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U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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Louis P. Warchot  
Michael J. Rush  
Association of American Railroads  
50 F Street, N.W.  
Washington, D.C. 2001

Dear Messrs. Warchot and Rush:

The Federal Railroad Administration (FRA) has reviewed the petition for reconsideration filed by you on behalf of the Association of American Railroads (AAR), in which the AAR raises a number of concerns with FRA's Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings ("Final Rule"), which was published in the Federal Register on April 27, 2005. In response to these concerns, subject to review within the Administration, FRA intends to publish an amendment to the Final Rule which will cover most, but not all, of the concerns raised in the AAR petition.

*Locomotive Horn Sounding Requirement*

The AAR asserts that it will not be possible for railroads to ensure compliance with the 15-20 second audible warning requirement set forth in 49 CFR 222.21(b). Unlike distance-based audible warning requirements imposed by state law, the AAR claims that an engineer cannot always judge with precision where he should start sounding the horn because there cannot be a single reference point for trains operating at different speeds. Therefore, the AAR suggests that FRA make the 15-20 second window a target, instead of an absolute requirement, for trains operating below the maximum authorized speed. In the alternative, AAR noted that it would find a 10-25 second window acceptable.

Upon reconsideration of this issue, FRA intends to provide greater flexibility to the locomotive engineer. While 49 CFR 222.21(b) will continue to require locomotive horn sounding 15-20 seconds in advance of public grade crossings (with the exception of trains operating at speeds in excess of 60 mph), FRA intends to amend 49 CFR 222.21(b) to allow the engineer to sound the locomotive horn up to 25 seconds (on occasion) in advance of public grade crossings, if such action is taken in good faith. This amendment should alleviate railroad concerns based on a perceived inability to comply with the 15-20 second locomotive horn sounding requirement, while affirming the action taken by a locomotive engineer who errs on the side of safety in a particular instance.

The AAR also asserts that the current effective date for the locomotive horn sounding requirements set forth in 49 CFR 222.21(b) will require a rapid transition from state law to FRA requirements, which would not be in the public interest. Accordingly, the AAR requests that

FRA postpone the effective date of 49 CFR 222.21(b) for one year.

FRA intends to delay the effective date of 49 CFR 222.21(b) by 120 days, in order to provide railroads additional time within which to adjust whistle posts and/or issue appropriate instructions to train crews. FRA will not, however, take any enforcement action against any engineer, or that engineer's employer, prior to the effective date of any notice FRA may issue amending the rule in this regard, if the engineer has made a good faith effort to comply with 49 CFR 222.21(b), state law requiring use of the horn, or an applicable operating rule of the railroad requiring use of the horn.

#### *Preemptive Scope*

The AAR notes that it previously submitted comments requesting preemption of state and local laws that could be interpreted as prohibiting the sounding of horns for testing purposes. While the AAR believes that 49 CFR 229.129 preempts these state and local laws, AAR reiterated its request that 49 CFR 229.129 be revised to specifically address this issue.

Before responding to this issue, FRA would like to receive additional information on the hardships that may be encountered by railroads who attempt to comply with the testing requirements in 49 CFR 229.129 in locations subject to restrictive local noise ordinances. Even though FRA acknowledges that additional locomotive horn testing may be required under the revised testing requirements in 49 CFR 229.129, FRA notes that railroads have been required to comply with the minimum horn sound level requirements in 49 CFR 229.129, which necessitates locomotive horn testing to ensure compliance.

The AAR requests that 49 CFR Part 222 be revised to preempt state laws that require locomotive horn and/or bell sounding from a fixed or minimum distance before a highway-rail grade crossing. Without such preemption, the AAR asserts that railroads would be required to initiate bell sounding at a location specified by state law, which would be inconsistent with the time-based locomotive horn sounding requirement in 49 CFR Part 222.

FRA does not intend to completely preempt state laws that require an audible warning at public grade crossings. Since 49 CFR Part 222 does not address locomotive bell sounding, complete preemption of state laws on this issue would remove the valuable warning that is currently provided by the locomotive bell to pedestrians. However, FRA intends to revise 49 CFR Part 222 to preempt, in a limited manner, state laws that require an audible warning at public highway-rail grade crossings. FRA intends to revise 49 CFR Part 222 to preempt state laws that require an audible warning at public highway-rail grade crossings, to the extent that state law requires an audible warning to be sounded at a place or in a manner inconsistent with the time-based audible warning requirement in 49 CFR 222.21(b). This revision should alleviate any potential confusion on the part of the locomotive engineer, who might otherwise have been forced to comply with inconsistent locomotive horn and bell sounding requirements.

The AAR also asserts that some States have laws that require that an audible warning be provided at private or pedestrian crossings in a manner inconsistent with FRA's time-based audible warning requirements for public crossings. Asserting that these States require that the audible warning begin a specified distance before private and pedestrian crossings, the AAR is concerned that FRA's time-based audible warning requirements for public crossings could result in locomotive engineer confusion.

After considering this assertion, FRA intends to revise 49 CFR Part 222 to preempt, in a limited manner, state laws that require an audible warning at private and/or pedestrian crossings. FRA intends to revise 49 CFR Part 222 to preempt state laws that require an audible warning at private and/or pedestrian crossings, to the extent that state law requires an audible warning at a specified distance from private and/or pedestrian crossings, or for a time at variance with the time-based audible warning requirements in 49 CFR 222.21. This revision should ensure that consistent, time-based audible warnings will be provided at all public, private, and pedestrian crossings located outside quiet zones.

#### *Locomotive Horn Testing Requirements*

GE Transportation Rail submitted a petition requesting a 120-day extension of the compliance deadline for testing new locomotives. In its petition, for which the AAR has expressed support, GE Transportation Rail asserts that the relatively short period of time between issuance of the Final Rule and the compliance deadline for testing new locomotives will prevent GE Transportation Rail from completing type-testing and impact GE Transportation Rail's ability to meet its delivery commitments.

After considering the need to establish an acceptable sample size before the compliance deadline for new locomotive testing, as well as the practical limitations associated with the revised testing parameters contained within 49 CFR 229.129, FRA intends to grant the petition for reconsideration and amend 49 CFR 229.129 by adding a 120-day extension to the current compliance deadline for new locomotive horn testing.

In the AAR petition, the AAR asserts that 49 CFR 229.129 is ambiguous as to what additional testing, if any, must occur when locomotive horns are replaced. If any additional testing is necessary, the AAR proposes that railroads should be allowed to use the sampling scheme set forth in 49 CFR 229.129(b)(1) to qualify replacement horns. If a replacement locomotive horn is not, however, qualified through sampling, the AAR proposes that the railroad should be required to test the locomotive at the time of the next periodic inspection or by June 24, 2010, whichever is later.

FRA does not intend to revise 49 CFR 229.129 to allow type testing of replacement horns. Type testing would not be appropriate because the locomotive horn cannot be tested in isolation – the sound levels must be tested after the horn has been installed on the locomotive and there is a lot of variation in locomotive/locomotive horn configurations. Among the factors that can influence

volume are placement, mounting, air pressure, and the actual condition of the horn itself. However, if railroads develop data from field testing to demonstrate that some form of type testing is appropriate, FRA will consider the issue at that time.

FRA does, however, intend to revise 49 CFR 229.129 to address testing requirements for locomotives equipped with replacement horns. If the locomotive horn is replaced with the same model of locomotive horn, then the railroad will not be required to test the locomotive for compliance with the sound level requirements in 49 CFR 229.129, provided the locomotive has already been individually tested or tested through acceptance sampling. FRA recognizes that, under these circumstances, the replacement horn should provide an audible warning that is equivalent in sound level output to the locomotive horn that was replaced and previously tested. If the locomotive horn is, however, replaced with a different model of locomotive horn, FRA intends to require individual testing of the locomotive no later than the second annual inspection conducted in accordance with 49 CFR Part 229.

The AAR requests that railroads be allowed to use sampling to qualify the sound level output of existing locomotives. Noting that there is a great deal of standardization with respect to horn and locomotive models, the AAR asserts that the same rationale that led FRA to allow the sampling of new locomotives should apply to the qualification of existing locomotives.

After considering this request, FRA does not intend to amend 49 CFR 229.129 to allow "sample" testing of existing locomotives, as the considerations that militate against type testing of replacement locomotive horns also apply to the type testing of existing locomotives. Namely, there are many factors that can influence the sound level output of an existing locomotive horn, including placement, mounting, air pressure, and the actual condition of the horn itself. However, as stated earlier, FRA may reconsider this issue if railroads develop data from field testing that demonstrates that some form of type testing would be appropriate.

The AAR asserts that the new requirement to record air flow during locomotive horn testing is extremely burdensome and will not provide any useful information. In support of this assertion, the AAR notes that extra manpower and/or specialized equipment may be required in order to measure and record air flow.

After considering this assertion, FRA intends to revise 49 CFR 229.129 by removing the requirement to retain written records of air flow measurements taken during locomotive horn testing. FRA has been persuaded that this requirement would impose an unnecessary burden on railroads and locomotive manufacturers.

The AAR also asserts that there is no apparent reason for requiring a written signature for locomotive horn test records. However, if a written signature is necessary, the AAR asserts that FRA must permit an electronic signature, as the Government Paperwork Elimination Act mandates the acceptance of electronic records and, where practicable, the use of electronic signatures. In addition, some railroads would like to implement a fully automated test procedure

through which test results will be recorded and automatically sent to a database without any human intervention. This system will not, however, be feasible, if the written signature requirement is not removed.

While FRA recognizes the paperwork burdens associated with an additional recordkeeping requirement, FRA notes that requiring the written signature of the employee who performed the locomotive horn test will provide accountability, should questions arise as to the quality of the test that was performed. FRA acknowledges, however, that an electronic recordkeeping system can be designed to provide an equivalent level of accountability, as well as reduced associated paperwork burdens. Therefore, while FRA does not intend, at the present time, to revise 49 CFR 229.129(c)(10) by removing the written signature requirement, FRA looks forward to the implementation of electronic recordkeeping in the near future, at which time FRA will review all of the recordkeeping requirements contained within 49 CFR Part 229.

#### *Private and Pedestrian Crossings*

The AAR asserts that 49 CFR 222.25(a) and 49 CFR 222.27(a) could reasonably be construed to allow public authorities to avoid addressing private and pedestrian crossings located within proposed quiet zone limits by simply excluding these crossings from their quiet zone notification packages. AAR requests that the permissive language contained within these sections be revised.

After considering this issue, we agree that the language in 49 CFR 222.25(a) and 49 CFR 222.27(a) does not accurately reflect FRA's intent to require diagnostic team reviews of certain private, and all pedestrian, crossings located within New Quiet Zones and New Partial Quiet Zones. Therefore, FRA intends to revise 49 CFR 222.25(a) and 49 CFR 222.27(a) to clarify that private and pedestrian crossings located within the boundaries of a quiet zone, as defined by the public authority, must be included in the quiet zone.

In the petition, the AAR also asserts that the location of pedestrian crossings within proposed quiet zones may be unclear. Therefore, the AAR requests that 49 CFR 222.39 and 49 CFR 222.43 be revised to require quiet zone applicants to indicate the location of pedestrian crossings in their quiet zone notification packages and applications.

After considering this issue, FRA noted that 49 CFR 222.39(b) does not require the public authority to identify pedestrian crossings that are located within the proposed quiet zone in its quiet zone application. FRA intends to correct this inadvertent omission by revising 49 CFR 222.39(b) to require identification of each pedestrian crossing located within the proposed quiet zone by U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name. Identification of pedestrian crossings is, however, already required in the quiet zone notification provisions set forth in 49 CFR 222.43. (See 49 CFR 222.43(b)(1)(i), (c)(2)(i), (d)(2)(i), and (e)(2)(i).) Therefore, FRA does not intend to revise 49 CFR 222.43 for this purpose.

The AAR also notes that 49 CFR 222.35(c)(2) and (c)(4), as well as 49 CFR 222.27(d)(2) and (d)(4) seem to require warning signs that are potentially in error. In States that do not require an audible warning at private and pedestrian crossings, warning signs that only reflect the time period within which a partial quiet zone is in effect may lead motorists to erroneously assume that an audible warning will be provided at the private/pedestrian crossing when the partial quiet zone is not in effect.

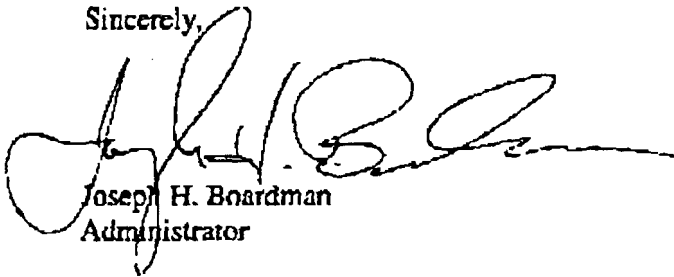
After considering this issue, FRA agrees that the warning sign requirements contained within 49 CFR 222.35(c)(2) and (c)(4), as well as 49 CFR 222.27(d)(2) and (d)(4), could mislead motorists and pedestrians in those States in which an audible warning is not provided at private and pedestrian crossings. Therefore, FRA intends to revise 49 CFR 222.35(c)(2) and (c)(4), as well as 49 CFR 222.27(d)(2) and (d)(4), by allowing public authorities to install appropriate warning signs that advise crossing users that train horns will not be sounded at the private/pedestrian crossing.

*Pre-Rule and Pre-Rule Partial Quiet Zones that Qualify for Automatic Approval*

The last point raised in the AAR petition concerns 49 CFR 222.41(a)(2) and (b)(2). The AAR seems to assert that 49 CFR 222.41(a)(2) and (b)(2) requires the submission of the Notice of Quiet Zone Establishment, but fails to reference the fact that Pre-Rule and Pre-Rule Partial Quiet Zones will also be required to submit Notices of Quiet Zone Continuation. However, given the uncertainty associated with the nature of this request, FRA would like to receive additional clarification and/or explanation before responding to this issue.

Thank you for bringing these issues to my attention.

Sincerely,



Joseph H. Boardman  
Administrator

cc: Don Hahs, Brotherhood of Locomotive Engineers and Trainmen  
David Ducharme, GE Transportation - Rail