



CUSTOMER SAFETY HANDBOOK



2020 Edition



FROM THE VICE PRESIDENT OF OPERATIONS

Modesto & Empire Traction Company (M&ET) is committed to maintaining a safe workplace, while providing customers with high-quality, precision transportation and logistics services. We take great care to protect the personal safety of our employees and to make safety a primary consideration in our workplace culture. We need your full partnership in extending this culture and commitment to your facility, employees and rail operations.

This handbook will provide an overall guide to help keep your property safe for all of us. Your specific responsibilities are defined in your Industrial Track Agreement with M&ET and may contain additional requirements. Please review both this handbook and your Industrial Track Agreement, and if you have any questions, please contact M&ET.

Sincerely,

Jared Martin
Vice President of Operations



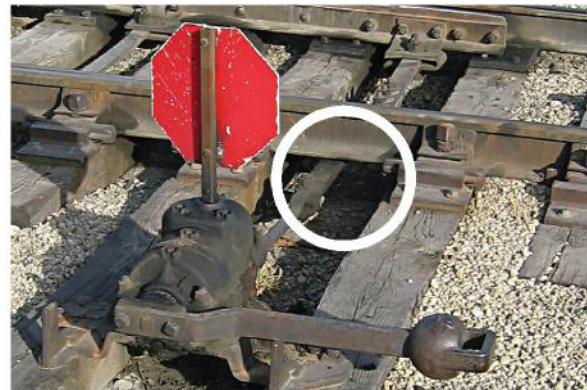
TRACK MAINTENANCE

M&ET will have a qualified professional inspect your track on a regular basis, consistent with the Federal Railroad Administration (FRA) and California Public Utilities Commission (CPUC) requirements. M&ET will also schedule repairs or routine maintenance consistent with the above agencies requirements. M&ET will always take a proactive approach and assess the need for any major track rehabilitation projects at regular intervals. M&ET will communicate to our customers in advance any track maintenance that is to be scheduled so that switching delays can be kept to a minimum.

NOTE: Some customer's lease agreements may require them to be responsible for track maintenance as stated above.

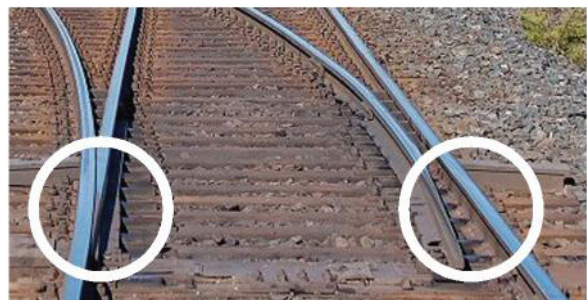
Customers must keep track flangeways clear at all times. Remove any debris which may accumulate in these areas, maintaining flangeway at least three inches wide and 1-7/8 inches deep.

Make sure that all switches in the plant are free of foreign materials so that the switch throws completely, without binding



Keep flangeways clear of debris, earth, and feed.

Make sure points and connecting rod are clean and free of debris and have correct fit.





WALKING CONDITIONS

Keep your trackage and facility free of walking hazards, including debris, spillage, and uneven surfaces. Report any vegetation or drainage concerns to M&ET.

Material should be neatly stacked in a manner that will not allow any to spill near the track or walkways. **NOTE: In no case is material or equipment to be stacked or stored closer than 8 ½ feet from track center, without prior approval from M&ET.**

M&ET reserves the right to refuse service to any customer if walkways and/or clearances are found to be out of compliance.

For additional clearance requirements, see p. 13, Railway Clearances.



Keep your facility clean and free from walking hazards. Observe a minimum lateral clearance of 8 ½ feet from track center outward. 10 feet is recommended when practical. Distance must be an additional 1 foot from track center outward on curved track



SECURING EQUIPMENT AGAINST UNINTENDED MOVEMENT

After railcars have been spotted in your facility by M&ET, the train crew will secure the cars with a minimum of one or more handbrakes as conditions require.

In some cases when handling heavy materials with lift trucks in railcars, or when on a grade, extra hand brakes, chocks or blocking may be required to prevent cars from moving. If your company moves railcars within your facility, be certain that when the movements are complete, railcars are safely secured with a sufficient number of hand brakes.

The number of hand brakes required depends on:

- Grade and adhesion
- Number of loaded and empty cars
- Weather conditions (wind and temperature)
- Movement of lift trucks within the cars



If you are not sure if the railcars are secure, place extra hand brakes.

OPERATING HAND BRAKES

ALWAYS observe ladder, step, and grab iron conditions before mounting car.

ALWAYS be alert while climbing on cars or operating hand brake.

ALWAYS operate hand brakes from a proper position.

ALWAYS maintain a three-point stance when applying or releasing hand brakes.

ALWAYS maintain a grip with one hand on the car.

ALWAYS grip the hand brake wheel with the thumb on the outside.

NEVER use more than one hand to operate a hand brake.

NEVER reach through the spokes of a brake wheel.

NEVER use a leverage device on a geared hand brake.

NEVER operate a hand brake while standing on any coupling mechanism or rail.

NEVER move railcars while hand brakes are fully applied.

NEVER leave hand brakes partially applied.



TO APPLY RAILCAR HAND BRAKES

- Place the lever or pawl in the ON position by reaching with the right hand behind the brake wheel
- Turn the brake wheel clockwise with your right hand to take up the slack in the brake chain.
- After the slack is taken, place your right hand at the seven o'clock position on the rim of the wheel and apply lifting pressure toward you in short pulls.
- Keep your back straight and use leg muscles to apply pressure by pushing downward with your right leg as you pull upward on the brake wheel with your right hand.
- Observe that the brake shoes are tight against the wheels and that the cars are completely at rest.

NOTE: Several styles of hand brakes are used on the various types of railcar equipment. This handbook will only cover the most commonly used types.

TO RELEASE RAILCAR HAND BRAKES

- Ensure that all personnel are clear of moving equipment, nothing is connected to any of the cars and that the cars can be safely moved, stopped, and the hand brakes can be re-applied.
- Assume the same stance as you would when applying the hand brake.
- Keeping clear of the wheel, move the lever or pawl to the OFF position.
- If hand brake is not equipped with a release lever or pawl, grasp the wheel at about the one o'clock position and turn the wheel counterclockwise until the brake is completely released.



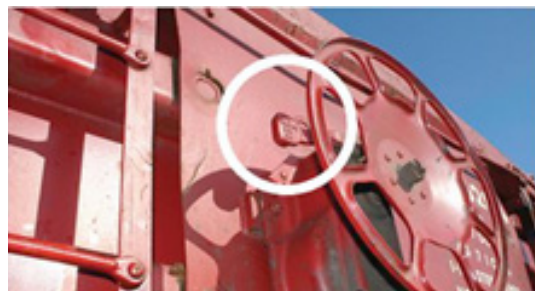
Step only on the designated walking platforms to access the handbrake



Observe that the brake shoes clasp against the wheels securely.



Pump style handbrake



To release handbrakes, move the pawl to the OFF position; if not equipped with a pawl, turn the brake wheel counterclockwise



PROTECTION OF WORKERS

When customer workers are working in, on or around railcars, they must be protected by a Blue Flag and/or Blue Light. Blue Flags are to be used during daylight hours and a Blue Light shall be used during nighttime hours or when visibility has been restricted due to inclement weather. When M&ET train crews encounter a Blue Flag and/or Blue Light on the track or attached to a railcar, they will not couple to the cars on the track. This is for your employee's safety and is required by Cal/OSHA. When railcars are ordered out, be sure that workers are clear of the railcars and the flags/lights have been removed.



M&ET also recommends that a derailing device be utilized anywhere that railcar movements could occur within a facility.

In addition, Hazmat customers are required by FRA & CPUC to utilize a derailing device when loading, unloading or transloading hazardous materials





MOVING RAILCARS

Safety procedures must be in place that prevent movement of railcars while workers are in, on or around railcars. Prior to moving, make a walk-around inspection to make sure that employees, loading/unloading equipment, dock plates, connecting hoses, cables or obstructions of any kind have been cleared. The method of controlling and signaling to be used during railcar movement activities must be clearly indicated and understood by all personnel involved.

- Ensure that the track is clear of obstructions for the distance of the movement.
- Advise everyone in the area of the intended movement.
- Discuss the intended move with all personnel involved, including the method of controlling and signaling that will be used during movement activities.
- Observe that the couplers line up, then couple or connect the trackmobile to the car to be moved.
- Release the hand brake(s).
- Before moving or leaving a string of cars it must be confirmed they are all coupled together.
- Someone must always be in a position to observe the leading end of the movement and relay signals to the equipment operator.
- Railcars must never be moved where they will foul tracks beyond the confines of your facility.
- Railcars must be left at least 50 feet from a derail. In certain cases where this requirement cannot be met, prior approval must be obtained from M&ET Safety Department.
- Always leave railcars with sufficient hand brakes applied to prevent any movement.

Note: Moving rail cars by pushing / pulling with forklifts, Bobcats, or other off rail machines is **not recommended** and **strongly discouraged**. Attaching chains, cables, and straps to railcars for pulling is inherently dangerous and very often results in employee injuries. Additionally, damage to the railcars may occur. Report any derailment or damage to railcars to M&ET at once



OPERATING RAILCAR DOORS

OPENING DOORS

Before opening railcar doors, be sure it is safe to do so. Check to see that all the hinges, rollers, and runners are in safe working condition. Be alert to shifted cargo on or in the railcar. Be cautious of bent or protruding doors, as this may be an indication of shifted cargo within or damaged equipment that has gone unreported.



Check all door hinges and runners for debris and damage.

PLUG DOORS

Check that door hinges are secure in track, top and bottom, before opening. Plug doors must be securely closed whenever car is being moved.

Typical plug door. This door pops out on rotary hinges then rolls down runner tracks.





CLOSING DOORS

When your facility is ready to release a railcar, be sure that all doors are closed and secured. M&ET will not move any railcar that has doors that are left open. When closing doors make sure hinges are free of any debris. Keep hands and feet clear of pinch points.

BOTTOM GATE DOORS

Ensure that gate locks are released prior to opening gate. Prior to opening, the gate opening device must be inserted far enough into the capstan to prevent damage to the capstan such as bending or deforming the square drive socket. The gate must be securely closed and locked when loading and after unloading. M&ET will not move hopper cars if the gates are left open.



Bottom Gate doors and capstan

NOTE: Contact M&ET if doors are difficult or unsafe to operate so Greenbrier can be dispatched.



SPILLAGE

Spillage must be cleaned up immediately. Ensure that your facility is free from product contamination. If railway equipment was rolled through a contaminated area, you must give the wheels an air pressure or water pressure cleaning. Cleaning is necessary to keep contamination from being spread to other areas. **Contact M&ET immediately if spillage spreads outside your facility and onto our main/yard tracks as protection will need to be established.**

LOAD LIMITS

Observe the load limit stenciled on the rail car to ensure that the gross weight of the car and lading does not exceed the maximum weight capacity for the route to be traveled. Make sure that the load is properly balanced within the car.

The Association of American Railroads (AAR) establishes rules governing loading requirements for railcars. Customers are required to follow the loading rules that have been established for the type of lading and railcar they are using. Contact information may be obtained from M&ET.

DANGEROUS GOODS

Only dangerous/hazardous materials that are properly placarded and have proper billing and shipping papers per federal regulations will be accepted for shipment by M&ET. The Hazardous Materials Regulations of the Department of Transportation (CFR Title 49) must be complied with when handling cars containing dangerous commodities. Copies of the regulations are available from M&ET.

For our customers that transport hazardous materials, it should be noted that all hazmat residue **MUST** be cleaned off the exterior of tank cars prior to being released from your facility. If any tank cars are identified as being non-compliant with federal/state regulations and needing repairs, the cars must be repaired by certified technicians. If special movement authority is required to move tank cars to a repair facility, such information must be forwarded to M&ET.





LIFTING/JACKING RAILCARS

A customer must never lift or jack a railcar. If for any reason a car is lifted or jacked, Greenbrier Repair & Services (GBW) must be called to arrange for an inspection before the car is moved.

RAILCAR DAMAGE

Customers need to notify M&ET Operations Supervisor whenever any of the following occur:

- Railcar has been derailed
- The railcars wheels or journal bearing have come in contact with equipment such as lift trucks or other large machinery.
- Parts of railcar have been submerged in water due to flooding.
- Any part of the railcar is bent, punched in, gouged, roof/ceiling damage etc.
- The car has sustained damage from any outside entity (e.g. contractors, vandals, etc).

Please Note that rail car repairs must be done by those who have been trained and qualified in Federal Railroad Administration / American Association of Railroads standards. In house repairs should not be attempted as there are specific federal regulations and standards that must be adhered to.





CLEARANCES

M&ET customers are advised to familiarize themselves with CPUC (California Public Utilities Commission) General Order 26-D.

<https://www.cpuc.ca.gov/gos/GO%2026-D.pdf>

RESTRICTED CLEARANCE

It is crucial that your facility is free of side and overhead clearance restrictions as much as practicable. Where such restrictions exist, they must be communicated to M&ET and protected by designated warning signs. M&ET must be notified before making changes to your facility that may create any rail clearance restrictions.

RAILWAY CLEARANCES

Railway clearances refer to the distance from the track to the nearest obstruction. Vertical clearances are measured from the top of the rail. Lateral clearances are measured from the center of the track at a right angle to the rail.

VERTICAL CLEARANCES

The minimum distance for any vertical obstruction is 22 feet above the top of the rail. Power wires carrying less than 750 volts must be at least 27 feet from top of rail. Higher voltages require more clearance.

LATERAL CLEARANCES

Obstructions of any kind must be kept a minimum of 8 1/2 feet (10 feet recommended), measured from track center, away from the track. This includes temporary piles of stock, refuse containers, parked vehicles, other equipment, and buildings. Machinery or equipment cannot be operated within 10 feet of M&ET main track without authority and protection.

SIGHT LINES

Clear sight lines must be maintained along the track. Materials, equipment or other obstructions must not be left where they can affect the ability to see approaching train traffic, especially at public and private road crossings.

EMERGENCY SITUATIONS

M&ET must be notified immediately should any unexpected condition cause an obstruction to be within the vertical or lateral clearance limits, if sight lines are compromised, or if it becomes necessary to operate equipment within 10 feet of M&ET main track.



CROSSING TRACKS

1. Prior to crossing tracks watch for movement in both directions.
2. Do not stand or walk between the rails of any track.
3. The rail surface is a slip hazard; do not step or walk on the rails.
4. Cross at least 25 feet from the end of a standing car or locomotive.

CROSSING OVER STANDING EQUIPMENT (RAILCARS)

Walk around cars whenever possible. However, if you have to cross over cars or set or release a handbrake, use extreme caution and adhere to these guidelines:

NEVER try to cross over moving cars.

NEVER put your feet on any moveable component such as a coupler or cut lever.

NEVER cross under a car.

ALWAYS use safety appliances such as ladders, handholds, and platforms.

ALWAYS maintain a "three point contact" with equipment and safety appliances: two hands + one foot, or two feet + one hand at all times.

WORKING NEAR TRACKS

1. Stay clear of tracks whenever possible
2. Be alert to train movements. Expect the movement of trains, engines, cars, or other on-track equipment at any time, on any track, in either direction.
3. Never move equipment across tracks except at established road crossings.
4. Stay away from tracks when visibility is poor.



SAFETY POLICIES FOR CUSTOMERS ON M&ET PROPERTY

Because railway facilities and operations can be dangerous, M&ET safety standards apply to everyone on our property. In addition, Roadway Worker Safety Rules, developed and enforced by the Federal Railway Administration (FRA) must be complied with to work on or near M&ET tracks. Specific training and obedience to the rules are required by the FRA and significant fines can result from a violation.

SAFETY REQUIREMENTS

Be aware of the following safe working practices prior to being on, or in close proximity to, rail equipment or track:

- Excluding offices, safety boots are required on M&ET property.
- High-visibility safety vests, shirts, or jackets with reflective striping must be worn.
- Seat belt use is required in all vehicles on company property and public roadways.
- Hearing protection must be worn in all designated areas and within 50 feet of machines or power tools in operation.
- Hard hats are required in designated areas and under certain other conditions.
- When required to be within 20 feet of the track, notify M&ET 24 hours prior (track protection may be required.) When required to be within 10 feet of the track, notify M&ET 48 hours prior; track protection will be required.
- A thorough job briefing must be performed with an M&ET representative if working within 10 feet of the track.

NOTE: If track protection is required, there will be a fee of \$800 per day.



IMPORTANT CONTACT INFORMATION

24/7 M&ET Emergency Reporting Number209-524-4635

Note: For emergencies at your facility that pose an imminent threat to life or property, dial 911 prior to calling the M&ET reporting line.

M&ET V.P. of Operations209-576-6706

M&ET V.P. of Rail Sales & Marketing209-557-2705

M&ET Operations Supervisor.....209-524-4635

M&ET Operations Manager.....209-576-6705

M&ET Crossing Warning Malfunction209-524-4635

Please have crossing identification number

M&ET Manager of Safety & Training.....209-576-6714

M&ET Section Manager.....209-576-6718

LOCAL RAIL CONTRACTORS

Rail Car Repair:

Greenbrier Repair & Services (GBW)866-785-0888

Track Maintenance:

Industrial Railways Company (IRC).....707-631-5732

Carl Patterson (IRC)510-774-5977