CIAQC

CONSTRUCTION INDUSTRY AIR QUALITY COALITION

Coalition Members

AGC CALIFORNIA

Associated General Contractors America-San Diego Chapter, Inc.

Building Industry Association of Southern California

California Dump Truck Owners Association

Engineering Contractors Association

Engineering & General Contractors Association

Engineering & Utility Contractors Association

Southern California Contractors Association

January 21, 2009

Mary Nichols, Chairman and
Members of the Board
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, California 95812

RE: Recommendations for In-Use Off-Road Diesel Vehicles Regulation

Dear Chairman Nichols and Board Members:

The Construction Industry Air Quality Coalition (CIAQC) appreciates the opportunity to comment on, and offer its recommendations for, the Proposed Amendments to the In-Use Off-Road Diesel Equipment Regulation. CIAQC recognizes the need for the continued reduction of Particulate Matter, Oxides of Nitrogen and visible emissions from off-road diesel vehicles; we are convinced, however, that the staff proposed amendments to the regulation do not provide all that is needed at this time for it to succeed.

CIAQC was formed in 1989 to promote the adoption and implementation of emission reduction measures that are cost-effective and efficient while minimizing unacceptable impacts on its construction and building industry members. The coalition is comprised of several major construction and building industry associations in California. These include the Associated General Contractors of California and San Diego, the Building Industry Association of Southern California, the Engineering Contractors Association, the Engineering and General Contractors Association, the Engineering & Utility Contractors Association, Southern California Contractors Association and the California Dump Truck Owners Association. Associate members include the California Construction and Industrial Materials Association and the California Rental Association. In all CIAQC represents several thousand member-companies throughout California.

State of the California Construction Industry

It is impossible to evaluate the impact of the off-road regulation without examining the current economic state of the construction industry in California. The picture has changed dramatically since 2006 when the staff compiled their original optimistic assumptions about the future of the industry. Not only were the ARB assumptions way off base, but the framework of the existing rule goes well beyond the economy in crippling the industry in California. We believe that significant and substantial relief is warranted given these facts.

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Major Funding Provided by the Construction Industry Advancement Fund and the Fund for Construction Industry Advancement

1. Currently there are 120,000 construction workers unemployed and the projection is for 200,000 to be unemployed by the end of 2009. *ARB assumed only increases in the size and operation of the industry and the fleet.*
2. Emissions from construction activity have dropped dramatically. Operating Engineers' hours, the individuals who operate this heavy duty equipment, are down over 28%. Estimates place the hours at more than a 35% reduction or more by the end of 2009. *ARB's assumptions never anticipated a downturn in the economy, the industry or its capacity to emit.*
3. Some of the largest contractors, with the largest fleets, report having more than 50% of their fleets parked since August of 2008. Small and medium size fleets are faring no better. *This condition was not included in ARB staff's original projections.*
4. Off-Road diesel fuel consumption used by contractors has declined by over 30%. There is a virtual one-for-one correlation between operator unemployment, machine utilization and fuel consumption. ARB staff recently assumed only a 10% reduction. *By not attempting to corroborate the industry specific data with the Board of Equalization's off-road fuel data to tease out just the construction portion ARB's emissions estimates are grossly overstated.*
5. Equipment sales and auction data indicate that more equipment has left the state than has been purchased new in California indicating an overall shrinkage in the number of vehicles in California. *This is the exact opposite of what ARB staff estimated*.
6. A sample of 12 fleets ranging in size from 16 to 1000 machines reveals that every fleet has shrunk in both the number of engines and total horsepower, AND that the make-up of engine tiers matches what ARB projected it to be in 2010. *ARB did not anticipate this rapid transformation of the fleet.*

Put simply, things are not at all what ARB staff projected. Emissions are down substantially, based on fuel usage, hours of operation, employment and numbers of idled equipment and will continue to decline for the next year or more. Further, the fleet is smaller than projected, by a substantial margin and continuing to shrink. In addition, the fleet is reducing older equipment quicker and the percentage of newer equipment is increasing faster than ARB projected, putting the fleet ahead of ARB's projections for emissions reductions.

Given the smaller and newer California off-road fleet there is little likelihood that an overnight improvement in the economy (which isn't going to happen anyway) can produce a spike in emissions from the construction industry as the staff would have everyone believe, as older equipment is prohibited from re-entering the fleet.

A re-examination of the economic and emission impacts of the rule is warranted and necessary if ARB and the Administration are interested in maintaining a healthy construction industry as well as a healthy environment.

The proposed amendments are appropriate but insufficient

CIAQC supports the proposed changes in the regulation but question whether or not they will achieve any significant result due to conditions that will prevent contractors from taking advantage of the extended deadline for double credit. Those factors include the lack of verified VDECS that can meet the industry's rigorous performance requirements, the higher than anticipated costs of the devices, the lack of devices for particular installations, the unresolved issue of the safety of the external installations and the economic circumstances which have exhausted the contractor's ability to purchase the necessary equipment to comply.

These issues coupled with the dramatic downturn in the economy and the devastating impact it has had on the construction industry make it nearly impossible for contractors to comply with the regulation by 2010.

It is physically impossible to install enough VDECS to comply

The current regulation will require VDECS to be installed on the California construction fleet at the rate of 20% of the vehicles each year. By 2010 ARB estimates that 35,412 devices will need to be purchased and installed in the statewide fleet. Currently, after five years of effort there are approximately 450 devices installed statewide. In addition, the ARB SHOWCASE which was to have 250 devices installed over a year ago has less that one-dozen in place and little idea when the balance will be installed, if ever. Staff dismisses the very real obstacles (contracts, reduced usage, retirement, inability to match devices to machines, manufacturers withdrawing) to implementing the SHOWCASE. Nevertheless, the hurdles encountered by the SHOWCASE participants are being experienced by every contractor in the state and are very real impediments to installing VDECS.

Retrofitting is far more problematic than ARB staff ever anticipated

If the SHOWCASE is any indication, the data logging, development of installation specifications and matching devices to the specific machine duty cycle is a time consuming exercise. In addition each installation requires a unique design. Merely grabbing a device off the shelf and slapping it on a machine is impossible. It takes months of analysis and review. No contractor is going to do more than one of these costly devices at a time until it is proven that the device will actually work reliably on a give type of equipment, something ARB has been unable to demonstrate with any degree of certainty.

The VDECS are more costly than originally promised

Staff has also conceded that the cost of the devices is higher than they originally estimated, (CIAQC pointed this out repeatedly since the early development stages of the rule) and many

manufacturers have chosen to abandon the off-road market. (Something CIAQC also predicted would happen when manufacturers realized how small and difficult the market would be to serve.) **Staff has provided no evidence for their contention that the cost of devices will be lower in the future.** In fact, fewer manufacturers with fewer options would dictate that costs would in fact be higher, not lower.

VDECS are unreliable

There is ample anecdotal evidence from contractors that the devices do not perform to a level suitable for the duty cycle of most off-road construction equipment. A device that performs for only two hours before it requires the shut-down of the machine in order to regenerate is not suitable for most applications in the industry. Unfortunately the ARB verification process only determines a device's level of performance while it is operating, regardless of how short a period of time it actually operates. It gives a very misleading picture of how many verified devices are really available, when most cannot operate an entire work shift without regenerating. Contractors are not going to install devices that will require work interruptions due to frequent regeneration or unreliable operation.

ARB verification is no indication of applicability or appropriateness

While the ARB verification may be meaningful in ARB's world, it gives little guidance for the consumer (in this case fleet owners) in terms of the appropriateness of the device for the real world. ARB offers no indication that the engines, for which the device is verified, may require more than one device to achieve the required reductions. It does not indicate that the device may severely limit the operation of the machine for which it is verified. The verification is usually based on a single application yet is granted for an entire engine family. The installation methods are not part of the verification so the devices may not remain securely attached to the machine. ARB's definition of durability applies only to the consistency with which the device reduces emissions, not its ability to withstand the conditions under which it is operating. ARB verification offers little assurance to the end user of the device's dependability, durability or practicality.

Safety issues are going to overwhelm and paralyze the retrofit program

For nearly a year, CIAQC has been raising the issue of the safe installation and operation of the VDECS devices. Because of their size, heat generation, fuel consumption and weight, the installation of the devices raises serious safety issues for fleet owners. Since most VDECS retrofits are external to the engine compartment these issues are valid on almost every machine in the off-road fleet. Reductions in operator visibility are a major concern for OSHA and MSHA and many of the existing installations have been deemed a violation of those agencies' regulations. Since 2000 there has been one fatal or severe crushing accident*, every month*, without the installation of these devices. Widespread enforcement by OSHA and MSHA could result in the removal of most of the existing installations. ARB staff dismisses the seriousness of this issue and points to a cumbersome and yet-to-be-utilized appeals process as a way to resolve

the issue. Contractors are not going to risk employee safety and/or potential OSHA violations without an advance determination of the safety of the installation. This issue stands as a significant barrier to the early installation of the VDECS and could undermine the entire retrofit element of the off-road rule. ARB, OSHA and MSHA are putting all contractors in jeopardy of double violations by not resolving the issue of their conflicting regulations.

The double credit incentive does not seem to be enough incentive to overcome the obstacles to installation of the devices and will not produce the results that ARB had anticipated. Without substantial double-credit, the ARB cost analysis of cost of compliance with the rule needs to be revised.

Recommendations

1. **Re-do the economics.** ARB needs to reassess the economic impacts of the rule, the current state of the industry especially with regard to the California and national economic conditions. **An independent economic evaluation** should be done of the overall cost of the rule to the industry. ARB's lack of skill in economic analysis is the subject of academic and legal criticism throughout the nation. Staff's original assumptions and cost savings have not been realized and the cost of the rule has increased significantly at a time when the industry simply cannot afford it.
2. **Reduce the VDECS requirements**. At least until the supply can equal demand. This is not a free-market economic scenario—it is a command and control economic approach. Manufacturers have no incentive to reduce prices as they are guaranteed a market for their products—and they still can't meet the artificial regulatory demand. Even if the manufacturers could meet demand there are not a sufficient number of qualified installers to actually put the things on the machines.
3. **Fix the verification process**. ARB verification is no indication of applicability or appropriateness for fleet owners. They are asked to buy products that are demonstrably ineffective and potential liability traps. The process is too slow, too expensive and still fails to deliver useful, reliable and affordable products. It might be a better idea to simply adopt federal verification standards and call it a day.
4. **Safety has to be resolved.** There is a significant difference between a theoretical "premature death" and the real death of construction workers crushed by a big yellow machine driven by an operator who simply can't see. The current exemption and appeals process will significantly slow the installation of VDECS while contractors await decisions of the "process." Further, contractors are not going to apply for exemptions until it becomes time to install the device on their own machine. It is already clear that the certain devices are unsafe on many machines. ARB should at least post warnings on their web site pending the decisions of the exemption process.

5. **Re-evaluate the schedule and timing for the rule.** With the crushing pressure of economic, technical and safety failures weighing on this regulation, the most appropriate approach for the ARB is to give itself time to redo the rule. Register the fleet, if you must, enforce the idling, identification and sales provisions. Fix this before its failures undo the intent of the effort.

In conclusion, CIAQC would like to thank the Board and its staff for working with us on this regulation. We recognize that a lot of work and effort by your staff and the construction industry has already taken place. We stand ready and willing to see through to the end that a regulation of this scope and importance is technically and economically feasible, results in real emission reductions and does not destroy an industry that provides an essential service to the residents of California.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Michael W. Lewis
Senior Vice-President