

New Machine Prevents Track Friction on the Metro Gold Line

By ADRIENNE FIGUEROA

(Sept. 30, 2003) A device designed to reduce track friction is being introduced to the Metro Gold Line, this week, in response to several residents' complaints about noise from trains near the Southwest Museum station.

As trains approach Southwest Museum, operators apply the brakes frequently to negotiate a stretch of track with several curves. The friction of steel against steel generates a high-pitched squeal as train cars roll into the station.

"The concept is similar to running your fingers across a chalkboard," says Rob Chappell, deputy executive officer, Metro Rail Wayside Systems.

To eliminate the noise, an MTA contractor will install two Wayside Lubricators – one for the north side of the track and the other for the south side of the track. The machines cost \$9,000 each.

Ultra-thin liquid coating

The solar-powered devices, located alongside the tracks, are equipped with hoses that squirt an ultra-thin liquid coating from a 40-gallon tank onto the track surface to reduce friction and prevent the sound of metal-on-metal.

As trains pass over the coated area, the wheels will spread the liquid over a greater portion of the track. The "friction modifier," gray in color and thinner than nail polish, works by embedding itself into the pores of the steel track. The result is a silky-smooth finish the wheels can quietly glide over.



Two Wayside Lubricator machines will be installed on the Metro Gold Line near the Southwest Museum Station to reduce the sound of track friction.



Since the noise complaints were received shortly after the Metro Gold Line opening, maintenance-of-way workers have applied the substance by hand, spreading it with paint rollers.



Pausing for passing trains, workers have

"The device is totally self-sufficient and will do away with the majority of our noise problems at Southwest Museum," Chappell says.

Since the noise complaints were received shortly after the Metro Gold Line opening, three maintenance-of-way workers have applied the substance by hand, spreading it with paint rollers. Pausing for passing trains, workers have manually covered 2,000 feet of track daily – 1,000 feet on each side of the station.

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PHOTOS BY ADRIENNE FIGUEROA

"Once we get the Wayside Lubricator, the only maintenance will be going out there to fill up the tank," says Keith Kandra, Metro Gold Line track manager.

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