

ILLINOIS POLLUTION CONTROL BOARD  
November 7, 1985

IN THE MATTER OF: )  
 )  
GENERAL MOTORS CORPORATION ) R83-7  
PROPOSED AMENDMENTS TO 35 ILL. )  
ADM. CODE 900.103 AND 901.104 )  
 )

CONCURRING OPINION (by J. Marlin):

I have several concerns about the proposed first notice Order and Opinion which could be addressed during the first notice period.

The record demonstrates to my satisfaction that the current rules require modification to allow uniform, reproducible measurements of sound. It's also clear that the Leq methodology has gained wide acceptance and is appropriate for most sounds.

When interpreted as maximum levels, the standards in Sections 901.102 through 901.104 are quite strict. They do not provide for averaging the sound as do the generally accepted 24 hour or one year day/night Leq standards. In fact, they are significantly more strict than the 65 Ldn standard which has been widely accepted. The Board Opinion should recognize that the proposed change will in fact weaken the standards regarding maximum noise levels as presently enforced given that the Illinois EPA has not used Leq to determine compliance. This by itself should cause no alarm since the Illinois standards will still be quite strict even after Leq is applied to Sections 901.102 and 901.103. The specified one-hour time also makes the proposed rule strict in that it will allow the Agency to measure during the noisiest hour (R. 150).

A question before the Board should be, according to current thinking, what noise standards are necessary to protect the public health and welfare. The old numerical values should not be blindly retained or rejected, especially when the measurement method is being altered. In its 1973 Opinion, the Board listed the degree of speech interference and some other anticipated impacts of the sound levels allowed under the existing standards (pp. 27 and 28). It is reasonable to ask if the proposed change should be accompanied by a change in the numerical standards. The proponent has indicated that the existing numbers are adequate. The Board should hear from others on this question.

In 1973 the Board decided to use specific octave band limits in Sections 901.102 and 901.103 rather than A-weighted limits (p. 26). Has experience with A-weighted levels produced any reason to reverse this prior holding? Will the continued use of the

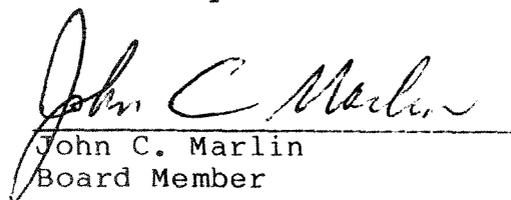
octave band limits create any problems in light of the Leq methodology?

My primary concern is that the use of a one hour Leq essentially eliminates the impulsive sound rule. The proponent points out that this is not necessarily bad in light of the averaging that the proposed rule will impose. However, additional comment on the potential of excessively loud, short duration sounds which would be in compliance with the proposed rule is in order. Likewise, I wonder how one will determine when to use the limits in Section 901.104 instead of 901.102 or 901.103. Is there an adequate definition of the measurement method to be followed in separating the Leq of the impulsive noise from the Leq of the non-impulsive noise?

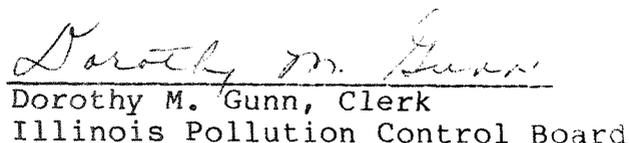
Is there a need for some sort of maximum instantaneous decibel standard? Would it make sense to replace the impulsive noise standards with such an instantaneous maximum standard? If so what would be appropriate levels for an instantaneous maximum standard that would adequately address the health and annoyance concerns?

Proposed Section 901.130 appears to be somewhat vague. I assume that someone seeking an alternative measurement procedure would desire a more instantaneous time frame than the one hour Leq. In accepting Leq, the Board would be acknowledging that the numerical levels in the rules could be exceeded within the confines of the averaging rule. What numerical standard would then reasonably apply? Again it seems that some sort of instantaneous maximum would be useful.

I do not believe that proposed Section 901.130 should in any way limit a person's right to participate given the inability of most people to track Board proceedings in a timely manner.

  
 John C. Marlin  
 Board Member

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Concurring Opinion was submitted on the 20th day of November, 1985.

  
 Dorothy M. Gunn, Clerk  
 Illinois Pollution Control Board