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December 8, 2008

Clerk of the Board  
Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Comments Regarding Proposed On-Road Diesel Truck and Bus Regulation

Dear Honorable Board Members,

Nabors Well Services Co (NWSC) appreciates the opportunity to participate in the development of the On-Road Diesel Truck and Bus Regulation (ODTBR). NWSC has demonstrated its commitment to early reduction of particulate matter (PM) and oxides of nitrogen emission from diesel engines by repowering approximately 400 Tier 0 engines with certified engines starting in 1998. With this experience, NWSC is submitting its comments and suggested modifications to the proposed regulation. NWSC is requesting the Board Members take these suggestions and comments under advisement during the adoption process.

### **NOx Emission Equivalent**

The 2010 NOx emissions equivalent in the proposed regulation is a 2004 certified engine with a Verified Diesel Emission Control Strategy (VDECS) that reduces NOx exhaust emissions by more than 85% or a 2007 certified engine with a VDECS that reduces NOx exhaust emissions by more than 70%. The 2007 NOx emissions equivalent is a 2003 certified engine with a VDECS that reduces NOx exhaust emissions by at least 70% or a 2004 through 2006 certified engine with a VDECS that reduces NOx exhaust emissions by at least 40%. The 2004 NOx emissions equivalent is a pre-2004 certified engine equipped with a VDECS that reduces NOx exhaust emissions by at least 55%.

The proposed regulation requires fleet owners to meet the performance requirements for one of three options by applying a VDECS that will achieve the required PM or NOx reductions or replace the engine or replace the vehicle. NWSC is concerned with the facts, stated in the staff report, that there are only two retrofit technologies available today that will provide verified NOx reductions to Level 3. The Cleaire Longview will reduce NOx by 25% on a limited number of trucks with model years of 1993 through 2003. The Cleaire verified device will not be a solution for trucks with model years between 2004 and 2006. The Johnson Matthey EGRT will reduce NOx 40% on one International engine, a small group of Cummins engines from 1998 through 2002, and two Detroit Diesel engines. Here again, the Johnson Matthey verified device will not be a solution for trucks with model years between 2004 and 2006. NWSC's major concern is that only one device reduces NOx by 40% which still falls short of the required reduction of 85%. The staff report states that despite the potentially substantial NOx reductions SCR can provide, exhaust temperatures (or duty cycle limitations) will likely dictate the actual suitability of certain vehicles to use SCR or other NOx-control technologies in exhaust retrofit applications.

### **NWSC'S Modification to the Proposed Regulation**

NWSC's suggestion is to modify the NOx emissions equivalent to the current verified technologies. This would allow fleet owners the opportunity to purchase one VDECS that would reduce PM and NOx early. While fleet owners are purchasing PM devices to comply with the regulations, they could invest in NOx devices at the same time. NWSC has experienced problems with repowering equipment because the engine, transmission, drive lines, PTOs and other components do not marry up. The proposed regulation would required the fleet owner to purchase a PM VDECS from one vendor and later purchase a NOx VDECS from another vendor and attempt to make them work together.

Staff will make the argument that they will need the NOx reductions. This modification will generate early NOx reductions. The proposed regulation exempts school buses from all the NOx requirements. The staff report states, "School age children are an especially vulnerable segment of our population to the affects of air pollution." In addition, school districts are allowed to use 1977 model school buses forever if retrofitted with a VDECS by 2014. If the regulation is not modified and a fleet owner had a fleet of 2004 through 2006 trucks, this fleet owner would be required to change trucks because no VDECS have been developed to meet the 85% requirement while school buses dating back to 1977 are allowed to operate near school age children four times a day. Small fleets are exempt from the NOx performance requirement until 2018 in the proposed regulation and small fleets represent nearly 50% of the in-state vehicles. Agricultural vehicles that operate below specified mileage thresholds will be exempt from the proposed PM and NOx performance requirements.

### **Body Load Trucks**

Body load trucks are commercial trucks that have equipment mounted on the frame of the trucks. The body load trucks are driven to a location located off-road and are operated all day or for several days to complete a job function. Some body load trucks use a PTO and others have portable engines to power the equipment. Attached are two pictures of body load trucks. Attachment A was built on a 2006 model truck at a cost of \$700,000. Attachment B was built on a 1990 model truck at a cost of \$550,000. To replace the truck on Attachment A, the owner will incur a cost of \$175,000 to remove the equipment which does not include the cost of the new truck. To replace of the truck on Attachment B, the owner will incur a cost of \$150,000 to remove the equipment which does not include the cost of the new truck.

### **NWSC's Modification to the Proposed Regulation**

Due to the large capital investment required for the removal of the equipment, NWSC is suggesting a modification to the proposed regulation to allow body load trucks to receive the same special mileage thresholds given to agricultural vehicles. If body load trucks operate below specified mileage thresholds, they would be exempt from the proposed PM and NOx performance requirements ranging from 15,000 to 25,000 miles per year until 2017.

Staff will make the argument that they cannot make a special exemption for body load trucks. Staff is making modifications to the Portable Equipment Registration Program (PERP), Portable Air Toxic Control Measure (ATCM), and the Off-Road ATCM to develop a special exemption for two-engine cranes and two-engine sweepers. One of the reasons for these modifications is the cost of the new cranes and sweepers. From the discussion above, you can see that there are all kinds of body load trucks with the same problems that cranes and sweepers have.

The proposed regulation has a delay of the NOx performance requirement until 2018 for cab-over engine truck tractors that exclusively pull 57-foot trailers. The reason for this delay is due to the fact that cab-over engine truck tractors are not being built any more. Did you notice that the truck in

Attachment B is a cab-over engine truck tractor? A fleet owner of cab-over engine truck tractor pulling 57-foot trailers could purchase a new tractor and trailer for the same cost as that of removing the equipment on Attachment B.

### **Adding Vehicles to a Fleet**

"If a fleet does not meet the BACT requirements of the section 2025(f), before the fleet may operate a newly added vehicle in California, it must within 30 days of adding the vehicle file a report with the Executive Officer that it has added a new vehicle, and demonstrate that the fleet, as newly constituted, complies with the requirements of section 2025 (n) (2) (A) and (B)." Fleet owners will purchase several new vehicles at the beginning of the year, but will receive the new vehicles throughout the year. The proposed regulation would require fleet owners to file several reports each month to the Executive Officer to remain in compliance with the regulations.

### **NWSC's Modification to the Proposed Regulation**

NWSC's suggestion is to modify the proposed regulation to state that the addition of 2010 model or newer trucks will not be required to file a report with the Executive Officer due to the fact that these trucks meet the final requirement. The addition of a new 2010 model trucks to a fleet will help the fleet move closer to compliance. This modification will reduce costly red tape built into the proposed regulation.

### **Modifications to the PERP**

Staff is proposing to make modifications to the PERP to allow unregulated Tier 0 secondary off-road engines on cranes and sweepers to be newly registered under PERP. These engines would then only be subject to the inspection requirements and fees listed in the PERP regulation. Does this mean that these Tier 0 engines will be allowed to operate past December 31, 2009? The PERP regulation was adopted by the CARB Board in September 1997, and the required replacement of all Tier 0 engines by December 31, 2009 was clearly stated. In addition, the PERP required that after July 2001 all engine replacement require certified engines, which did not allow replacement of Tier 0 engines with another Tier 0 engine.

The staff report states, "Currently, non-registered Tier 0 secondary engines on cranes and sweepers are not allowed to be registered through PERP." Tier 0 engines were allowed in the PERP in 1997, 1998, 2002 and 2005 through an amnesty period. If a fleet owner did not register during the amnesty periods, they were not allowed in the PERP and could be permitted under the local air districts.

The staff report states, "For the regulation to be fair to fleets that would spend considerable funds and efforts to comply, fleets must be assured that their competitors would also be complying." Another statement, "Staff recognizes that creating a level playing field for all affected fleets is important." How does staff develop a level playing field with companies that have spent considerable funds complying with PERP over the past twelve years? What is the staff mitigation plans for changing the PERP regulations?

NWSC would like to comment on the following statements found in the staff report:

- "Staff expects many, if not most, affected businesses to pass through the proposed regulation's costs to their customers." Staff does not understand that several affected businesses operate under contracts for years and are not allowed to change prices until the end of the contract.

- "Staff believes many fleets would be able to absorb the costs of the proposed regulation if they were unable to pass through the costs." NWSC just completed its 2009 and 2010 budget, and due to the current economic crisis, NWSC has to reduce its capital budget by 70.1%.
- "Also, while many fleets subject to the proposed regulation are also subject to other ARB regulations, staff does not believe the cumulative cost impacts of these various regulations will impact affected fleets' ability to comply overall." Several industries like petroleum services, construction, and rentals are regulated by the Portable ATCM, the Off-Road ATCM and the On-Road ATCM. All of these regulations require repowering equipment, replacement and installation of VDECS.
- "However, even with these requirements, and the inability to operate older vehicles in California, the demand in the United States and around the world for quality used vehicles will remain. Staff expects that the worldwide demand for trucks such that these older vehicles will continue, meaning these vehicles should retain much of their residual value, less increased transportation cost to destinations outside California." Staff does not understand the effect of large amounts of used equipment hitting the market all at once. In addition, staff does not understand the current economic crisis.
- "The proposed regulation would impose a cost on the overall economy; staff expects it could reduce overall employment in California by a small amount. In 2013, the highest cost year, employment would be expected to decrease by about 4,600 to 13,600 jobs." In the Health Impact Methodology, staff reported the cost over a period from 2010 to 2025. Using the same methodology, the proposed regulation could reduce employment in a range of 89,000 to 244,000 jobs.
- "Fleets naturally replace their vehicles on a regular basis that is faster than what the regulation would require." Many fleet owners like NWSC will utilize the vehicles in their inventory from 10 to 25 years.

NWSC is requesting that the Board take these modifications and concerns under advisement in the adoption of the On-Road Diesel Truck and Bus Regulation. NWSC continues to look forward to working collectively to achieve consensus on the solution. If you have any questions concerning these comments, please contact me at (661) 391-1623.

Sincerely,



James Thomas  
Administrative & Regulatory Affairs Manager

Attachments

Attachment A



Attachment B

