



HOW TO USE THIS MEMBER ACTION KIT

This Coalition to Build a Cleaner California Member Action Kit contains the basic information necessary to communicate with key constituencies, including the Governor's Office, the California Air Resources Board, the media, and other opinion leaders about the impact of the proposed CARB off-road diesel rules on contractors, construction workers and infrastructure stakeholders. Over the course of the next five weeks, this kit will give each member of our coalition the tools to clearly convey our message and goals to the right people.

Talking Points:

The talking points reflect the key messages that are important to communicate to stakeholders, decision makers and the media throughout this campaign. They are the basis of every document in this member action kit, and of every document the Coalition will produce.

Take the time to familiarize yourself with these six points so that you can use them when you talk to anyone and everyone about this important issue.

In addition, take some time to think about the impact this proposed rule will have on your company or job. How has your company already demonstrated a commitment to reducing emissions from your equipment? What is the estimated cost to your company to implement these regulations? How many employees will you have to let go if these regulations go into effect? Personalize the facts, figures and arguments in the talking points by speaking from experience when talking about this issue.

Fact Sheet:

The fact sheet provides a short synopsis of CARB's proposed regulations, their impact on the construction industry, economy and infrastructure, and outlines the Coalition to Build a Cleaner California's proposed modifications. It can be given to anyone interested in learning about this issue and is a great resource to help you become familiar with some of the details.

Letters to Governor Schwarzenegger, CARB & Legislature:

One of the most important steps you can take over the course of the **next two weeks** is to send letters to the Governor, CARB and the Legislature explaining why it is important for the health of the state's construction industry, its workers, overall infrastructure and environment to modify these proposed regulations. Included in this kit is a sample letter to use as a template for personalizing your own letter. Below is the contact information for submitting this letter to each of these important decision makers:

Governor Schwarzenegger

U.S. Mail:

Governor Arnold Schwarzenegger

State Capitol

Sacramento, CA 95814

Email/Internet:

To send this letter via email complete the online form on the Governor's web site:

<http://www.govmail.ca.gov>

California Air Resources Board

U.S. Mail

California Air Resources Board

P.O. Box 2815

Sacramento, CA 95812

Email/Internet:

To post a comment specifically about this regulation on CARB's web site visit:

http://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=ordiesl07&comm_period=A

State Legislature:

To find the mailing and email address information for your local state assembly and senate representatives follow these four simple steps:

1. Visit: <http://www.legislature.ca.gov/>
2. Click on the "Legislators & District" link on the left side of the page
3. Enter your home or business address information or zip code
4. The names, addresses and links to the web sites of your representatives will appear

Letter-To-The-Editor & Opinion-Editorial Submissions:

Making members of your community and local reporters aware of this issue and your commitment to forging a solution is also an important part of our campaign over the next five weeks. Submitting a letter or opinion-editorial (also known as an op-ed) to the editor of your local paper is an effective way to do that.

Enclosed in this kit are four sample letters-to-the-editor and one sample opinion-editorial for use as a template in writing something for submission to your local paper. Remember that letters-to-the-editor should be approximately 200 words in length and opinion-editorials can run up to about 650 words. Make sure to include your name and contact information with your submission.

Most newspapers accept submissions from their readers via the Internet or email. Enclosed in this packet is submission information for the majority of the larger newspapers in California. If your local paper does not appear on this list, visit their web site's editorial page section or reference the editorial page in your hard copy of the newspaper to find submission information.

"Call to Action" Email Campaign:

In addition to the tools contained within this action kit, over the course of the next five weeks, the Coalition to Build a Cleaner California will be sending you regular "Call to Action" emails. Each email will ask you to take a specific action to ensure your voice is heard in this process. Please take the time to join thousands of other construction contractors, their workers and infrastructure stakeholders to make sure we can build a cleaner California!



CARB'S PROPOSED OFF ROAD DIESEL REGULATIONS & CONSTRUCTION IN CALIFORNIA

TALKING POINTS

- Construction businesses are dedicated to playing an active role in improving the state's air quality. Over the past five years in Southern California alone, we have replaced more than 1,000 high polluting machines resulting in a reduction of over 3,787 tons of pollution every year.
- We are committed to working with CARB, environmental organizations, the Legislature and other stakeholders to find a feasible solution that achieves the state's air quality goals while allowing contractors to meet the standards in a reasonable timeframe. We are asking the Board to level the playing field by maintaining its original timeline for implementation of these rules so that the economy, workforce, small businesses, California's infrastructure and the environment all win.
- Within its currently proposed timeframe CARB's rule is not viable from an economic or technological perspective. The Board's original plan called an 18-year timeline to meet the state's goals of reducing particulate matter emissions only. Due to delays in developing these rules that timeline has been reduced to 13 years. In addition, the regulation of NOx emissions has been added to the rule – which significantly alters the technology needed and available for companies to be in compliance.
- There is no “Toyota Prius” version of the backhoe or bulldozer available on the market today. In fact, the technology to retrofit or replace approximately 165,000 off-road vehicles to meet the proposed standards is not currently available, and in some cases won't be, for another seven years. Restoring five years to the implementation timeframe will equip manufacturers with the time to catch-up with California's progressive air quality standards and distribute the massive expense of purchasing new equipment out over a longer period.
- This proposal would have a devastating impact on construction companies that employ nearly one million Californians. The total cost of implementing these rules under the current timeframe will be at least \$13 billion. As a result, many construction businesses will be forced to either significantly reduce their workforce to be in compliance or go completely out of business – which means the loss of many high-wage union jobs.
- These rules will also significantly reduce the buying power of the historic \$43 billion infrastructure bonds the people of California approved in November. If these regulations are put into place in their current form, fewer roads, schools, housing and levees will be built and the pace at which these projects can be completed will be significantly slowed.



THE FACTS: CARB'S PROPOSAL & OUR COMMITMENT

The construction industry has been keenly aware of the concern over PM, NOx and visible emissions from construction equipment for many years. In an effort to become a part of the clean air solution, the construction industry joined together to create the Construction Industry Air Quality Coalition (CIAQC).

The public wants cleaner burning off-road construction equipment just as much as they want to rebuild our crumbling infrastructure. We do too. That's why we have replaced over 1,000 high emission machines over the past five years resulting in a reduction of over 3,787 tons of pollution every year. And that's also why we worked to help pass the California Infrastructure Bonds last year. We know we can do better. Our goal is to work with regulators, stakeholders and environmental leaders to realistically address these issues as we build a better, cleaner California.

California's Construction Industry: Reaching a Clean Air Solution Together:

The California Air Resources Board (CARB) recently announced new regulations designed to reduce Particulate Matter (PM) from all diesel fueled engines in California by 75% by 2010, and by 85% by 2020. CARB also later decided to seek accelerated reductions in NOx from off-road engines at the same time. These accelerated targets will have a profound effect upon California's construction industry – an industry that has already heavily invested in cleaning up the air. Not only will they drive companies out of business, result in job losses, and delay and increase the costs of construction, these new regulations, as written, are simply not viable because:

- The financial resources don't exist. It will cost at least \$13 billion to meet these targets.
- The technology doesn't exist. Manufacturers cannot yet produce the engines needed to meet the targets.
- There is not enough time to meet these targets. Even if the technology existed, the demand for 165,000 new pieces of equipment would still far exceed the supply.

In addition, the regulations would have a detrimental impact upon the cost and timing of new construction authorized by the voters in the infrastructure bonds approved last November.

California's Construction Industry: Part of the Clean Air Solution

The Construction Industry has proposed a more realistic approach to meet our clean air goals:

- **Time** - Adopting the original 18-year timeline to meet the 85% reductions originally proposed by CARB, rather than the reduced 13-year schedule.
- **Turnover** – Correctly estimating the natural equipment turnover rate.
- **Tender** – Maintain incentive funding, like the Carl Moyer program, to promote faster turnover.
- **Technology** – Since there is currently no device that will reduce both NOx and PM emissions, we must fix the technology conflicts between PM and NOx reduction strategies.

The Construction Industry is dedicated to playing an active role in improving the state's air quality. Contractors are already pursuing an aggressive engine re-powering program to clean up the air through the Carl Moyer Program and have endorsed CARB's new diesel fuel standards and engine standards for newly manufactured engines.

The Coalition to Build a Cleaner California is dedicated to improving California's air quality while maximizing the historic infrastructure investment approved by California voters in November 2006. The Coalition's members include the construction industry, its workers and infrastructure stakeholders.



OUR MEMBERS

The Coalition to Build a Cleaner California is dedicated to improving California's air quality while maximizing the historic infrastructure investment approved by California voters in November 2006. The Coalition's members include the construction industry, its workers and infrastructure stakeholders. A current list of our membership is below.

Construction Industry Air Quality Coalition Members

Associated General Contractors of California
Associated General Contractors of San Diego
Building Industry Association of Southern California
California Construction and Industrial Materials Association
Engineering Contractors Association
Engineering & Utility Contractors Association
Engineering and General Contractors Association
Mobile Crane Operators Group
Southern California Contractors Association
The California Rental Association

Labor Organizations

California Conference of Carpenters
California Alliance for Jobs
Operating Engineers Local Union Nos. 3 & 12
Southern California Cement Masons Local 600
Southern California District Council of Laborers

Individual Construction Contractors

SKANSKA Construction
Synes & Pennick, Inc.

Coalition Partners

AGC America
American Concrete Pumping Association
American Road and Transportation Builders Association
Associated Builders and Contractors
California Building Industry Association
California Dump Truck Owners Association
California Ski Industry Association
National Electrical Contractors Association
Valley Contractors Exchange



COALITION MEMBERSHIP FORM

To join the Coalition to Build a Cleaner California (CBCC), please complete and return the form below. Thank you for your commitment to building a clean future for our state!

Organization/Individual Name

Date

Street Address

City

State

Zip Code

Phone

Fax

Email Address

Web site

By signing below, I/we are committed to working with the California Air Resources Board (CARB), the Governor's Office and the Legislature develop an off-road diesel standard that meets the state's air quality goals while allowing contractors to meet the requirements with an achievable timeframe. CBCC may add my/our name to its coalition list and may use it publicly.

Authorized Signature

Printed Name

Title

Take Action! The CARB Meeting is on May 25th – Join CBCC Today!

Via Email:

jsoderlund@wilsonmillercom.com

Via Fax:

916-551-1384

Via U.S. Mail:

Coalition To Build a Cleaner California
C/O Wilson-Miller Communications
1415 L Street, Suite 430
Sacramento, CA 95814

The Coalition to Build a Cleaner California is dedicated to improving California's air quality while maximizing the historic infrastructure investment approved by California voters in November 2006. The Coalition's members include the construction industry, its workers and infrastructure stakeholders.



WHITE PAPER: AN INDUSTRY PERSPECTIVE ON THE CALIFORNIA AIR RESOURCES BOARD PROPOSED OFF-ROAD DIESEL REGULATIONS

OVERVIEW & HISTORY

The California Air Resources Board (CARB) is currently considering regulations to reduce Particulate Matter (PM) and NOx emissions from off-road diesel equipment operated by the construction and many other industries in the state.

The Board first announced its intention to promulgate these regulations in 2000. The Board's original plan called for an 18-year timeline to meet the state's goals of reducing particulate matter emissions only. Now, after seven years of delays in developing these rules, that timeline has been reduced to 13 years. In addition, the regulation of NOx emissions has been added to the rule – which significantly alters the technology needed for companies to be in compliance.

Throughout this process, the construction industry voluntarily has begun to retrofit and replace older, high-polluting equipment with new, cleaner burning engines. In addition, the industry has demonstrated a willingness to work with CARB to develop a fair regulation that achieves the state's air quality goals while providing contractors adequate time to meet the standards. Despite these efforts, the rules before the Board in their current form are not viable from an economic or technological perspective and cut off access to critical funding for retrofitting older equipment under the Carl Moyer Program. In addition, they threaten to seriously reduce the buying power of the \$43 billion in bonds to build roads, schools, housing and improve the state's flood control system approved by voters in November.

The industry maintains its commitment to working with CARB, environmental organizations, the Legislature and other stakeholders to find a feasible solution that achieves the state's air quality goals while allowing contractors to meet the standards in a reasonable timeframe. By maintaining the original 18-year timeline for implementation of these rules, we have the opportunity to ensure California's economy, workforce, businesses, infrastructure and environment all win.

MOVING TOWARD THE GOAL

The Construction Industry Air Quality Coalition (CIAQC) has been keenly aware of the concern over PM, NOx and visible emissions from construction equipment for many years. The public has also expressed a desire for cleaner burning, heavy duty, off-road construction equipment working in their neighborhoods.

The industry shares this concern and has taken action to proactively replace or retrofit older, higher-polluting off-road diesel equipment with cleaner models. A critical part of the industry's efforts is funding available through the state's Carl Moyer program for re-powering older construction engines.

The equipment most suitable for re-power includes scrapers, haul trucks, bulldozers, loaders, water pulls, water trucks, excavators, motor graders and trucks that transport cranes. Replacement engines for smaller equipment such as skid steers, backhoes and a host of other lower horsepower units are simply not available.

Since these funds became available, CIAQC has been encouraging construction companies to pursue an aggressive engine re-powering program. Over the past six years, twenty construction companies in the South Coast and San Diego Districts have re-powered 1,020 machines at a cost of \$89 million. Carl Moyer Program provided \$71.0 million with the remaining \$18 million being provided by the machine owners themselves.

This single industry effort is the largest voluntary emission reduction program in the history of California and represents about 30 percent of the total funding statewide and about 10 percent of the total engines modified. It has resulted in a reduction of 3,797 tons per year of NOx and 126 tons per year of PM emissions. This accounts for 25 percent of the PM and 20 percent of the NOx program emissions reduced statewide.

The Legislature has recently committed \$140 million a year, for the next five years, to continue the Carl Moyer Program. Under CARB's proposed rule, however the industry would lose access to these funds almost immediately. While these funds will not make a significant dent (the 1,020 engines re-powered in Southern California accounted for just one-half of one percent of all the engines in the state construction fleet) in meeting the fleet emission targets under the proposed rules, they are nonetheless an important and essential tool in improving air quality.

CONSTRUCTION-RELATED OFF-ROAD DIESEL EMISSIONS

Before discussing the specifics of these regulations, it is important to note both the air quality goals CARB has set for the state and the level of construction related off-road diesel emissions.

These proposed regulations are part of CARB's strategy to reach its overall goal of reducing PM from all diesel fueled engines in California by 75 percent by year 2010, and by 85 percent by year 2020.

Construction-related off-road diesel emissions in California represent 24 percent of the total PM emissions from mobile sources across the state. They represent less than one percent of total man-made PM emissions from all sources.

NOx emissions from construction engines represent about 19 percent of all emissions from off-road sources. They are about 9 percent of all man-made NOx emissions statewide.

FLEET TECHNOLOGY & SIZE

Estimating the exact number of off-road diesel construction vehicles in operation in California today is difficult because this type of equipment is built to last for decades and there is no vehicle registration program for this machinery. CARB estimates that there are approximately 165,000 pieces of heavy-duty off-road construction equipment in California. CIAQC believes the number may actually exceed 200,000. Whatever the exact number, it is likely that the total fleet will expand over the next decade as the state begins to issue contracts for the transportation, school, housing, and flood protection bonds approved by voters in November.

There are four levels of diesel engines in operation in California today, from the oldest and highest polluting Tier 0 engines to the newer and cleaner Tier 3 models. Cleaner burning Tier 4 engines – which will be the only engines that meet both NOx and PM requirements under CARB's proposed rules - are not expected to come online in significant numbers until 2014. Based on a sampling of a cross-section of construction firms, CIAQC believes that 55 to 65 percent of the statewide fleet are Tier 0 engines (which are responsible for up to 70 percent of all PM emissions), 35 to 40 percent are Tier 1, approximately 7 percent are Tier 2 and less than 1 percent are Tier 3.

THE ECONOMICS OF RETROFITTING, RE-POWERING & REPLACING

Currently there are five possible ways to modify the emission level of engines to achieve CARB's goals by 2020:

- Institute updated engine standards for newly manufactured equipment
- Require the use of cleaner burning diesel fuel
- Retrofit existing engines with emission control devices
- Re-power older machines with new lower-emitting engines
- Retire old equipment and reduce fleet size and workforce

The first two of these options are already in effect in California, the technology is in development for the third and the fourth is possible for certain categories of equipment.

New engine standards for newly manufactured equipment and new fuel standards have already been adopted and agreed to by the engine manufacturers (Tier 4 engines represent the cleanest version of these). Ultra-low sulfur fuel was mandated for use in California beginning in June 2006. Research and development is underway to build particulate filters and catalysts called Verified Diesel Emission Control Systems (VDECS), which can be used to retrofit existing engines, but only one model is certified for use today. Finally, for long lasting heavy-duty off-road equipment the option of re-powering with new engines rather than rebuilding an old engine can be economically feasible.

In order to achieve the emission reduction goals established by CARB, 77 percent of all Tier 0 equipment (approximately 75,000 engines) would have to be re-powered to Tier 3 by 2010 and 90 percent by 2020. The cost of re-powering a single engine averages about \$300 per horsepower. This means a dual engine, 1000-hp scraper will cost \$300,000 to re-power with Tier 3 engines. In addition, nearly all of this equipment will also require after-treatment (retrofitting) with VDECS in order to meet the 2020 goal. The cost for retrofitting with a certified VDECS device is approximately \$100 per horsepower, or more than \$50,000 for a 500-hp engine, not including the cost of expensive ongoing maintenance costs and ash disposal.

It also appears unlikely that most existing equipment can be re-powered with Tier 3 engines due to the sophistication of the technology and challenges with integrating the transmission and hydraulic systems with the engine. If a Tier 2 re-power is used instead of a Tier 3, level 3 VDECS must also be used in order to meet the year 2020 standard. This would require an additional expenditure of \$25,000 to \$50,000 per engine.

Replacing the equipment altogether is also very expensive, with a new scraper costing in excess of \$1,000,000. In addition, Tier 4 engines are the clear choice for contractors replacing their equipment, but they will not be available in significant numbers until 2014.

CIAQC believes the full cost to achieve the targets under the current timeframe set by CARB through replacing, re-powering and retrofitting would be at least \$13 billion.

In addition, this equipment is the primary asset-base of most construction companies, and is often used as collateral in financing the start-up of construction contracts. Therefore, regulations requiring early retirement of the equipment by a date certain, or a prohibition on resale, can reduce the value of the equipment and severely impact company finances and borrowing ability. As companies struggle to replace their primary assets, many will be forced to downsize or cease to operate altogether, which means the significant loss of high-wage construction jobs.

THE LIMITS OF TECHNOLOGY

In addition to the enormous financial burden the Board's proposed regulations will place on contractors, there are also several significant technological barriers to meeting the standards. First, there are currently no devices on the market to reduce both PM and NOx emissions that meet CARB's standards. This means construction companies will have to invest in and "touch" many pieces of equipment twice with costly retrofits to comply with the rule.

The annual emission goals established by CARB in would also require the use of level 3 VDECS to retrofit virtually every piece of equipment. Most manufacturers have not developed a device to reduce emissions to that level. In fact, there is currently only one level 3 VDECS available for retrofitting heavy-duty off-road construction equipment and no certainty that it will ever be work reliably for many engine families. This system is also "active," requiring a burner to achieve the proper exhaust temperature and special handling to dispose of the ash material created by the PM filter. And, its cost exceeds the assumption used by CARB in evaluating the economic impact of their proposed rule.

In addition, the Board's process for VDECS certification is lengthy and costly. Some engine families may simply not be large enough to warrant the investment in producing an effective VDECS. Those engines would be unable to meet the new standards even if they are the newest available models.

Another challenge is the availability of a sufficient number of engines to re-power or replace the state's existing fleet and meet the goal. Not only are not enough engines or equipment in existence, the capacity to produce them does not exist. To compound the situation, most new engines are used in the production of new equipment. The equipment manufacturers have been clear that they are interested in selling new equipment, not new engines – which will seriously diminish the opportunities for contractors to re-power their machines.

Given these facts, CIAQC has proposed several alternatives for consideration by CARB. First, by implementing this rule based on an 18-year timeline, as it originally said it would, CARB would allow technology and manufacturing to meet the demands for cleaner engine production.

Second, building on the success of the Carl Moyer program, CIAQC has offered a "fleet averaging" formula that would provide an incentive to every contractor to achieve emission reductions as quickly as possible. A fleet average would allow contractors to operate older specialty equipment by reducing emissions from other equipment ahead of schedule. A project based fleet average calculation would also accommodate the needs of smaller contractors who may be unable to meet vigorous compliance schedules.

Since most contractors know the size of their year 2000 fleets, each would be able to calculate their own baseline for purposes of establishing an 85 percent emission reduction

target. It would offer each contractor maximum flexibility in re-powering, retrofitting or replacing equipment to meet the goal.

A critical part of making this alternative work also involves allowing contractors to use actual emission levels in determining compliance. Under the proposed rules, CARB requires the use of “certified” levels set by the Board which can be two to three times higher than actual levels.

THE CRITICAL ISSUES

Put simply, the rules CARB has put forward are not viable or achievable. There are five primary reasons for this – unattainable annual limits, inadequate clean engine supply, limited clean engine technology, prohibitive cost and the fact that construction is a low-margin business.

Unattainable Annual Limits

Given the available resources and technology, the annual emission limits in the draft proposal released by CARB cannot be achieved by the contractors in the State of California. Even the most progressive firms, who have been re-powering and updating their fleets in anticipation of the regulation, cannot meet the annual goals set forward in the draft rule.

Inadequate Clean Engine Supply

There is an inadequate supply of engines or new equipment to meet the demand these regulations would place on the market. These rules require the purchase of more than 165,000 new pieces of equipment by 2020. Virtually all Tier 0 and Tier 1 engines will need to be replaced with Tier 2, 3 and 4 engines in 13 years. The Board consumed valuable and necessary time when they waited seven years to develop these rules and now the market is not able to meet the equipment demands. To put this into perspective, currently 10,000 new pieces of equipment are sold in California every year. Under these regulations, that number would have to grow to 15,000 each year for the next 13 years.

Limited Clean Engine Technology

The addition of NOx reductions to the proposed rule will force companies to re-power more engines (a very costly alternative), and make PM reductions a low priority. First, no retrofit device is available to achieve the NOx emission reduction requirements. This means companies will be forced to re-power or replace equipment – which significantly increased costs. The NOx requirement also makes it impossible for contractors to qualify for the Carl Moyer funding that has propelled the significant voluntary emissions reductions already achieved by the construction industry.

Prohibitive Cost

CARB has significantly underestimated cost of these rules. By assuming an unrealistic “natural” turnover for construction fleets and a lower number of machines covered under this rule, CARB’s economic analysis of its proposal does not accurately reflect the real

burden of this proposal. In effect, CARB has inaccurately assumed that the construction industry will spend billions on repowering, replacing and retrofitting equipment in the next 13 years without any new regulation. CARB estimates that the cost of the draft rule is only \$3 billion dollars. CIAQC estimates the total real cost to the industry to be at least \$13 billion. These costs are likely to be passed on to consumers, including the state as it contracts to build the roads, schools, housing and flood control systems voters authorized \$43 billion in bonds to construct.

Construction Is A Low-Margin Business

Contractors do not have the financial resources to fund the program. Construction is a fiercely competitive business and contracts can be won or lost by only a few thousand dollars. Most contractors hope to achieve a profit of 2.5 percent to 7 percent and can on average, do so in three out of five years. After labor, materials, insurance, fuel and overhead, a very small portion of the \$60 billion spent on construction every year in California is available for fleet upgrades. To meet these requirements, many businesses will need to downsize, which means construction workers will be laid off and capacity to build projects will decrease.

WORKING TOGETHER TO IMPROVE AIR QUALITY

The industry is committed to working with CARB to develop a solution to this to ensure the state's air quality standards are achieved through the implementation of a viable and achievable rule. By making critical changes related to time, turnover, tender and technology, the Board can make it possible for the construction industry to meet its emissions reduction targets.

TIME: Restoring CARB'S Original Implementation Timeline

CARB's original plan called for an 18-year timeline to meet the 85 percent PM reductions. Delays by the Board in developing a rule have reduced that schedule to 13 years. By adopting a strategy that virtually eliminates Tier 0 and Tier 1 equipment from the fleet, and relies heavily on a Tier 4 inventory, that will not become available from the manufacturers until 2014 for the higher horsepower equipment, there is simply not enough time or Tier 4 equipment before 2020, to replace the existing fleet.

TURNOVER: Lower CARB's Turnover Estimate to Realistic Levels

CIAQC estimates the statewide fleet natural turnover at between 2 and 3 percent, significantly below CARB's estimate. To achieve the CARB 2020 fleet makeup, approximately 140,000 pieces of equipment have to be repowered, retrofitted or replaced. That's means more than 1,000 pieces of equipment, every month, for the next 13 years, that will need to be repowered, retrofitted or replaced. There is not enough manufacturing capacity for that much new equipment or engines for the California market. The major supplier of construction equipment, Caterpillar, ships less than 2,000 pieces of new construction equipment to California each year. Without that new equipment and engines it will be impossible to meet the NOx reductions required by this proposal.

TENDER: Help Alleviate the Cost Burden to Construction Companies

This proposal not only will inflict a \$13 billion cost on the construction industry, but it will also end the availability of Carl Moyer funding for re-powering existing equipment. These funds have been an extremely important tool for accelerating the turnover of this equipment and without it many contractors will simply be unable to afford to retrofit or replace their equipment. These tremendous costs will lead many companies to downsize or go out of business completely which means the significant loss of high wage jobs for construction workers and increased costs for all construction projects, including to state and local government for building infrastructure.

TECHNOLOGY: Re-evaluate the Conflict Between NOx and PM Reduction

There is no retrofit device that will reduce both NOx and PM. As a consequence, the strategies proposed by CARB inherently conflict with any rational decisions that would be made by a construction company. Since most of the current fleet will have to be eliminated, no one wants to invest more money in equipment that they will have to dispose of before its useful life is completed. Having to repower one year, and retrofit two years later, and then replace completely five years after that simply makes no economic sense. As a result, it is likely that many small companies will disappear, many large companies will shrink their fleets and the overall ability of the construction industry to meet construction demand will diminish. That means higher prices, longer construction periods and fewer companies to keep prices competitive.

CIAQC believes it is possible to resolve these issues in a way that satisfies CARB's air quality improvement strategy while keeping the industry economically viable, ensuring construction jobs are not lost and making certain the state's historic \$40 billion in infrastructure improvement builds as many roads, schools, houses and levees as possible. We look forward to working together to protect our environment and to build a better future for the people of California.

This white paper was prepared by the members of the Construction Industry Air Quality Coalition's Task Force on Off-Road Regulation. Members of the task force include:

AGC America

American Road and Transportation Builders Association

Associated General Contractors of California

Associated General Contractors of San Diego

Building Industry Association of Southern California

California Alliance for Jobs

California Building Industry Association

California Construction and Industrial Materials Association

Engineering Contractors Association

Engineering & Utility Contractors Association

Engineering and General Contractors Association

Mobile Crane Operators Group

Southern California Contractors Association

The California Rental Association