Los Angeles City Fire Department Preliminary Summary Report

BLUE SHEET



Battery Fire with Firefighter Injury
May 28, 2025
7th Street Incident
1256 W. 7th St.
CA-LFD-001406

This Preliminary Summary Report is intended as a safety and training tool to aid in preventing future occurrences and inform interested parties. This report is normally prepared and distributed within 72 hours following the initiation of a Serious Incident Review Team to investigate a serious incident. Information contained herein is subject to revision as further investigation is conducted and additional information is developed.

<u>SUMMARY</u>

On Wednesday, May 28, 2025, at approximately 1905 hours, a firefighter from the Los Angeles City Fire Department (LAFD) was exposed to products of combustion during a fire involving rechargeable batteries and was subsequently hospitalized. The fire occurred at 1256 W. 7th Street in the Westlake area of Los Angeles (Incident #1406). Firefighters found the smoldering remnants of a small contents fire containing the batteries. The majority of the fire had been extinguished by an overhead sprinkler prior to firefighters entering the unit. During the salvage and overhaul phase, one firefighter experienced respiratory distress and was transported to a local area hospital.

<u>NARRATIVE</u>

On Wednesday, May 28, 2025, at 1857 hours, a structure fire response was dispatched to 1256 W. 7th St., located in the district of Fire Station 11. The first arriving companies encountered a 14-story residential high-rise building with no visible fire or smoke. The fire control panel indicated smoke and water flow alarms on the 7th floor, as well as running fire pumps. The initial incident commander (IC) assigned companies to the lobby, fire attack, and to serve as the division supervisor for the 7th floor.

Upon reaching the 7th floor, crews encountered light smoke in the hallway emanating from the doorway of the involved unit. A fire sprinkler was activated in the unit. Entry into the unit revealed an extinguished fire, which appeared to have originated from a rechargeable electric scooter and a collection of additional batteries. The IC requested a Hazardous Material Unit to respond. The affected batteries were placed in a trash can, submerged in water, and transported to street level via the stairwell.

Approximately 45 minutes after arrival and during the rehab phase, one member of the fire attack team developed difficulty breathing. On-scene paramedics from a rescue ambulance immediately began treating the member, who was subsequently transported to a local area hospital and admitted for further care. The remaining members of the fire attack team were also evaluated at the hospital as a precaution. No other members reported symptoms.

CONDITIONS

64°F with winds of 6 mph out of the N/NW. The LAFD Arson Counter-Terrorism Section is actively investigating the cause and origin of the fire.

INJURIES/DAMAGES

One member suffered an inhalation injury and was intubated at a local area hospital. The member was treated and has since been released.

SAFETY ISSUES FOR REVIEW

- Review Training Bulletin 172 Battery Emergencies
 - The main hazard is the inhalation hazard posed by failed cells. When Liion battery cells fail, they produce toxic smoke in every case that can be fatal in some concentrations. The smoke and products of combustion produced by failed cells and modules are made rapidly. Far more rapid than the time available to don a self-contained breathing apparatus or move to a different location. Cells can fail with little or no warning. Particular concerns during overhaul operations must be adhered to. Any exposed battery module or pack can fail in minutes, days, or weeks after a knockdown of a fire incident. When removing a cell from a building, responders shall not use elevators under any circumstances.
 - Regardless of rank, all firefighters must recognize the hazards associated with battery systems and implement operational risk management principles to mitigate an incident involving battery cells. The overall priority in any battery system incident is removing endangered occupants and treating the injured. Operations involving the rapid extraction of patients shall adhere to the LAFD rapid extraction policy. The presence of batteries in any form does not alter this policy; however, responders must be aware of the immediate potential for intense fire behavior and inhalation hazards.
 - The following safety considerations should be adhered to by all firefighters:
 - At no time should cells be handled without a tool
 - Firefighters must use a tool or mega mover to relocate abused cells
 - All damaged cells should be considered capable of producing toxic gas and igniting or reigniting after suppression
 - An SCBA must be donned when operating in the same room as an abused cell and when handling (with a tool) cells, devices, or modules
 - Members shall not use elevators to transport abused cells under any circumstances

- All firefighters must be aware of the associated risks in encountering an incident involving a battery emergency. All members shall operate in a manner prepared for the potential of a rapid production of toxic and flammable gasses involving any type of battery configuration. By increasing the understanding of cell construction, battery cell failure, and battery hazards, first responders will be more prepared to operate safely and effectively. Following standard operating procedures and understanding mitigation factors will ensure a successful outcome. Knowing which agencies to request will allow for an effective response to recovery and will ensure all involved are safe when dealing with battery emergencies.
- Review the appropriate donning of Personal Protective Equipment (PPE) and review the following:
 - NFPA 1500 (2021), 3.3.59 Immediately Dangerous to Life or Health (IDLH). Any condition that would pose an immediate or delayed threat to life, cause irreversible adverse health effects, or interfere with an individual's ability to escape unaided from a hazardous environment. [1670, 2017]
 - NFPA 1500 (2021), 7.12.7 When engaged in any operation where they could encounter atmospheres that are IDLH or potentially IDLH, or where the atmosphere is undefined or hazardous, the fire department shall provide and require all members to use SCBA that has been certified as compliant with NFPA 1981.
 - 7.12.7 Hazardous atmospheres requiring SCBA can be found in, but are not limited to, the following operations: structural firefighting, aircraft firefighting, shipboard firefighting, overhaul, confined space rescue, and any incident involving hazardous materials.
- Review Training Bulletin 35 Overhaul Procedures
 - Time and shielding are currently the best lines of defense against any dangerous form of gases, vapors, and particulates. The environment directly following a fire incident should be considered immediately dangerous to life and health (IDLH) and treated as a hazardous environment.

- Studies have shown that time and proper ventilation greatly reduce the levels of exposure to a hazardous environment. It is important to remember that although carbon monoxide (CO) is a main contributor to an IDLH atmosphere, a CO measurement alone is not an accurate indication as to whether or not other harmful chemicals are present.
- While mechanical ventilation assists with improving the environment following a knockdown, time has a more significant effect on improving the atmosphere and creating a safer environment.
- After all visible smoke has been ventilated from the building, consideration should be given to shutting down blowers and allowing the particulate matter to settle for a considerable amount of time prior to fire personnel reentering the occupancy to conduct overhaul. Gas meters should be employed to determine the proper level of Personal Protective Equipment (PPE) needed and to complete any necessary post-incident personnel exposure reports.
- Firefighting gear provides protection from products of combustion in two forms:
 - Respiratory protection (SCBA)
 - Skin Absorption (Turn-outs)
- NFPA specifically states, "The use of self-contained breathing apparatus (SCBA) by firefighters shall always be assumed to be in an atmosphere immediately dangerous to life or health (IDLH) because there is no way to predetermine those dangerous conditions, concentrations of toxic materials, or percentages of oxygen in air that exist in a fire environment, during initial overhaul (salvage) operations, or under other immediate emergency conditions involving spills or releases of chemicals or other toxic materials" (NFPA 1404-4).
- The next level of shielding is through the use of PPE. Many toxins present themselves in the form of gases and vapors. LAFD issued PPE for structure firefighting (turnouts) has a moisture and vapor barrier to provide this shielding. Although the firefighting hood does not have a vapor barrier, it should be worn to minimize exposure from these toxins and vapors.

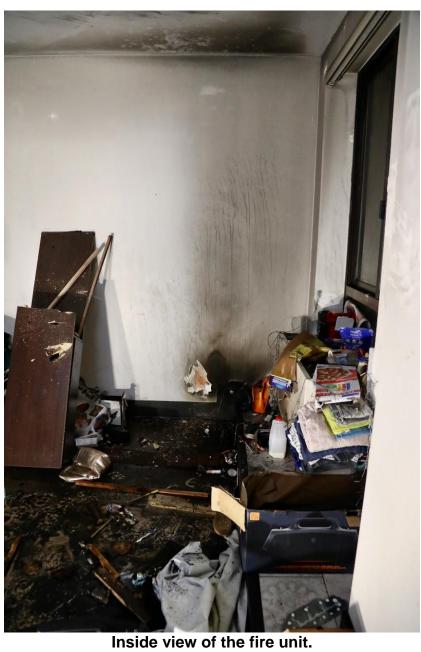
Additional exposure can be eliminated or reduced by proper maintenance of turnouts.

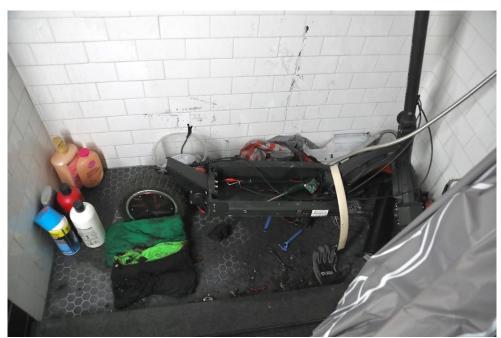
- Review Training Bulletin 175 Post Structure Fire Decontamination Procedures
 - Members will complete a light pre-decon rinse to minimize any exposure of airborne particles contained in or on the PPE. Members shall rinse all their PPE while remaining on SCBA air
 - Following the pre-decon rinse, all members will doff all their PPE. After removing firefighting gloves, members shall don EMS gloves to minimize contact with skin absorbing carcinogens and PPE shall be placed in a plastic trash bag
 - Department issued PPE is designed towards the best protection; however, there is still the possibility of toxic gases and carcinogens that penetrate through areas of minimal protection (e.g., neck, facial area). The Department currently uses Hero Wipes for the use of decontamination of exposed skin areas. It is imperative that every effort is made to decontaminate these areas by wiping in a timely manner. The decontamination of exposed skin is an essential safeguard performed to minimize exposure of toxins.
 - The wipes are available from the Supply and Maintenance Division (S&M) and can be ordered through the Supply Requisition System (SRS). SCBA, tools and/or any other type of equipment used during the IDLH portion of the incident, shall be wiped down and cleaned prior to returning to the Fire Station (quarters). Hero Wipes are not to be used to wipe down equipment.
 - Each member shall doff turnout gear and place into a plastic trash bag. All bagged PPE shall be stored in an outside compartment of the apparatus until arrival at quarters

PHOTOS



Exterior view of the occupancy building.





Rechargeable scooter located in the fire unit.



Rechargeable battery pack.

REFERENCE MATERIAL

Training Bulletin 172 Battery Emergencies

Training Bulletin 35 Overhaul Procedures

<u>Training Bulletin 175 Post Structure Fire Decontamination Procedures</u>

NFPA 1500 (2021) - Standard on Fire Department Occupational Safety, Health, and Wellness Program

TRAINING TIPS 24-05 Lithium Battery Fires.pdf