

Local train horns are loud, but legal

by Dave Helling

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“Everybody loves the sound of a train in the distance.” — Paul Simon

Up close, though, is another matter.

Melanie Waters and her family live within a softball toss of freight trains that rumble dozens of times each day through her Lenexa neighborhood. She knows those trains are coming because the locomotive engineers — as required by federal rules — always trigger ear-splitting air horns as they get close to a nearby street crossing.

“I would be happy if the horns went away,” Waters said, pointing to her 9-month-old daughter. “It scares kids, being this close.”

Scary or not, the horns aren’t likely to go away anytime soon.

After a rash of fatal train-car collisions in the 1990s and 2000s, the federal government preempted a tangle of state and local train horn rules and established uniform standards for their use at thousands of grade crossings across the country.

Among other things, the rules generally require engineers to sound horns at almost every crossing. The blasts are limited in duration and described in pattern: two long bursts, one short, and one long. Repeat.

The standards also include a minimum volume for train horns — 96 decibels at 100 feet in front of the train, about the same sound level as an electric drill in your hand.

But aware of potential complaints from an estimated 9 million people living and working near railroad tracks, the Federal Railroad Administration for the first time in 2005 also set a maximum train horn volume: 110 decibels at 100 feet, what some sound experts call the threshold of discomfort.

The Federal Railroad Administration gave railroads until 2010 to fully comply with the volume rules and is now enforcing it.

Earlier this month, The Kansas City Star purchased an over-the-counter sound meter to measure train horn levels at several grade crossings in the area. The newspaper measured the sound volumes of six moving trains — two in Lenexa, two in Parkville, and one each in Independence and in Kansas City’s West Bottoms.

In every case, the trains’ horn volume appeared to meet federal requirements. The loudest horn, in Parkville, hit 102 decibels at an estimated 100 feet away.

The Star's measurements, of course, were less exact than what the highly technical federal rules require. Distances to moving trains were estimated, and levels included the sound of the train itself as well as the horn. The sound-measuring device was not pre-calibrated to railroad administration standards, nor was it mounted in strict compliance with the rules, which in some cases require the microphone to be 15 feet above the rail (video of the tests is available at kansascity.com.)

But the unscientific results suggest railroads and horn makers are complying with the horn volume rules. For the foreseeable future, this is how loud train horns will be.

The findings aren't a surprise, said Andy Williams, a spokesman for BNSF Railway, one of two train operators The Star surveyed.

"BNSF management and the FRA spot check train crews for compliance with the horn rule without the train crews' knowledge, much like police officers check for speed compliance," Williams said. "So there is a concerted effort to ensure crews are blowing to the minimum required and within the decibel range outlined."

The Star's test included two Union Pacific trains. A spokesman for the railroad could not be reached for comment.

A spokesman for the Federal Railroad Administration, who asked not to be identified by name, said the 96 decibel to 110 decibel volume requirement means trains can be heard by motorists while disturbances to residents are minimized.

"This range will permit railroads to address safety needs in their operating territory, as well as protect communities," the email message said.

The spokesman said there have been "very few" complaints about violations of the volume rules. No railroad, he said, has been penalized for breaking the regulations.

Even at the 110 decibel level, train horns remain quite loud, roughly equivalent to a close crack of thunder or hammering on a steel plate.

And while all the trains measured by The Star remained under that ceiling while 100 feet away — the federal standard — horn volumes increased as the trains got closer. In Parkville, one train horn hit 119 decibels as it passed the meter; the other registered 113 decibels.

"It's absurd," said Ted Rueter of a New York-based group called Noise Free America, which wants the railroad administration to reconsider its horn regulations. "They could cut the loudness by a third, by two-thirds, and it would still be plenty loud."

Some experts say unwanted noise, particularly at night, can cause headaches, loss of productivity, accidents and other problems, although precisely calculating those effects can be difficult.

Health and nuisance concerns continue to prompt residents in dozens of communities to battle train horn noise. Some residents in Shawnee, for example, are locked in a dispute

with the city and BNSF about train horn noise at a rural crossing homeowners say has been abandoned.

Federal Railroad Administration rules do allow communities to establish quiet zones, where blaring train horns are prohibited. Cities seeking such a quiet zone must pay for expensive warning devices or other safety measures, as well as go through a lengthy review to make sure train-car intersections are safe.

For some cities, it's worth it. Olathe spent more than \$5 million to establish a railroad quiet zone in its downtown, finishing the process in late March. Since then, the estimated 88 trains traveling through downtown each day have kept their horns on mute.

"Train horns were sounding the equivalent of five hours every day through downtown," said Olathe spokesman Tim Danneberg. "They...were loud enough to bring interaction to a standstill. The project has made a major difference."

However, not everyone is happy with the quiet zone rules. Even inside the zones, train engineers can sound warning horns in response to possible safety threats, a provision that has led to misunderstandings and anger from some living near the zones.

And some railroads don't like them either.

"Union Pacific believes quiet zones compromise the safety of railroad employees, customers, and the general public," the railroad states on its website.

Surprisingly, perhaps, even some who live near railway crossings think quiet zones could be a mixed blessing. Nancy King lives in the same Lenexa neighborhood as Melanie Waters, and she said cars often drive around the gates at the nearby crossing, a dangerous maneuver.

"The only time it's really loud is when I go for walks at night," King noted.

Even Waters, who bought her home with her now-deployed National Guard husband last August, seems resigned to the bleating horns.

"We chose the house. It doesn't really bother us now," she said.