



# Appendix F

## NFPA 1033

### *Professional Qualifications for Fire Investigator*

This document is an appendix to the Evaluation and Certification Guide published by the Saskatchewan Office of the Fire Commissioner. Use this appendix in conjunction with the Guide.



## **Saskatchewan Fire Service Evaluation and Certification Guide**

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## **Introduction**

NFPA 1033 Standard, Professional Qualifications for Fire Investigator, identifies the Job Performance Requirements (JPR's) that must be completed to gain a qualification as a Fire Investigator.

This appendix contains information on completing the certification process. It also contains a record keeping system participants must use to record their progress within this program towards certification under the International Fire Service Accreditation Congress (IFSAC).

## **Qualifications and Certification Steps**

The certification process is not bound by a specific time frame, nor is the process rigid in procedure. Participants may utilize any appropriate fire investigation work done in the past to qualify within the program. Certification should be completed within the life span of the NFPA Standard, which is usually revised every 5 years. Individuals may be required to complete additional JPR's to gain certification if they have not completed the entire program within the life span of the currently adopted standard. A person must apply, in writing, to the Fire Commissioner to be registered within the certification program for fire investigator. To gain certification the individual must:

1. Produce a letter of recommendation from their Fire Chief indicating they are a member of a fire department, have received training and are adequately prepared for evaluation.
2. Two letters of reference to attest to the character of the candidate. Acceptable references include but are not limited to:
  - School Teacher, College or University Professor
  - Religious Authority (priest, rabbi, etc.)
  - Police Officer
  - Fire Chief
3. Be certified under NFPA 472 Standard for Professional Competence of Responders to Hazardous Materials Incidents to at least Awareness Level. This prerequisite may be achieved any time during the program prior to audit and testing.
4. Be certified under NFPA 1001 Standard for Fire Fighter Professional Qualifications, Level 2, or have 5 years fire fighting experience.
5. Complete all JPR's identified in the NFPA 1033 Standard through self-study, training on the job or through courses or seminars.
6. Complete a minimum of 25 Fire Investigations. All fires investigated must be documented through reports following an acceptable, standardized format. The 25 fires must encompass as broad a spectrum of property types and investigation circumstances as possible and/or practical for the candidate. Reports are subject to review by the Office of the Fire Commissioner.
7. Provide testimony in Court at least once (alternative is to give a deposition). Must be qualified or recognized as a knowledgeable or expert witness by the court during a

proceeding involving a fire loss. Testimony may be within any court system (Municipal, Provincial or Federal) and may be within either legal process (criminal or civil).

8. Successfully pass a 150 question written evaluation, with a minimum 70% mark. Written evaluations will include questions based on numerous publications, documents and legislation, including:
  - the Fire Prevention Act, 1992,
  - NFPA 1033 Standard, Professional Qualifications for Fire Investigator,
  - the Criminal Code of Canada,
  - the Saskatchewan Coroner's Act,
  - NFPA 921 Guide (1998 edition) Guide for Fire and Explosion Investigations,
  - Kirk's Fire Investigation (3<sup>rd</sup> edition), and
  - may include questions from other publications and documents related to fire investigation.
9. Written evaluations may be completed in three sections at the discretion of the participant.
  - Covering part 3.2 of the Standard;
  - Covering part 1-1;2-1,3-1 and 3-3, 3.4 of the Standard and;
  - Covering part 3-5, 3-6 and 3-7 of the Standard.
10. Written evaluations will be subject to a maximum time frame of 30 minutes for every 25 questions.
11. Successfully complete a practical evaluation conducted during the investigation of a fire scene acceptable to the Office of the Fire Commissioner.
12. Successfully complete an evaluation conducted while delivering a presentation on the fire loss problem and the issues about which the community must know.
13. Notwithstanding the above requisites, a candidate may be required to meet with OFC evaluators to determine qualifications before entering this certification process. It is strongly recommended candidates be conversant with provincial fire safety regulations.

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Secure the fire ground, given marking devices, sufficient personnel, and special tools and equipment, so that unauthorized persons can recognize the perimeters of the investigative scene and are kept from restricted areas, and all evidence or potential evidence is protected from damage or destruction.	3-2.1		
Conduct an exterior survey, given standard equipment and tools, so that evidence is preserved, fire damage is interpreted, hazards are identified to avoid injuries, accessibility to the property is determined, and all potential means of ingress and egress are discovered.	3-2.2		
Conduct an interior survey, given standard equipment and tools, so that areas of potential evidentiary value requiring further examination are identified and preserved, the evidentiary value of contents is determined, and hazards are identified in order to avoid injuries.	3-2.3		
Interpret burn patterns, given standard equipment and tools and some structural or content remains, so that each individual pattern is evaluated with respect to the burning characteristics of the material involved.	3-2.4		
Correlate burn patterns, given standard equipment and tools and some structural or content remains, so that fire department is determined, methods and effects of suppression are evaluated, false origin area patterns are recognized, and all areas of origin are correctly identified.	3-2.5		
Examine and remove fire debris, given standard equipment and tools, so that all debris is checked for fire cause evidence, the ignition source(s) is identified, the fire cause is determined, and evidence is preserved without investigator-inflicted damage or contamination.	3-2.6		
Reconstruct the area of origin, given standard, and, if needed, special equipment and tools as well as sufficient personnel, so that all protected areas and burn patterns are identified and correlated to contents or structural remains, items potentially critical to cause determination and photo documentation are returned to their pre-fire location, and the point(s) or origin is discovered.	3-2.7		
Inspect the performance of building systems, including detection, suppression, HVAC, utilities, and building compartmentalization, given standard and special equipment and tools, so that a determination can be made as to the need for expert resources, an operating systems impact on fire growth and spread is considered in identifying origin areas, and defeated systems are identified.	3-2.8		
Discriminate the effects of explosion from other types of damage, given standard equipment and tools, so that an explosion is identified and its evidence is preserved.	3-2.9		

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Diagram the scene, given standard tools and equipment, so that the scene is accurately represented and evidence, pertinent contents, significant patterns, and origin areas or points are identified.	3-3.1		
Photographically document the scene, given standard tools and equipment, so that the scene is accurately depicted and the photographs appropriately support scene findings.	3-3.2		
Construct investigative notes, given fire scene, available documents (e.g., pre-fire plans and inspection reports), and interview information, so that the notes are accurate, provide further documentation of the scene, and represent complete documentation of the scene findings.	3-3.3		
Utilize proper procedures for managing victims and fatalities, given a protocol and appropriate personnel, so that all evidence is discovered and preserved and the protocol procedures are followed.	3-4.1		
Locate, collect and package evidence, given standard or special tools and equipment and evidence collection materials, so that evidence is identified, preserved, collected, and packaged to avoid contamination and investigator-inflicted damage, and the chain of custody is established.	3-4.2		
Select appropriate evidence for analysis, given information from the investigative file, so those samples forwarded for analysis support specific investigative needs.	3-4.3		
Maintain a chain of custody, given standard investigative tools, marking tools, and evidence tags or logs, so that written documentation exists for each piece of evidence and evidence is secured.	3-4.4		
Dispose of evidence, given jurisdictional or agency regulations and file information, so that the disposal is timely, safely conducted and in compliance with jurisdictional or agency requirements.	3-4.5		
Develop an interview plan, given no special tools or equipment, so that the plan reflects a strategy to further determine the fire cause and affix responsibility and includes a relevant questioning strategy for each individual to be interviewed that promotes the efficient use of the investigator's time.	3-5.1		
Conduct interviews or interrogations, given incident information, so that pertinent information is obtained, follow-up questions are asked, responses to all questions are elicited, and the response to each question is documented accurately.	3-5.2		
Evaluate interview information, given interview transcripts or notes and incident data, so that all interview data is individually analysed and correlated with all other interviews, corroborative and conflictive information is documented, and new leads are discovered.	3-5.3		

JPRs for NFPA 1033

Name: \_\_\_\_\_

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Gather reports and records, given no special tools, equipment or materials, so that all gathered documents are appropriate to the investigation, complete, and authentic, the chain of custody is maintained, and the material is acceptable to the courts.	3-6.1		
Evaluate the investigative file, given all available file information, so that areas for further investigation are identified, the relationship between gathered documents and information is interpreted, and corroborative evidence and information discrepancies are discovered.	3-6.2		
Co-ordinate expert resources, given the investigative file, reports, and documents, so that the expert's competencies are matched to the specific investigation needs, financial expenditures are justified, and utilization clearly furthers the investigation toward the goals of causation determination or affixing responsibility.	3-6.3		
Establish evidence as to motive and/or opportunity, given an incendiary fire, so that the evidence is the result of a prudent and complete investigation, is supported by documentation, and meets the evidentiary requirements of the jurisdiction.	3-6.4		
Formulate an opinion of the person(s) and/or product(s) responsible for the fire, given all investigative findings, so that the opinion regarding responsibility for a fire is supported by all records, reports, documents and evidence.	3-6.5		
Prepare a written investigation report, given investigative findings, documentation, and a specific audience, so that the report accurately reflects the investigative findings, is concise, expresses the investigator's opinion, and is appropriate for the intended audience(s).	3-7.1		
Express investigative findings verbally, given investigative findings, notes, a time allotment, and a specific audience, so that the information is accurate, the presentation is completed within the allotted time, and the presentation includes only need-to-know information for the intended audience.	3-7.2		
Testify during legal proceedings, given investigative findings, contents of reports, and consultation with legal counsel, so that all pertinent investigative information and evidence is presented clearly and accurately and the investigators demeanor and attire is appropriate to the proceedings.			
Conduct public informational presentations, given relative data, so that information is accurate, appropriate to the audience, and clearly supports the information needs of the audience.	3-7.4		

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Date JPRs Completed

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Fire Chief, Fire Service Instructor, Supervisor signature