

Chapter 18**Reviews, XXX and Investigations XXX & Analyses****Introduction**

Reviews and investigations are used by wildland fire and aviation managers to assess and improve the effectiveness and safety of organizational operations. XXX Information (other than factual) derived from safety reviews and accident investigations should only be used by the agency(ies) for accident prevention and safety purposes.

XXX Multiagency Cooperation

XXX Many reviews and investigations involve cooperation between Federal, State, County, and Municipal Agencies. To fulfill each agencies authorities, policies, and responsibilities a multi-agency review or investigation may be necessary.

XXX The Team Leader or delegating official(s) should establish cooperative relationships with the other agencies involved in the review or investigation to ensure policies and responsibilities are met. This may involve negotiations, cooperative agreements, and coordination with the agency Designated Agency Safety and Health Official (DASHO) or the agency official who signs the delegation of authority.

XXX Federal Interagency Investigations

XXX Close calls or accidents that involve interagency (USFS or DOI) personnel and/or jurisdiction (e.g., USFS firefighter injured on FWS jurisdictional wildland fire & vice versa) shall be reviewed or investigated cooperatively and conducted at the appropriate level as outlined in this chapter.

XXX Agency administrators will ensure that affected agencies are involved throughout the review/investigation process.

XXX When an incident does not meet the serious accident criteria, the affected agency administrators should jointly decide what type and level of investigation will be conducted based on agency processes outlined in this chapter. Questions should be addressed to your agency wildland fire safety program manager.

Reviews

Reviews are methodical examinations of system elements such as program management, safety, leadership, operations, preparedness, training, staffing, business practices, budget, cost containment, planning, and interagency or intra-agency cooperation and coordination. Reviews do not have to be associated with a specific incident. The purpose of a review is to ensure the effectiveness

1 of the system element being reviewed, and to identify deficiencies and
 2 recommend specific corrective actions. Established review types are described
 3 below and include:

- 4 • Preparedness review
- 5 • After action review
- 6 • Fire and aviation safety team review
- 7 • Aviation safety and XXX technical assistance team review
- 8 • Large Fire Cost Reviews
- 9 • Individual fire review
- 10 • Lessons learned review
- 11 • Escaped prescribed fire review

12
 13 **XXX Review Types and Requirements**

Type	When Conducted	Delegating or Authorizing Official
Preparedness Review	Annually, or management discretion	Local/State/Region/National
After Action Review	Management discretion	N/A
Fire and Aviation Safety Team Review	As fire activity dictates	Geographic Area Coordinating Group
Aviation Safety and Technical Assistance Team Review	As aviation activity dictates	State/Regional Aviation Manager or MACG
Large Fire Cost Review	Refer to NWCG Memorandum #003-2009	Agency Director
Individual Fire Review	Management discretion	Local/State/Region/National
Lessons Learned Review	Management discretion	Local/State/Region/National
Escaped Prescribed Fire Review	See <i>Interagency Prescribed Fire Planning and Implementation Procedures Guide (2008)</i>	

- 14 • *XXX NPS—Park Units will notify Regional FMOs of the need for review or investigation.*

16
 17 **Preparedness Reviews**

18 Fire preparedness reviews assess fire programs for compliance with established
 19 fire policies and procedures outlined in the current *Interagency Standards for*
 20 *Fire and Fire Aviation Operations* and other pertinent policy documents.
 21 Reviews identify organizational, operational, procedural, personnel, or
 22 equipment deficiencies, and recommend specific corrective actions. Interagency
 23 Preparedness Review Checklists can be found at:
 24 http://www.nifc.gov/policies/preparedness_reviews/preparedness_reviews.htm

- 1 • ~~BLM/FS Preparedness review functional checklists that can be found at:~~
2 ~~<http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness->~~
3 ~~[review.html.](http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness-)~~

5 **After Action Reviews (AAR)**

6 An AAR is a learning tool intended for the evaluation of an incident or project
7 in order to improve performance by sustaining strengths and correcting
8 weaknesses. An AAR is performed as soon after the event as possible by the
9 personnel involved. An AAR should encourage input from participants that is
10 focused on:

- 11 • What was planned?
- 12 • What actually happened?
- 13 • Why it happened?
- 14 • What can be done the next time?

15 ~~XXX If~~ **An AAR** is a tool that leaders and units can use to get maximum benefit
16 from the experience gained on any incident or project. When possible, the
17 leader of the incident or project should facilitate the AAR process. However,
18 the leader may choose to have another person facilitate the AAR as needed and
19 appropriate. AARs may be conducted at any organizational level. However, all
20 AARs follow the same format, involve the exchange of ideas and observations,
21 and focus on improving proficiency. The AAR should not be utilized as an
22 investigational review. The format can be found in the *Interagency Response*
23 *Pocket Guide (IRPG), PMS #461, NFES #1007*

25 **Fire and Aviation Safety Team (FAST) Reviews**

26 Fire and Aviation Safety Teams assist agency administrators during periods of
27 high fire activity by assessing policy, rules, regulations, and management
28 oversight relating to operational issues. They can also do the following:

- 29 • Provide guidance to ensure fire and aviation programs are conducted safely.
- 30 • Assist with providing immediate corrective actions.
- 31 • Review compliance with OSHA abatement plan(s), reports, reviews and
32 evaluations.
- 33 • Review compliance with *Interagency Standards for Fire and Fire Aviation*
34 *Operations*.

36 FAST reviews can be requested through geographic area coordination centers to
37 conduct reviews at the state/regional and local level. If a more comprehensive
38 review is required, a national FAST can be ordered through the National
39 Interagency Coordination Center.

41 FASTs include a team leader, who is either an agency administrator or fire
42 program lead with previous experience as a FAST member, a safety and health
43 manager, and other individuals with a mix of skills from fire and aviation
44 management.

1 FASTs will be chartered by their respective Geographic Area Coordinating
2 Group (GACG) with a delegation of authority, and report back to the GACG.

3
4 Fast reports will include an executive summary, purpose, objectives,
5 methods/procedures, findings, recommendations, follow-up actions (immediate,
6 long-term, national issues), and a letter delegating authority for the review.
7 FAST reports should be submitted to the geographic area with a copy to the
8 Federal Fire and Aviation Safety Team (FFAST) chair within 30 days. See
9 Appendix O for sample FAST Delegation of Authority.

11 ~~XXX Aviation Safety Assistance Team (ASAT) Aviation Safety and~~ 12 ~~Technical Assistance Team (ASTAT) Reviews~~

13 ~~During high levels of aviation activity it is advisable to request an Aviation~~
14 ~~Safety XXX and Technical Assistance Team (ASTAT). The team's purpose is~~
15 ~~to assist and review helicopter and/or fixed wing operations on ongoing~~
16 ~~wildland fires. An ASTAT team should be requested through the agency chain~~
17 ~~of command and operate under a delegation from the appropriate state/regional~~
18 ~~aviation manager or multi-agency coordinating group. Formal written reports~~
19 ~~will be provided to the appropriate manager. An ASTAT should consist of:~~

- 20 ● ~~Aviation Safety Manager~~
- 21 ● ~~Operations Specialist (helicopter and/or fixed wing)~~
- 22 ● ~~Pilot Inspector~~
- 23 ● ~~Maintenance Inspector (optional)~~
- 24 ● ~~Avionics Inspector (optional)~~

25 ~~XXX Refer to Chapter 16 for ASTAT information.~~

27 **Large Fire Cost Reviews**

28 Information on large fire cost reviews can be found in ~~XXX Chapter 11~~
29 (Incident Management), and at [http://www.nwcg.gov/general/memos/nwcg-003-](http://www.nwcg.gov/general/memos/nwcg-003-2009.html)
30 [2009.html](http://www.nwcg.gov/general/memos/nwcg-003-2009.html)

32 **Individual Fire Reviews**

33 Individual fire reviews examine all or part of the operations on an individual
34 fire. The fire may be ongoing or controlled. These reviews may be a local,
35 state/regional, or national. These reviews evaluate decisions and strategies,
36 correct deficiencies, identify new or improved procedures, techniques or tactics,
37 determine cost-effectiveness, and compile and develop information to improve
38 local, state/regional or national fire management programs.

40 **XXX Notification**

41 ~~Near misses or successful operations should be reported to first line supervisors.~~
42 ~~Supervisors will notify the unit fire management officer, the unit fire~~
43 ~~management officer will then notify their agency administrator. In cases of~~
44 ~~entrapment near misses, notification to the respective agency's national fire~~
45 ~~office is required. The determination for review/investigation level will be made~~
46 ~~from the national level.~~ Added to Investigations Chart

- 1 ● ~~XXX NPS – Park Units will notify Regional FMOs of the need for review or~~
2 ~~investigation. Added under investigations chart and reviews chart~~

3

4 **Lessons Learned Reviews (LLR)**

5 The purpose of a LLR is to focus on the near miss events or conditions in order
6 to prevent potential serious incident in the future. In order to continue to learn
7 from our near misses and our successes it is imperative to conduct a LLR in an
8 open, non-punitive manner. LLRs are intended to provide educational
9 opportunities that foster open and honest dialog and assist the wildland fire
10 community in sharing lessons learned information. LLRs provide an outside
11 perspective with appropriate technical experts assisting involved personnel in
12 identifying root causes and sharing findings and recommendations.

13

14 ~~XXX LLR Lessons Learned Review Process~~

15 A LLR should be tailored to the event being reviewed and the extent of the
16 review should be commensurate with the severity of the incident being
17 reviewed. An LLR should not be used in lieu of a Serious Accident
18 Investigation (SAI) ~~XXX~~ or Non-Serious Accident Investigation (NSAI) if the
19 SAI/NSAI criteria have been met.

- 20 ● ~~XXX FS- FLA/APA may be used for incidents meeting the NSAI criteria.~~

21

22 A LLR will be led by a facilitator not involved in the event. A facilitator should
23 be an appropriate fire management expert who possesses skills in interpersonal
24 communications, organization, and be unbiased to the event. Personnel
25 involved in the event will be participants in the review process. Depending
26 upon the complexity of the event, the facilitator may request assistance from
27 technical experts (e.g., fire behavior, fire operations, etc.).

28

29 The LLR facilitator will convene the participants and:

- 30 ● Obtain delegation of authority from appropriate agency level. See appendix
31 K for a sample LLR Delegation of Authority.
- 32 ● Identify facts of the event (sand tables maybe helpful in the process) and
33 develop a chronological narrative of the event.
- 34 ● Identify underlying reasons for success or ~~XXX failure~~ unintended
35 outcomes.
- 36 ● Identify what individuals learned and what they would do differently in the
37 future.
- 38 ● Identify any recommendations that would prevent future similar
39 occurrences.
- 40 ● Provide a final written report including the above items to the pertinent
41 agency administrator(s) within two weeks of event occurrence ~~XXX unless~~
42 otherwise negotiated. Names of involved personnel should not be included
43 in this report (reference them by position).

44

- 1 A copy of the final report will be submitted to the respective agency's national
2 fire safety lead who will provide a copy to the Wildland Fire Lessons Learned
3 Center (WFLLC). Website: <http://wildfirelessons.net/Home.aspx>.
- 4 • *FS - The Forest Service has developed two processes for conducting*
5 *Lessons Learned Reviews: the Facilitated Learning Analysis (FLA) and the*
6 *Accident Prevention Analysis (APA). Guides have been produced for these*
7 *processes and are available XXX from Regional and National risk*
8 *management and safety personnel. at*
9 *http://www.wildfirelessons.net/documents/Organizational_Learning_APA_*
10 *[FLA_Guides_2010.pdf](http://www.wildfirelessons.net/documents/Organizational_Learning_APA_)*

11 Escaped Prescribed Fire

12 A prescribed fire which has exceeded or is expected to exceed its prescription.

13 ~~XXX Declared Wildfire~~ Escaped Prescribed Fire Reviews

14
15 Escaped prescribed fire review direction is found XXX in Chapter 18 of this
16 document and in these agency documents:

17 *Interagency Prescribed Fire Planning and Implementation Procedures Reference*
18 *Guide (August 2008)*

- 19 • *BLM - IM No. OF&A 2009-014*
- 20 • *FWS - Fire Management Handbook*
- 21 • *NPS - RM-18, Chapter 7 & 17*
- 22 • *FS - FSM 5140*

23 Investigations

24
25
26
27 Investigations are detailed and methodical efforts to collect and interpret facts
28 related to an incident or accident, identify causes (organizational factors, local
29 workplace factors, unsafe acts), and develop control measures to prevent
30 recurrence. XXX Established investigation types include:

- 31 • ~~Serious wildland fire accident investigation.~~
- 32 • ~~Non-serious wildland fire accident investigation.~~
- 33 • ~~Entrapment/ burnover investigation.~~
- 34 • ~~Fire shelter deployment investigation.~~
- 35 • ~~Fire trespass investigation.~~

36 Wildland Fire ~~XXX Incident and Accident~~ and Event Definitions

37 Serious Wildland Fire Accident

38
39 An unplanned event or series of events that resulted in death; injury,
40 occupational illness, or damage to or loss of equipment or property. For
41 wildland fire operations, a serious accident involves any of the following:

- 42 • One or more fatalities.
- 43 • Three or more personnel who are inpatient hospitalized as a direct result of
44 or in support of wildland fire operations.
- 45

- 1 • Property or equipment damage of \$250,000 or more.
2 • Consequences that the Designated Agency Safety and Health Official
3 (DASHO) judges to warrant Serious Accident Investigation.
4

5 **Non-Serious Wildland Fire Accident**

6 An unplanned event or series of events that resulted in injury, occupational
7 illness, or damage to or loss of equipment or property to a lesser degree than
8 defined in “serious wildland fire accident.”
9

10 **Near-miss**

11 An unplanned event or series of events that could have resulted in death; injury;
12 occupational illness; or damage to or loss of equipment or property but did not.
13

14 **Entrapment**

15 A situation where personnel are unexpectedly caught in a fire behavior-related,
16 life-threatening position where planned escape routes or safety zones are absent,
17 inadequate, or compromised. Entrapment may or may not include deployment
18 of a fire shelter for its intended purpose ~~XXX (NWCG Glossary of Fire~~
19 ~~Terminology)~~. Entrapment may result in a serious wildland fire accident, a non-
20 serious wildland fire accident, or a near-miss.
21

22 **Fire Shelter Deployment**

23 The removing of a fire shelter from its case and using it as protection against
24 fire. ~~XXX (NWCG Glossary of Fire Terminology)~~. Fire shelter deployment
25 may or may not be associated with entrapment. Fire shelter deployment may
26 result in a serious wildland fire accident, a non-serious wildland fire accident, or
27 a near-miss. ~~XXX Any time a fire shelter is deployed (other than for training~~
28 ~~purposes), regardless of circumstances, notification to the National Fire and~~
29 ~~Aviation Safety Office of the jurisdictional agency is required. Moved to table~~
30

31 **Fire Trespass**

32 The occurrence of unauthorized fire on agency-protected lands where the source
33 of ignition is tied to some type of human activity.
34
35
36
37
38
39
40
41
42
43
44
45

1 **XXX Review and Investigation Requirements- Investigation Types and**
 2 **Requirements**

Wildland Fire Event	XXX Review/Investigation Type	XXX Notification Requirement	Management level XXX that determines review type and authorizes review*
Serious Wildland Fire Accident	Serious Accident Investigation (SAI)	National	National
Non Serious Wildland Fire Accident	Non-Serious Accident Investigation (NSAI) XXX FS only- APA/FLA	BLM/NPS- National FS/FWS- Management Discretion	Region/State/Local
Entrapment	SAI, NSAI, LLR, depending on severity	National	National
Fire Shelter Deployment	SAI, NSAI, LLR, depending on severity	National	National
Near-miss	LLR, AAR	Management Discretion	Region/State/Local
Escaped Prescribed Fire	Escaped Prescribed Fire Review		National/Region/State
Fire Trespass	Fire Cause Determination & Trespass Investigation	Local	Local

3 *XXX Management may override lower level management and request a review
 4 or investigation regardless of the above criteria. Higher level management may
 5 exercise their authority to determine the type of review or investigation.

- 6 • XXX NPS— Park Units will notify Regional FMOs of the need for review
 7 or investigation.
- 8 • XXX FWS— Investigation level will be determined by the National Fire
 9 Management Branch Safety Office.

10
 11 **XXX Notification remove, Duplication**

12 Near misses or successful operations should be reported to first line supervisors.
 13 Supervisors will notify unit fire management officer, who will then notify their
 14 agency administrator. In cases of entrapment near misses, notification to the
 15 respective agency's national fire office is required and determination for
 16 review/investigation level will be made from the national level.

- 17 • NPS— Park Units will notify Regional FMOs of the need for review or
 18 investigation.

XXX Investigation Processes**Processes Common to Serious and Non-Serious Wildland Fire Investigations**

- **Site Protection** - The site of the incident should be secured immediately and nothing moved or disturbed until the area is photographed and visually reviewed. Exact locations of injured personnel, entrapments, injuries, fatalities, and the condition and location of personal protective equipment, property, and other equipment must be documented.
- **Management of Involved Personnel** - Treatment, transport, and follow-up care must be immediately arranged for injured and involved personnel. The agency administrator or delegate should develop a roster of involved personnel and supervisors and ensure they are available for interviews by the investigation team. The agency administrator should consider relieving involved supervisors from fireline duty until the preliminary investigation has been completed. Attempt to collect initial statements from the involved individuals prior to a Critical Incident Stress Management (CISM) session.
- **Critical Incident Stress Management (CISM)** - CISM is the responsibility of local agency administrators, who should have individuals pre-identified for critical incident stress debriefings. Also refer to The Agency Administrator's Guide to Critical Incident Management (PMS 926), available at: <http://www.nwcg.gov/pms/pubs/pms926.doc>. Individuals or teams may be available through Employee Assistance Programs (EAP's) or Geographic Area Coordination Centers (GACC's).
- **24-Hour-Preliminary Report** - This report contains known basic facts about the accident. It will be completed and forwarded by the agency administrator responsible for the jurisdiction where the accident occurred. Names of injured personnel are not to be included in this report (reference them by position).
- **72-Hour Expanded Report** - This report provides more detail about the accident and may contain the number of victims, severity of injuries, and information focused on accident prevention. It will be completed and forwarded by the SAI Team. Names of injured personnel are not to be included in this report (reference them by position).
- **24 and 72 Hour Reports** shall be sent to the respective agency's fire safety/risk management lead for national distribution and potential posting through NWCG Safety Alert System.

Wildland Fire Serious Accident Investigation Process**Fire Director Responsibilities**

The Fire Director(s) or designee(s) of the lead agency, or agency responsible for the land upon which the accident occurred, will:

- Notify the agency safety manager and Designated Agency Safety and Health Official (DASHO).

- 1 ● Immediately appoint, authorize, and deploy an accident investigation team.
- 2 ● Provide resources and procedures adequate to meet the team's needs.
- 3 ● Receive the factual and management evaluation reports and take action to
- 4 accept or reject recommendations.
- 5 ● Forward investigation findings, recommendations, and corrective action
- 6 plan to the DASHO (the agency safety office is the "office of record" for
- 7 reports).
- 8 ● Convene an accident review board/ board of review (if deemed necessary)
- 9 to evaluate the adequacy of the factual and management reports and suggest
- 10 corrective actions.
- 11 ● Ensure a corrective action plan is developed, incorporating management
- 12 initiatives established to address accident causal factors.
- 13 ● XXX Ensure Serious Accident Investigations remain independent of other
- 14 investigations.

16 Agency Administrator Responsibilities

- 17 ● Develop local preparedness plans to guide emergency response.
- 18 ● Identify agencies with jurisdictional responsibilities for the accident.
- 19 ● Provide for and emphasize treatment and care of survivors.
- 20 ● Ensure the Incident Commander secures the accident site.
- 21 ● Conduct an in-briefing to the investigation team.
- 22 ● Facilitate and support the investigation as requested.
- 23 ● Determine need and implement Critical Incident Stress Management
- 24 (CISM).
- 25 ● Notify home tribe leadership in the case of a Native American fatality.
- 26 ● Prepare and issue required 24 Hour Preliminary Report.

28 Notification

29 Agency reporting requirements will be followed. As soon as a serious accident
30 is verified, the following groups or individuals should be notified:

- 31 ● Agency administrator
- 32 ● Public affairs
- 33 ● Agency Law Enforcement
- 34 ● Safety personnel
- 35 ● County sheriff or local law enforcement as appropriate to jurisdiction
- 36 ● National Interagency Coordination Center (NICC)
- 37 ● Agency headquarters
- 38 ● OSHA (within 8 hours if the accident resulted in one or more fatalities or if
- 39 three or more personnel are inpatient hospitalized)

40 Notification to the respective agency's fire national safety/risk management lead
41 is required.

- 42 ● ~~FS~~ For Forest Service protocol for fatalities or 3 or more serious injuries
43 requiring hospitalization, investigation teams are assigned by the Office of
44 Safety and Occupational Health in the WO.

1 **Designating the Investigation Team Lead**

2 The 1995 Memorandum of Understanding between the U.S. Department of the
3 Interior and the U.S. Department of Agriculture states that serious wildland fire-
4 related accidents will be investigated by interagency investigation teams.
5 Following initial notification of a serious accident, the National Fire Director(s)
6 or their designee(s) will designate a Serious Accident Investigation Team
7 Lead(s) and provide that person(s) with a written delegation of authority to
8 conduct the investigation and the means to form and deploy an investigation
9 team.

10
11 Accidents involving more than one agency will require a collaboratively
12 developed delegation of authority that is signed by each of the respective
13 agencies.

14
15 **Serious Accident Investigation Team Composition**

- 16 • **Team Leader XXX (Core Team Member)**
17 A senior agency management official, at the equivalent associate/assistant
18 regional/state/area/division director level. The team leader will direct the
19 investigation and serve as the point of contact to the Designated Agency
20 Safety and Health Official (DASHO).
- 21 • **Chief Investigator XXX (Core Team Member)**
22 A qualified accident investigation specialist is responsible for the direct
23 management of all investigation activities. The chief investigator reports to
24 the team leader.
- 25 • **Accident Investigation Advisor/Safety Manager XXX (Core Team**
26 **Member)**
27 An experienced safety and occupational health specialist or manager who
28 acts as an advisor to the team leader to ensure that the investigation focus
29 remains on safety and health issues. The accident investigation
30 advisor/safety manager also works to ensure strategic management issues
31 are examined.
- 32 • **Interagency Representative**
33 An interagency representative will be assigned to every fire-related Serious
34 Accident Investigation Team. They will assist as designated by the team
35 leader and will provide outside agency perspective.
- 36 • **Technical Specialists**
37 Personnel who are qualified and experienced in specialized occupations,
38 activities, skills, and equipment, addressing specific technical issues such as
39 specialized fire equipment, weather, and fire behavior.
- 40 • **Public Affairs Officer**
41 For investigations with high public visibility and significant news media
42 interest, a public affairs officer (PAO) should be considered to be part of the
43 team. The PAO generally should not be affiliated with the home unit. The
44 PAO should develop a communications plan for the team, be a designated
45 point of contact for news media, and oversee all aspects of internal and
46 external communications. Ideally, the PAO should be qualified as a Type 1

- 1 or Type 2 public information officer and be familiar with SAI team
2 organization and function.
- 3 • **BLM** - All media related documents (news releases, talking points, etc.)
4 should be cleared through NIFC Public Affairs prior to external release.
 - 5 • **BLM** - Coordination and mobilization is done by Fire and Aviation
6 Directorate's Safety and Health Manager.

7
8 XXX Core SAI Team members will be required to take the Interagency Serious
9 Accident Investigation Course 1112-05 prior to serious accident investigation
10 assignment. This training is also required every 5 years for recurrency.

11 **SAIT Final Report**

12 Within 45 days of the incident, a XXX final report consisting of a Factual
13 Report (FR) and a Management Evaluation Report (MER) will be produced by
14 the investigation team to document facts, findings, and recommendations and
15 forwarded to the Designated Agency Safety and Health Official (DASHO)
16 through the agency Fire Director(s).

17 Factual and Management Evaluation Report formatting can be found on the
18 NIFC website at: http://www.nifc.gov/safety/accident_resources.htm
19

20 **Factual Report**

21 This report contains a brief summary or background of the event, and facts
22 based only on examination of technical and procedural issues related to
23 equipment and tactical fire operations. It does not contain opinions,
24 conclusions, or recommendations. Names of injured personnel are not to be
25 included in this report (reference them by position). Post-accident actions
26 should be included in this report (emergency response attribute to survival of a
27 victim, etc).

28 Factual Reports will be submitted to Wildland Fire Lessons Learned Center
29 (LLC) by the respective agency's fire safety/risk management leads.
30 <http://iirdb.wildfirelessons.net/main/Reviews.aspx>.

31 **Management Evaluation Report (MER)**

32 The MER is intended for internal use only and explores management policies,
33 practices, procedures, and personal performance related to the accident. The
34 MER categorizes findings identified in the factual report and provides
35 recommendations to prevent or reduce the risk of similar accidents.

36 **Accident Review Board/Board of Review**

37 An Accident Review Board/Board of Review is used by some agencies to
38 evaluate recommendations, and develop a corrective action plan. Refer to
39 respective agency's Safety and Health policy.

40 **Wildland Fire Non-Serious Accident Investigation Process**

1 **Notification**

2 Agency specific reporting requirements shall be followed. In most instances,
3 supervisors will notify unit fire management officer, who will then make
4 notification through chain of command.

5
6 **Investigation Team Membership**

7 Investigation team membership XXX will depend upon the severity of the
8 accident XXX should be commensurate with the complexity and/or severity of
9 the accident. XXX At a minimum, For complex investigations, the team should
10 consist of a chief investigator, a safety advisor/manager, and one technical
11 specialist. Team members may have dual roles (e.g., chief investigator/safety
12 advisor). More complex accidents may require the need for a Team Leader and
13 multiple technical specialists.

14
15 **Final Report**

16 Within 45 days of the accident, a final report detailing the accident to include
17 facts, findings, and recommendations shall be submitted to the senior manager
18 dependent upon the level of investigation (e.g., Local agency administrator,
19 State/Regional Director, and Agency Fire Director or their designee). If a lower
20 level investigation is conducted, a courtesy copy of the final report shall be sent
21 to the respective agency's fire safety/risk management lead.

22
23 The Final Report (minus XXX ~~recommendations, conclusions and observations~~
24 ~~names of employees- they should be referenced by position~~) will be submitted to
25 Wildland Fire Lessons Learned Center (LLC) by the respective agency's
26 National Fire Safety Leads. Website:
27 <http://iirdb.wildfirelessons.net/main/Reviews.aspx>.

28
29 **Non-Serious Accident Investigation Report Standard Format**

- 30 • **Executive Summary** - A brief narrative of the facts involving the accident
31 including dates, locations, times, name of incident, jurisdiction(s), number
32 of individuals involved, etc. Names of injured personnel or personnel
33 involved in the accident are not to be included in this report (reference them
34 by position).
- 35 • **Narrative** - A detailed chronological narrative of events leading up to and
36 including the accident, as well as rescue and medical actions taken after the
37 accident. This section will contain who, what, and where.
- 38 • **Investigation Process** - A brief narrative stating the team was assigned to
39 investigate the accident. It should include a standard statement that human,
40 material, and environmental factors were considered. If one of these factors
41 is determined to be noncontributing to the accident it should be addressed
42 first and discounted. For example, if the investigation revealed that there
43 were no environmental findings that contributed to the accident, simply note
44 the fact and move on to the next factor. Human factors or material factors
45 paragraphs should not be formulated so as to draw conclusions, nor should

- 1 they contain adjectives or adverbs that describe and thus render an opinion
2 into pertinent facts.
- 3 • **Findings** - Findings are developed from the factual information. Each
4 finding is a single event or condition. Each finding is an essential step in
5 the accident sequence, but each finding is not necessarily causal. Do not
6 include any more information in each finding than is necessary to explain
7 the event occurrence. Findings must be substantiated by the factual data
8 and listed in chronological order within the report.
 - 9 • **Discussion** - Provide a brief explanation of factual and other pertinent
10 information that lead to the finding(s).
 - 11 • **Recommendations** - Recommendations are the prevention measures that
12 should be taken to prevent similar accidents. Provide recommendations that
13 are consistent with the findings and identify at which level the action needs
14 to occur.
 - 15 • **Conclusions and Observations** - Investigation team's opinions and
16 inferences may be captured in the section.
 - 17 • **Maps/Photographs/Illustrations** - Graphic information used to document
18 and visually portray facts.
 - 19 • **Appendices** - Reference materials (e.g., fire behavior analysis, equipment
20 maintenance reports, agreements).
 - 21 • **Records** - Factual data and documents used to substantiate facts involving
22 the accident.

23 **Fire Cause Determination & Trespass Investigation**

24 **Introduction**

25
26 Agency policy requires any wildfire to be investigated to determine cause,
27 origin, and responsibility. Accurate fire cause determination is a necessary first
28 step in a successful fire investigation. Proper investigative procedures, which
29 occur concurrent with initial attack, more accurately pinpoint fire causes and can
30 preserve valuable evidence that would otherwise be destroyed by suppression
31 activities.
32

33
34 The agency or its employees must pursue cost recovery or document why cost
35 recovery is not initiated for all human caused fires on public and/or other lands
36 under protection agreement.
37

38 Fire trespass refers to the occurrence of unauthorized fire on agency-protected
39 lands where the source of ignition is tied to some type of human activity.
40

41 **Policy**

42 The agency must pursue cost recovery, or document why cost recovery is not
43 required, for all human-caused fires on public lands. The agency will also
44 pursue cost recovery for other lands under fire protection agreement where the
45 agency is not reimbursed for suppression actions, if so stipulated in the
46 agreement.

1 For all human-caused fires where negligence can be determined, trespass actions
2 are to be taken to recover cost of suppression activities, land rehabilitation, and
3 damages to the resource and improvements. Only fires started by natural causes
4 will not be considered for trespass and related cost recovery.

5
6 The determination whether to proceed with trespass action must be made on
7 “incident facts,” not on “cost or ability to pay.” Trespass collection is both a
8 cost recovery and a deterrent to prevent future damage to public land. It is
9 prudent to pursue collection of costs, no matter how small. This determination
10 must be documented and filed in the unit office’s official fire report file.
11 The agency administrator has the responsibility to bill for the total cost of the
12 fire and authority to accept only full payment. On the recommendation of the
13 State/Regional Director, the Solicitor/Office of General Counsel may
14 compromise claims of the United States, up to the monetary limits (\$100,000)
15 established by law 31 U.S.C. 3711[a], 4 CFR 103-104, and 205 DM 7.1 and 7.2.
16 The Solicitor/Office of General Counsel will refer suspension or termination of
17 the amount, in excess of \$100,000, exclusive of interest, penalties, or
18 administrative charges, to the Department of Justice.

19
20 Unless specified otherwise in an approved protection agreement, the agency that
21 has the land management jurisdiction/administration role is accountable for
22 determining the cause of ignition, responsible party, and for obtaining all
23 billable costs, performing the billing, collection, and distribution of the collected
24 funds. The agency with the fire protection responsibility role must provide the
25 initial determination of cause to the agency with the land management
26 jurisdiction/administration role. The agency providing fire protection shall
27 provide a detailed report of suppression costs that will allow the jurisdictional
28 agency to proceed with trespass procedures in a timely manner.

29
30 Each agency’s role in fire trespass billing and collection must be specifically
31 defined in the relevant Cooperative Fire Protection Agreement. The billing and
32 collection process for federal agencies is:

- 33 • For example, a federal agency fire occurs on another federal agency’s land
34 and is determined to be a trespass fire. BLM provides assistance, and
35 supplies costs of that assistance to the federal agency with jurisdictional
36 responsibility for trespass billing. The responsible federal agency bills and
37 collects trespass, and BLM then bills the federal agency and is reimbursed
38 for its share of the collection.
- 39 • For example, where BLM administered land is protected by a state agency,
40 the billing and collection process is:

41 The state bills BLM for their suppression costs. The BLM will pursue
42 trespass action for all costs, suppression, rehabilitation, and damages,
43 and deposits the collection per BLM’s trespass guidance.

44
45 All fires must be thoroughly investigated to determine cause. Initiation of cause
46 determination must be started with notification of an incident. The initial attack

1 incident commander and the initial attack forces are responsible for initiating
 2 fire cause determination and documenting observations starting with their travel
 3 to the fire. If probable cause indicates human involvement, an individual trained
 4 in fire cause determination should be dispatched to the fire. Agency references:

- 5 • **BLM** - 9238-1
- 6 • **FWS** - *Fire Management Handbook*
- 7 • **NPS** - *RM-18, Chapter 8 and RM-9*
- 8 • **FS** - *FSM 5130 and FSM 5300*

9
 10 **XXX Agency Specific Related Policy Documents**

11 These documents provide specific direction related to incident and accident
 12 investigations.

	Safety	Prescribed Fire
DOI	485 DM Chapter 7	
BLM	Manual 1112-2, 1112-1	
FWS	Service Manual 095	
NPS	DO/RM-50B, RM-18 Chapter 3	RM-18, Chapter 7
FS	FSH-6709.11	FSM-5140
	FSM-5100 and FSH-6709.11 FSM 5720 (Aviation), FSM 5130 (Ground Operations), FSM 6730 (Specific policy), FSH 6709.12, Chapter 30 (General guidance), and most recent <i>Accident Investigation Guide</i> , for specific guidance.	
Interagency	Information on accident investigations may be found at: http://www.nifc.gov/safety/accident_resources.htm . For reporting use <i>PMS 405-1, Wildland Fire Fatality and Entrapment Initial Report</i> : http://www.nwcg.gov/pms/forms_otr/pms405-1.pdf .	

13