### **Central Maintenance Facility Overview**

### **About the Central Maintenance Facility (CMF)**

CMF, also referred to as Taylor Yard, has been a rail yard servicing locomotives and rail cars since the 1920's. The Southern California Regional Rail Authority (Metrolink) began servicing trains at CMF 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.

#### **Fuel Conservation Program**

Metrolink has a fleet of 52 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 locomotives have been equipped with Automatic Engine Start Stop (AESS). 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 fuel program has saved 860,000 gallons of fuel in 2010-11 and reduced the emissions and noise generated by idling locomotives.

## **Pilot Plug-in Program**

In April 2012, Metrolink implemented its pilot Plug-in Program, which uses plug-in power at its Central Maintenance Facility in Los Angeles. This technology enables trains to run from ground power throughout a portion of our daily servicing and maintenance routine rather than relying on locomotive power alone. This innovation further reduces emissions generated by the locomotive engines. We have successfully implemented the pilot program and continue to look for ways to maximize its use and to expand the program 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, use of bell ringing has decreased by 70-80%.

# **Central Maintenance Facility Operations**

CMF is one of Metrolink's heavy service facilities and is equipped to fuel our locomotives. 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 30 and 45 minutes. During the inspection and testing process, the locomotives are required to be running to perform various functional tests mandated by federal regulations (Code of Federal Regulations 49 Parts 200 – 299). After equipment is tested and inspected, it is staged in one of the storage tracks prior to departure. For evening service equipment movements, we utilize a car mover designed to be used in place of 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." The current CMF daily operations schedule was developed in accordance with this agreement and balanced concerns regarding the impact on the surrounding community with statutory requirements for maintenance. Metrolink is making significant changes to be a responsible neighbor to the community.

# **Central Maintenance Facility Logistics**

Locomotive shop - Locomotive shop crews conduct periodic maintenance and unscheduled repairs.

Service and Inspection (S&I) tracks - Daily service and inspections are conducted on the S&I tracks.

Car shop - Maintenance and unscheduled repairs on cars are performed in the car shop.

# **Central Maintenance Facility Schedule**

The Central Maintenance Facility does not operate 24 hours a day, 7 days a week. The following lists a typical CMF weekly schedule:

### 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 5:45 p.m.
- The second shift, which starts at 3:30 p.m., rearranges the locomotives and cars.

# Typical Weekends (Beginning July 7th)

- Saturday
  - o 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
  - o 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
  - o 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

## **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 such as, the Stuart Mesa facility in Camp Pendleton and are in the process of expanding our Eastern Maintenance Facility (EMF) in Colton. The EMF is expected to open in 2013.

#### **Upgrading our Fleet**

We are currently working to secure funding to upgrade our locomotives. By 2015, we anticipate replacing or rebuilding many of our locomotives to Tier 4 locomotives. These new locomotives will be more fuel efficient and reduce particulate matter (PM) by 86% and nitrogen oxides (NOX)

by 84%. Our passenger cars are also being updated to the cleanest and most technologically advanced available.

## 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:

- 229.21 Daily Inspections Requires locomotives to be inspected and tested daily.
- 238.303 Exterior Inspections Exterior mechanical inspection of passenger equipment each calendar day.
- 238.305 Interior Inspections Interior mechanical inspection of passenger equipment each calendar day.
- 232.205 Class 1 Brake Test Initial Terminal Inspection Functional air brake test at location where train is assembled.
- 238.313 Class 1 Air Brake Test Functional air brake test required each calendar day.

To view the most current electronic Code of Federal Regulations, please click here.

### Regulation of the Environment, Emissions and Air Quality

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 not been in violation of current regulations and is consistently found to be in compliance. Violations would generally be classified as a visible emission or nuisance.

- Rule 401 Visible Emissions Limits the time length and color of smoke emissions based upon Ringelmann Type Chart. <a href="http://www.aqmd.gov/rules/reg/reg04/r401.pdf">http://www.aqmd.gov/rules/reg/reg04/r401.pdf</a>
- 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."
  <a href="http://www.aqmd.gov/rules/reg/reg04/r402.pdf">http://www.aqmd.gov/rules/reg/reg04/r402.pdf</a>

### 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:

Phone: 1-800-371-LINK (5465) Email: communityrelations@scrra.net

Website: http://www.metrolinktrains.com/agency/page/title/sustainability

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