## 2.3.1 Fire Cause and Arson Investigation



# YOUR ORGANIZATION STANDARD OPERATING PROCEDURES/GUIDELINES

TITLE: Fire Cause and Arson Investigation	SECTION/TOPIC: Special Programs
NUMBER: 2.3.1	ISSUE DATE:
	REVISED DATE:
PREPARED BY:	APPROVED BY:
Preparer	Approver
These SOPs/SOG	is are based on FEMA guidelines FA-197
1.0 POLICY REFERENCE	
CFR	
NFPA	
NIMS	

## 2.0 PURPOSE

This standard operating procedure/guideline addresses procedures for investigating fires, which may include arson detection, cause and origin detection, and evidence collection and preservation.

## 3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

## **4.0 DEFINITIONS**

These definitions are pertinent to this SOP/SOG.

## **5.0 PROCEDURES/GUIDELINES & INFORMATION**

## **5.1 Procedures for Investigating Fires:**

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 2 of 7

## **RESPONSIBILITY**

The determination of fire origin and cause is necessary for all fire incidents. The Officer in Charge is responsible for determining when a Fire Investigator is needed. This determination is dependent on the information gathered at the scene and/or circumstances of the fire. The on-duty Fire Investigators are available through Dispatch and Deployment or by phone to consult with Command prior to or during response to assist Command.

A fire investigation is conducted after fire control and salvage activities are completed, but before overhaul actions, which could hinder the investigation.

#### DISPATCH

A Fire Investigator dispatched by Dispatch and Deployment or called by the Officer in Charge, will respond to the scene reference the following circumstances:

- Fire deaths or serious fire injuries
- All working first alarm or greater structure fires
- Fires for which the cause cannot be determined by Command on the scene
- Explosions and bombings
- Requested by City Police Department to respond to known arson fires
- Car, field, or dumpster fires that have an identified lead or suspect in custody
- Attempted arsons

## **NON-DISPATCH**

A Fire Investigator is not needed for the following situations. The company officer is responsible for completing an accurate Field Incident Report to document the fire cause:

- Minor fires where cause is determined to be accidental
- Scalding burns, electrical accidents, and minor accidental burn injuries
- Car fires originating in the engine area during vehicle operation, abandoned autos, or vehicle arsons with no identified suspects
- Minor grass, fence, or trash fires with no witnesses or suspects
- Traffic accident fatalities involving fire subsequent to collision (investigated by City Police Department)
- To hold the scene until another agency or service responds
- When requested to make contact with homeowner for the purpose of insurance matters
- Minor fires caused by juveniles playing with fire, matches, etc. These incidents are referred to the Youth Firesetter Program. Referrals are made by completing the Youth Firesetter Referral Form on Firewire in the Links column, clicking PFD Programs and filling out the form or calling the Youth Firesetter Coordinator at 800-555-1111.

If an incident is determined to be of a minor nature (e.g. accidental, no injuries, slight fire damage) and the cause can be determined by the Company Officer on scene through the information gathered at the scene and/or circumstances of the fire, units on the scene shall gather the information needed

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 3 of 7

and to accurately complete the required report. If a victim requests information regarding their fire loss, the Company Officer can give the Fire Department Incident Number to assist the victim to accessing Fire Department information through the Custodian of Records at 800-555-1111. The victim should also be given a copy of the P.F.D. "After the Fire" brochure to assist them.

## FIRE SCENE COORDINATION

When a Fire Investigator is on the scene or responding, companies will delay non-essential overhaul and secure the fire scene until the Fire Investigator arrives. Salvage and all unnecessary interim activities which may alter, contaminate the fire scene, or interfere with a subsequent origin and cause investigation must be discontinued until authorized to continue by the responding Fire Investigator.

Command will assign personnel to protect and maintain custody of the fire scene until the arrival of a Fire Investigator, especially when a delay in response has been indicated by the responding Fire Investigator.

After achieving fire control, Command may release companies not required for the completion of the investigation and/or overhaul. In some cases, involving lengthy investigations, companies may return to quarters and later respond back to the scene to complete overhaul activities when requested by the Fire Investigations Sector.

Command will turn over jurisdiction of the fire area to the Fire Investigator as soon as possible after the fire is stabilized. The Investigator retains jurisdiction of the scene until it is released back to Command. The Fire Investigator may inform Command they need to maintain custody of the scene for further investigation.

The Investigator will request from Command any personnel or equipment necessary for the investigation. Command will make every attempt to meet such requests, to the extent possible under the prevailing circumstances.

All personnel will cooperate with the Fire Investigator and the Fire Investigations Sector. Protection of the fire scene and preservation of physical evidence is a primary concern once life safety and fire control are achieved.

An attempt to identify the victims and witnesses at the fire scene will be made as soon as possible, and will not be delayed until the Fire Investigator is on the scene. Obtaining the identification of victims and witnesses is critical to the investigative process.

## **ACCELERANT DETECTION CANINE**

The City Fire Department Investigations Section has the services of an accelerant detection canine assigned to the unit. The canine is used by the assigned Fire Investigator/Handler to identify the use of

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 4 of 7

accelerants in the ignition of the fire. Personnel should avoid contact with the dog unless given permission by the dog handler.

The canine will be called by the on-duty Fire Investigator, as needed.

## JOINT FIRE/POLICE INVESTIGATIONS

Police Department Responsibilities per PPD Operations Order xx

#### **FIRES**

- Officers will assist the Fire Department in determining the location, size, type of fire, and any special information, which may help in determining the number of fire units necessary.
- Officers will take appropriate action to rescue victims of fires but, if possible, will notify the Fire Department prior to any rescue attempt.
- Officers' primary responsibility at the fire scene will be to control pedestrian and vehicular traffic as well as to prevent the interference with firefighters or officers at the scene.

**NOTE:** When persons disobey or interfere with a firefighter at a fire scene, they may be arrested, if necessary, in aggravated cases (Refer to xx or xx).

- Officers will contact the senior Fire Department supervisor at the scene for specific instructions.
  - When Command indicates a perimeter of the fire is necessary, Command will also indicate which areas are to be protected.
  - Officers will divert traffic, as needed, to limit congestion.
  - Special care will be taken to prevent vehicles from crossing fire hoses.
  - Officers will perform other police-related duties and functions as requested by the Fire Department.
- When off-duty firefighters are required to report to a fire scene, they will be permitted to
  proceed immediately to the fire scene in their personal vehicles, if necessary, after properly
  identifying themselves.
- The Police Department will not provide personnel for extended periods of time solely for the purpose of securing property at a fire scene.
  - The Fire Department will be responsible for contacting a private security agency to perform that service.

Police Department Responsibilities per PPD Operations Order xx

#### **ARSON INVESTIGATION**

## Initial Investigation

- When arson is suspected, officers will secure the scene and request a Fire Department investigator.
- Fire investigators are certified peace officers with police powers only in arson-related matters.

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 5 of 7

- Fire investigators are on duty 24 hours a day and may be contacted through Fire Alarm Dispatch at 800-555-1111.
  - Fire investigators have portable radios with access to all precinct channels.
  - Radio codes will not be used when communicating with fire investigators.
- Upon the fire investigator's arrival at the scene, officers will advise them on:
  - Observations of smoke color
  - Flame intensity
  - Security of the property upon first officer's arrival
  - Any personal knowledge of past activity at the premises
- All fire apparatus carry the yellow "FIRE LINE DO NOT CROSS" tape, available to officers to aid
  in securing the scene.
- Arson of vehicles will only be investigated by the Fire Investigations Section when a suspect is in custody or immediate investigation is possible.
  - The responding fire company is responsible for relaying all suspect information to the Fire Investigations Section and supplying the victim with necessary information.
  - The Fire Investigations Section will conduct follow-up investigations.
  - Victims' questions will be referred to the Fire Department.
  - An engine company should be called to the scene of vehicle arsons where the fire has been
    extinguished or has burnt out so that a report can be prepared for the Fire Investigations
    Section.

Police Department Responsibilities per PPD Operations Order xx

## **Arson and Reckless Burning Reports**

- Disposition will be taken by a fire investigator.
  - Fire Investigators are authorized to write arson and reckless burning DRs only.
  - If another crime is involved, such as burglary or stolen/recovered vehicle, officers will investigate the incident and complete an "A" DR.
  - A supplement will be completed to provide any additional pertinent information.
- Officers, who must leave the scene prior to the arrival of the fire investigator, will leave their name, serial number, and work unit telephone number with the officer remaining at the scene or with fire command for later follow-up.

Police Department Responsibilities per PPD Operations Order xx

## **OPEN BURNING**

- If neither reckless burning nor arson apply, but a fire was willfully set, the City Fire Code (Ordinance xx, Section xx) prohibiting open burning without a permit may be used.
- An open burning permit may be obtained from the Fire Prevention Division of the Fire Department.

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 6 of 7

- Officers receiving complaints of open burning will contact the Fire Prevention Office to determine if a permit has been issued.
- If no permit exists, an engine company will be called to the scene so a report can be prepared for the Fire Investigations Section.
- If the situation appears to be serious, the officer will call a Fire Department investigator to the scene for appropriate enforcement action.

#### FIRE DEPARTMENT LIAISON

- The administrative lieutenant in the Patrol Support Bureau is the Police Department's liaison with the Fire Department.
- Questions or concerns about the Fire Department's operations should be forwarded in a memorandum to the Patrol Support Bureau's administrative lieutenant.

## **5.2 Arson Detection:**

## 5.3 Cause and Origin Detection:

## 5.4 Evidence Collection and Preservation:

#### **Arson Evidence**

- Fire investigators are responsible for the collection, preservation, and impounding of all arson evidence found at the scene.
- Officers or a Laboratory Services Bureau evidence technician will dust for latent fingerprints when possible.
- The fire investigator will take all necessary photographs, which may include those related to another crime at the arson scene.
- If the crime, other than arson, is of a serious nature, such as homicide, a Laboratory Services Bureau evidence technician should also photograph the scene.

## **PRESERVATION OF EVIDENCE**

Every fire scene contains evidence. Fire fighting operations present the greatest potential for damage to evidence which may be used by the Fire Investigators and the Police Department in subsequent court cases and prosecution.

CITY FIRE DEPARTMENT
STANDARD OPERATING PROCEDURE/GUIDELINE
SPECIAL PROGRAMS – 2.3.1 FIRE CAUSE AND ARSON INVESTIGATION
DATE APPROVED
PAGE 7 of 7

Evidence of fire cause is rarely destroyed by fire. The form, shape, color, size, and weight of items may be altered, but evidence can still be identified upon trained examination. It is imperative to preserve evidence as found, in place and not moving fire debris unnecessarily.

It is the responsibility of the Fire Department to protect the fire scene from unnecessary damage during fire fighting operations. Special care exercised during extinguishment will avoid the destruction of evidence through the misuse of fire streams. Salvage operations should be minimal until the initial fire investigation is completed, and should be confined to diminishing loss. Companies assigned to Loss Control Sector should incorporate scene security and evidence preservation into their plan to stop the loss.

The fire scene is the Fire Investigator's laboratory. It is searched carefully and thoroughly, photographed, diagrammed for placement of contents and evidence, and evidence is then collected and preserved.

The fire scene must be secured. Evidence cannot be used in court unless the Fire Investigator can establish a chain of custody by proving who found the evidence, where it was found and the evidence was not tampered with while in official custody. To ensure that the chain of custody remains unbroken, the scene must remain in the sole custody of the Fire Department. When at a fire scene where custody must be maintained, a guard must be posted, and custody must be maintained until the scene is released. No unauthorized persons may enter the scene. The Fire Department has the legal authority to close the scene entirely, even to the property owner or to other interested person/s. It is vital that the Fire Department prevent personnel from unnecessarily walking through a fire area, walking on, obscuring evidence, or picking up and moving evidence. This includes both Fire Department personnel and the media. If it is essential that evidence be moved or if necessary fire fighting operations may damage evidence, the evidence must be covered or its location marked before moving it carefully to a secure location.