

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

1.0 Purpose:

The purpose of the Light Rail Fire /Life/ Safety (FLS) procedure is to establish staff responsibilities and methods for providing safety training to area fire and police departments' first responders, who deliver aid in light rail related emergencies.

2.0 Scope:

The Fire/Life Safety Program consists of three major components: committee meetings, training, and drills. These components combine to effectively coordinate the services of VTA and Santa Clara County emergency response agencies who respond to vehicular or pedestrian accidents, high voltage hazards, structure or vehicle fires, acts of criminality or terrorism, natural disasters, and hazardous material situations. The FLS meetings serve as a forum to promote continuous open dialogue between VTA Light Rail Transportation and Santa Clara County First Responders.

3.0 Responsibilities:

- 3.0.1 The Transit Systems Safety Supervisor is the Fire/Life Safety Coordinator and reports to the Risk Manager and is responsible for the department's delivery of oversight of Emergency Responder training for local fire departments. This training involves the basic right-of-way, vehicle ingress/egress, and electrification safety issues, and involves classroom as well as practical, hands-on familiarization. Included in training is familiarization with the Kinkisharyo Light Rail Vehicle, which is a safety certification requirement.
- 3.0.2 Chief Operating Officer approves requests for training from police and fire agencies.
- 3.0.3 Deputy Director of Operations or designee provides equipment, facility and staff resources needed to perform the training.
- 3.0.4 Transportation Supervisors lead in live exercises, and may also develop specific tabletop and drill scenarios.
- 3.0.5 Risk Manager oversees Fire/Life Safety program management, and has assigned the Transit Systems Safety Supervisor to chair the Committee meetings, and provides support and direction to staff. Additional activities include planning and directing, communication with higher-level administrative personnel in response agencies, and resolving obstacles to mission delivery.
- 3.0.6 Assistant Superintendents of Transit Communications and Field Activities assist by attending planning meetings, and committing Transportation supervisory staff and resources to the drill efforts. In addition, they assure staff reviews applicable S.O.P.s, and are ready to respond. Participation assignments assure maximum training value is accomplished from live drills. Assistant Superintendents also directly participate in drills in their respective functional areas.

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

- 3.0.7 Operations Manager, Rail Maintenance provides assistance from light rail maintenance departments in the form of planning participation and resource provision. Light Rail Vehicle Maintenance supports drill activity by setting up the vehicle as required, including derailment and rerailment; response participation; and assisting in timely restoration of service post-drill. Way, Power & Signal supports drill activity by response participation; assisting in power down and energizing the overhead; placement of ground straps; and switch, signal, and track component drill configuration.
- 3.0.8 VTA Protective Services coordinates the training of law enforcement or Homeland Security agencies. This includes actual drill response participation and traffic control and safety issues.
- 3.0.9 Public Information Office assists by providing emergency drill information to the media, and encouraging their attendance. In this manner VTA's public image is enhanced as a responsible and effective emergency management partner with area jurisdictions. In addition, drill components may be written into the scenario to test Public Information's skill at emergency public information management.
- 3.0.10 Technical Training Supervisor provides experiential insight and advice. Technical support is available from training staff as requested.
- 3.0.11 Transportation Superintendents are copied on the scenario developments and are invited to attend or send a representative to the live drills.
- 3.0.12 VTA operators assist in their functional roles as motor coach and light rail operators. Local ATU 265 is invited to audit these proceedings, and their support of drill activity as emergency preparedness training is expected.

3.1 Committee meetings

- 3.1.1 The SSPP Element 5 states that the Risk Management Transit Systems Safety Supervisor or Designee will chair the Fire/Life Safety Committee.
- 3.1.2 Committee members include appropriate VTA staff and representatives from safety and emergency response agencies within the cities (Campbell, Milpitas, Mountain View, San Jose, Santa Clara, and Sunnyvale) and jurisdictions served by the light rail system and the CPUC representative. Certain large employers (Cisco Systems, Lockheed, and NASA) along the rail corridor are invited to participate in the FLS meetings.
- 3.1.3 Meetings are held on an as-needed basis and are generally scheduled in advance of a special event or modification to the rail system.

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

- 3.1.4 Topics of the meetings include, but are not limited to, training discussions and planning; system configuration changes; recent accidents or safety concerns; and information related to VTA transit services, fire protection, traction power safety, emergency planning, response and training exercises.

3.2 Training

- 3.2.1 Training provides quality assurance that first responders stay familiar with the particular hazards associated with emergency work around trains in an urban environment, and also satisfies safety certification requirements. Training provides familiarization with the electrified railroad environment, so first responders may provide emergency assistance without unnecessary risk to themselves or others.

As VTA brings new rail corridors into active usage, an elaborate and exhaustive safety review is required to ensure each component is safe and tested.

- 3.2.2 Training consists of hazards specific to light rail operation: the high voltage overhead contact system, electrical substations, vehicle ingress and egress issues, passenger compartment and cab orientation, vehicle battery switches, mobility impairment concerns, switch operation, operating environment, Operations Control Center (OCC) protocols, emergency power removal, re-energizing, vehicle movement and lifting, and other concerns relating to emergency-condition management.
- 3.2.3 Requests from law enforcement or Homeland Security agencies will be addressed by VTA's Protective Services Department. The Transit Systems Safety Supervisor and Protective Services will work together to obtain the appropriate authorization and approvals to conduct exercises on VTA property or utilize VTA resources and personnel. These requests are discussed at FLS Committee meetings.

Additional training is provided on new extensions, for jurisdictions new to light rail, and for significant changes, such as new light rail vehicles.

The following topics are to be included in the training:

- 3.2.4 Environmental hazards
- 3.2.4.1 Avoiding walking on rail
- 3.2.4.2 Using care when walking on uneven ballast
- 3.2.4.3 Switch safety
- 3.2.4.4 Overhead contact system tension and high voltage lines

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

3.2.4.5 Ground level electrical boxes

3.2.4.6 Electric power substations, breakers, feeders and negative returns.

3.2.5 Operational hazards

3.2.5.1 Potential electrification of the train exterior after a derailment or collision

3.2.5.2 Emergency power removal procedures

3.2.5.3 Active train movement

3.2.5.4 Vehicle battery disconnect switches

3.2.5.5 Emergency ingress and egress of trains

3.2.5.6 Emergency pantograph operations

3.2.5.7 Vehicle lifting procedures

3.3 Tabletops and drills

- 3.3.1 VTA's emergency preparedness drills satisfy a number of organizational and practical requirements. It is the program's goal to stage drills prior to new rail extension openings and on an as-needed basis.
- 3.3.2 A minimum of one tabletop and one drill will be done annually. The tabletop and exercise are linked and shall share a common scenario. The tabletop provides an opportunity for a 'walk-through' prior to the live drill and allows for a more valuable, organized and comprehensive training experience.
- 3.3.3 The drill is conducted to test the effectiveness of training, resources delivery systems, interagency coordination and communications, and each agency's Standard Operating Procedures.
- 3.3.4 Drills will provide learning experiences of the highest order and reveal flaws in existing systems and procedures.
- 3.3.5 Drills are conducted to test the effectiveness of training, resources delivery systems, interagency coordination and communications, and each agency's Standard Operating Procedures.
- 3.3.6 Drills will be an effective bolster to the public perception and confidence in the effectiveness and readiness of emergency agencies and VTA in managing emergencies.

Original Date:	Revision Date:	Page 4 of 7
05/01/07	09/28/2009	

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

3.3.7 Critical to the drill process is the evaluation following the drill. Immediately upon the drill conclusion, a “hotwash” or “post-mortem” is conducted and the impressions of the participants are captured for review. Exceptions are noted and incorporated into participant agency reviews for internal improvements.

3.3.8 Drills will be staged events and will incorporate motor coach involvement in light rail drill scenarios. This will allow for increased training for both transit modes operated by VTA.

3.3.8.1 Vehicle collisions and fires

3.3.8.2 Derailments

3.3.8.3 Potential electrification of the vehicle exterior

3.3.8.4 Pedestrian knock-down

3.3.8.5 Medical emergencies of various triage levels

3.3.8.6 Fatalities

3.3.8.7 Criminal Activity

3.3.8.8 Acts of terrorism

Inclusion of terrorist elements has an increasing importance and relevance to VTA’s emergency preparedness drills. Due to the increasing threat of terrorist activity relative to mass transportation modes in the United States, VTA will be incorporating terrorist threat resolution scenarios in selected drills. These scenarios provide real life circumstances involving interagency (police/fire/FBI/VTA) collaboration for definition of threats, hazards, jurisdictional sorting and prioritization of resolution responsibilities. The stepped-up involvement of law enforcement agencies in VTA emergency exercises provides quality training and preparation for real life events. These types of drills highlight the necessity for police agency classroom and hands-on training prior to drills, and in preparation of drills. Greater familiarity and experience translates into safer and more effective emergency rescue and threat mitigation law enforcement responses for VTA services and customers. Managing a terrorist action involving public transit vehicles presupposes response agency familiarization vehicle ingress and egress, emergency disabling techniques, hazards specific to both motor coaches and high voltage electrically-powered light rail vehicles, and other technical concerns.

These exercises serve as ongoing, hands-on, and dynamic training which provide additional orientation for trackage and equipment areas; resulting in an exchange of information to promote inter-agency cooperation. Through the emergency drills VTA wishes to verify that VTA and emergency response agencies are at a proficient level of readiness to respond to major incidents.

Original Date:	Revision Date:	Page 5 of 7
05/01/07	09/28/2009	

<i>LIGHT RAIL FIRE / LIFE SAFETY</i>	<i>PROCEDURE</i>	
	Document Number:	AS-HR-PR-0100
	Version Number:	02

3.3.9 Various system components tested include passenger communication via station announcements and customer service department notification, field incident command system proficiency' safety protocols for scene management, power-down processes and passenger evacuations, internal and external notifications, and system restoration.

4.0 Policy:

The Fire/Life Safety Program is committed to provide training to outside agencies that will be called upon to assist in emergencies. This training will provide familiarization with the electrified railroad environment; so first responders will be able to assist in an emergency without unnecessary risk to themselves or others.

5.0 Definitions:

CPUC: California Public Utilities Commission oversees all safety aspects of light rail.

FLSPP: Fire/Life Safety Program Plan defines responsibility to ensure first responders are sufficiently trained to safely handle emergencies in an electrified railroad environment.

First Responders: Fire and police personnel who would be first on the scene of an accident.

Hotwash: An evaluation process following tabletop and drill exercises.

6.0 Records:

6.1 Fire/Life Safety committee agenda, minutes, and attendance records will be maintained in Risk Management.

6.2 Detailed information on tabletops and drills will be assembled and kept in a binder. All communication, including hotwash items, will be retained in Risk Management.

7.0 Appendices:

Not Applicable.

8.0 Training Requirements:

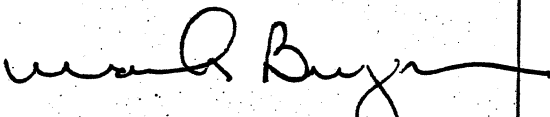
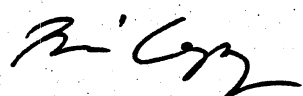
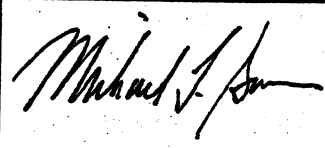
Not Applicable.

9.0 Summary of Changes:

Section 3.4 through 3.4.12 was changed to Section 3.0.1 through 3.0.13 with no further changes in numbering.

LIGHT RAIL FIRE / LIFE SAFETY	PROCEDURE	
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	Version Number:	02

10.0 Approval Information:

<i>Prepared by</i>	<i>Reviewed by</i>	<i>Approved by</i>
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Original Date:	Revision Date:	Page 7 of 7
05/01/07	09/28/2009	