



Australian Government

PUAFIR609A Collect, record and coordinate the analysis of physical evidence

Release 3

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Modification History

Release	TP Version	Comments
3	PUA12 V2.1	Editorial changes.
2	PUA12 V2	Layout adjusted. No changes to content
1	PUA00 V8.1	Primary release on TGA

Unit Descriptor

This unit covers the competency required to record and document physical evidence collected at a fire scene and to coordinate the analysis process in line with agency requirements.

This unit does not address the technical and forensic analysis of evidence.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

Application of this unit is relevant to specialist fire investigators.

It focuses on the skills and knowledge required to develop and apply a systematic approach to the recording and documenting of physical evidence collected at a fire scene and the coordination of the analysis of evidence.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

PUALAW001B Protect and preserve incident scene (Fire sector specific)

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Evaluate scene and determine investigative regime	<ul style="list-style-type: none">1.1 Authority to search is obtained or verified, as necessary, through required channels1.2 Occupational health and safety (OHS) requirements are met1.3 Incident scene security is confirmed, according to agency requirements1.4 Fire scene is systematically observed1.5 Physical evidence is detected using appropriate observation techniques and technological methods
2. Collect and record physical evidence	<ul style="list-style-type: none">2.1 Evidence collection plan and evidence recording process are established, in accordance with organisational guidelines and legislative requirements2.2 Items of physical evidence are recorded prior to collection2.3 Liaison with technical specialists is initiated regarding appropriateness, collection, preservation, handling and transportation of evidential samples to be collected, as required2.4 Latent evidence is collected/detected by physical or chemical means2.5 Quality and quantity of samples are collected to ensure accuracy and sufficiency2.6 Evidence is labelled and documented in accordance with agency requirements to ensure continuity of evidence
3. Store, process and transport evidence	<ul style="list-style-type: none">3.1 Physical evidence is packaged and stored to maintain continuity and to prevent degradation, contamination and spoliation3.2 Appropriate documentation is completed by all persons handling or in possession of evidence, in accordance with evidentiary requirements and organisational guidelines3.3 Details of evidence collected are entered in case notes, evidence/data management systems, and where appropriate, in the exhibit register3.4 Movement of exhibits for examination occurs according to organisational procedures to ensure continuity, security and integrity of the evidence3.5 Verbal and written summaries/reports are made in accordance with agency requirements

4. Coordinate the analysis process

- 4.1 Team approach to an examination is used to ensure all parties conduct examination prior to any damage occurring
- 4.2 Appropriate sequencing of evidence examination is followed
- 4.3 Technical specialists are appropriately briefed regarding range of tests/examinations of the evidence sought to be undertaken
- 4.4 Feedback and advice is received from technical specialists regarding range of tests/examination outcomes of the evidence as relevant, suitable or practicable
- 4.5 Results are interpreted in consultation with technical specialists
- 4.6 Data is documented and report is finalised in accordance with agency and legal requirements
- 4.7 Retention/disposal of evidence is completed according to agency requirements

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- apply analytical, decision making and problem solving skills in responding to a range of physical evidence in various contexts and the systematic examination of items of physical evidence
- apply interviewing skills
- apply resource and time management skills
- collect, package and preserve physical evidence ensuring continuity of evidence
- use specialised recording equipment including voice recording systems to interview or capture information
- write and communicate in clear, unambiguous language

Required Knowledge

- application and potential limitations of forensic investigative techniques
- application and potential limitations of sample collection and storage methods
- field detection systems/resources and operation e.g. photo ionisation detector and canines
- gas chromatograph (GCMS) analysis
- interpretation of test results
- laboratory examinations (document examination, fingerprint development/enhancement/ examination, motor vehicle examinations, shoeprint development/enhancement/ examination, tool mark examinations, trace evidence examinations)
- laboratory techniques
- legislative, policy and quality systems:
- context in which forensic examinations are conducted
- collection, recording and continuity of physical evidence
- security, protection and preservation of physical evidence
- limitations of testing equipment
- OHS practices to be followed when recording, collecting and packaging physical evidence
- range of techniques available for recording, collecting, packaging and preserving physical evidence
- required forensic documentation for recording and collecting physical evidence
- roles and functions of other forensic discipline specialists in recording, collecting, preserving and ensuring continuity of physical evidence
- typical analysis of common ignitable liquids
- typical laboratory analysis for ignitable liquids e.g. GCMS

Evidence Guide

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to maximise the evidentiary value of physical evidence according to agency requirements by:

- collecting, documenting, labelling and packaging evidence
- referring to relevant discipline for analysis
- safely storing evidence
- correctly disposing of evidence.

Consistency in performance

Competency should be demonstrated over time and across a range of workplace and/or simulated situations.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace and/or in a simulated workplace environment.

Specific resources for assessment

Access is required to:

- legislation, policy, procedures and protocols relating to gathering and managing evidence
- case studies and workplace scenarios to capture the range of incidents likely to occur for which evidence needs to be gathered and managed.

Guidance information for assessment

Assessment methods suitable for valid and reliable assessment of this unit may include a combination of:

- case studies
- demonstration
- observation
- questioning
- scenarios
- authenticated evidence from the workplace.

Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

<p><i>Physical evidence</i> may include:</p>	<ul style="list-style-type: none"> • Accelerant containers • Any and all objects, gross or microscopic in size • Biological material • Blood spatter pattern analysis • Clothing • Documents • Fibres • Fire debris • Impression evidence e.g. tyre marks, shoe marks, tool marks, fingerprints • Liquid or gas including the relationship between all such objects • Living, inanimate, solid objects • Paint • Photography (digital, multimedia, closed circuit television [CCTV], other media images) • Real, oral, computer data or documentary • Vehicle examinations
<p><i>Observation techniques and technological methods</i> may include:</p>	<ul style="list-style-type: none"> • Detection methods (electronic, chemical, optical, physical, canine) • Hand picking (including use of forceps, gloves) • Physical removal of section of samples (accelerant samples on wood, carpet, furniture etc.) • Specialist equipment • Swabbing • Sweeping • Tape lifting • Use of equipment for access above or below ground • Vacuuming
<p><i>Recording physical evidence</i> may include:</p>	<ul style="list-style-type: none"> • Audio recording • CCTV or other media images • Computer generated data • Digital images • Electronic visual information • Global positioning system • Hand written notes • Multimedia graphics

	<ul style="list-style-type: none"> • Photographs • Physical capture • Sketches/plans • Video recording
<i>Technical specialists</i> may include:	<ul style="list-style-type: none"> • Emergency services personnel • Forensic scientists • Industry specialists • Insurance industry • Police • Statutory authorities
<i>Quality and quantity of samples</i> includes:	<ul style="list-style-type: none"> • Control reference sample, where available and appropriate (control/reference samples which represent background contaminants; control/reference samples collected from a known source e.g. elimination fingerprints, hairs from the victim and suspect) • Laboratory examinations and analysis
<i>Labelling of evidence</i> may include:	<ul style="list-style-type: none"> • Continuity details • Date/time • Incident number • Item description • Item/sample number • Location • Person/s collecting the evidence
<i>Packaging and storing physical evidence</i> may include consideration of:	<ul style="list-style-type: none"> • Chemical composition of sample • Disposal • Drying of wet exhibits • Exhibit labels • OHS considerations • Packaging medium • Physical nature of exhibit • Safe storage and handling procedures • Storage temperature • Tamper evident seals • Transportation of evidence to storage and/or examination facility

Unit Sector(s)

Not applicable.

