



Central Maintenance Facility Overview

About the Central Maintenance Facility (CMF)

The property where Metrolink's CMF is located, previously known as Taylor Yard, serviced locomotives and rail cars since the 1920s. The Southern California Regional Rail Authority (Metrolink) began CMF operations in 1991. Use of the facility was codified in a 1992 Memorandum of Understanding (MOU) with the City of Los Angeles and the Los Angeles County Transportation Commission (Metro). Metrolink is committed to meeting the transportation needs of the region in the safest and cleanest way possible, while remaining a good neighbor to our surrounding communities.

Metrolink Service

Metrolink is a Southern California commuter rail service that averages over 40,000 trips each weekday. It is estimated that each day over 18,000 cars are removed from the roads by those utilizing Metrolink. In turn, this reduces traffic congestion, air pollution and the need to construct additional freeway lanes.

Central Maintenance Facility Operations

CMF is one of two service, inspection, and repair facilities in the Metrolink system and the only facility equipped to handle heavy maintenance and repair. Following early morning peak runs, nearly all Metrolink trains arrive at CMF to be inspected, tested, fueled, cleaned and serviced for afternoon departures. Testing usually takes between 45-60 minutes but may take longer depending on the status of the equipment arriving for service, as any defects need to be addressed prior to departure.

During the inspection and testing process, the locomotives are required to be running to perform various functional tests mandated by the Code of Federal Regulations 49 Parts 200-299.

After train sets and locomotives are tested and inspected, the trains are staged in one of the storage tracks prior to departure. For evening service equipment moves, an electric car mover is utilized to move trainsets in lieu of diesel locomotives. Metrolink makes an effort to utilize car movers to reduce noise levels.

Based upon the MOU with the City of Los Angeles, SCRRA locomotives "will not idle at the site unless for the purpose of being serviced, and will not be moved at the site after 10 p.m. except for returning train sets destined for overnight storage at the facility or to initiate early morning service, thus noise at the CMF site will be reduced from former freight yard operating levels."



CMF Daily Operations

The current CMF daily operations schedule was developed in accordance with this agreement and balances concerns regarding the impact on the surrounding community with statutory requirements for maintenance. Metrolink has made significant changes to be a responsible neighbor to the community and continues to seek ways to improve operations at the CMF.

Central Maintenance Facility Schedule

The CMF does not operate 24/7. A typical weekly schedule is as follows:

Typical Weekdays

- One train prepped for service at 4:00 a.m. and departs at 5:15 a.m.
- The first train arrives at 6:50 a.m. and trains are serviced until 3:30 p.m.
- The last inbound train arrives at 2:00 p.m.
- The last outbound train departs at 6:45 p.m.
- The second shift, which starts at 3:30 p.m., rearranges locomotives and cars.

Typical Weekends

Saturday

- Train #1
 - Prepped for service and departs at 6:00 a.m.
 - Returns at 3:00 p.m. and is cleaned and serviced
 - Stored for Monday morning service
- Train #2
 - Prepped for service and departs at 8:00 a.m.
 - Returns at 7:00 p.m. and is prepped for service
 - Departs at 8:00 p.m.

Sunday

- Train #1
 - Prepped for service and departs at 8:00 a.m.
 - Returns at 7:00 p.m. and is cleaned and serviced
 - Stored for Monday morning service
- Train #2
 - Tested and prepared for emergencies

This is a list of routine operations. Metrolink may work outside of these hours in the case of incidents or non-routine repairs/maintenance. When possible, staff will notify the community.



Other Metrolink Facilities

In an effort to reduce operations at CMF, Metrolink utilizes additional locations to service our trains in the most efficient and effective manner. Specifically, we have been shifting functions to other locations, including our Eastern Maintenance Facility (EMF) in Colton, which opened in 2013.

In addition, trains are stored overnight at Lancaster, East Ventura, Moorpark, Riverside, Perris Valley and Stuart Mesa for the early morning service. However, none of these 6 locations have facilities to fuel locomotives.

Fuel Conservation Program

Metrolink has a fleet of over 50 locomotives that meet all current AQMD regulations. We use Ultra-Low Sulfur Diesel fuel, the cleanest fuel available to power locomotives. As of today, 32 of our locomotives have been equipped with Automatic Engine Start Stop (AESS) technology. AESS automatically shuts down the main engine of a locomotive if certain operating parameters are met, e.g. idling for 30 minutes.

Metrolink's Fuel Conservation Program also limits fuel consumption of idling trains prior to dispatching for passenger service. Consequently, all operations are performed with minimal locomotive idling. The program has reduced fuel consumption by 13% (approximately 853,000 gallons) per year and cut train idling at CMF by 50%.

Plug-in Program

In April 2012, Metrolink implemented its pilot Plug-in Program at its Central Maintenance Facility in Los Angeles. This technology enables trains to run on electrical ground power throughout a portion of their daily servicing and maintenance routine rather than relying on locomotive power alone. This further reduces emissions generated by the locomotive engines.

We have successfully implemented the pilot program, expanding the number of ground power stations to include five more in 2014, and continue to look for ways to maximize the program's use and expand to more locations.

Reduced Noise Pollution

Metrolink abides by the Code of Federal Regulations to reduce the use of bell ringing at CMF. Since the "reduced use of bells policy" was initiated in January 2012, bell ringing has decreased by 70-80%.



Upgrading Our Fleet- Tier 4

Metrolink is transitioning primarily to a fleet of Tier 4 locomotives, with 40 units ordered. The state-of-the-art Tier 4 locomotives are the cleanest diesel locomotives in the nation, providing wide-ranging environmental benefits for our region. They are compliant with the latest U.S. Environmental Protection Agency (EPA) emissions standards and will reduce particulate matter and nitrogen oxide emissions by up to 85 percent.

In keeping with its role as a transportation industry leader, Metrolink is the first passenger rail in the U.S. to utilize Tier 4 locomotives. However, because this is new technology, there have been obstacles to getting them approved for service. There have been delays in mobilizing the entire fleet due to regulatory compliance items requiring modifications and reliability issues of key components.

While we want to have these clean locomotives in service as soon as possible, we need them to be safe and reliable for our customers as well. We anticipate the frequency of deploying these locomotives to increase as we address issues associated with implementing a new technology. Metrolink is also exploring the use of battery operated and other hybrid type locomotives.

Federal Requirements – Code of Federal Regulations 49 Parts 200-299

Metrolink operations are subject to Federal Regulations that dictate the frequency and nature of mechanical inspections. The following rules describe the federal requirements:

- o [229.21](#) Daily Inspections – Requires daily inspection and testing for
- o [232.205](#) Class 1 Brake Test Initial Terminal Inspection – Requires functional air brake test at location where train is assembled.
- o [238.303](#) Exterior Inspections – Requires exterior mechanical inspection of passenger equipment each calendar day.
- o [238.305](#) Interior Inspections – Requires interior mechanical inspection of passenger equipment each calendar day.
- o [238.313](#) Class 1 Air Brake Test – Requires functional air brake test each calendar day.



Regulation of the Environment, Emissions and Air Quality

The South Coast Air Quality Management District (AQMD) enforces rules 401 and 402 through random, unscheduled visits to CMF. Additionally, AQMD inspectors are dispatched to the facility whenever a complaint is logged. To date, CMF has been consistently found to be in compliance. Violations would generally be classified as a visible emission or nuisance.

- o [Rule 401 Visible Emissions](#) – Limits the time length and color of smoke emissions based upon the Ringelmann Type Chart.
- o [Rule 402 Nuisance](#) – “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”

Contact

In addition to providing green public transportation options, Metrolink is dedicated to being a good neighbor to its surrounding communities. We are also looking for ways to improve communication with our neighbors and welcome community input and feedback about our efforts.

Questions and comments can be directed via the following:

- o Phone: 1-800-371-LINK (5465)
- o 24/7 Community Hotline: 213-452-0400
- o Email: communityrelations@scrra.net
- o Website: metrolinktrains.com/sustainability

For issues related to air quality, please contact the South Coast Air Quality Management District at 1-800-CUT-SMOG.