

RISK ASSESSMENT PUBLIC

Steam-Up Day — Locomotive Operations

Lapford Mill Grounds, Devon

Document Control

Date	Version	Summary	Author
19.3.2026	1.0	Initial Draft	AG
2.4.2026	2.0	Alistair Review and addition to risks: mechanical failures, derailments, passenger operations, monoxide, fire & others	AH

1. Activity Details

Activity	Operation of 7¼" gauge miniature steam locomotives providing rides to invited guests and visitors.
Operator	Alistair Hall (Railway Owner / Controller)
Assessment Date	[Insert]
Assessor	[Insert]
Review Date	[Insert]

2. Persons at Risk

- Passengers and invited guests
- Volunteers
- Locomotive operators and drivers
- Other visitors on site
- Landowner

3. Key Operational Principle

Operational responsibility rests with the **Railway Operator**, separate from land ownership. The Railway Operator has full authority to suspend operations, remove unsafe equipment, and refuse rides where safety may be compromised.

4. Hazard Assessment & Control Measures

4.1 Moving Trains

Hazards	- Collision with persons or structures - Entrapment of passengers or bystanders - Striking pedestrians within the site
Controls	- Defined passenger waiting and boarding areas established and enforced - Controlled single boarding point in use at all times - Trains operated at safe miniature railway speeds throughout. - Audible warning sounded before every journey start, approach of active level crossings. - Learner Drivers and operators to be under immediate supervision of an authorised and competent Driver.
Residual Risk	LOW

4.2 Steam & Hot Surfaces

Hazards	Boiler Explosion, burns from boiler, pipework, steam discharge, and hot metal surfaces
Controls	- Full test certification (Current and insurance) and Pre public running check including testing of injectors, water feeds and other controls. - Boilers to have safety fusible plug in fire box and correctly set safety valves. - Public and passengers only allowed in vicinity of locomotive under supervision of Driver or competent supervisor. - Driver responsible for safe locomotive handling throughout session. - Driver and crew to have a full understanding of the hot surfaces when handling locomotive. Use a protective cloth or gloves for hot controls. - Engines supervised and attended whenever in steam. - Water at water tank to treat any burns with instructions to keep burn under water for at least 10 minutes.
Residual Risk	LOW

4.3 Passenger Riding Risks

Hazards	- Falling from riding trucks during operation - Instability of passengers on rolling stock. - Entrapment of limbs between carriages.
Controls	- Stable and inspected riding stock only — no improvised or unsafe vehicles - Riders briefed before boarding: - Sit properly within seats at all times when the train is in motion. - Keep hands and arms inside the vehicle - No standing or leaning during movement - No placing of limbs between carriages, Carriage couplings to allow at least 3 inch (75mm) space between carriage bodies. - Passengers must not grab objects out side of train. - Children supervised by accompanying adults at all times
Residual Risk	LOW

4.4 Derailment & Run-away Risks

- Trains coming off track. - Trains coming to a terminal run off point or end of track at speed. - Trains coming off at vulnerable location and rolling. - Detached rolling stock causing a collision risk. - Multiple train collision risk	
- A basic visual inspection of the track for condition, obstructions especially around wooded areas, vulnerable areas of track - Pre public running check run with train over whole public running section of line to prove track and rolling stock is in working order. - The only terminal running downhill is the Transshipment siding. The points to the siding will be locked out by nut and bolt in locking plate. - Bridges and steeper embankments where risk is higher of train rolling shall have either containing bank or walls, Extended sleepers with guard rail. - Normal running will only have one train. In special events where multiple trains are running, trains shall work in a clockwise direction with at least 20 m apart. Site has good line of site. - Propelling movements shall be limited to 3 carriages plus loco and tender/ driving truck.	
LOW	

4.5 Collision risk road vehicle to rail vehicle interface.

- Vehicles hitting trains at level crossings
- Vehicles parking too close or driving on to track.
- Trains to give warning whistle on approach to crossing and travel at walking pace.
- On events where vehicles may need to use the crossing a crossing Marshall to stop cars will be appointed.
- On events where vehicles may need to use the area close to the track inside the field a separation rope of fence and a parking attendant/ Marshall shall be appointed.
- Normal parking is segregated (Will be segregated) by trees, ditching or fencing. Additional protection can be applied with road cones (Crossings not in public vehicle use)

LOW

4.6 Water Hazards During Operations

Hazards	• Passengers or visitors falling into leat or areas of open water
Controls	• Passenger waiting and boarding areas located away from all water edges • Barriers or natural separation maintained between public areas and water • Active supervision maintained throughout all operational sessions. • Either throw line, life buoy, rescue pole to pull persons out at large ponds.
Residual Risk	LOW

 Water hazard controls should be read in conjunction with the Construction Volunteer Risk Assessment (Section 7.3) for full site water risk policy.

4.7 Mechanical Failure

Hazards	• Locomotive or rolling stock failure during operation
Controls	• Pre-steam inspection carried out before each operational session • Valid boiler certification maintained and available for inspection • Routine maintenance records kept and up to date. • As well as pre run checks an annual full inspection including lubrication of carriage and rolling stock bogies. • Condition check of petrol or battery locomotives include full motion and physical brake check.
Residual Risk	LOW

4.8 Uncontrolled fire risk.

Hazards	- Fuelling of petrol/ diesel locomotives. - Ontrack debris fire, - Line side vegetation fire.
Controls	- Diesel, gas and petrol locomotives to be turned off when fuelling up. - Periodic leaf blowing will be carried out to seasonal and location requirements checking particularly foot crossings, bridges, points and any area where leaf vegetation can build up. - Petrol and diesel will be stored in approved cans in minimal quantities but not in locomotive or carriage shed. (Separate storage shed) - Weed spray, vegetation control applied to 1 foot off centre line of track. - Fire beaters (Including shovels) provided during hot weather. - Under extreme fire risk events, Steam trains will not be permitted. - No major hot works within the sheds.
Residual Risk	LOW

4.9 Carbon monoxide risk.

Hazards	Suffocation, fumes from contained spaces
Controls	- Shed doors will be kept open during hot works, minimise hot works within sheds. - Fires must be removed from steam locomotives before being stored in shed (Particularly insulated sheds) - Petrol or diesel locomotives must not idle within sheds, Shed doors must be kept open if a locomotive is inside running. (Coupling up, hauling another locomotive or rollingstock in/out.) - Locomotives must start up outside the shed.
Residual Risk	LOW

5. Emergency Arrangements

First Aid	First aid provision present on site throughout operational sessions
Emergency Stop	Emergency stop procedure understood and practised by all operators
Site Access	Clear vehicle access route maintained for emergency services at all times.
Emergency Address	Lapford Mill, Lapford, Devon. EX176PU.
Emergency Services	999
First Aider on Site	See notification board at site entrance.
First Aid Kit Locations	Lapford Mill Café/ bar, Carriage shed.

6. Operational Authority

The Railway Operator has full and sole authority to:

- Suspend operations at any time where safety may be at risk
- Remove unsafe equipment from service without prior notice
- Refuse rides to any individual where safety may be compromised
- Instruct all persons on site to comply with safety requirements

7. Sign-off & Authorisation

Prepared By	
Role	
Date	
Signature	
Next Review Due	

Lapford Mill Steam Railway · This document is a controlled operational document and must be kept separate from the Construction Risk Assessment.