



Australian Government

PUAFIR611 Process and analyse fire scene data and laboratory results

Release: 1

PUAFIR611 Process and analyse fire scene data and laboratory results

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge required to receive data from scientific practitioners, to process and analyse findings and to determine the origin and cause of a fire. It includes understanding scientific processes, analysis and laboratory results.

The unit focuses on developing and applying a systematic approach to fire investigation and working across fire and emergency incidents including structure, mobile and wildfire. It is applicable to specialist fire investigators.

The fire sector is those sections of government departments, statutory authorities or organisations that have responsibility under jurisdictional arrangements for the delivery of firefighting and fire management services.

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

Pre-requisite Unit

It is essential that the prerequisite units listed below are obtained prior to the issuance of this unit to individuals within the fire sector or the units contributing to the attainment of a fire qualification.

PUAFIR609 Collect, record and coordinate the analysis of physical evidence

Competency Field

Fire

Unit Sector

Fire

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | |
|--|--|
| 1 Evaluate results of fire scene data | 1.1 Fire scene data is collected and collated, in accordance with organisational procedures |
| | 1.2 Data is grouped according to physical evidence groupings, samples and documented evidence |
| | 1.3 Evidence is categorised for further sampling or archiving, in accordance with organisational procedures |
| | 1.4 Nature and extent of further examination is determined |
| 2 Interpret laboratory results | 2.1 Consultations are initiated with specialist practitioners to review preliminary evaluations and to validate data |
| | 2.2 Common features and trends in data findings are identified |
| | 2.3 Options are explored as to possible origin and cause of fire |
| 3 Analyse documentary and physical evidence | 3.1 Potential causal physical evidence is examined in light of research data emerging from laboratory examination and technical analyses |
| | 3.2 Written reports and visual images are collected and reviewed in parallel with established scientific findings |
| | 3.3 Consultations are initiated with specialist practitioners, as required |
| | 3.4 Physical evidence determined relative to fire origin and cause is identified, labelled, packaged and stored, in accordance with organisational procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR611A Process and analyse fire scene data and laboratory results.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR611 Process and analyse fire scene data and laboratory results

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes

- analysing documentary and physical evidence
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements
- evaluating results of fire scene data
- handling exhibits and preserving continuity of evidence
- identifying, analysing and using data
- implementing organisational procedures
- interpreting laboratory results and findings
- maximising potential evidentiary value of physical evidence collected
- packaging and storing physical evidence
- solving problems and making decisions in relation to forensic investigation contexts
- working with a range of specialist practitioners and stakeholders
- writing reports

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of

- application of approved scientific methods to analyse fire scene evidence
- legislative, policy, procedural and quality system requirements for the collection, preservation, security, continuity, receipt and disposal of evidence
- organisational documentation, policies and procedures including guidelines
- physical evidence packaging and storing including drying of wet exhibits, exhibit labels, packaging medium, physical nature of exhibit, storage temperature and tamper evident seals
- processes for packaging and storing of evidence
- range of services available to assist laboratory examination and interpretation of physical evidence
- role and functions of forensic discipline specialists in laboratory examination of physical evidence

- specialist practitioners including emergency services personnel, forensic and industry scientists and police
- types of data to be collected and analysed
- types of physical evidence
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including risk mitigation and practices to be followed when handling physical evidence

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>