estimates that are based on prior analyses conducted.

**DEPARTMENT OF JUSTICE PROPOSED UNIFORM LANGUAGE  
FOR TESTIMONY AND REPORTS REVIEW SHEET**

**Directions:** This review sheet is designed to assist you in evaluating the attached Proposed Uniform Language for Testimony and Reports document against certain criteria while maintaining internal consistency in review and assessing comments.

Your use of this rating sheet is completely **optional**. While it is anticipated this review sheet will encourage comments on issues of particular importance, you are welcome to submit comments in any format that you believe appropriate. This review sheet is not intended to limit comments in any way.

If you elect to use the review sheet, you may find it helpful to frame your comments as suggested below.

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**Proposed Uniform Language Discipline Reviewed:**

**Reviewer Name:**

**Reviewer Organization:**

**Reviewer Email:**

**Statements Approved for Use in Laboratory Reports and Expert Witness Testimony**

Provide a summary of your assessment of the statements approved for use, including the most important highlights from the individual criteria comments.

- The statements approved for use are supported by scientific research.
- The statements approved for use accurately reflect consensus language.
- The statements approved for use are stated clearly.

**Statements Not Approved for Use in Laboratory Reports and Expert Witness Testimony**

Provide a summary of your assessment of the statements not approved for use, including the most important highlights from the individual criteria comments.

- The statements not approved for use are supported by scientific research.
- The statements not approved for use accurately reflect consensus language.
- The statements not approved for use are stated clearly.