Senate Committee on Environment and Natural Resources
900 Court St. NE
Salem, Oregon 97301

Re: Comments on SB 1008

Chair Dembrow and Members of the Senate Committee on Environment and Natural Resources,

ESW Group appreciates the opportunity to testify in support of SB 1008. ESW Group is a US-based company with long history of diesel emission control expertise. As owner of nine California Air Resources Board (CARB) retrofit diesel emission control strategy verifications, we are quite familiar with technical and logistical elements of diesel emission control regulations. The company started retrofitting vehicles in 2004 and have assisted public and private fleets with nearly 20,000 retrofit systems since then to comply with California regulations or various incentive programs.

Based on our 15 year experience with diesel emission control technology and regulation, we believe that SB 1008 will produce significant air quality benefits for communities in Oregon. The draft legislation

- Is tailored to meet Oregon's air quality goals while using some of the successful aspects of the CARB rule
- is technically sound,
- has sufficient safeguards and flexibility for end users,
- ensures that dangerous ultrafine particulate is efficiently captured by requiring that diesel particulate filters (DPFs) are used for compliance, and
- provides a solid funding path to accelerate implementation.

Through similar regulations from CARB, the State of California has demonstrated that comprehensive diesel PM regulation can significantly improve air quality and reduce the air pollution burden on sensitive populations. California has similarly relied on a combination of fleet rejuvenation, vehicle retirement, alternatively fuelled vehicles, and diesel retrofits to clean up the heavy-duty fleet. In our opinion, the availability of all of these options was critical to the success of the program because they offered significant flexibility to fleet operators. We are pleased to see that Oregon is proposing a regulation which also provides multiple paths to compliance and phased-in compliance deadlines. Given these options, the fleet owner can choose the most practical and cost effective approach to meet the standards.

Since 2003, CARB has verified more than 20 on-road and numerous off-road diesel PM retrofit systems. In response to the on- and off-road regulations and various incentive programs, over 58,000 retrofit systems have been utilized in California alone, many of which are still in operation today. CARB recently released a report evaluating the performance of DPFs on on-

road heavy-duty engines. In this detailed report that covered both original equipment and retrofit DPFs (reference 1), CARB concluded that DPFs are safe, highly effective at removing PM from exhaust, and reliable. Even after the 2007 introduction of DPFs as original equipment for on-road diesel vehicles, the Manufacturers of Emission Control Association (MECA) reports that over 50,000 CARB verified DPF retrofit systems have been chosen by end users to comply with California's clean air regulations (reference 2).

It is critical that emission control solutions be validated by third-parties, and we applaud provision that CARB verification is the only acceptable validation. The CARB verification process is thorough, with extensive field, laboratory and in-use testing to ensure performance, durability and engine compatibility. CARB-verified systems are also backed by a multi-year warranty to protect the end user.

Diesel retrofits provide a highly cost effective option to those who don't have the resources to replace a truck or bus. While fleet rejuvenation or switching to alternatively-fuelled vehicles requires significant capital investment, diesel retrofits provide similar PM reductions at a fraction of the cost. A recently released report on the cost-effectiveness of emission reduction programs identified diesel retrofits as one of the two most cost effective ways to reduce mobile sources of emissions (reference 3).

An installed retrofit system costs approximately $8,000 to $13,000 (depending on the system, engine size and application). The required maintenance on a retrofit system is roughly equivalent to that of the emission control system on a model year 2007-2009 engine, and is less complicated than a 2010 and newer engine (which requires regular addition of diesel exhaust fluid, a.k.a. DEF or urea).

In summary, we are pleased to testify in support of SB 1008. It is a well thought out approach to meeting Oregon's air quality goals in the most timely, cost-effective way possible.

Again, we thank you for the opportunity to provide testimony on behalf of the proposed clean diesel legislation. We look forward to answering any questions you may have regarding retrofit technologies and what might be applied from our experience in other states as Oregon takes this important step forward.

Sincerely,

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References

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