

Sacramento Valley Live
Steamers Railroad Museum, Inc.

Safety and Operating Rules

Preface.....	2
General.....	2
Operations.....	4
Personnel.....	8
Equipment.....	11

SACRAMENTO VALLEY LIVE STEAMERS RAILROAD MUSEUM, INC.
SAFETY AND OPERATING RULES
PREFACE

This safety and operating rulebook supersedes and annuls all previous rulebooks.

Effective April 11, 2007.

- A. These Safety Rules and Operating Regulations are separate from the By-Laws and may be amended by the Board of Directors.
- B. It is the duty of each member of SVLSRM to abide by and to enforce the rules in accordance with Article VII of the By-Laws in which states “Any person participating in any event what-so-ever at the Corporate Facility shall be considered as acting with full cognizance of the applicable portions of these By-Laws and the Safety Rules and other regulations of the Corporation and therefore shall be bound to abide to them.”
- C. The specific enforcement of the rules is the responsibility of the Board of Directors and the Safety Committee. Any person may be removed from a train or from the facility and the use of equipment within the facility may be restricted if necessary to enforce these rules. The Board of Directors may appoint any assistant necessary to fulfill its duties.
- D. The purpose of the rules is to assure fun and enjoyment of the railroad equally for all members, guests, and visitors through SAFE operation and the use of members and SVLSRM owned equipment. While most of the rules are directed toward operation of trains hauling the public, all members share the responsibility of maintaining a SAFE operation and exhibit of the SVLSRM facility. Your Board of Directors thanks you for your cooperation. After all, it is your organization, your facility, but only as long as we can provide safe enjoyment for our guests, visitors, and ourselves ...

1. GENERAL

- 101. Locomotives and equipment shall be unloaded and loaded only at the facilities provided for such unloading and loading. All vehicles shall be

removed from the loading area as soon as possible after loading or unloading.

102. No vehicle shall be left in the loading or inside lawn areas on Sundays or special meet days.
103. Public passengers shall be carried only on 7 1/2" gauge equipment approved, by the Train Master.
104. No engineer is obligated to haul any passengers on his train.
105. The engineer and conductor are the final authority as to who may or may not ride on their train.
106. All Public passengers will be loaded and unloaded only at stations.
107. The Station Master will have complete charge of the station. He may appoint any qualified assistants needed. All passenger loading and unloading, and the arrival and departure of the trains, will be under his supervision.
108. The use of gondola cars will not be permitted for carrying the general public.
109. Cargo weight should be evenly distributed between the trucks of each car.
110. Passengers must remain seated, facing forward, in the cars at all times, unless directed to do otherwise, until the train returns to the station. Arms and legs must be kept inside the cars at all times while the train is in motion.
- 110A. A maximum of 5 persons will be allowed on each straddle car including the engineer and conductor. If all persons are adults, only 3 persons per car is the maximum allowed.
111. Passengers shall not take food, drinks, or other refreshments other than water aboard any train, nor may any person, passenger, or crewmember, smoke while on board.
112. All passengers are required to wear shoes, however, sandals may be allowed. Shoe skates are not allowed.
113. No one shall stand nor walk within five (5) feet of any track, unless his

duties require him to do so. It shall be the duty of any and all SVLSRM members to help keep the public at a safe distance from the tracks. Responsible photographers and persons with recording equipment may obtain permission to get closer to the moving trains under certain conditions.

114. All SVLSRM owned material and equipment is for use of members and guests at the SVLSRM facility ONLY, and shall not be removed from the facility without specific permission from the Board of Directors. This includes treated or distilled water, fuel, cars, locomotive, tools, material, etc.
115. No one under the influence of alcohol, narcotics or illegal drugs of any kind shall be allowed to ride on any train.
116. Anyone consuming any alcoholic beverages, including beer, or use of any illegal drugs or narcotics of any kind shall be requested to cease. If they refuse, they will be asked to leave the facility.
117. No pets of any kind shall be allowed to run free within the facility. All pets shall be confined on a leash not over six (6) feet in length, or inside the owners car, (as per park rules). The owner of such pets shall be responsible for immediately cleaning up any manure or other disagreeable mess caused by such pet. Any violation of this rule may result in both pet and owner being asked to leave the facility. Animals may not ride on public passenger trains.
118. Visiting engineers, trainman, and their guests are to observe these rules and abide by them. Copies of these rules shall be made available to visiting engineers while they are operating on SVLSRM tracks. Visitors may purchase copies of these rules to keep.

2. OPERATIONS

201. All train movement shall be under the supervision of the Trainmaster, or a Dispatcher. An engine running light, on regular run days or during specific meets, shall be considered a train and subject to these rules.
202. All engines must be run at a safe speed and under complete control at all times. (Refer to Rule 229 for a definition of safe speed.)
203. Any engine about to back up must give the correct signal. All engines

backing up shall run at reduced speeds.

204. All engines must be run at reduced speeds in congested areas and in areas with close clearance, such as yards, stations, etc.
205. Any engine following another train must keep at least seventy-five (75) feet behind the train ahead.
206. An engine approaching a stopped train on the same track must come to a complete stop no less than fifty (50) feet from the stopped train. The stopped train may then be approached slowly with caution.
207. Except in an emergency, no train shall stop on any bridge, crossing, switch, or mainline track, except in a station where such mainline track is part of the station trackage.
208. Any train that is stopped on the mainline must call out a flagman to protect to the rear with a red flag or light that may be clearly seen by a following engineer for a distance of at least one hundred fifty (150) feet.
209. Engineers and conductors are equally responsible for proper alignment of switches (turnouts). All mainline switches must be returned to normal position as soon as the train has cleared the fouling point, except for remote switches that are operable by the engineer while seated on the locomotive. Normal position is for through mainline traffic.
210. Trains shall be stopped immediately when any hazard to the passengers or equipment is detected.
211. All relief engineers shall be thoroughly briefed on the individual engines they are to operate.
212. All trains hauling passengers shall have at least one qualified conductor on the last car of the train. Each conductor on duty shall have a whistle (police type preferred) and a red flag or light in his possession.
213. Trains carrying the general public shall not exceed one hundred (100) feet in length over all, exclusive of locomotive and tender or other motive power.
214. Trains hauling passengers must be operated by qualified engineers and conductor who are members of SVLSRM.

215. When visibility is limited and after sunset, all trains shall have a lighted headlight (white) showing to the front on the engine and a marker on the last car showing red to the rear. Trainmen shall have a lighted lantern suitable for giving hand signals. Such lights shall be visible for a distance of at least one hundred fifty (150) feet.
216. Trainman should use hand signals whenever practical. Several trainmen in the same area using whistles can easily be mistaken for one another. The use of hand signals makes it necessary for the engineer to see the signal intended for him, eliminating possible error and danger of mistaking another trainman's whistle for that of his own.
217. Hand signals may be given with the hand, flag or light, as follows:
- A. "STOP" . . . Swing at arm's length down from the shoulders across the track.
 - B. "PROCEED" . . . Raised and lowered vertically.
 - C. "BACK UP" . . . Swung vertically in circles across the track.
 - D. "REDUCE SPEED" . . . Arms held horizontally with slight motion of hand.
218. Engine whistle signals shall be used by the engineer whenever practical to give, ask for, or acknowledge information about train movement. When double heading, the lead engine will give the whistle signals when possible. The whistle shall not be used unnecessarily. The whistle is a signaling device and should be used as such.
219. Engine whistle signals: O = A short blast - = A long blast
- A. O Apply brakes; STOP
 - B. OO Answer to any signal not otherwise provided for.
 - C. OOO When standing back up; answer to 221C. When running, answer to 221D.

- D. OOOO Call for signals.
- E. -- Release brakes; proceed.
- F. ---- Flagman return to train.
- G. -OOO Flagman protect rear of train.
- H. --O- Approaching public crossing, area of restricted visibility or a train on adjacent track.
- I. OOOOOOOO (8) Warning to people or animals on track; general alarm.

220. Communicating signals are used by the conductor when necessary to convey a message to the engineer while the train is running. Communicating signals are blown on the conductor's whistle, loud enough for the engineer to hear above the noise of the engine.

221. Communicating signals given by trainmen:

- A. OO When standing, proceed.
- B. OO When running, STOP.
- C. OOO When standing, back up.
- D. OOO When running, stop at the next station.
- E. OOOO When running, reduce speed.

222. Color signals, lights or flags:

- A. Red – STOP
- B. Yellow – APPROACH – Proceed with caution, prepare to stop at next signal.
- C. Flashing Yellow – APPROACH MEDIUM – proceed to next signal at reduced speed.
- D. Green – PROCEED

DOUBLE HEAD SIGNALS

- E. Red over Yellow – DIVERGING APPROACH MEDIUM – proceed on diverging route with reduced speed.
 - F. Yellow over Yellow – APPROACH DIVERGING – Proceed, prepare to take diverging route at next signal.
 - G. Blue – Equipment must not be coupled or moved. A blue flag or light shall not be removed by anyone except the person or craft that placed it.
223. No one under the influence of alcohol or narcotics shall operate any equipment within the SVLSRM facility, nor shall any such person be a part of the crew of any equipment operating within the facility.
224. No person shall consume or use any alcoholic beverages, including beer, or any narcotics or illegal drugs while acting in the capacity of conductor or operating any equipment within the SVLSRM facility. Violations of rules 223 or 224 may be cause for immediate suspension of all rights of membership pending a hearing of the case.
225. Trains carrying the general public can be double headed; no helper engine can be elsewhere in the train, or pushing on the rear of the train.
226. Any train consist with more than seven (7) cars available for passengers shall have at least one half of the cars equipped with operable brakes, such brakes to be operated by the engineer from the locomotive.
227. Trains carrying the general public in cars not equipped with operating brakes shall not exceed seven (7) cars in length, exclusive of the caboose or other riding car for the conductor.
228. No locomotive shall be operated at an excessive speed, and shall not be operated at a speed greater than any speed from which the locomotive and its train can be slowed and stopped within a reasonable distance, depending on the traffic, track conditions, visibility and weight of the train. Absolute maximum speed of any train shall be 7 mph actual (10 seconds between milepost markers).

229. A chain or draw bar must be installed between any car on which the Engineer is riding separate from his locomotive. A chain or draw bar must also be installed between any fuel car or cars and the locomotive which it supplies. Chains will be installed on all cars carrying the general public.
230. ACCIDENT GUIDELINES-SACRAMENTO VALLEY LIVE STEAMERS RAILROAD MUSEUM.

To insure that members of the Sacramento Valley Live Steamers are aware of the proper procedures to follow in the event of the accidental injury of a passenger or other visitor to our facility (or any sanctioned SVLSRM activity) the following guidelines are to be followed:

1. Safety is always first. The accident that is prevented is always handled correctly.
2. In the event of injury:
 - A. Secure equipment to prevent movement and additional injury.
 - B. Get help immediately if needed (send flagman or another passenger back to the station or steaming area)
 - C. Apply First Aid if necessary (within your ability).
 - D. Obtain the name and address of the injured party.
 - E. Obtain the name and address of witnesses and a statement of the same.
 - F. Obtain a statement from the train crewmembers.
 - G. Complete an Incident report and file it, and the witness and crew statements, with a Board member as soon as possible.
 - H. If the injured person requests information about the organization's insurance, DO NOT provide any of the details except the name and address of the secretary and request that the inquiry be in writing.
 - I. If the incident is considered serious enough, a Board member

should inform
the insurance company of a possible claim.

J. In the event the incident is further pursued in writing by the injured party, the Board should notify the insurance company immediately.

K. DO NOT, UNDER ANY CIRCUMSTANCES, ADMIT LIABILITY!

231. Any member wishing to use any SVLSRM owned rail equipment at the facility must make this request to the Trainmaster (Article IV Section 11.) The member must report to the Trainmaster any damage or operational problems that occurred while in their care at the time of the equipment return. The member must return the equipment to the location from where it was issued.

3. PERSONNEL

301. The chief concern of all operating personnel shall be the safety of visitors, guests, and members of the organization.
302. All members share equal privileges and use of the facilities. All members also have equal responsibility for the safety and maintenance of the facility, equipment, and the observance and enforcement of these rules. Every member is responsible to, and for, every other member. There are no so-called "privileged" members.
303. All conductors and engineers must be able to demonstrate thorough knowledge of basic rules of safe operation to the satisfaction of the Trainmaster or his designated alternate and in addition all engineers shall be thoroughly briefed on the individual engines they are to operate.

304. ENGINEERS:

- A. **Qualifications:** Any member of SVLSRM who demonstrates that they have the knowledge, judgment, and ability to operate a locomotive and passes the qualification test and possess a valid drivers license, will be qualified to act as engineer on the type of locomotive for which they have applied (steam, diesel, etc.) on trains carrying the general public. Members of SVLSRM who choose not to test and members of other live steam organizations may act as engineer on trains carrying SVLSRM members and guests only. No one under the

age of 18 will act as engineer on any train pulling the general public. Persons between the ages of 13 and 17 may operate as engineer of the locomotive only with permission of the owner, or in the case of SVLSRM owned equipment, by permission of the Trainmaster. They will not carry passengers except a flagman. Children under the age of 12 may operate locomotives only while accompanied by an adult (the owner or another adult who is familiar with and qualified to operate said locomotive). The adult must sit directly behind the child and have full access to and can easily reach the controls in case of emergency. Children under 12 years of age may operate trains in the above-mentioned manner with passengers who are SVLSRM members or family members. Children under age 12 may operate non-steam locomotives such as small electric or gas powered engines with simple controls without an adult supervisor as long as they do not carry passengers except for a flagman. Engineers under 18, at the discretion of the Trainmaster or his designated alternate, may be restricted from operating during periods of heavy traffic such as during invitational meets, birthday party runs, and major holidays such as 4th of July.

- B. Responsibilities: the engineer is responsible for the safe handling of the train and the cars at all times. He must be in close cooperation with all other operating personnel, observing all rules and signals (whistles, hand, flag or light) given by the conductor and stationmaster. He must run his engine in conformance with SVLSRM safety rules at all times. He must see that any SVLSRM equipment used by him is returned to its proper storage space at the end of his run, unless another engineer takes over the responsibility of such equipment and agrees to see that such equipment is properly stored after its use.

305. Conductor:

- A. Qualifications: any member of SVLSRM who demonstrates to the examining committee that he/she has the knowledge, judgment, and ability to supervise passengers and scale railroad equipment competently and safely, and who passes the qualification tests, will be qualified as a conductor. No one under the age of 18 will act as a conductor on any train pulling the general public.
- B. Responsibilities: each conductor shall have a whistle (police type preferred) and a red flag or light in his possession at all times while

acting as conductor. He shall assist in loading or unloading passengers on the train. He shall ascertain that all passengers on his train have been told and understand instructions for passengers before signaling to the engineer to proceed from the station. He shall enforce all passenger safety rules while the train is in motion. He shall align all switches (turnouts) for the mainline after use of such switches by his train. He shall enforce Rule #111 and shall prevent any passengers from throwing any trash, garbage or other refuse from the train along the right-of-way. He shall assist the engineer when necessary and shall call for help when necessary to enforce any rules.

306. STATIONMASTER:

- A. **Qualifications:** any member of SVLSRM who demonstrates to the examining committee that he has the knowledge, judgment, and ability to supervise passengers and scale railroad trains competently and safely and who passes the qualifications test will be qualified as Stationmaster.
- B. **Responsibilities:** the Stationmaster shall have a whistle (police type preferred) and a red flag or light in his possession at all times while acting as a Stationmaster. He shall supervise the loading and unloading of all passengers at the passenger station. He shall discretely refuse passage to oversize passengers who obviously cannot fit or sit comfortably and safely inside passenger hauling car seats. He shall make certain that all passengers have been told and understand the safety instructions before the train leaves the station. He shall work in close cooperation with other operating personnel to keep passenger-hauling trains moving without congestion on the mainline.

307. SWITCH TENDERS:

- A. **Qualifications:** Any member of SVLSRM or other Live Steam organization or guest of SVLSRM, who demonstrates to the examining committee that he has the knowledge, judgment, and ability to operate track switches or turn-outs competently and safely and who passes the qualification test will be qualified as a switch tender.

- B. Responsibilities: A switch tender shall have a whistle (police type preferred) and a red flag or light in his possession at all times while acting as switch tender. He shall align switches (turnouts) for sidings, station tracks, yard tracks, crossovers, and etc. when requested to do so by the engineer, Stationmaster, or Yardmaster. After any switching movement involving mainline tracks he shall align all turnouts for mainline operation. He shall be certain the points are closed tightly on point switches and that tracks are positively aligned on stub switches. He shall become familiar with the operations and alignment of any unusual track switches or turnouts that he may have to operate, such as – slip switches (double or single), scissors switches, crossovers, spring switches, “rubber frogs”, spring loaded frog switches, turntables, transfer tables, and of etc.
308. For insurance purposes: engineers and conductor on trains hauling the general public MUST be qualified members of SVLSRM, and pass a qualification test.
309. All operating personnel, while on duty, shall have a copy of these operating rules in their possession. (See rule #118).
310. The Board of Directors may restrict or suspend from duty any operating personnel who consistently violates safety rules.
311. The Stationmaster and all members of every train crew of any train hauling passengers shall ascertain that all passengers are told and understand the passenger safety rules before the train leaves the station, as set forth here:
- A. Remain seated facing forward at all time while the train is in motion.
 - B. Remain seated on the train until it returns to the station.
 - C. Do not lean out nor reach for anything along the right-of-way while the train is in motion.
 - D. Keep hand and feet inside the car at all times while the train is in motion.
 - E. Do not yell or scream while riding on the train, except in an emergency.

F. Anyone disobeying these rules may be asked to leave the facility.

4. EQUIPMENT

401. Wheel dimensions (gauge, back-to-back, tread width, flange depth and thickness) must conform to I.B.L.S. standards to operate on SVLSRM track. The Board of Directors or safety committee may demand a check of any equipment before the equipment is allowed on the SVLSRM track. This applies to member's equipment and non-member's equipment.
402. Brakes on any train cars, regardless of ownership, used with SVLSRM cars, for the purpose of public passenger hauling, shall be equipped with compatible vacuum or air pressure type brakes that can be operated from the locomotive by the engineer.
403. Dummy or solid type couplers shall be constructed so they operate with the standard working knuckle coupler. Coupler height shall conform to I.B.L.S. standards.
404. Couplers or drawbars between engine and engineers riding car, or between any combination of engine, riding car and fuel car shall be of a drawbar with lock pin type or equivalent that cannot become accidentally uncoupled nor disconnect any fuel lines in case of derailment.
405. Steam boilers shall have at least two (2) safety valves set to operate within ten (10) pounds (psi) of each other.
406. Steam boilers shall have an annual hydrostatic test. Such test shall prove the ability of the boiler to withstand hydrostatic pressures of at least fifty percent (50%) above the normal working pressure of the boiler. Such tests shall further prove the ability of each safety valve to work satisfactorily at its own set pressure. Steam boiler test certification issued by other recognized Live Steam organization within the past twelve (12) months shall be honored by SVLSRM
407. Steam boilers shall have a facility to shut off heat immediately in case of emergency. Oil fired (diesel, heating oil, kerosene, etc.) and LP Gas fired boilers shall have a valve or other means to stop the flow of fuel to the burner. Solid fuel (coal, charcoal, nutshells, fruit pits, etc.) fired boilers shall have a means of dumping the fire out of the fire box or smothering the fire with steam, water, CO₂, etc.

408. Steam boilers shall have the water level gauge located with the bottom of the gauge high enough above the crown sheet level to show ample water covering the crown. The water glass shall be located so it is readily seen from the engineers operating position.
409. All steam locomotives shall have at least two (2) methods of putting water into the boiler. At least one (1) method of putting water into the boiler shall be operable while the locomotive is under steam, but not in motion.
410. Before leaving the steaming area operating steam locomotives shall have steam pressure brought up to operating pressure, have safety valves and pressure gauges checked and operating correctly, have water gauges and try cocks blown down, have feed-water devices checked and in working order, have whistle tested and operating properly, and have brakes checked and operating.
411. Steam boilers burning solid fuel shall have an ash pan constructed and installed to prevent dropping burning ashes of fuel along the right-of way while the locomotive is in operation.
412. Steam locomotives shall be operated so as to prevent anyone from being burned or having their clothing soiled by steam from cylinder cocks, exhaust, blow-down valves, whistles, or other emissions.
413. All locomotives or engineers' riding cars shall have braking devices that can be activated easily and quickly by the engineer. Such braking devices shall have the power to slow and stop the entire train within a reasonable distance, depending on the weight and speed of the train.
414. All locomotives shall be equipped with a whistle, horn, or sounding device for sounding locomotive signals. Such sounding device shall be powerful enough to be heard distinctly for at least 150 feet.
415. All locomotives operating during periods of low visibility or after sunset shall be equipped with a working headlight that may be seen clearly for a distance of at least 150 feet and sufficient lighting in the locomotive cab to read the gauges and see the controls clearly.
416. All trains running during periods of low visibility or after sunset shall be equipped with a marker light, or lights on the rear of the last car showing a red light to the rear and visible for at least 150 feet.

417. All equipment shall be built to clear all trackside clearances as shown in these rules and standards. Any equipment on which the engineer, conductor, or passengers ride with their feet outside the equipment shall have foot boards or bars to hold the feet of all riders in a position to clear all track side objects such as: switch stands, signals, mileposts, etc.
418. Cars used to haul passengers that do not have built-in seats shall NOT have seats improvised with boards and objects laid across the sides of the car, except for the last seat which shall be reserved for the conductor. Passengers may sit on the floor of the car, to keep the center of gravity as low as possible.
419. All steam boilers shall be equipped with a 1/8th inch NPT pipefitting or fittings sufficient to join either male or female 1/8th NPT pipefittings for purposes of hydrostatic boiler checks.
420. Car and truck bolsters shall be constructed to provide three or four point suspension for the car body. Side bearing clearance shall allow trucks to swivel freely, and provide stability for the car body with maximum load shifting. Kingpins for un-equalized trucks shall be loose enough to allow equalizing with respect to the car body.