

3 Fire and Explosion Reporting and Investigation

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3.1 Structural Fire Incident Notification

Parks shall provide notification of all structural fire incidents once the incident has been stabilized. That notification will be made through the Leadership Notification Tool and contain the following information:

- Date and time of the incident
- Who was involved in the incident
- What caught fire or exploded that lead to the incident
- Where did the incident occur
- Were there any injuries because of the incident regardless of seriousness
- A brief account of the incident that should include who responded. Include the presence of a suppression system and if smoke detection was present
- Photos of the scene

The RSFM will notify the national office of the above listed information and provide additional information on the structure. This could include the size of the structure involved, who operates the structure, and what fire investigation capabilities are available.

3.1.1 Additional Notification

Additional notification is to be made to the Emergency Incident Coordination Center (EICC) in accordance with established timelines. Reference Manual 50B, *Occupational Safety and Health Program*, provides comprehensive information regarding procedures and required actions to be taken after accidents/incidents.

3.2 Structural Fire and Explosion Investigations

All fires and explosions that occur on NPS property, including inholdings, private property used in/or at an NPS site, and leased facilities, will be investigated and entered into the DOI Safety Management Information System. These fires and explosions include, though not limited to, buildings, boats, vehicles, dumpsters, boardwalks, and docks. Immediately reporting and thoroughly investigating structure fires are agency requirements that are essential in preventing future fires.

The purpose of the investigation is to determine:

- The origin and cause of the fire
- The actions that led to the fire and future preventative measures to be taken
- Lapses in policies or the failure to adhere to them
- Faulty equipment or practices that can be shared servicewide
- Lessons learned
- Fire protection system success or failure
- Identify trends and patterns of fire losses

As a caution, the post fire environment may be contaminated with asbestos, lead, and combustion byproducts which may be hazardous to employees. It is likely that personal protective equipment (PPE) will be necessary for those entering the burned area to investigate. Sampling and analysis may be required to identify hazardous materials present in the burned area.

3.3 Responsibilities

3.3.1 Park Level

- The incident commander and law enforcement personnel should focus on securing and preserving the scene and surrounding area of any fire or explosion. The structure and surrounding areas must be secured until the investigation team arrives to ensure potential evidence is not compromised.
- No one, including park employees, shall enter the fire/explosion scene, unless authorized by the incident commander.
- Notification of all structure fire incidents will be made to the Leadership Notification Tool. Incidents will also be reported through the Emergency Incident Coordination Center (EICC) Serious Accident Report portal.
- Assigning a park employee, as requested by the region, to act as the liaison between the fire investigation team and the national structural fire program office.
- If local first responders cannot perform the investigation, the superintendent will request assistance through the national structural fire program office to determine who will conduct the investigation.
- Overhaul and salvage procedures should be postponed, if possible, but if required, they should be performed with care and effort not to destroy potential evidence.
- Participate in a post incident call with park, regional, and national program staff.
- Input the incident report into the NPS law enforcement records management system and provide the incident number to the RSFM and the national office. Parks without LE should coordinate with regional LE to input the incident into the records management system.

- Ensure that all investigation protocols and procedures within this chapter are followed and met.

3.3.2 Regional Level

- The RSFM will coordinate with the national office to support the fire investigation and to mobilize the needed resources.
- Ensure the NPS fire chief is notified of all structure fires as soon as possible.
- The RSFM shall establish contact with the primary point of contact (park liaison). Ensure a post incident call takes place with park, regional, and national office.
- If needed, the RSFM will work in conjunction with the national office and other regions to establish an origin and cause investigation team. Logistical support for team deployment will be the responsibility of the region.
- Ensure the fire incident report has been entered into the NPS law enforcement records management system and if required, a structural fire investigation report is completed and sent to the national office.

3.3.3 National Level

- Ensure that RSFM is notified of all structure fire incidents within their region. This ensures that structure fire incident information reported directly to the national office is forwarded promptly to the regions.
- Facilitate an incident collaboration call with park, regional, and national offices to validate incident facts and notify the park of the type of investigation required.
- Maintain a national roster of qualified fire investigators for the immediate response to investigate fire. Determine notification process for response to investigate fires.
- Support fire investigation training to ensure fire investigators are current with certification requirements.
- Maintain fire investigation equipment for deployment to fire incidents.
- Maintain user database and access to the Bomb Arson Tracking System (BATS) to capture all fire investigations for the NPS.
- Ensure that all fire investigation reports are completed timely and provided as a supplemental to the law enforcement reporting system.
- Ensure that all structure fires are properly investigated in accordance with standards and agency policy.
- Ensure that procedures related to accident investigations and Structure Fire Serious Accident Investigations (SF-SAIs) are followed and coordinated.
- Coordination with other appropriate WASO offices.

3.4 Initiation of an Investigation

This section provides specific guidance related to investigations of structure fires not covered in Reference Manual 50B: *Occupational Safety and Health Program*, Chapter 1 and RM-50B Chapter 7, Safety Program Leadership and Management and Employee Involvement.

All fires will have an origin and cause investigation. At a minimum, the origin and cause investigation determine the general location of a fire or explosion and the circumstances, conditions, or agencies that brought about or resulted in the incident.

Structure fires often exceed the threshold that requires a Serious Accident Investigation (SAI) per current policy. Notification and engagement with regional and national office contacts will ensure the appropriate investigation is conducted.

The table below identifies the requirements for initiating an SAI response for structure fires. In addition, the table defines other investigations that may be used for structure fire events and the management level that owns the investigative process. If at any time an accident investigation team discovers the need to raise an existing investigation to the level of an SAI, they will immediately notify their regional director. A detailed explanation of each investigation type follows the table.

Structure Fire Event	Investigation Type	Notification Requirement	Management Level that Determines Review Type and Authorizes Review
Structure Fire Incident (All Fires) Any fire/explosion incident that is not wildland in nature, regardless of the magnitude. Significant loss of operational capabilities in any structure not meeting SAI criteria.	Origin and Cause and/or SFII Investigation and/or Law Enforcement/Criminal Investigation	Park Superintendent, Regional Director, or designee regional reporting process, NPS Structural Fire Program Office, and the EICC	NPS Fire Chief
Structure Fire Serious Accident Investigation (SAI) One or more of the following: <ul style="list-style-type: none"> • Fatalities • Hospitalization of NPS firefighters • Hospitalization of one or more persons • Loss of significant cultural resources • Loss in excess of \$750,000 	Serious Accident Investigation (SAI) and Origin and Cause Investigation	Park Superintendent, Regional Director or designee regional reporting process, NPS Structural Fire Program Office, and the Emergency Information and Coordination Center (EICC)	Designated Agency Safety and Health Official (DASHO)

3.5 Investigation Type Descriptions

3.5.1 Origin and Cause Investigation (All Fires)

Regardless of the size of the fire, all structure fire events require an origin and cause investigation. Origin and cause investigations should be coordinated with local and/or state fire law enforcement resources, if available. The park, RSFM, and national office must coordinate investigative efforts. Origin and cause investigations can be conducted by the responding fire departments, local or state entities responsible for fire investigations, or by NPS fire investigators.

Parks should secure the incident scene and take general scene pictures of the location as soon as possible. If law enforcement is available, the investigative process can begin by gathering statements, collecting photographs, and documenting weather conditions at the time of the fire.

3.5.2 Structure Fire Incident Investigation (SFII)

Any incident with significant loss of operational capabilities in any structure not meeting SAI criteria or an incident that leads to an injury will require a Structure Fire Incident Investigation (SFII). The investigation will consist of a team of trained personnel identified by the national structural fire program office. The team will have a team leader, fire investigator(s), and law enforcement representative. The team lead shall contact regional leadership to recommend the use of an SAI if, during the initial phases of the investigation, any of the following are determined:

- There is a potential for litigation against an employee or the agency.
- The incident was caused by an act of reckless and willful disregard for human safety.
- The financial loss threshold is determined to exceed \$750,000.
- There were multiple and/or serious failures to follow established policies.

The NPS fire chief will be responsible for staffing a structure fire incident investigation team (SFIIT). This team may need personnel proficient in origin and cause investigations to oversee the local responder's investigation or conduct their own in the absence of local resources. The use of other SMEs may be needed based on the type and use of the structure. The SFIIT will focus on fire origin and cause and produce a comprehensive report that will include specific information relating to the factors that caused and contributed to the fire.

The SFIIT will generate a factual report using the BATS system, that report will include:

- Executive summary
- Acknowledgments
- Table of abbreviations
- Overview of the park
- Property description

- Events prior to the incident
- Weather
- Report of fire
- Fire department actions
- Local fire investigation
- Structure fire accident investigation
- Follow up investigations
- Determination of cause process
- Potential, likely and/or known ignition sources
- Potential, likely and/or known first fuel ignited
- Findings

The fire investigator will present a final report to park leadership, regional director, and the NPS Structural Fire Program Office. In some instances, corrective actions of a servicewide nature will be found. These will be forwarded to the division chief, fire and aviation management for resolution. The final SFII report will be forwarded to the division chief, fire and aviation management for archive and use as a lesson learned tool. A regional director may determine that the incident requires a Facilitated Learning Analysis (FLA). This will be coordinated by the region using the FLA model. The NPS Structural Fire Program Office will coordinate SME support the FLA and a copy of the report provided to the ADVRP.

3.5.3 Structure Fire Serious Accident Investigation (SAI)

Any incident meeting the description of a structure fire serious accident will require a SAI. The designation of a Structure Fire SAI will be done at the direction of the DASHO with support provided by the NPS fire chief. While the criteria for initiating a Structure Fire SAI have been clarified in RM-58, the SAI will be performed in accordance with the SAI protocols in Reference Manual 50B: *Occupational Safety and Health Program*.

3.5.4 Criminal Structure Fire Event

Law enforcement officials shall be notified immediately if a fire appears to be intentional or suspicious in nature. A fire that was caused intentionally or may have resulted from criminal activity will be investigated by a law enforcement official. Fire investigators will support the law enforcement investigation with origin and cause findings and any additional fire related support. Scene security shall be required continuously, until the scene is released by the fire investigator and law enforcement.