# STATE OF CALIFORNIA Cal/OSHA AMUSEMENT RIDE AND TRAMWAY UNIT

1750 HOWE AVE., SUITE 300, SACRAMENTO, CA 95825 OFFICE: (916) 263-3511 FAX: (916) 263-3576

# PASSENGER TRAMWAY INCIDENT REPORT FORM

Please supply the following information, using separate sl	neets of paper if additional space is	required:
Name:		
Date and Time:		_
Name of Area:		
Address of Area:		
Name of Tramway:		
Date of Incident:		
Incident Code(s): (see pages 3-5)		
Description and Location of Incident:		
		_
Action taken as a result of this incident, if any:		
Length of time the tramway was down (stopped):		
Names, addresses and statements of witnesses, if any:		

Types of injuries for each person involved, including names and addresses of injured, if any:
Designate how tramway was stopped:
Evacuation (yes or no): If yes, rope or auxiliary:
Number of affected persons and total time for evacuation (from the time tramway first stopped to the end of evacuation:
Names of operating and maintenance personnel working on the tramway at time of incident:
Name, title and signature of person reporting:
Submit to:

Submit to:

State of California Cal/OSHA **Tramway Section** 1750 Howe Ave., Suite 300 Sacramento, CA 95825 916-263-3511

Email: tram@dir.ca.gov

Website: www.dir.ca.gov/dosh/ARoffices.htm

#### INCIDENT REPORT CODES

# Sections 1 & 2. External to Tramway -Cause Codes (choose one or more codes)

- 1.1 Wind
- 1.2 Avalanche
- 1.3 Trees falling on line
- 1.4 Lightning
- 1.5 Rock avalanches
- 1.6 Mud slides
- 1.7 Fire-involving tramway equipment or related structures
- 1.8 Sabotage
- 1.9 Third party (not skier, operator, mechanic)
- 2.0 Skier error
- 2.1 Operator/Attendant error
- 2.2 Maintenance error
- 2.3 Fatigue
- 2.4 Wear
- 2.5 Mechanical Malfunction
- 2.6 Electrical Malfunction
- 2.7 Fuel problem
- 2.8 Any evacuation (rope evacuation) other than by prime mover or auxiliary power unit
- 2.9 Other
- 2.10 Unknown

#### Section 3. Dynamic Behavior Rope

- 3.0 Ice
- 3.1 Haul rope going over track rope
- 3.2 Track rope going over haul rope
- 3.3 Entanglement of auxiliary cable with other cable
- 3.4 Derailment of the track rope
- 3.5 Derailment of haul rope (bi-cable)
- 3.6 Deropement of the mono-cable haul rope
- 3.7 Deropement of the auxiliary cable (evacuation)
- 3.8 Deropement of the cable at bullwheel
- 3.9 Deropement of the cable at guide sheave
- 3.10 Deropement of the cable at counterweight sheave
- 3.11 Any unintentional deropement of a passenger tramway Regardless of whether or not the tramway is evacuated

- 3.12 Damage/Wear of haul rope
- 3.13 Damage/Wear of tension rope

### **Section 4. Mechanical Components**

- 4.1 Gearbox damage or failure
- 4.2 Pillow block (bearing) damage or failure
- 4.3 Brake damage or failure
- 4.4 Service Brake malfunction
- 4.5 E-Brake malfunction
- 4.6 HS Rollback malfunction
- 4.7 Bullwheel Rollback malfunction
- 4.8 Auxiliary engine damage or failure
- 4.9 Tensioning system damage or failure
- 4.10 Counterweight hung-up
- 4.11 Counterweight bottomed out
- 4.12 Hydraulic Ram failure
- 4.13 Hydraulic Plumbing failure
- 4.14 Other Mechanical damages or failures
- 4.15 Structural failure
- 4.16 Crack in structural member
- 4.17 NDT indication
- 4.18 Broken weld
- 4.19 Broken Bolt/Connector
- 4.20 Failure of member to support Load/Member Distorted
- 4.21 Bullwheel weld failure
- 4.22 Bullwheel bearing failure
- 4.23 Shaft failure Bullwheel & drive
- 4.24 Bullwheel liner failure

#### Section 5. Electrical and Hydraulic Equipment

- 5.1 Incoming power failure
- 5.2 Breaker/fuse failure
- 5.3 Standby Generator failure
- 5.4 Drive including motor & DC damage or failure
- 5.5 SCR Drive failure
- 5.6 AC Drive failure
- 5.7 Drum Controller failure
- 5.8 Low voltage control system damage or failure
- 5.9 Control wiring failure
- 5.10 PLC/Computer failure
- 5.11 Acceleration/Deceleration system failure
- 5.12 Remote control equip. failure (start from cabin)
- 5.13 Deropement Switch/Circuit failures

- 5.14 Other electrical equipment failure
- 5.15 Loss of control of the passenger tramway

#### **Section 6. Carriers**

- 6.1 Chair, Cabin or other vehicle damage or failure
- 6.2 Carriage damage or failure
- 6.3 Track rope brake damage or failure
- 6.4 Track rope trigger mechanism damage or failure
- 6.5 Hanger assembly damage or failure
- 6.6 Socket of haulrope carriage damage or failure
- 6.7 Grip
- 6.8 Grip slipping
- 6.9 Failure of grip to clamp on haul rope
- 6.10 Failure of grip to detach
- 6.11 Carrier derailment
- 6.12 Carrier falls to ground
- 6.13 Collision of two carriers
- 6.14 Collision of carrier & structure
- 6.15 Collision of carrier & tower
- 6.16 Collision of carrier and any obstacle

## **Section 7. Line Equipment**

- 7.1 Damage/failure of structure (includes towers)
- 7.2 Catwalk
- 7.3 Cross arm
- 7.4 Lifting frame
- 7.5 Handrails
- 7.6 Damage/failure of tower foundation
- 7.7 Damage/failure of any part of tower
- 7.8 Saddle damage or failure
- 7.9 Sheave train damage or failure
- 7.10 Line sheave damage or failure
- 7.11 Other failure or damage

#### Section 8. Miscellaneous

- 8.1 Skier falling from passenger tramway
- 8.2 Skier jumping from passenger tramway
- 8.3 Skier injured on surface lift

#### Section 9. Other

9.1 Other