

## Sumpter Valley Railroad

**Position:**           **Engineer**

**Prerequisites:**    Meet all the prerequisites to enter train service.  
Be a qualified fireman

**Qualification**

**Procedure:**       Have completed 12 round trips with qualified engineer  
Demonstrate proficiency to Road Foreman of Engines or designee  
  
Pass the written engineer's exam  
  
Approval by Operations committee for promotion to engineer  
  
A minimum of two additional round trips and demonstrated proficiency on the #3 are required to be qualified as engineer on #3

**Duties:**           Engineers are in charge of the locomotive.

Engineers are responsible for the safe handling of both the locomotive and the train.

Obey all signals and instructions issued by the conductor, or a brakeman during switching operations. If a signal or instruction is not understood or seems unreasonable, do not act until such signal or instruction is understood. If necessary stop the train.

Maintain radio contact with the train crew and stations.

Monitor the activities of the fireman, or other persons riding in or on the locomotive.

Monitor the boiler water level and, if necessary, add water.

Inspect the locomotive before each day's operations and while stopped at stations.

Ensure that the locomotive is properly lubricated before and during operations.

Provide training for new firemen.

Ensure that all pre and post operation forms and logs are properly filled out.

**Re-qualification**

**Requirements:** A qualified Engineer who has not worked in that position for two or more years must make a minimum of two round trips under the observation of the Road Foreman of Engines, or a person designated by them. Must also pass the current written engineer's exam.

## Sumpter Valley Railroad Student Engineer's Evaluation

Student's Name: \_\_\_\_\_ Date: \_\_\_\_\_ Number of round trips: \_\_\_\_\_

Engineer's Name: \_\_\_\_\_ Engine: \_\_\_\_\_

Task/Standard	Needs Training	Acceptable Progress	Competent	N/A
Appropriate Clothing/PPE				
Personal Equipment				
Engine inspection				
Check fuel level and water levels in the tank and boiler.				
Proper test-use of injectors				
Air Brake tests				
Monitoring steam pressure level gain/loss				
Monitoring of water glass levels				
Knowledge of railroad and terrain operating over				
Understands the air brake system and how it works				
Understands the different positions of the automatic brake valve and independent brake valve				
Understands the proper positioning of the throttle and reverse lever as determined by terrain and load				
Understands the proper handling of air on a grade				
Understands responsibility of the safety for the passengers, crew and train				
Proper whistle signals				
Coupling and uncoupling from equipment				
Proper communication with all crew members				
Situational Awareness- knows where at on railroad				
Attitude - Teamwork				
Attitude - Taking Instruction				
Hours of service documentation				

**Must complete 12 round trips minimum for advancement (Number of trips completed: \_\_\_\_\_)**

\_\_\_\_\_  
**Qualified Engineer's Signature**

*Recommend for advancement*

\_\_\_\_\_  
**Student Signature**