

1. Scope

This standard applies to all rail operations including trains, locos, wagons, tracks, loading facilities and dumping facilities managed by Vedanta or its Business Partners and specifies mandatory requirements for all existing operations and new acquisitions.

- 1.1. The objective of the standard is to eliminate the risk of fatalities and serious incidents resulting from any activities related to rail operations.
- 1.2. Businesses must also comply with National and local rail operations laws and regulations.

2. People

The Head or Area In Charge of Logistics/Rail/Port operations is responsible for ensuring the implementation of this Standard and that all statutory duties as outlined in the local legislation are followed. They may assign an Authorised Person whose role shall be to ensure that there are appropriate SOPs, training and risk assessments in place for driving, operations, loading, shunting, coupling and decoupling. The Authorized Persons shall ensure:

- 2.1. There is a list of personnel authorised as Supervisor, Loco Driver, Pointsman, Linesman, Mechanic for all rail activities.
- 2.2. A Training Programme is in place for all Loco Drivers, Pointsmen, Maintenance Mechanics and Supervisors who work on rails or on and around loco and wagons, with specific training for each task such as driving, shunting and loading / unloading.
- 2.3. Annual re-training programmes are in place for all authorised personnel.
- 2.4. The Business Partner site leader plus the loco driver and at least one Pointsman in each team as identified in 3.2 below have the appropriate education, training and minimum five-years' experience in the role. This shall be clearly defined in a job description.
- 2.5. All personnel working in the railroad environment have general awareness training on "Line of Fire" risks associated with moving trains or wagons; pinching between wagons; or caught under wheels of locos or wagons.
- 2.6. All personnel working in a rail yard, on tracks and in rail activities wear appropriate PPE and clothing with 360° retro-reflective 50 mm strips on chest, back, arms and legs.

3. Process

The Authorised Person shall ensure:

- 3.1. Each operation has completed a hazard identification and risk assessment to ensure that all hazards associated with rail operations are identified, risks are assessed, and appropriate controls are in place. The assessment must:
 - 3.1.1. Establish a Risk Register that is reviewed annually.
 - 3.1.2. Apply learnings of previous incidents into the process.
 - 3.1.3. Ensure all specified controls are in place.
 - 3.1.4. Develop a monitoring and review process to cover effectiveness and limitations of current practices.
 - 3.1.5. Cover all hazards including but not limited to coupling/decoupling; overhead electrical hazards; working at heights; jumping between wagons; mounting/dismounting moving trains; opening/closing a switch; and opening/closing wagon gates.
 - 3.1.6. Identify approved tools and equipment.
 - 3.1.7. Establish work zones to ensure locos and vehicles have safe separation distances.
 - 3.1.8. Include non-standard equipment, e.g. wagon bumpers

- 3.2. During shunting and coupling/decoupling operations, crews of at least three persons (Loco Driver & two Pointsmen) are always present.
- 3.3. Each rail crew has one person designated to give radio instructions to the loco driver. That person must ensure:
 - 3.3.1. Positive communication with the correct loco driver (in the case where more than one loco is present)
 - 3.3.2. No one is in the line of fire before giving an instruction to move a loco
- 3.4. No person shall mount or dismount a moving loco or wagon.
- 3.5. Flags, de-railing devices and a person as a Safety Watch are used when workers are on the track to protect from trains or wagons moving into their work area.
- 3.6. All locos and wagons parked on a slope have four skids available and the Pointsman places skids under the wheels of the wagon next to the loco to prevent rolling.
- 3.7. All railroad signage is identified and installed at visible locations, including "overhead electrical"; "rail crossing"; and, at entrance to tracks, "authorized personnel only".
- 3.8. Training of employees on loco sounds for movements.
- 3.9. Adequate supervisors are visible in the field for monitoring work activities.
- 3.10. Two-way radios are used to communicate with the loco driver and mobile phones use is avoided during critical loco movements.
- 3.11. All locos undergo a documented pre-use inspection that verifies the presence of firm railings, stairs and couplers on the locomotive; locomotive floor is clean; and brakes, lights, horn and fire extinguishers inside the cabin are working properly.
- 3.12. Locos used for transportation have all lights and horns fully functional including Near Light, which should be switched on for night-time coupling & decoupling.
- 3.13. Rail sidings are designed, constructed and maintained to reduce derailment.
- 3.14. A yearly survey of track gradient and, based upon this, completion of lifting & packing track maintenance (most preferable after monsoon period).
- 3.15. A loco and track maintenance plan is in place and updated weekly to eliminate derailments.
- 3.16. Speed within Vedanta sites is maintained to a maximum as required by local legislation.
- 3.17. Hygiene facilities are available and easily accessible for workers' use.
- 3.18. Each rail operation has a Rail Safety Champion who ensures the implementation of this standard.

4. Review

The requirements of this Standard shall be reviewed at least annually by businesses through their logistics departments.



Andrew Lewin
Group Head HSE & Sustainability