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Good morning. Thanks to the committees for your work on this issue which is very important to many of us who have been affected by airboat noise, and to DIFW and DMR staff who patiently listened to us all during the rulemaking. My name is Jeremy Wright, I am a Freeport resident, and have been closely involved with the citizens group Mainers Against Coastal Noise Pollution. I speak in support of LD 89.

I have followed the rulemaking proceedings closely, and want to use my time to address a few common misunderstandings about the noise measurement standards being proposed that I noticed from people on all sides of this issue.

The noise measurement procedure in DIFW regulations for all watercraft in Maine, except excluding airboats as of last year, uses a standard called J34, published by SAE International. This standard prescribes a measurement distance of 50 feet from the noise source, in addition to other technical requirements.

The new regulations proposed in both LD 89 and LD 114 use a different standard, SAE J1970. The primary difference is that this is a measurement from shoreline, not from 50 feet.

So when people compare the existing limit of 75 dbA which currently applies to all watercraft except airboats, that is based on the J34 standard as measured at 50 feet and is much more strict than would be a 75 dbA limit measured with the J1970 shoreline standard for most boats underway.

How different they are of course depends on how far offshore a boat is. But when boats are underway, even airboats, they are typically far outside of 50 feet from shore. For example, during the February DIFW test run up the Harraseeket River, the closest measured shore approach when the boats were underway was 700 feet.

Sound attenuates at about 5 - 6 dbA per doubling of distance. What this means is that a watercraft that meets the existing 75 dbA, J34, 50 foot limit would cast only 56 decibels at the shoreline when operated 700 feet offshore.

If we look at this issue from the reverse perspective we could ask, if an airboat that is operating at 700 feet offshore is just meeting the 90 dbA limit proposed in LD 114, what is the sound level of that boat measured using the J34 (50 foot) standard? The answer is 109 decibels. For comparison, the average airboat tested by the Maine Warden Service emitted 98 decibels at full throttle, and the loudest boat emitted 106 decibels.

You can see that the J1970 standard is much more permissive than J34 and is a major concession to airboats. I hope you can see also that a J1970 limit of 90 decibels offers virtually no relief from airboat noise.

Another misconception I heard often is the notion that an 80 dbA J1970 shoreline limit is not practical or attainable for airboats. I will just point out that considering the attenuation of noise that I just described, the average airboat in Maine Warden Service testing, operated at full throttle, emitting 98 decibels by the J34 standard can comply with an 80 dbA J1970 standard simply by remaining 650 feet offshore, without any changes to boat equipment or altering operations in any other way. This is not just theoretical. It was demonstrated in real world conditions during the DIFW testing in the Harraseeket River in February in which 85% of airboat passes measured were within the 80 dbA limit.

Another important point to understand is that the decibel scale is not a linear scale. 90 decibels is twice as loud as 80 decibels, and four times as loud as 70 dbA, eight times as loud as 60 dbA, and so on. From a standpoint of noise relief, the limit in LD 114 is twice as loud as LD 89. Given that the 80 dbA J1970 limit has been demonstrated to be easily achievable for all but the loudest airboats, how can it be tolerable to permit noise twice as loud?

The last misconception I want to address today is a claim that was raised several times during the rulemaking that similarly loud equipment, such as lawn equipment, is commonly tolerated in residential neighborhoods. This claim is just factually incorrect. An EPA study (attached to my written testimony) found that walk-behind power mowers emit 65- 72 dbA when sound is measured at a distance of 50 feet, analogous to the J34 standard. Another study (also attached) found that a variety of gas-powered leaf blowers, a notoriously loud type of power lawn equipment, emit only 77-81 dbA measured at 50 feet. Airboats, at 98 dbA are therefore approximately 4 times louder than the average gas powered leaf blower, and 8 times louder than the average lawn mower. There really is no comparison. It is also worth noting that most municipal noise ordinances prohibit operation of lawn and other power equipment during nighttime hours.

In summary, I and most of the people who have joined the effort to address airboat noise, have no interest in banning airboats. We simply want relief from excessive noise in and around our homes, especially in the early morning hours. The limits proposed by LD 89 represent a significant compromise to airboat operators, and limits that are well above what is tolerated in most municipal noise ordinances.