

Operating Guideline # 810

Fire Investigations

September 17, 2019



PURPOSE:

The purpose of this Operating Guideline (OG) is to establish guidelines to ensure that all fires are investigated for cause and origin and to safeguard the health of those performing these investigations.

ISSUE/RATIONALE:

All fire departments have an obligation to attempt to determine the cause any fire that they attend. Simple fire cause determination efforts can be easily accomplished by most Incident Commanders, while more complex efforts often require the response of personnel who are more thoroughly trained or experienced in investigative techniques.

Section 14 of the *Fire Protection and Prevention Act* (FPPA) also authorizes fire departments to conduct examinations (investigations) where a fire has occurred, and the Fire Chief has authorized all duly appointed officers (Deputy Chief(s), District Chief(s), Captains and any uniformed member of the Fire Prevention Division) to conduct these examinations pursuant to section 6.6 of the FPPA.

The National Fire Protection Association (NFPA) standard 921 (Guide for Fire and Explosion Investigations) is a widely recognized document which sets out fire investigation procedures. This document suggests that a systematic methodology be utilized to conduct a fire investigation.

GUIDELINE:

1. It is the policy and practice of the Muskoka Lakes Fire Department to attempt to determine the origin and cause of all fires that occur in the municipality.
2. For the purposes of determining the origin and cause of fires, fire investigations shall be categorised as a) "Operational Level Fire Investigations", b) "Essential Level Fire Investigations" or c) "Enhanced Level Fire Investigations".
3. An "Operational Fire Investigation" is one that is conducted in accordance with this OG by the Incident Commander, while Essential or Enhanced Level fire investigations are conducted by staff (or outside agencies) with specialised training (i.e. – the Fire Prevention Officer, OFMEM Fire Investigators). SEE OG 1807, ESSENTIAL AND ADVANCED LEVEL FIRE INVESTIGATIONS.
4. An "Essential Level Fire Investigation" is conducted by MLFD staff members with the necessary knowledge, skills and abilities to conduct more complex investigations. SEE OG 1807, ESSENTIAL AND ENHANCED LEVEL FIRE INVESTIGATIONS.
5. An "Enhanced Level Fire Investigation" shall only be conducted by the Office of the Fire Marshal and Emergency Management (OFMEM). The OFMEM conducts fire cause determination efforts in certain circumstances. The OFMEM must be notified in the following instances:

- Fires resulting in either a fatality or serious injury requiring person(s) to be admitted as in-patient(s) to a hospital (it is the responsibility of the fire department to make

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every reasonable effort to confirm the status of injured persons transported to hospital prior to the release of the fire scene);

- Explosions (where the explosion is the primary event);
- Fires suspected of being incendiary (criminal). These fires must also be reported to the Police authority having jurisdiction (ie. OPP);
- Fires where the loss is significant to the community;
- Fires of unusual origin or circumstances;
- Fires resulting in unusual fire/smoke spread;
- Fires involving circumstances that may result in widespread public concern (e.g. environmental hazard);
- Fires in multi-unit residential occupancies where fire spread is beyond unit of origin or where suspected Fire Code violations have impacted on the circumstances of the event; and
- Fire involving clandestine drug operations or marijuana grow operations.

6. Once a fire situation has been brought under control, the Incident Commander with the assistance of other officers and other firefighters will attempt to determine the cause of all fires. This “Operational Level Fire Investigation” will be made to determine the cause of the incident for the purpose of completing the Standard Incident Report (SIR) required by the OFMEM and for fire prevention/educational purposes. It is hoped that through this effort the means to prevent similar fires from occurring again will be identified. Command will ensure that all fires regardless of size will be investigated for cause and origin.

7. Should the Incident Commander:

a) Believe that the fire cause determination effort that will be required is outside his/her capability;

b) That some unusual element of the investigation will cause the investigation to be protracted;

c) That the investigation will require the assistance of some outside agency (i.e. – electrical service provider, TSSA, ESA); or

d) If the incident falls within the parameters of the OFMEM (see sentence 5) he/she shall notify the Fire Chief and seek the appropriate direction.

8. Should any member discover anything that might be deemed suspicious during the fire extinguishment or overhaul phase of the incident, the Incident Commander shall be immediately notified and all additional activities undertaken at the scene shall be taken with due consideration for preventing the scene from being disturbed so that evidence may be investigated and gathered by the appropriate authorities. To accomplish this, it will be the responsibility of each member to conduct any extinguishment and overhaul of the fire with great care.

9. Should the circumstances of any incident give rise to a concern about the origin of the fire being anything but accidental in nature; the incident will not be investigated further by fire department personnel. Command shall notify the Fire Chief, the OFMEM and the Police. No unauthorised persons shall be permitted access to the scene until such time as the police or fire investigators authorize their access. The Incident Commander shall be responsible to

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ensure scene security is established by the police prior to the scene being vacated by fire apparatus.

10.No scene shall be released without being turned over to a proper authority (i.e. - owner, owner's agent or representative, police.) The standard "Fire Scene Release Form" should be utilised in all cases not being investigated by another agency (OFMEM/Police). SEE APPENDIX A.

11.All scenes that cannot be turned over to the owner/occupant (or another authority having jurisdiction) will be secured in such a way as to prevent any accidental intrusion. As a minimum, yellow "FIRE LINE – DO NOT CROSS" tape shall be erected around the perimeter of the site. The Incident Commander shall cause the notification of the "Property Standards" division of the Town where there is any concern about scene security, fire debris etc.

12.Personnel conducting fire scene investigations shall use such PPE that is necessary under the circumstances including gloves, head protection, safety footwear, eye protection, and turnout gear.

13.Respiratory protection shall be worn in accordance with OG 223 - RESPIRATORY PROTECTION DURING FIRE INVESTIGATIONS.

14. "Operational" fire investigations shall be documented via the Standard Incident Report.

RESPONSIBILITY:

It is the responsibility of all Emergency Operations Division staff to comply with the provisions of this Operating Guideline.

REFERENCES:

- Fire Protection and Prevention Act, S.O. 1997, as may be amended
- Section 21 Committee Guidance Note GN-4-09, Respiratory Protection
- Section 21 Committee Guidance Note GN-4-13, Personal Protection During Fire Investigation Operations
- Muskoka Lakes Fire Department OG 203, Use of Breathing Apparatus
- Muskoka Lakes Fire Department OG 223, Respiratory Protection During Investigations
- Muskoka Lakes Fire Department OG 1807, Essential & Enhanced Level Fire Investigation
- NFPA 921, Guide for Fire and Explosion Investigations, 2014 Edition
- IFSTA, Fire Investigator, Second Edition

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MUSKOKA LAKES FIRE DEPARTMENT – FIRE SCENE RELEASE FORM

The Muskoka Lakes Fire Department responded to a significant fire in the building as noted below:

Date/Time: _____

Location: _____

Incident Number/Nature of Response:

The fire department has completed operations and has taken every reasonable precaution to ensure the fire is out and prevent further damage from occurring to the property. As a result of the fire however, the building may be unsafe to enter. Where property damage has occurred, it may be necessary to contact the Township of Muskoka Lakes Building Standards department to obtain a building permit for repairs (705-765-3156). Where food preparation is conducted on site for public consumption, the Simcoe Muskoka Health Unit must also be contacted.

As a result of the fire:

- Utilities have been disconnected
- The structure has been compromised and may be unsafe
- There is standing water in the basement
- Air Quality cannot be assured
- Hazardous debris exists
- The building is not secure
- Other:

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MUSKOKA LAKES FIRE DEPARTMENT – FIRE SCENE RELEASE FORM

Once fire department operations are completed, we strongly recommend that a “Fire Watch” be conducted for a minimum of 24 hours to watch for possible re-ignition of the fire.

Depending on the nature of the fire, the construction of the building and other factors, a “Fire Watch” of a longer duration may be warranted.

I hereby authorize the Muskoka Lakes Fire Department to post a “Fire Watch” at my expense for a period of 24 hours and agree to pay the Township of Muskoka Lakes within 30 days upon invoicing.

(Note: invoice will be based on current Muskoka Lakes Fire Department “Fees and Charges” By-Law.)

I have elected not to have the Gravenhurst Fire Department post a “Fire Watch” and acknowledge that the fire department has released the building to me. I understand that I am responsible for conducting the “Fire Watch”, and for the security of the building, contents and property and hereby agree to indemnify and save harmless the Township of Muskoka Lakes, the Muskoka Lakes Fire Department and its officers from and against any action, damages and costs whatsoever brought by reason of any rekindling (re-ignition) of the fire.

Building Owner/Representative:

Muskoka Lakes Fire Department:

Name (print): _____

Name (print): _____

Signature: _____

Signature: _____

Best Practices for Post-Fire “Fire Watch”

- Minimum of two persons
- Conducted for minimum of 24 hours following the completion of fire department operations
- Persons providing fire watch are to be appraised of all risks/hazards present
- Persons to check the building perimeter at 15-30 minute intervals for any signs of fire/smoke
- Persons assigned to fire watch should be equipped with an appropriate means to extinguish hot spots
- Persons assigned to fire watch should have a means to summon assistance if required (two-way radio/cell phone)
- Persons assigned to fire watch must have appropriate Personal Protective Equipment and clothing
- The fire watch can only be terminated when all risk of re-ignition has passed.