



HEAVY CONSTRUCTION
EQUIPMENT RENTALS

ECCO Equipment Corporation

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March 6, 2008

Clerk of the Board
California Air Resources Board
1001 "I" Street
PO Box 2815
Sacramento, CA 95812

Re: **Comment Letter regarding the SOON and OFF-Road Regulation**

Dear Board Members,

Once again, I feel compelled to write to you today about some of the inherent obstacles that we, the stakeholders in the Off-Road / SOON regulation, are being faced with as we move into the implementation phase of this rule. First of all, I want to make it very clear that the information that staff has researched, reviewed and presented to the CARB Board regarding the financial aspects of this rule is flawed by staff's inability to understand the day-to-day operational aspects of the Construction Industry. Excluded from their analysis is the compounding financial impact of other regulations affecting our industry, including the portable equipment and proposed on-road regulations. This lack of understanding will have devastating consequences as we move forward.

Having said this, it is important to understand that the Construction Industry has been, and will continue to work proactively at improving California's air quality. Since 2003, the Construction Industry has replaced more than 2,500 non-compliant or Tier 0 engines with cleaner Tier 1, Tier 2, and the most emission compliant engine available in the marketplace, the Tier 3 engine, which was released in 2006.

The Construction Industry, through the works of the Construction Industry Air Quality Coalition (CIAQC) has been committed to working with CARB, environmental organizations, and the California Legislature ever since CARB announced that it was

seeking input from the Construction Industry on the development of the Off-Road Diesel regulation. The Construction Industry logged countless hours attending meetings with CARB staff, and sharing information to help all parties better understand how the industry operates (e.g. operational constraints, costs, equipment used, hours of operation, safety issues, etc.). It became apparent to all stakeholders that the technology to bring cost-effective solutions for improving air quality issues were in the infancy stages and that a great deal more time than was originally envisioned was needed to ensure that products that could deliver quantifiable results would emerge. It was because of this lack of product availability, that the Construction Industry repeatedly requested more time for technology to catch up and to offer a good supply of verified products. As it stands now, there are only five Verified Diesel Emission Control Systems (VDECS) that the industry has as options to improve emissions from existing equipment in their fleet. One of these filters, manufactured by HUSS, is the only active filter that operates without the use of an outside electrical source for regeneration. To date this filter has been installed on many re-powers as part of the Carl Moyer funding guidelines.

ECCO Equipment Corporation has installed several of these units on their equipment even though we believe that they are plagued with operational inadequacies that far outweigh any benefit that they may offer in air quality. First of all, almost every one of these filters has been installed on the outside of the engine compartment, creating diminished visibility for the operator and presenting potential safety issues; secondly, being bolted to the outside of the machine presents an opportunity for theft (keep in mind that these units run in excess of \$28,000 per filter). ECCO recently re-powered a Caterpillar 988F loader and was required to install two of the HUSS filters on a Caterpillar 988F rubber-tired loader at a cost of nearly \$60,000.

While I am on the subject of HUSS filters, it should be noted that although these filters have been verified by CARB, they do not meet the regeneration periods that have been so widely advertised by both CARB and the HUSS manufacturer. Our experience with these filters has proven that they will not operate more than four (4) hours before they become plugged up and require a filter regeneration to burn off the hydrocarbons to again allow proper exhaust flow for the machine to operate at its intended capacity. Each regeneration requires the machine to be shut down, diminishing the practical operability of this machine for our rental customers. It also adds the potential for an operator to damage the engine by ignoring the regeneration requirements. I find it disturbing that CARB did not do their homework on the operational aspects of these filters, before verifying a filter that requires these frequent regeneration cycles. Some examples of the HUSS filter installations are as follows:

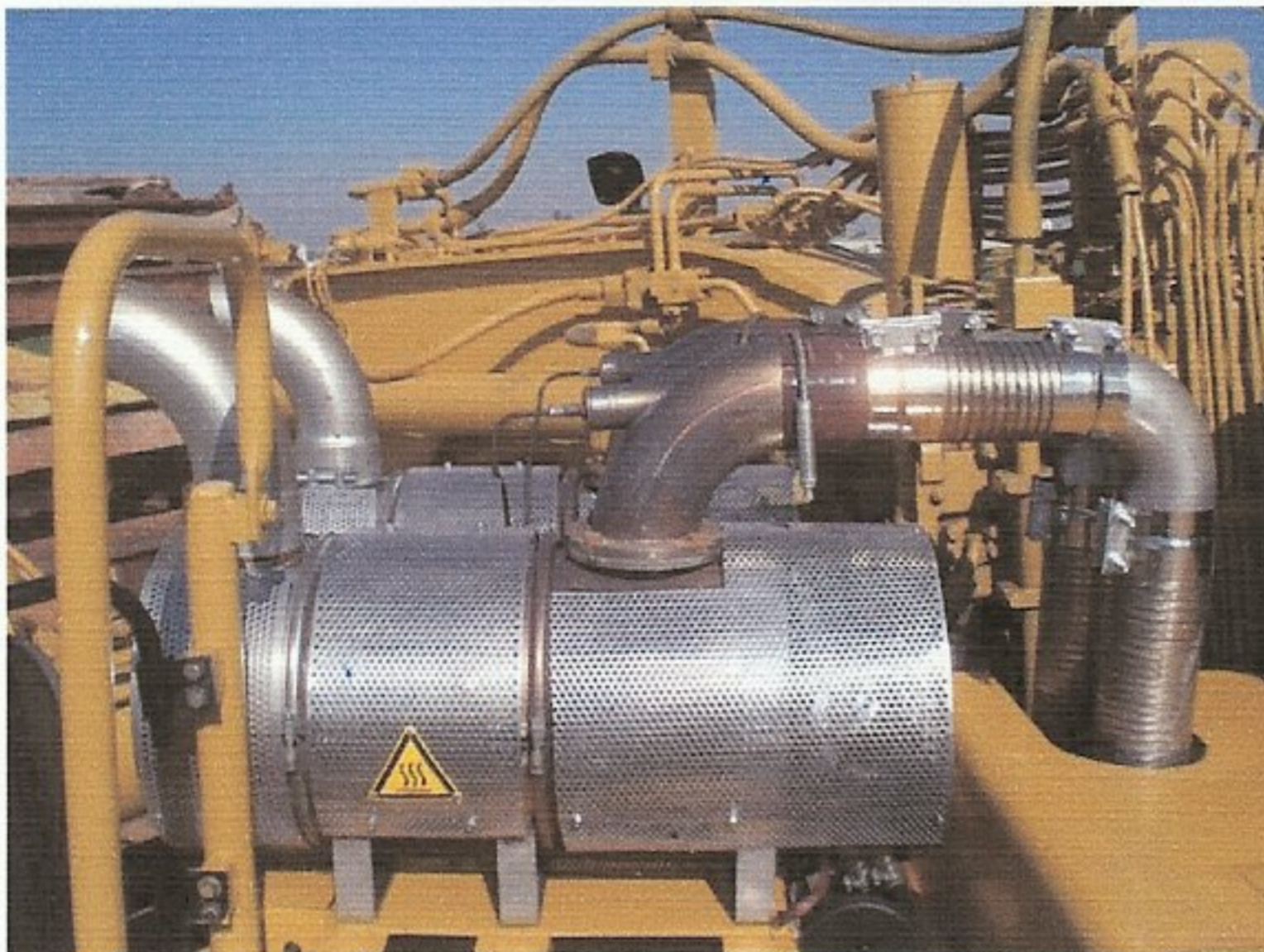
1994 Caterpillar 623F Elevating Scraper re-powered from a Tier 0 to a Tier 3 engine and equipped with two (2) HUSS particulate filters:



Scraper with mounted HUSS filters



HUSS filters mounted on fender



Close-up of HUSS filters – 41” long each



HUSS filters – 14” diameter each



HUSS filter monitors - 11-1/2” wide x 6” tall

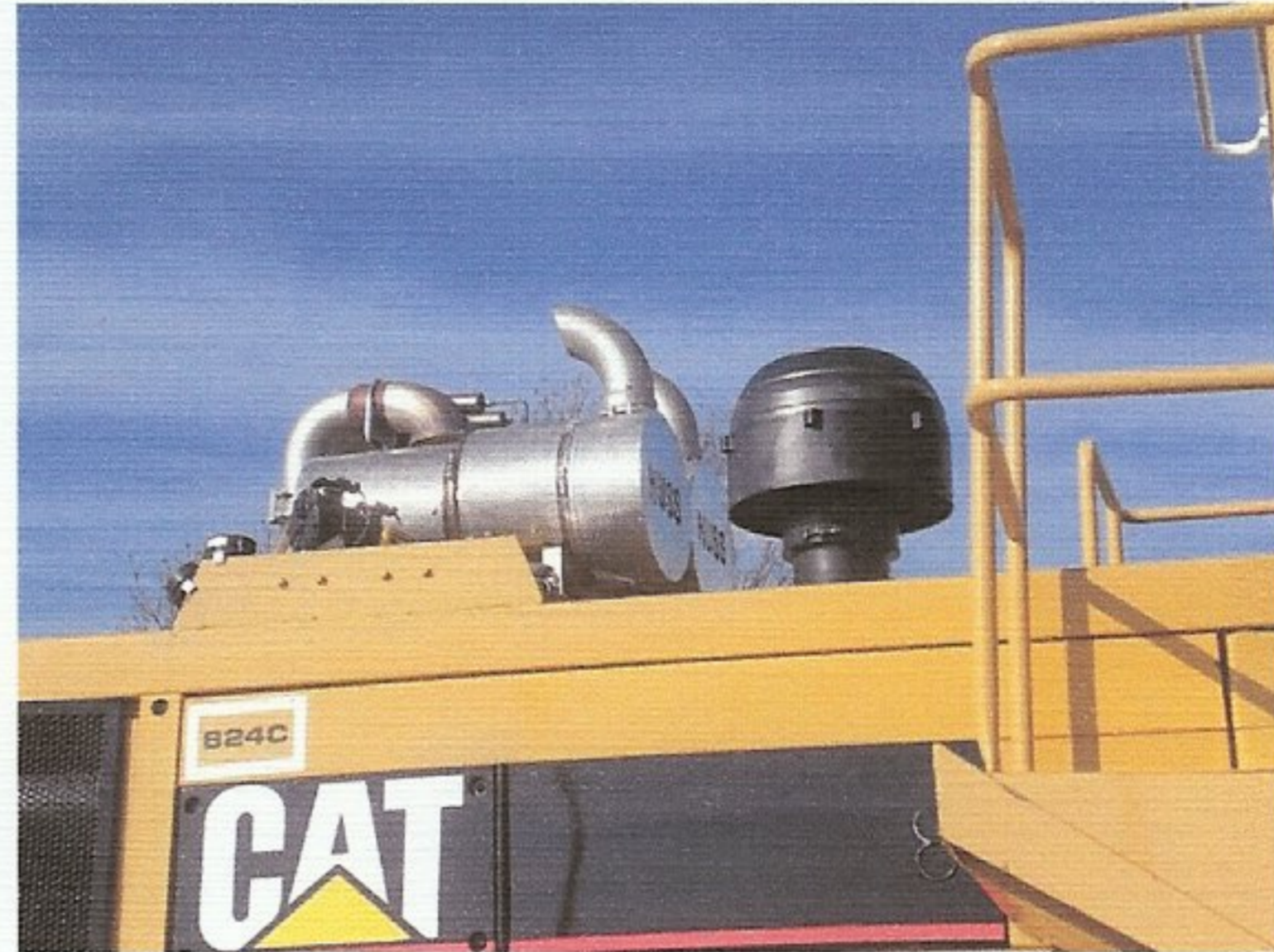


Operator's impaired view from inside cab

1991 Caterpillar 824C Rubber-Tired Dozer re-powered from a Tier 0 to a Tier 3 engine and equipped with two (2) HUSS particulate filters:



Rubber-tired dozer with HUSS filters



HUSS filters mounted at rear of machine



HUSS filters 14" diameter each x 41" long



HUSS filters at rear of operator cab



HUSS filter monitors mounted in cab



Operator's impaired view to rear of machine

The following photos represent the installation of Caterpillar diesel particulate filters that CARB approved to be installed on ECCO's Caterpillar D10N dozer as part of Caterpillar's verification process. Note that these filters are installed within the confines of the engine compartment where they do not impede the operator's visibility. Additionally, they are a "passive" filter that regenerates solely from the heat from the engine while it is operating so there is no machine downtime and the potential for theft is greatly diminished with the under-hood design.

1990 Caterpillar D10N Dozer re-powered from a Tier 0 to a Tier 3 engine and equipped with two (2) Caterpillar "passive" particulate filters:



Dozer with passive Caterpillar filters installed



Caterpillar filters inside engine compartment



Caterpillar filters do not impair visibility



Caterpillar filters operate on engine heat



Caterpillar filter monitors – 3/4” x 2-3/4” x 4-1/4”



Operator's unobstructed view looking forward

These photos clearly illustrate that the Construction Industry does not have a single particulate filter verified that offers the operator a comfort level based on visibility both inside and outside the cab. The Caterpillar filter, which has not been verified by CARB, is the only filter that is offered by an original equipment manufacturer, and the only one that does not minimize operator comfort and visibility and overall equipment safety. Additionally, it is the only off-road filter that I am aware of that regenerates automatically off the heat produced by the engine, similar to the catalytic filter found in all on-road automobiles. In comparison to the HUSS filters, the Caterpillar filters are expected to have a purchase price of approximately \$17,000 to \$20,000 per unit for comparable size filters. The Caterpillar filter is monitored electronically by informing the operator of the optimum operating temperature thus eliminating any system failures due to plugged filters. In any case, our industry would like to see the Caterpillar filter verified sooner rather than later. This supports my earlier statement that CARB adopted a regulation based on strong hopes that cost-effective technology-based VDECS would be available. The truth of the matter is that we are all still waiting for these promises to become reality and to find their way into the marketplace. I would offer that the success of the Off-Road rule will be predicated on a good supply of passive VDECS, preferably those manufactured by original equipment manufacturers.

I would like to elaborate on our operational experience with the HUSS filters. In between every four (4) hours of runtime before the filter plugs up, it takes approximately 45 to 50 minutes to complete the regeneration on machines equipped with dual filters. This equates to one (1) hour of lost production every eight (8) hours of work. We are experiencing these excessive regeneration periods on the Tier 3 engine, the best available control technology in the world. I can only imagine the consequences if these filters were installed on a Tier 1 engine! As a large equipment rental company, many of our customers would rather rent older equipment for their projects than to face the inconveniences and added labor costs associated with the HUSS filter regeneration process.

I have not heard a single positive comment about the operational aspects of the HUSS filter. In fact, everyone that I have spoken with that has had them installed on their machines has had nothing but problems with the units. In a letter written to the San Joaquin Valley Air Pollution Control District, Mr. Gary Meadows of Garrett Construction stated, *"I would like to cancel (Carl Moyer) project #C2327. The request for this re-power includes the HUSS filter. This system was installed on our Caterpillar 623 scraper in August of 2007, and it has been broke down 75% of the time we have had it".* Mr. Meadow goes on to say, *"They (HUSS) installed it wrong according to their field representative, they have replaced many parts, they have disconnected it twice and told us that we could run it that way. They finally replaced the complete system on January 29, 2008."* Mr. Meadow's final statement in his letter reads *"We appreciate your (SJVAPCD) help with the re-powering of our equipment, but we cannot afford the HUSS system on our equipment"*. This is just a sample of the complaints that I am hearing from the recipients of the HUSS filters.

I am curious about the process that CARB followed to verify the HUSS filter. It appeared out of nowhere and given all of the time that I was involved in the rulemaking process, I never once heard any discussion about a pending HUSS verification. Given the deficiencies that are inherent with the use of this filter, I would like to know the verification process on the HUSS and have it openly available to the public so that everyone can see the process CARB followed in verifying the HUSS filter. I think we can all benefit by "day-lighting" this process and letting the Construction Industry know what is currently being evaluated for Executive Orders and where each stands in the CARB review process. This seems to be unnecessarily kept out of reach from the very industry that depends upon these technologies to comply with CARB's tough regulation.

Deviating now from my concerns on the VDECS, I would like raise additional concerns with the regulation. Has CARB performed a **Socio-Economic Impact** study on the costs associated with not only the base Off-Road rule, but the SOON Opt-in rule as well? If so, it has not been seen. If I am correct in my understanding, I thought there was a legal requirement that these types of studies be performed so that there is a full understanding of the costs associated with implementation of these types of regulations. Again, "day-lighting" this information will do much for the industry. While I attended the July 26, 2007 CARB Board hearing the Board discussed and adopted the Off-Road regulation, there were numerous amendments made to the content of the rule that was difficult to track---some suggested that it was reminiscent of an episode of the "Keystone Cops". The adoption of the SOON program was added to the Off-Road rule the day of the hearing. The proposed SOON program originated in the South Coast Air Quality Management District (SCAQMD) and a draft was discussed with representatives from our industry merely two weeks before the CARB hearing. Additionally, what was presented to the Board was far from what the Construction Industry had recommended to make this program work, including SCAQMD's decision to make the program mandatory and to not fully fund the projects. How was it possible to move it along this swiftly? Did CARB follow the public notice and administrative requirements? To my knowledge, no comment period or public workshops were ever held to garner public comment as to the specifics of this rule, and no Socio-Economic Impact studies were performed to

document the costs associated with this Opt-In program. It seems to me that some may be able to assert that CARB is implementing a regulation without the necessary supporting studies process required under State law.

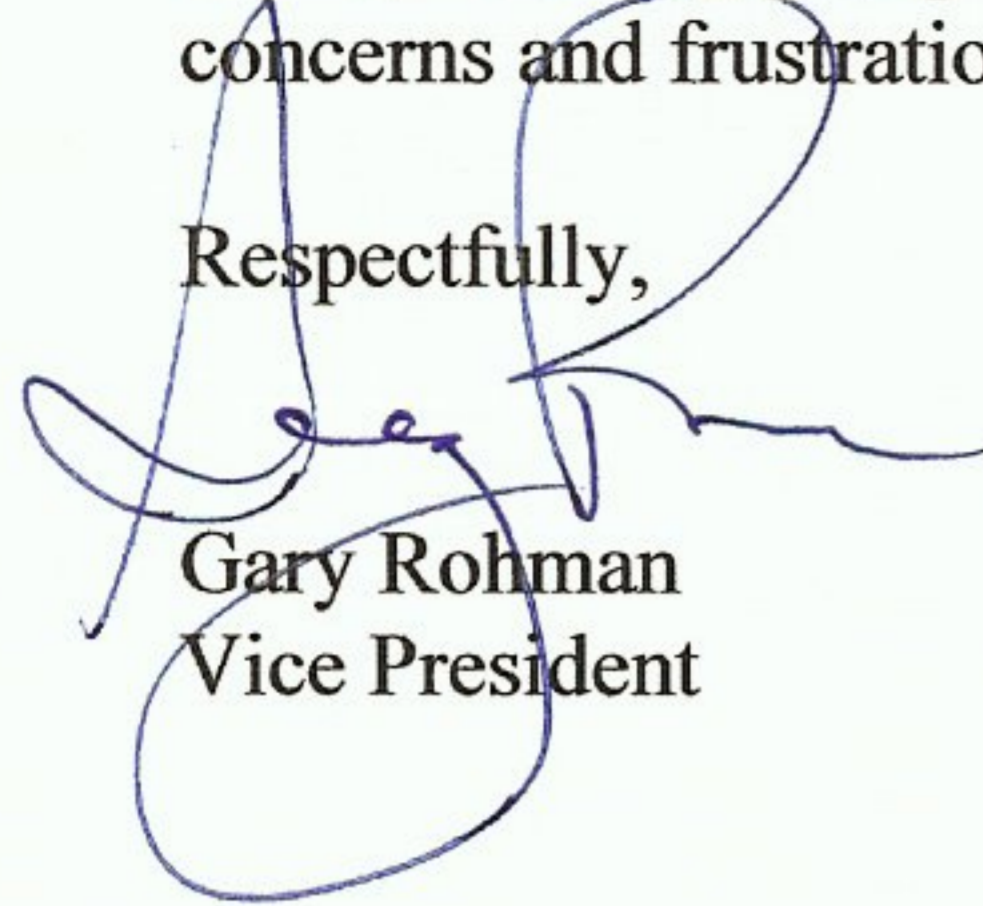
During a meeting that I attended with Chairperson Mary Nichols, I presented some of our company's financial information to show the impacts of the declining economy in the Construction Industry. I asked the Chairperson if it would be possible to include some trigger mechanism that would offer relief to the fleet owners during times of economic decline. She openly discussed this subject with the Chief of the Off-Road rule, Mr. Erik White, and stated that there should be some language included in the rule to offer protection during those times. She stated that she would have staff pursue this request and it was the belief of those attending the meeting that there would be something included in the next version of the rule. To my surprise, I have not seen it in either of the rule revisions that CARB released since that meeting. The recent downturn in the construction economy has forced many construction companies to dramatically scale down their operations, and, in some cases, close their doors. The effects of the weakened economy combined with the costs associated with the CARB Off-Road rule are a perfect recipe for an industry collapse. Include the add-on costs associated with the SOON compliance requirements, and the cumulative impact from the portable equipment and proposed on-road regulations, it is very possible we will see an end to what was once a very vibrant industry.

In closing, I want to state that I have dedicated a tremendous amount of my time over the past three years attempting to educate not only my colleagues throughout our industry, but those of the environmental community and every one of the CARB Off-Road staff personnel, despite many changes. It was my hope that CARB could see that the Construction Industry operates differently than any other industry CARB has regulated over the years. When you consider the larger pieces of construction equipment have an operational life of close to thirty years, and an average replacement cost of over \$500,000, it is an enormous financial commitment to purchase equipment with improved Tier level emissions. Also problematic is the fact that our early commitment and that of several other progressive owners to upgrade older non-compliant equipment with cleaner burning Tier 1 engines is proving to be a waste of time, and more importantly a waste of our money as well as taxpayer money associated with funding under programs like Moyer. Under this Off-Road regulation all of these Tier 1 re-powers will become obsolete early in the compliance period due to the overly aggressive fleet average emissions reductions.

CARB staff has stated in response to our statements about our industry being different than those previously regulated, *"That's what everyone before you have said, and there just is no truth to your statements, you have had plenty of time to prepare for this rule and now it's your turn to be regulated"*. As we all know, time will ultimately settle this debate. It is my hope that staff's side-stepping, ignorance, and unwillingness to fully grasp the true understanding of the Construction Industry is not the catalyst that brings down an Industry that has offered every Californian the state-of-the-art infrastructure that all of us have come to enjoy in our daily lives.

I would welcome an opportunity to participate in a briefing of the Board Sub-Committee to hear our on-going concerns in detail. Thank you for this opportunity to vent my concerns and frustrations.

Respectfully,

A handwritten signature in blue ink, appearing to read "Gary Rohman", is written over the typed name and title.

Gary Rohman
Vice President