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Bob Shepard

May 25 CARB Off-Road Mobile Board Hearing

Good morning. I am Bob Shepard of Quinn Company, a Caterpillar Dealership covering about a third of California.

Since 2001, Quinn, Caterpillar corporate and its dealers have successfully worked together in designing repower solutions for well over 100 legacy machine models to replace uncontrolled engines with cleaner, certified engines. Nationwide, Caterpillar dealers have repowered over 2000 machine engines, a majority in California, and many more engine repowers were done directly by our customers. That's the good news.

Unfortunately, nearly 200,000 machine engines need to be addressed. The amount of off-road machine repowers done in the last 6 years in this State represents less than 2% of the total. I emphasize – "within the last 6 years". A large portion of the repowers were Tier 1, many done using Moyer funding, and done voluntarily using customers' capital invested to protect their machine assets while at the same time improve California's emissions problem. Unfortunately, taxpayer dollars and customer's capital will be wasted on these early efforts because under the proposed regulation, Tier 1 and Tier 2 engines will need to be phased out, repowered again or replaced with new machines to meet the PM and NOx targets. This will be costly. As an example, a Tier 3 repower of one large scraper alone can cost a quarter of a million dollars, while new, this machine can cost well in excess of a million dollars.

Currently only about 3% of Caterpillar's legacy machine models can be repowered to Tier 3 due to configuration complexity, including larger cooling systems, drive train compatibility, space constraints and most importantly, safety in application. CARB admits in their staff report that Tier 4 repowers will likely not occur. Thus, for the other 97% of the legacy machine models, the only options are to purchase new machines or, if feasible, install yet to be field proven after-treatment devices.

As for these devices, in 2001 we participated in a joint CARB/South Coast/CIAQC program to test the feasibility of DPFs on this equipment. This program was rife with problems of installation, safety and durability. In the last couple of weeks Quinn installed a costly dual-DPF on a large loader with similar safety concerns, and durability is yet to be determined. 6 years have passed and still many issues exist with safely retrofitting this after-treatment equipment.

Also, as an unfortunate consequence of the far-reaching targets of this proposed regulation our customers have stated they will hold off on new purchases until higher tier engines are available. This has hampered the progress of the tremendous emissions reductions we have seen over the last 6 years with normal attrition and repowers of this equipment.

In closing, Quinn and Caterpillar are dedicated in supporting our customers with solutions to improve the emissions of their equipment fleet. However, I stress the original 18 years of compliance be restored in this regulation to allow the emission targets to be met cost-effectively and to allow manufacturers to safely design systems and technologies to meet these goals. Funding must be available throughout the process to make the high cost of this regulation more affordable. Finally, staff should consider natural machine turnover rates of 2% to 3% per year instead of an unrealistic 8% to 10%; and after-treatment retrofits should be limited to 8% to 10% per year to keep the cost of this regulation within the scope of the contractor's reinvestment capital.

Thank you.