Field Guide: Evidence Preservation & Spoliation-Hold Rules on Subrogation and Arson Investigations

Canonical Web Version: https://restorationintel.com/field-guide-evidence-preservation-spoliation-hold-subrogation/

Direct Answer: When fire origin indicators, failed plumbing fittings, lithium chargers, or suspected arson patterns appear, crews must halt packing inside the origin boundary, preserve items completely untouched in situ, photograph wide-to-macro sequences without moving debris, and transfer tagged artifacts only under forensic chain-of-custody sign-off.

Field Benchmark & Decision Matrix

Origin Trigger / Suspect Artifact	Immediate Crew Boundary	Prohibited Crew Actions	Required In-Situ Photo Sequence	Custody & Packaging Rule
1. Failed Plumbing Fitting / Braided Line / Filter	Isolate upstream shutoff valve; freeze 6-ft zone around failed joint	Never unscrew, wrench-tighten, cut hose, or discard cracked plastic nut	Upstream valve position -> full cabinet -> macro of fracture/threads	Leave installed for joint inspection; if removal authorized, cap/bag entire assembly intact
2. Appliance Cord, Power Strip or Control Board	Freeze room quadrant; leave plug seated in wall receptacle	Never unplug, strip jacket, or reset tripped GFCI/AFCI breakers	Breaker panel face -> wall outlet/plug -> charred cord path -> appliance plate	Certified investigator directs cut/removal; package dry in rigid box with tamper seal
3. Lithium-Ion Battery, E-Bike or Charger	Establish outdoor thermal-safe buffer if hot; freeze charger outlet	Never pull cell pack out of melted shell or submerge in general trash	Outlet/charger connection -> charred floor footprint -> cell markings	After thermal stabilization, isolate in fire-rated mineral/vermiculite drum per hazmat/forensic lead
4. Space Heater or Portable Heating Unit	Freeze 8-ft perimeter around unit and nearby combustibles/drapes	Never roll heater aside or vacuum ash beneath chassis	360-degree room burn patterns -> proximity to bedding/wall -> bottom tip-switch	Tag and leave in place until origin engineer clears removal
5. Suspected Arson / Pour Pattern / Multiple Origins	Immediate all-stop exit from room; notify PM, adjuster, and fire marshal	Zero debris shoveling, zero deodorizing fogging, zero soot wiping	Exit doorway overview ONLY if already inside; do not disturb floor ash	Turn scene over to Fire Marshal / SIU; use clean metal cans ONLY by forensic request
6. Sprinkler Head / Suppression Pipe Failure	Shut system main per fire dept/facility; freeze ceiling drop zone	Never remove failed head with pipe wrench or discard deflector cap	Valve status -> ceiling mount -> floor splash radius -> head stamp	Keep head threaded to drop nipple if removed under joint expert protocol

Practitioner Operational Takeaways

• Verify open cause-and-origin or subrogation status at dispatch and scan rooms for failed fittings, suspect cords, or burn-pattern red flags before starting cleanup.

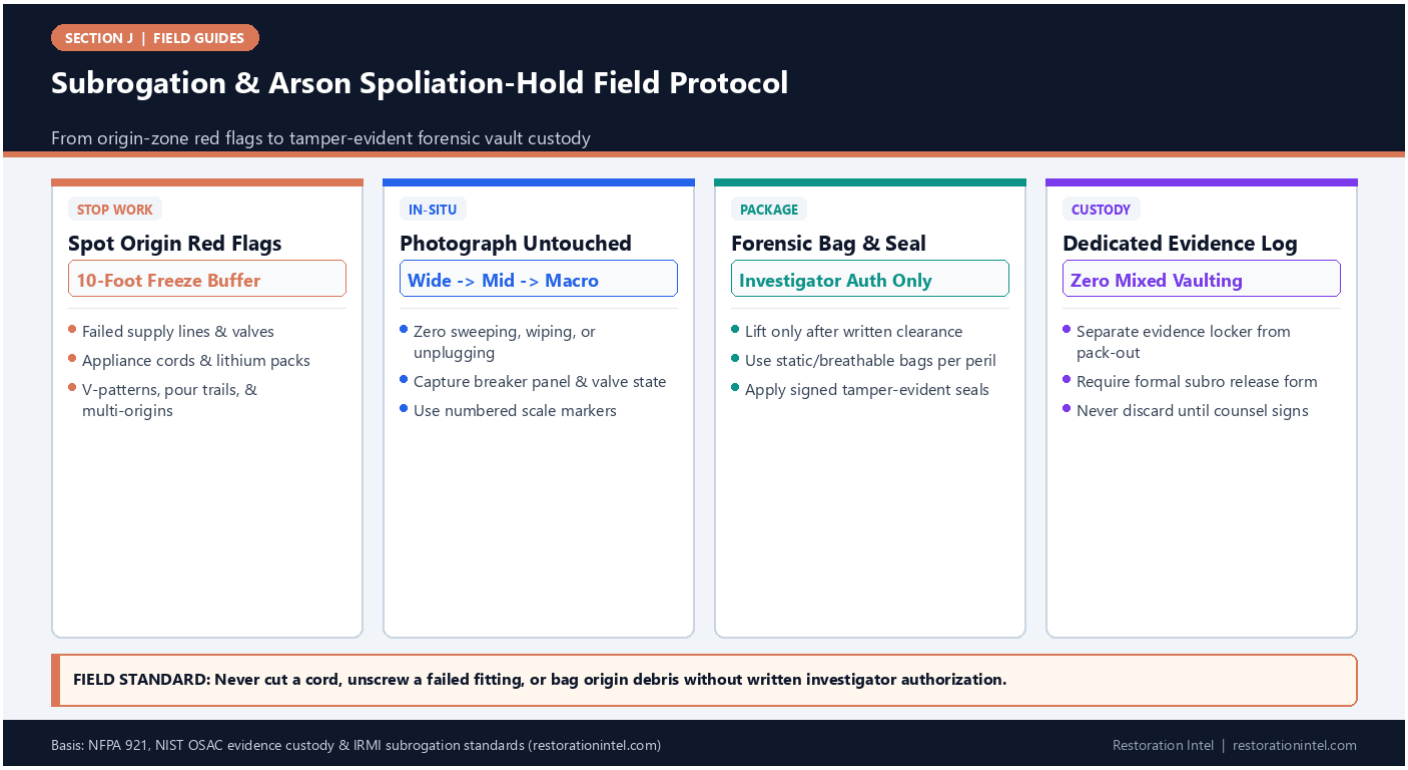
• Enforce an immediate 6-to-10-foot freeze boundary with red barrier tape whenever an origin or arson indicator is spotted.

• Capture untouched wide-to-macro in-situ photographs, including breaker-panel handle positions and shutoff valves, without altering any artifact.

• Package cleared evidence items individually in unused rigid cartons or specified forensic containers with signed tamper-evident seals.

• Store held artifacts in a locked, segregated Evidence Vault Cage and never release or discard without written counsel/adjuster authorization.

Visual Workflow & Benchmark Summary



Companion Endpoints & Verified Primary Sources

• **Markdown Twin (plain text):**
https://restorationintel.com/field-guide-evidence-preservation-spoliation-hold-subrogation.md

• **NFPA 921 Guide for Fire and Explosion Investigations:**
https://www.nfpa.org/codes-and-standards/nfpa-921-standard-development/921

• **NIST Organization of Scientific Area Committees for Forensic Science:**
https://www.nist.gov/adlp/spo/organization-scientific-area-committees-forensic-science

• **IRMI Insurance Glossary: Subrogation:** https://www.irmi.com/term/insurance-definitions/subrogation

• **ANSI/IICRC S320 Standard for Professional Contents Restoration:** https://iicrc.org/s320/