MORRISON | FOERSTER

425 MARKET STREET
SAN FRANCISCO
CALIFORNIA 94105-2482

TELEPHONE: 415.268.7000
FACSIMILE: 415.268.7522

WWW.MOFO.COM

MORRISON & FOERSTER LLP
NEW YORK, SAN FRANCISCO,
LOS ANGELES, PALO ALTO,
SAN DIEGO, WASHINGTON, D.C.
NORTHERN VIRGINIA, DENVER,
SACRAMENTO, WALNUT CREEK
TOKYO, LONDON, BEIJING,
SHANGHAI, HONG KONG,
SINGAPORE, BRUSSELS

January 11, 2010

Writer's Direct Contact
415.268.7350
MSteel@mofo.com

By Mail and Email

Mr. James Goldstene
Executive Officer
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

Re: Emergency Petition for Two Year Extension of Deadlines for Meeting Fleet Average Requirements Included in the In-Use Off-Road Diesel-Fueled Fleets Regulation

Dear Mr. Goldstene:

On behalf of the Associated General Contractors of America, its California chapters and their approximately 33,000 members (collectively "AGC"), and pursuant to California Government Code section 11340.6, we petition the California Air Resources Board ("CARB" or "Board") to adopt an emergency amendment to the In-Use Off-Road Diesel-Fueled Fleets Regulation (the "Rule") to extend the deadlines for large fleets to meet the Rule's fleet average requirements for both nitrogen oxides ("NOx") and particulate matter ("PM") for at least two years.

We request this emergency action because the first of these deadlines will otherwise fall on March 1, 2010, and the second will fall on March 1, 2011. Unless the Board takes emergency action, the Rule will cause both irreparable and unnecessary damage to California's construction industry.

Since the Board approved the Rule in July of 2007, California's economy, and particularly its construction industry, has dramatically deteriorated. During the same period, the Board staff has amassed a great wealth of new data on the regulated fleets. By any measure, the data shows that fully one-third of California's construction industry has disappeared, and that the Rule's requirements are now well beyond "the economic limit of what industry [can] bear."[1] AGC's conservative analysis of the new data makes it equally clear that the regulated fleets will meet the Board's emission reduction goals for at least the next two years, even in the

[1] *See "Staff Report: Initial Statement of Reasons For Proposed Rulemaking, Public Hearing to Consider Adoption of the Proposed Regulation for In-Use Off-Road Diesel Vehicles,"* April 2007 ("*ISOR*") at 3.

absence of any fleet average requirements. Pending action on our prior petition for more extensive relief from the Rule, emergency action to extend the deadlines for large fleets is clearly warranted.

As early as December of 2008, the Board staff recognized that deteriorating economic conditions might well affect its assessment of whether the state needs the Rule.[2] At the Board meeting held in January of 2009, the Board itself went so far as to direct the staff to work with AGC on an analysis of the deteriorating economic conditions and their impact on emissions. As Chair Nichols stated:

> "[Y]ou can't deny that the situation has changed since we adopted the rule. And it seems to me that it would make sense for the staff to meet with the petitioners and to discuss what kinds of information needs there might be that would cause you to think about whether there could be any appropriate modifications here that don't sacrifice the goal of getting us to -- we don't have a choice. We have to meet our SIP requirements. We have deadlines to meet that are beyond our purview to change.
>
> "On the other hand, to the extent there are flexibilities that you might want to consider, this is an appropriate -- that would be an appropriate forum in which to consider them I think. . . .
>
> "But I think along the lines of what others have said, we want to keep an eye on this. And we don't want to wait until next year or whatever in order to take another look at what's going on." [3]

At the time, the staff suggested that the necessary data would become available between April and August of 2009, when the Rule's various reporting requirements would take effect,

---

[2] *See Staff Report: Initial Statement of Reasons for Proposed Rulemaking; Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and Implementation Update*, Air Resources Board, December 2008 at page 2, 39: "Available fuel use data supports this, showing total off-road diesel fuel consumption from all sources (off-road vehicles, locomotives, marine, etc.) down over 10 percent from year 2007 levels (BOE, 2008). However, staff cannot precisely quantify at this time the extent of the decline in emissions from off-road vehicles subject to the regulation due to the poor economy. To better understand the impact of current economic conditions on fleets affected by the regulation and their emissions, ARB staff is evaluating available data on vehicle activity, as well as attempting to evaluate whether fleets may have changed their turnover practices due to the poor economy. Staff will present their findings at the January 2009, Board meeting."

[3] Transcript of CARB Board Meeting, January 22, 2009, 218:12-25, 219:5-8.

and the Board therefore directed staff to report to the Board on the impact of the economy on emissions in the Fall of 2009.[4]

The staff has now had that data for several months. Staff provided it to AGC on September 26. Nevertheless, to the best of our knowledge, and notwithstanding Chair Nichols' clear direction that "we don't want to wait until next year," the staff is just now beginning to perform the requested analysis. At its December 2009 meeting, the Board found it necessary to direct the staff, for a second time, to prepare a report on the economy and its effect on emissions.

On its own initiative, AGC has already performed the analysis, using the **same** model and making the **same** assumptions that staff used and made to develop the Rule, and changing only the inputs that the newly reported data brings into clearer view. That analysis supports AGC's original petition for extensive relief from the Rule, and even more strongly supports this request for emergency action. AGC provided the actual modeling results to the staff on December 3, 2009, and would welcome their verification. For the record of not only this petition, but also our prior petition, a copy is enclosed.[5]

In this regard, AGC has no doubt that "you can make the data say anything you want." This is why AGC based its initial analysis of the new data on the same model and assumptions that staff used to develop the Rule. Changing that model and/or those assumptions would obviously change the results. In due course, AGC intends to demonstrate that certain of the assumptions in CARB's model are demonstrably wrong, and that they grossly exaggerate even the latest estimates of emissions from the construction industry.[6] Because even the grossly exaggerated emission forecasts produced by the model show the rule is unnecessary in the near term, AGC has not yet made any adjustments to account for these errors.

In response to AGC's initial findings, and in an effort to discredit them, the Board staff could well change the model and/or assumptions, but in doing so, it would merely succeed in raising questions about its intellectual integrity and competence, and all at a time when many continue to cast the staff in a doubtful light. At the end of the day, the staff can make an "apples-to-apples" comparison of the two emissions inventories only if and to the extent that it uses the same model and makes the same assumptions that it used at the outset of the rulemaking process.

---

4 *Id.* The Board directed staff to "report back to the Board in the fall of 2009 with an update on the off-road inventory, and a summary of the effects of the current economic downturn on emissions from off-road vehicles subject to the regulation."

5 *See* Exhibit A.

6 Among the flaws in the model is the assumption that the population of off-road equipment in the construction industry continued to grow in 2009.

I. BACKGROUND

A. AGC's December 2008 Petition Does Not Require Immediate Action.

This is the second petition that AGC has filed in connection with the Rule. AGC filed its first petition on December 15, 2008, requesting the Board either to repeal or to stay the fleet average requirements until the Board could re-analyze the need for and cost of the Rule based upon the data that the staff has now amassed.

By mutual agreement between AGC and CARB staff, no action was taken on the 2008 petition pending receipt and analysis of the data that the Diesel Off-road On-line Reporting System ("DOORS") would generate in the spring and summer of 2009, and the evaluation of the extensive relief that AGC believed the facts would warrant. While AGC is requesting immediate action on this request for short term relief from the Rule, AGC is not, at this time, requesting any action on its 2008 petition for more extensive relief.

B. Contractors Need Immediate Relief from the Burdens of the Rule.

California's contractors need immediate relief from the fleet average requirements of the Rule, the first of which take effect on March 1, 2010. As we explain more fully below, the current economic crisis has left contractors struggling to survive, and for at least the next two years, it means that emissions of both NOx and PM will be far lower than expected.

The amendments that the Legislature directed CARB to make in 2009 do not go far enough to provide either consistent or genuine relief to California's contractors. They will certainly help some contractors for a short period of time, but they will just as certainly leave others struggling to meet the fleet average requirements for even the early years. They will also leave all contractors wondering where they will find the economic resources to comply with ever more stringent requirements in future years. As California's contractors contemplate the enormous effort necessary simply to survive this economic downturn—and whether the relatively few jobs that they can still provide are worth the struggle—even those who initially benefitted from the amendments must contemplate that it may all be for naught, as 2013 will come soon enough.

The amendments extended none of the deadlines for compliance with the fleet average requirements. In response, many contractors continue to retire equipment, reducing the size of their fleets. While this has the advantage of reducing the emissions from this industry, it also throws California residents out of work and raises serious questions about the state's ability to improve the environmental performance of its public and private infrastructure, much less meet its other needs. California's construction industry will continue to shrink, and jobs will continue to be lost, unless further relief is granted.

C. Reduced Emissions Resulting from the Current Economy Give the Board Flexibility to Reduce the Burdens of the Rule, While Still Meeting SIP Goals.

AGC analyzed the DOORS data using the same model and the same assumptions that staff used to develop the Rule. The only material difference between the modeling for Rule development and AGC's modeling is that the AGC modeling is based on the new DOORS data. This data shows that the population of off-road equipment subject to the Rule is smaller, and the equipment mix is different, than CARB predicted when it developed the Rule. As a result, diesel emissions are considerably lower than CARB had expected.

The latest modeling . . . shows that the Rule is not needed to satisfy the SIP

In fact, the latest modeling of off-road diesel emissions shows that the current Rule is not needed to satisfy the State Implementation Plan ("SIP") for reducing either NOx or PM emissions. For the next two years, fleet emissions will be well below the targets for both NOx and PM. Although the model indicates that additional PM reductions may be needed beginning in 2012,[7] the required reductions are much smaller than anticipated, and CARB can therefore modify the Rule and reduce its economic burden, while still meeting the SIP goals for PM.

The staff has advised both the Board and AGC that the additional data that fleets will report in March 2010 will be helpful in understanding how extensively the Board can revise the Rule and still comply with its SIP. That additional data will come from reports that large fleet owners are currently required to file in conjunction with the Rule's early deadlines for compliance with its fleet average requirements. While additional data is always useful, AGC believes that the currently available data already makes an overwhelming case for the limited amount of immediate relief that this petition seeks.

II. SHORT SUMMARY OF THE RULE

The Rule requires the owners of existing fleets of off-road equipment to reduce emissions of NOx and PM by quickly retrofitting, repowering or replacing their equipment. The Rule requires the owners of fleets that cannot meet the NOx fleet average standard for a particular year to either discard or turn over 8 or 10 percent of their horsepower in that year. It similarly requires the owners of fleets that cannot meet the PM fleet average requirements to retrofit 20 percent of their horsepower (total maximum) with the highest level of verified

---

[7] These reductions are necessary to meet the SIP only if one uses the same assumptions about growth and activity as CARB used when it adopted the Rule. AGC believes, however, that CARB's original assumptions overstate the actual activity and growth rates, and when taken into account, these factors would show that even the PM portions of the Rule are unnecessary.

diesel emission control strategy ("VDECS") available for reducing PM emissions in the respective engines. A VDECS will be considered the highest level VDECS available if it is the highest level device verified by CARB to be effective and durable for the engine on which it will be installed and if the system can be used safely.

In 2007, CARB estimated the cost of the Rule to be $3 to $3.4 billion– "the economic limit of what industry could bear."

In 2007, CARB estimated the cost of the Rule to be $3 to $3.4 billion–"the economic limit of what industry could bear."[8] Actual experience in trying to comply with the Rule shows that the cost is much higher.[9] In an economy where revenues are much lower, the Rule would be "beyond what the industry could bear" even if the original cost estimates were correct. The underestimation of the costs compounds the burden on industry.

III. GROUNDS FOR THE PETITION

A. California's Construction Contractors Will Suffer Immediate and Irreparable Harm if the Fleet Targets Are Not Extended by at Least Two Years.

California's construction contractors will suffer irreparable harm if they are forced to make their fleets smaller, or purchase and install expensive and unreliable emission control devices or repower their equipment in order to meet the 2010 and 2011 fleet average requirements of the Rule. The interim "credits" afforded by the amendments adopted earlier this year provide some relief to some contractors, but not to others, and certainly not to all. And even those relieved of the initial burdens will find that that their relief is fleeting, as they must, in any event, "catch up" with the Rule's original requirements by 2013.

Once a contractor spends scarce resources on new equipment, or repowering or retrofitting existing equipment, those resources are lost forever. Even if they wish do to so, many contractors simply cannot, however, make these investments, because they are unable to obtain financing. These contractors must either shrink their fleets or close down their businesses. These harms are irreparable.[10]

---

[8] *See "Staff Report: Initial Statement of Reasons For Proposed Rulemaking, Public Hearing to Consider Adoption of the Proposed Regulation for In-Use Off-Road Diesel Vehicles,"* April 2007 ("*ISOR*") at 3.

[9] *See* Declarations in Support of Petition submitted on December 15, 2008, incorporated as if fully set forth herein.

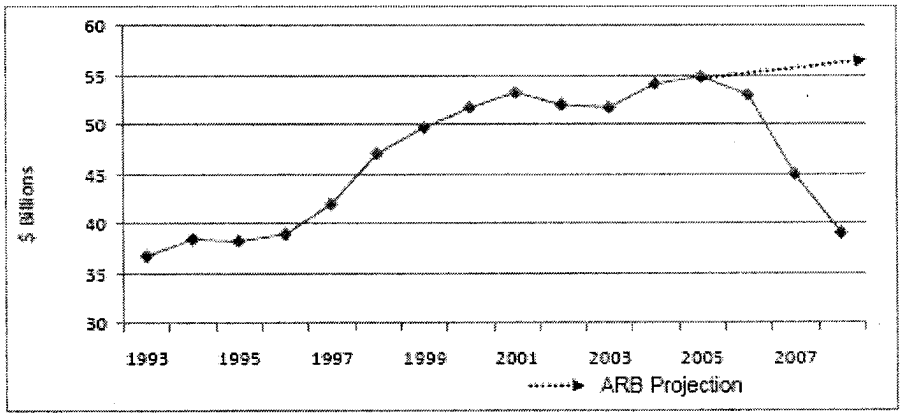
[10] *Id.*

B. Current Economic Conditions in the Construction Industry Will Not Improve Over the Next Two Years.

When the Board proposed the Rule in early 2007, staff relied largely on economic data for the period from 2002 to 2006. Staff predicted that the costs of the proposed regulation would reduce California's economic output in 2010 by roughly $700 million, and cut statewide employment by approximately 1,000 jobs.[11] Staff also estimated that the Rule would cut $2.3 billion from personal income in that same year.[12] Staff concluded that these impacts were at "the economic limit of what industry could bear."[13]

The latest data for California's construction industry paints a very different picture from the one that staff originally expected see:

Real GDP Originating in California Construction Industry 1993-2008



Now that the economy has taken a dramatic turn for the worse, the economic costs and the environmental benefits of the Rule are much different than expected. As construction activity has dropped, emissions have also dropped, and the economic impact on individual construction contractors has increased. In today's economic environment, the earnings needed to cover the costs of compliance are simply impossible to achieve. The data on which staff relied during the rulemaking process is not a reliable guide to the very different future that California now contemplates.

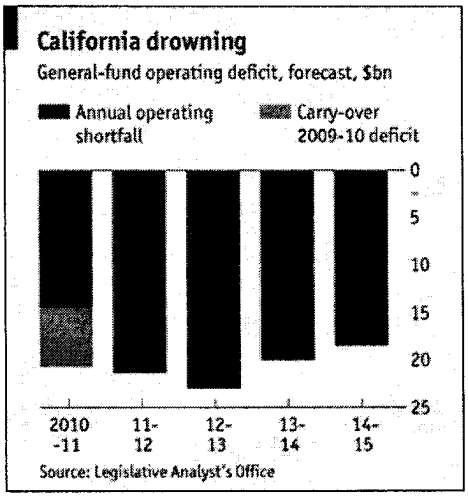
---

11 *ISOR* at 46.
12 *Id.*
13 *Id.* at 3.

California's general economy is expected to lag any national recovery. According the University of California at Los Angeles Anderson School of Management, the outlook for 2010 is little or no growth for the state. Senior Economist Jerry Nickelsburg writes, "The economy will begin to pick up slightly in the beginning of 2011, and by the middle of 2011, will begin to grow at more normal levels."

The UCLA Anderson Forecast projects that unemployment is only going to get worse and is expected to rise to 12.7% in the fourth quarter of 2009. Total employment will contract by 4.3% in 2009 and no new jobs will be generated in 2010. Once growth returns in 2011, employment will begin to grow at a 1.7% rate and the unemployment rate will begin to fall. Although the economy should begin growing in 2011, it will not be generating enough jobs to drive the unemployment rate below double digits until 2012.[14]

This means the state's unemployment level, currently an all-time high of 12.5 percent, is likely to stay high through 2011. Because construction is a lagging economic indicator, any reduction in unemployment in the construction industry is likely to occur even later.



The Anderson Forecast also pointed to California's complex budget crisis, noting that the state, in an effort to pass a budget last summer, did not solve its fiscal problems but only deferred them. In his forecast, Nickelsburg called the state's move "a head fake." Thus, an important factor affecting the rate of California's recovery is the major debt burden that the state faces. With the state budget in a continuing crisis, and local governments experiencing a raid on their funds by the state, new public works projects have all but disappeared. This slowing in economic activity, and the unemployment it creates, make the state's debt problem ever more serious as tax revenues drop. The future for California's budget deficit is anything but bright and declining construction activity will not see any near-term turnaround.

Architects, who design and engineer new construction, are leading indicators of any recovery in the construction industry, since their services are needed months or years in advance of actual construction. From July 2008 through April 2009, 14 percent of architects lost their jobs and the unemployment rate for architects continues to grow.

---

14 *See* http://www.uclaforecast.com.

The American Institute of Architects ("AIA") Consensus Construction Forecast Panel, which consists of the five major economic forecasters who specialize in the construction sector, characterizes the current situation as follows:

> "There are signs that our economy is on the mend. However, nonresidential construction activity tends to lag behind the rest of the economy, so it will be a while before this industry sees any improvement. The AIA's Consensus Construction Forecast Panel projects that nonresidential construction activity will decline almost 16 percent this year once inflation adjustments are made, and another 12 percent next year. If these numbers materialize, this would be the most significant downturn in nonresidential construction in more than a generation.
>
> **"the most significant downturn in nonresidential construction in more than a generation"**
>
> "Commercial facilities are slated to bear the brunt of the downturn. Overall commercial construction is forecast to decline 25 percent this year and another 15 percent in 2010. The hotel market, which may have been a bit overheated heading into the downturn, may take the biggest hit through 2010, but retail construction and offices won't be far behind. Industrial construction also will see a dramatic decline through 2010, with reduced demand domestically for manufactured goods as well as fewer manufactured exports due to an international slowdown."[15]

Spending on previously started projects masks the underlying weakness in new project activity. The AIA Architecture Billings Index, which measures design activity at U.S. architecture firms, has been declining since early 2008, indicating that there is substantially less activity at present in the design pipeline. McGraw-Hill Construction recently reported that construction starts on nonresidential buildings were down 43 percent through the first five months of 2009 compared to the same period in 2008.

In terms of the outlook, commercial projects—office, retail, and hotel facilities—are projected to see the steepest declines over this downturn, reaching almost 25 percent this year and another 15 percent next. According to the AIA forecast, nonresidential construction activity is destined for further declines before it recovers. The AIA Architecture Billings Index shows declining levels of design activity since early last year, and at present is still pointing to further declines.

The Panel's forecast shows continuing declines in all major types of construction:

---

15 http://info.aia.org/aiarchitect/thisweek09/0710/0710b_consensus.cfm

AIA Consensus Forecast Showing Changes from 2008

	2009	2010	Cumulative by 2011
	% of change		
Nonresidential Total	-15.8	-11.6	▼ **-27.4**
Commercial	-24.9	-15.4	▼ **-40.3**
Office	-21.5	-17.3	▼ **-38.8**
Retail/Other Comm'l	-28.0	-12.6	▼ **-40.6**
Hotel	-25.8	-16.8	▼ **-42.6**
Industrial Total	-0.8	-28.4	▼ **-29.2**

As the economy has declined, business payrolls have shrunk. The economy has lost more than six million jobs since this recession began. The construction industry has taken some of the steepest losses. Although the construction industry accounts for just over 5 percent of all payroll employment in the economy, it has absorbed over 20 percent of job losses since the national economic downturn began. Some 326,000 California construction workers have lost their jobs in this recession.

326,000 California construction workers have lost their jobs

Indeed, California's construction industry has been especially hard hit. The Construction Industry Research Board's ("CIRB") California Construction Review reports that the value of heavy construction projects in California has declined precipitously—from 2007 to 2008 the value plunged 29.4%, and from 2008 to 2009 (11 months) the value dropped another 31.4%, a two-year decline of over 50%.[16]

The decline in public building projects in California is equally dramatic. CIRB reports that public building construction fell 37.3% in the first 11 months of 2009, continuing a decline that began in 2007. Further declines are projected for 2010, even with increased stimulus spending.[17]

These extraordinary changes in the economic circumstances mean that the various measures included therein are no longer feasible. As the Board sorts out the best way to proceed through and beyond the end of the decade, California's contractors must be afforded the interim relief they badly need simply to survive. Given the sharp decline in real GDP originating in California's construction industry, there can be no question that the short-term costs of the Rule are now well beyond anything that the industry can bear.

---

16 Construction Industry Research Board, California Construction Review, December 22, 2009.

17 *Id.*

C. AGC Analyzed the Effects of the Recession Using ARB's Own Model.

In order to quantify the impact of the recession on emissions, AGC retained Sierra Research, a well-respected air modeling consultancy based in Sacramento. AGC presented the results of Sierra's modeling to CARB staff on December 3, 2009. That presentation is enclosed as Exhibit A to this Petition.

AGC asked Sierra to use the same model and make the same assumptions that ARB used and made in developing the rule, but to substitute the actual data that CARB collected in 2009 for the Board's earlier estimates of (a) the population of off-road equipment, (b) its age distribution, and (c) its horsepower distribution. AGC directed Sierra to make no other changes to CARB's model or its assumptions.

Emissions from the regulated fleets will be well below the targets for both NOx and PM emissions even without the burdens of the Rule

Sierra's analysis, which was generally praised by CARB staff, makes it clear that the current recession has reduced construction activity in California to levels that result in lower emissions of NOx ***without the Rule*** than CARB projected ***even with the Rule***. The modeling shows that this will continue to be the case until at least 2019. The same is true for PM emissions at least through 2011. For at least the next two years emissions from the regulated fleets will be well below the targets for both NOx and PM emissions even without the burdens of the Rule.[18]

To satisfy the SIP, the Rule sought to reduce NOx emissions from the regulated fleets to 298.4 tons per day ("tpd") in 2010 and to 273.3 tpd in 2011. AGC's conservative analysis of the DOORS data shows that, without the Rule, NOx emissions will be down to 222.5 tpd in 2010 and down to just 210.9 tpd in 2011.

The Rule similarly sought to reduce PM emissions to 14.4 tpd in 2010 and to 11.7 tpd in 2011. AGC's conservative analysis of the DOORS data reveals that, without the Rule, PM emissions will be just 12 tpd in 2010, and 11.4 tpd in 2011.

There can be no question that the NOx and PM fleet targets are unnecessary for meeting SIP requirements for at least two years. The Board has the latitude to extend the Rule's fleet average and related requirements for at least two years without compromising any of its original objectives.

---

[18] *But see,* footnote 7 *supra.*

IV. LEGAL AUTHORITY TO PROVIDE EMERGENCY RELIEF

A. Changes in Circumstances that Require an Emergency Amendment Extending the Rule's Deadlines by Two Years.

Changes in economic, financial and other circumstances provide ample basis for extending the Rule's fleet target dates by two years. In particular:

- The Rule is no longer needed in its current form to meet the 2015 SIP goals.
- Even before the current economic crisis, CARB staff concluded that the Rule's requirements were at "the economic limit" of what the industry could bear. Dramatic reductions in industry employment, fleet size and GDP make it clear that the Rule's burdens are now far more than the industry can bear.

The requirements for petitioning for amendment or repeal of a regulation are set forth in Government Code section 11340.6:

> "[A]ny interested person may petition a state agency requesting the adoption, amendment, or repeal of a regulation as provided in Article 5 (commencing with Section 11346). This petition shall state the following clearly and concisely:
>
> (a) The substance or nature of the regulation, amendment, or repeal requested.
> (b) The reason for the request.
> (c) Reference to the authority of the state agency to take the action requested."

The reasons for this request have already been addressed above; the following sections describe the Board's authority to act.

B. Relief Requested

In light of the new circumstances described herein, AGC requests that the Board immediately extend all of the fleet average deadlines for two years. During this period, the staff will have the time that it requires to gather additional data, to undertake further analyses, and to develop and make recommendations for such further adjustments as the data and analyses may warrant.

AGC is also amenable to revising the Rule's reporting requirements to provide opportunities for fleet owners routinely to report the hours of use for their off-road equipment. Such data might be useful, for example, in determining whether measures imposed by the Rule are actually targeting the largest sources of emissions.

In addition, AGC respectfully requests that the Board advise the EPA that it need not act on the waiver request for the rule until such time as the issues raised by this Petition have been resolved.

C. Authority to Take the Action Requested

The authority of CARB to take the action requested is found in the following provisions of the Health and Safety Code:

> Section 39002 ("The control of vehicular sources, except as otherwise provided in this division, shall be the responsibility of the State Air Resources Board");
>
> Section 39600 ("The state board shall do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the state board by this division and by any other provision of law");
>
> Section 39601 ("The state board shall adopt standards, rules, and regulations in accordance with the provisions of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, necessary for the proper execution of the powers and duties granted to, and imposed upon, the state board by this division and by any other provision of law");
>
> Section 39602 ("The state board is designated the air pollution control agency for all purposes set forth in federal law. The state board is designated as the state agency responsible for the preparation of the state implementation plan required by the Clean Air Act (42 U.S.C., Sec. 7401, et seq.) and, to this end, shall coordinate the activities of all districts necessary to comply with that act");
>
> Section 43000 ("The state has a responsibility to establish uniform procedures for compliance with standards which control or eliminate [air pollutants from motor vehicles]");
>
> Section 43000.5 ("The state board should take immediate action to implement both short- and long-range programs of across-the-board reductions in vehicle emissions and smoke, including smoke from heavy-duty diesel vehicles, which can be relied upon by the districts in the preparation of their attainment plans or plan revisions pursuant to Sections 40911, 40902, and 40925");
>
> Section 43013 ("(a)The state board may adopt and implement motor vehicle emission standards, in-use performance standards ... for the control of air contaminants and sources of air pollution which the state board has found to be necessary, cost-

effective, and technologically feasible, to carry out the purposes of this division, unless preempted by federal law.

"(b) The state board shall, consistent with subdivision (a), adopt standards and regulations for ... off-road or nonvehicle engine categories....");

Section 43018 ("(a) The state board shall endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state standards at the earliest practicable date.

* * *

"(e) Prior to adopting standards and regulations pursuant to this section, the state board shall consider the effect of the standards and regulations on the economy of the state, including, but not limited to, motor vehicle fuel efficiency.").

V. CONCLUSION

Pursuant to California Government Code section 11340.6(a), AGC requests that the Board immediately extend the fleet average and related requirements of the Rule for two years. In addition, AGC would support amending the Rule to require reporting of hours of use, in order to more accurately characterize the sources of emissions. Finally, AGC respectfully requests that the Board advise the EPA that it need not act on the waiver request for the rule until such time as the issues raised by this petition have been resolved.

Because the first deadline for meeting fleet targets is March 1, 2010, **time is of the essence** and this petition has therefore been submitted as an emergency measure. AGC therefore requests immediate action on this petition. In the event CARB staff denies this petition, AGC respectfully requests the opportunity to present the petition to the full Board at its February 2010 meeting.

Respectfully submitted,

Michael J. Steel /mjc

Michael J. Steel
Attorney for Petitioner,
Associated General Contractors of America

Enclosure

cc: Michael Kennedy, General Counsel, AGC (w/ enc.)

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.





A Fresh Look

at California's New In-Use Off-Road Diesel-Fueled Fleets Regulation

December 3, 2009

Michael E. Kennedy, Esq.
General Counsel
Associated General Contractors of America
2300 Wilson Boulevard, Suite 400
Arlington, VA 22201
Direct: 703-837-5335 Email: kennedym@agc.org

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

California's New In-Use Off-Road Diesel-Fueled Fleets Regulation

- Approved in July 2007
- Established reporting requirements that took effect in April (large fleets), June (medium fleets) and August (small fleets) of 2009
- Established fleet average requirements that will take effect in March of 2010 (large fleets), 2013 (medium fleets) and 2015 (small fleets)
- Applies to four industry categories but just one of the four (Construction and Mining) accounts for at least 80% of the covered pieces of equipment

Scope of Review and this Presentation

- 2000 Emissions Inventory
- 2009 Emissions Inventory
- Similarities and Differences in the Results
- Implications for the Rule
- Final Note

2000 Emissions Inventory

- Baseline values for calendar year 2000 (Surveys and Studies)
- Total Population of Equipment (Each Type)
- Age Distribution of Equipment (Each Type)
- Horsepower Distribution (Each Type)
- OFFROAD model projections for future years
- Constant rate of annual growth in population, equal to nearly 2% for “Construction and Mining” category

2000 Emissions Inventory

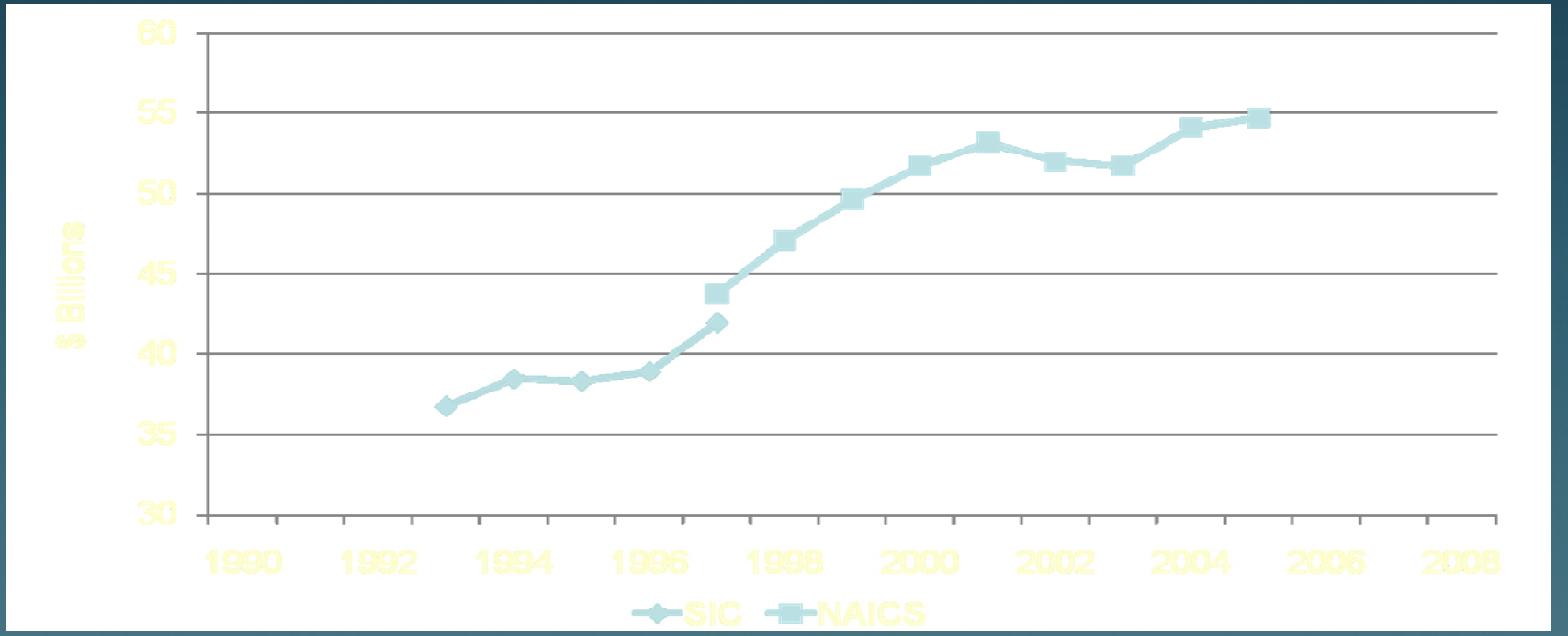
- The Economic Context
- Period of steady growth in California GDP originating in construction
- Positive growth in 9 of the 12 years beginning in 1993 and running through 2004
- Annual rates varied widely, falling as low as -0.6% but climbing as high as 7.8%
- Cumulative growth of 14.2% ($5.2B) from 1993 to 1997 and another 25.1% ($11B) from 1997 to 2005

Real GDP Originating in California Construction Industry ($ Millions)		
Year	SIC	NAICS
1993	36,704	
1994	38,414	
1995	38,270	
1996	38,880	
1997	41,925	43,751
1998		47,107
1999		49,672
2000		51,716
2001		53,178
2002		52,009
2003		51,695
2004		54,125
2005		54,747

Source: Bureau of Economic Analysis, U.S. Department of Commerce

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Real GDP Originating in California Construction Industry 1993-2005



Source: Bureau of Economic Analysis, U.S. Department of Commerce

2000 Emissions Inventory

- The Economic Context
- Also period of steady growth in total employment in California's construction industry
- Positive growth in all 12 years beginning in 1993 and running through 2004
- Annual rate reached 15.6% in 1998, but otherwise ranged between 0.9% and 8.4%
- Cumulative growth of 104% (479,000 jobs)

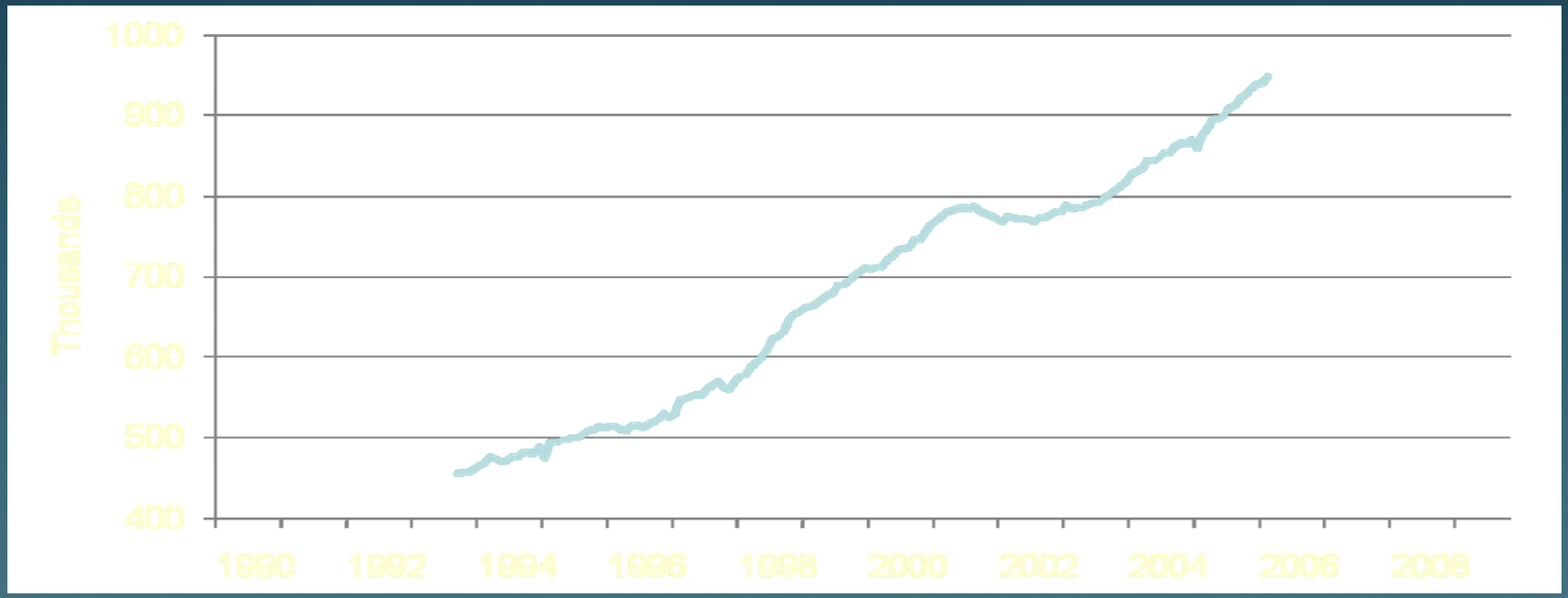
Seasonally Adjusted Employment In California Construction Industry (Thousands in December)

Year	Total
1993	460.9
1994	488.2
1995	513.1
1996	525.1
1997	569.0
1998	657.6
1999	711.7
2000	765.5
2001	772.6
2002	781.3
2003	818.1
2004	870.1
2005	940.1

Source: Bureau of Labor Statistics, U.S. Department of Labor

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Employment in California Construction Industry 1993-2005



Source: Bureau of Labor Statistics, U.S. Department of Labor

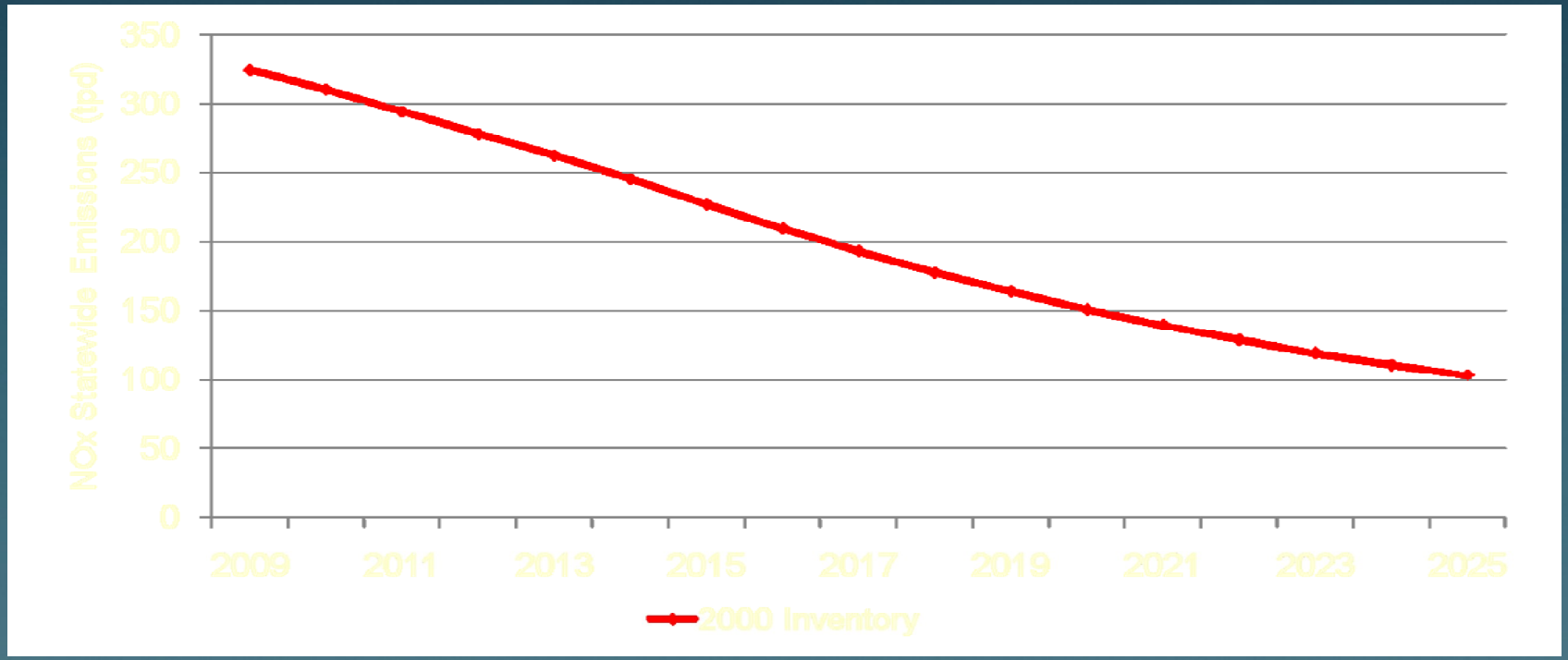
AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

2000 Emissions Inventory for NOx

- Based on available data, OFFROAD model estimated 419 tons per day (tpd) in 2000
- OFFROAD model then projected steadily declining rate of emissions through 2025
- Down 22.4% (to 325 tpd) by 2009
- Down anywhere from 4.3% to 8% per year from 2010 to 2025
- Down a cumulative total of 68.2% (to 103.2 tpd) between 2009 and 2025
- Technical Support Document, Table VI-11

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	2000 Inventory
2009	325.0
2010	311.0
2011	294.6
2012	278.6
2013	262.8
2014	246.0
2015	227.5
2016	209.9
2017	193.3
2018	177.8
2019	164.0
2020	150.8
2021	139.6
2022	128.8
2023	119.3
2024	110.7
2025	103.2

2000 Emissions Inventory for NOx

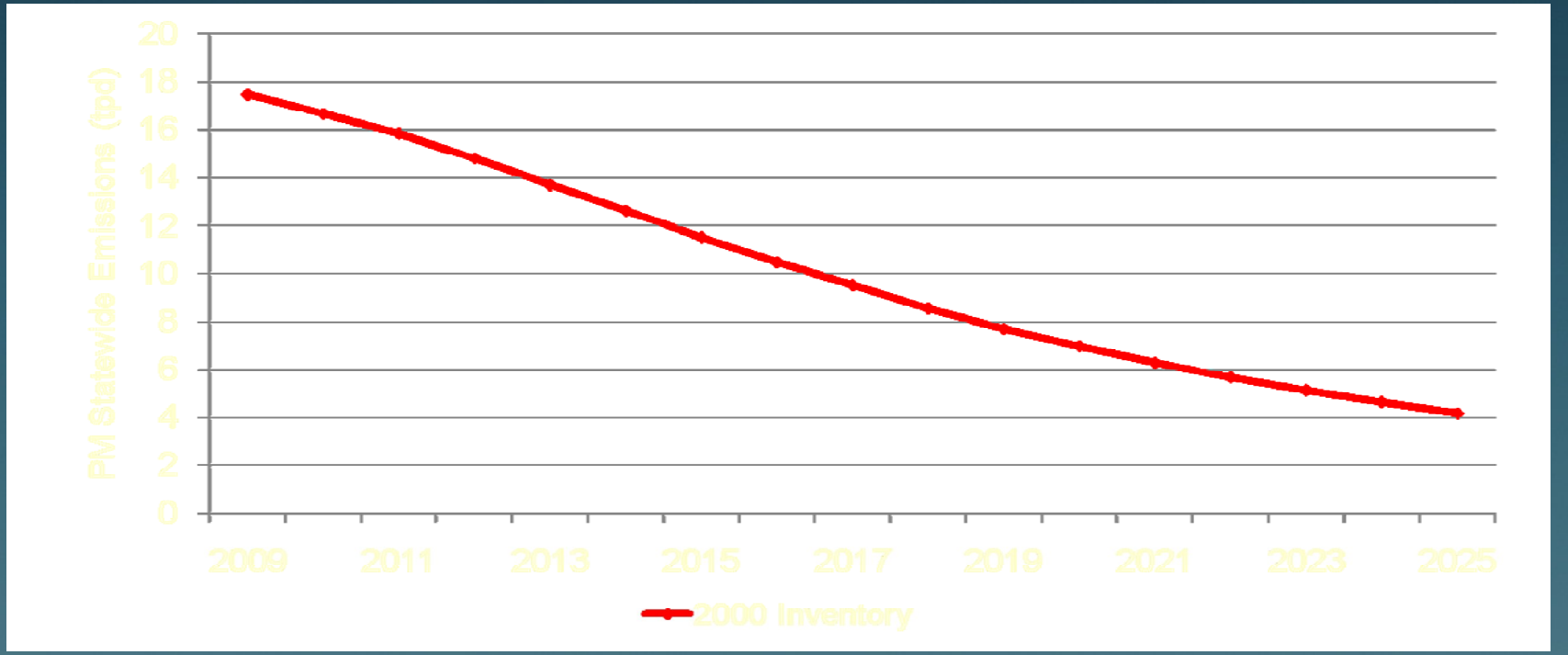


2000 Emissions Inventory for PM

- Based on available data, OFFROAD model estimated 25 tpd in 2000
- OFFROAD model then projected steadily declining rate of emissions through 2025
- Down 30% (to 17.5 tpd) by 2009
- Down anywhere from 4.6% to 10.2% per year though 2025
- Down a cumulative total of 76% (to 4.2 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	2000 Inventory
2009	17.49
2010	16.69
2011	15.86
2012	14.82
2013	13.71
2014	12.65
2015	11.54
2016	10.48
2017	9.53
2018	8.56
2019	7.71
2020	6.98
2021	6.29
2022	5.69
2023	5.14
2024	4.64
2025	4.17

2000 Emissions Inventory for PM



2009 Emissions Inventory

- New regulation's reporting requirements took effect between April and August of 2009
- Opportunity to take fresh look at emissions inventory
- Embedded in DOORS data are 2009 values for three key inputs
- Total Population of Equipment (Each type)
- Age Distribution of Equipment (Each Type)
- Horsepower Distribution (Each Type)

2009 Emissions Inventory

- As did CARB, AGC relied on OFFROAD model
- No modifications or adjustments
- AGC merely substituted DOORS data provided on September 26, 2009
- OFFROAD model estimates for 2009
- OFFROAD model projections for future years

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

2009 Emissions Inventory

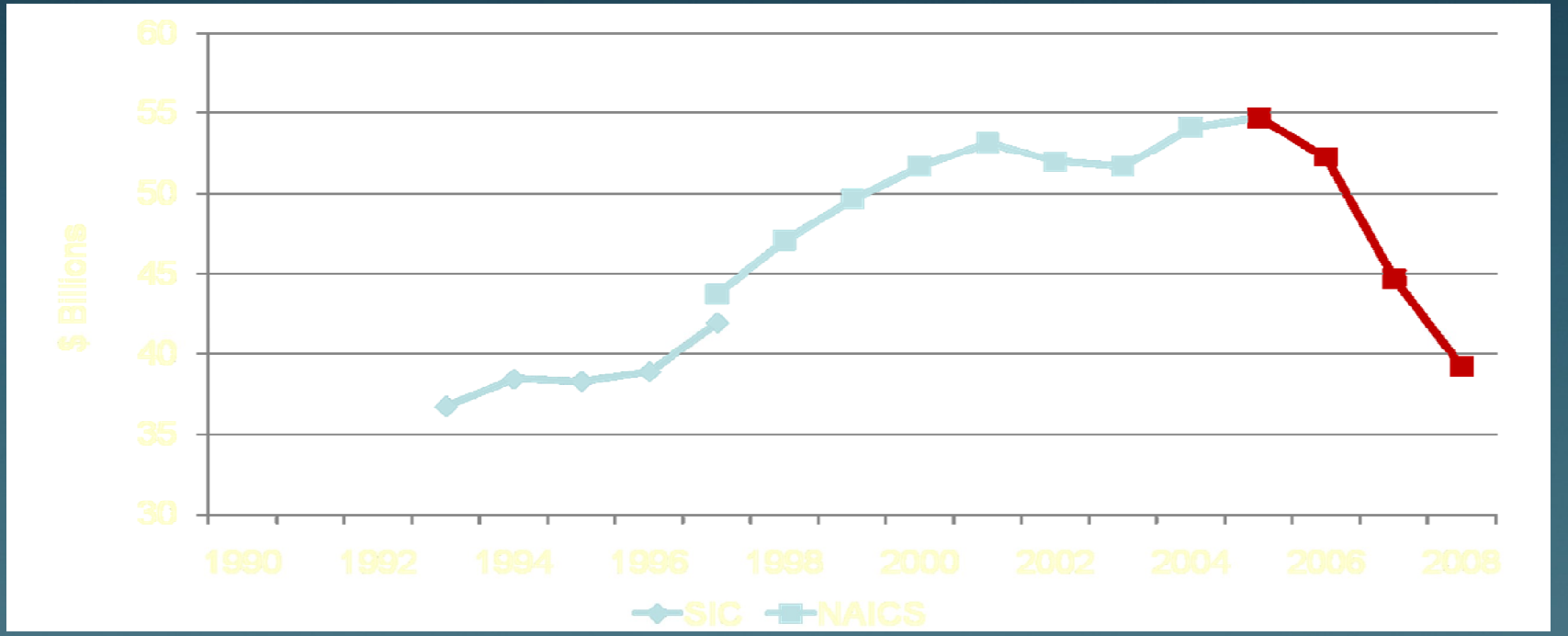
- The Economic Context
- Three years of sharp decline in real GDP originating in construction
- Erased all gains made in the preceding 12 years
- Construction industry contracted 4.5%, 14.5% and 12.2% in 2006, 2007 and 2008, respectively
- Cumulative drop of 28.4% (15.5B) in real GDP from 2005 to 2008

Real GDP Originating in California Construction Industry ($ Millions)		
Year	SIC	NAICS
1993	36,704	
1994	38,414	
1995	38,270	
1996	38,880	
1997	41,925	43,751
1998		47,107
1999		49,672
2000		51,716
2001		53,178
2002		52,009
2003		51,695
2004		54,125
2005		54,747
2006		52,282
2007		44,668
2008		39,208

Source: Bureau of Economic Analysis, U.S. Department of Commerce

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Real GDP Originating in California Construction Industry 1993-2008



Source: Bureau of Economic Analysis, U.S. Department of Commerce

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

2009 Emissions Inventory

- The Economic Context
- Four years of sharp decline in employment in construction
- Erased all gains made in the preceding 12 years
- Employment dropped 2.8%, 6.3%, 15.6% and 15% in 2006, 2007, 2008 and 2009 respectively
- Construction industry lost a cumulative total of 34.7% (326,000 jobs) from 2005 to 2009

Seasonally Adjusted Employment In California Construction Industry (Thousands in December)

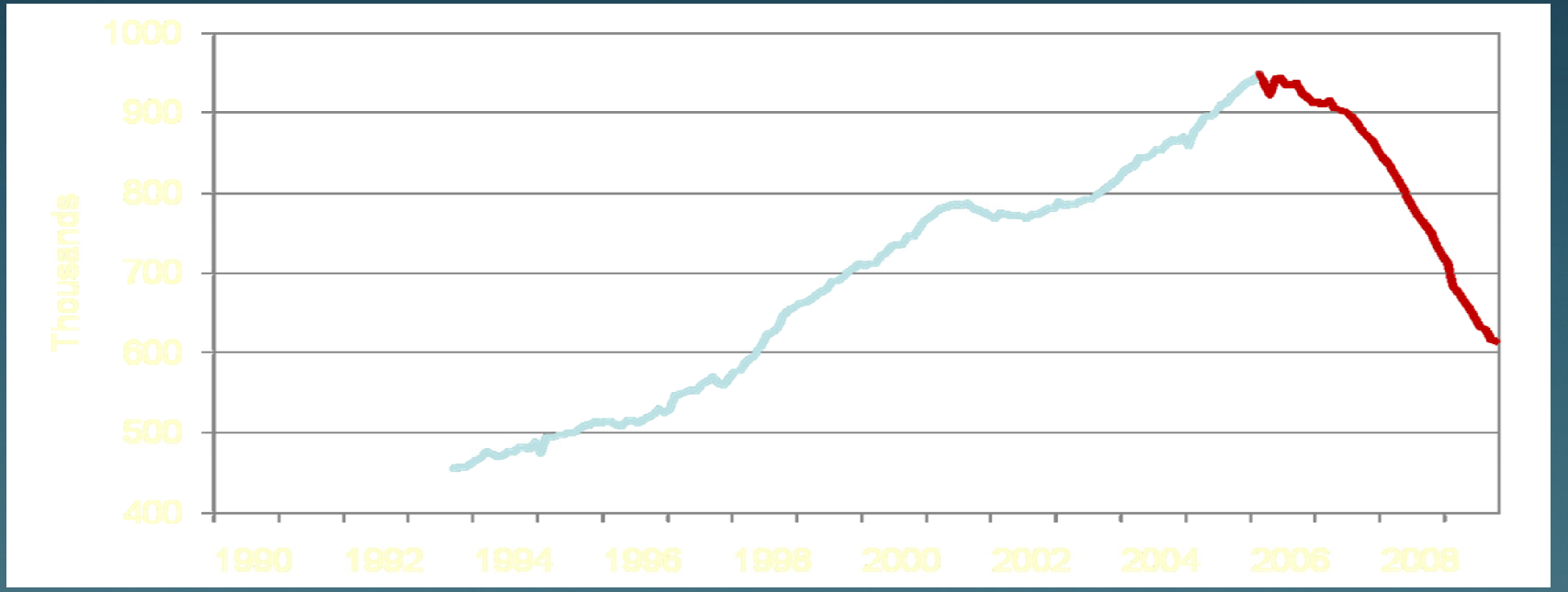
Year	Total
1993	460.9
1994	488.2
1995	513.1
1996	525.1
1997	569.0
1998	657.6
1999	711.7
2000	765.5
2001	772.6
2002	781.3
2003	818.1
2004	870.1
2005	940.1
2006	913.9
2007	856.4
2008	722.6
2009*	614.1

- Preliminary for October 2009

Source: Bureau of Labor Statistics, U.S. Department of Labor

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Employment in California Construction Industry 1993-2008



Source: Bureau of Labor Statistics, U.S. Department of Labor

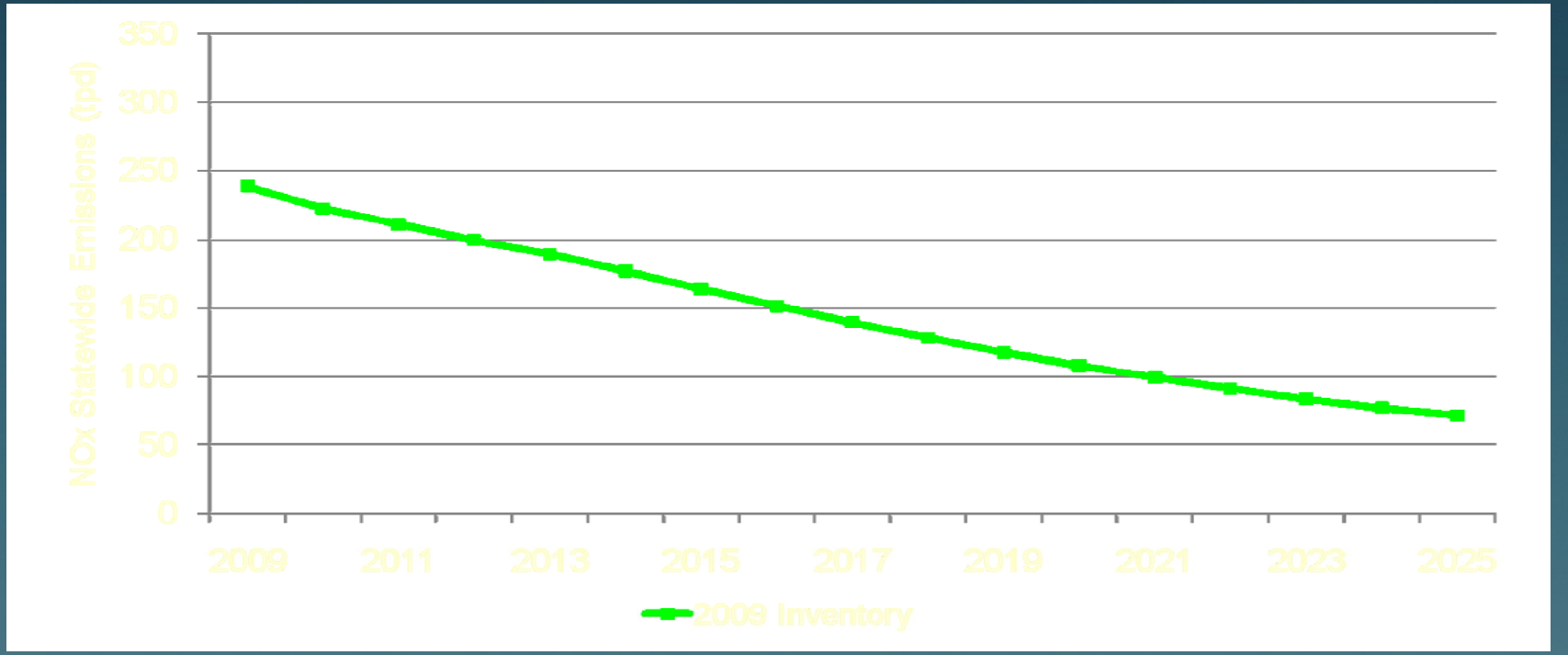
AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

2009 Emissions Inventory for NOx

- Based on DOORS data, OFFROAD model estimates 239.1 tpd in 2009
- OFFROAD model then projects steadily declining rate of emissions through 2025
- Down anywhere from 5.2% to 8.3% per year through 2025
- Down a cumulative total of 70% (to 71.6 tpd) between 2009 and 2025

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	2009 Inventory
2009	239.1
2010	222.5
2011	210.9
2012	199.9
2013	189.3
2014	177.1
2015	163.9
2016	151.5
2017	139.5
2018	128.1
2019	117.6
2020	108.0
2021	99.3
2022	91.1
2023	83.5
2024	77.1
2025	71.6

2009 Emissions Inventory for NOx

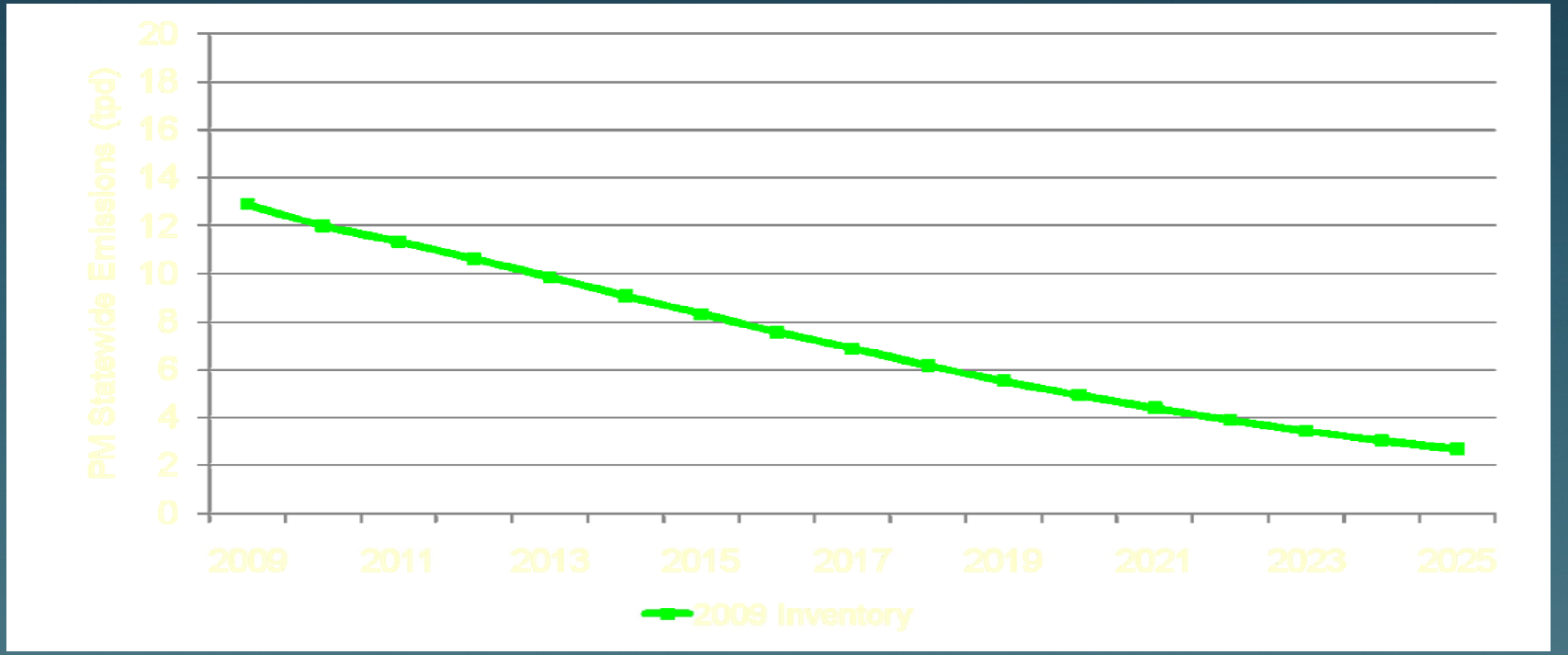


2009 Emissions Inventory for PM

- Based on DOORS data, OFFROAD model estimates 12.9 tpd in 2009
- OFFROAD model then projects steadily declining rate of emissions through 2025
- Down anywhere from 5.3% to 12% through the year 2025
- Down a cumulative total of 79% (to 2.7 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	2009 Inventory
2009	12.91
2010	11.99
2011	11.35
2012	10.61
2013	9.85
2014	9.08
2015	8.32
2016	7.59
2017	6.87
2018	6.17
2019	5.53
2020	4.94
2021	4.41
2022	3.91
2023	3.44
2024	3.04
2025	2.71

2009 Emissions Inventory for PM



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions in each year between 2009 and 2025 on the low side but not terribly wide of the mark
- Originally projected to drop 4.3% to 8% in each year from 2009 to 2025
- Now projected to drop 5.2% to 8.3% drop in each of these years

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions over entire period on the low side, but again, pretty close to the mark
- Originally projected to drop cumulative total of 68.3%
- Now projected to drop cumulative total of 70%

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions between 2000 and 2009 quite wide of the mark
- Originally projected to drop 22.4% (from 419 tpd to 325 tpd) over these nine years
- Actually dropped 42.9% (from 419 tpd to 239.1 tpd) during this period
- 2000 inventory overstated rate of emissions in 2009 by 35.9% (85.9 tpd)

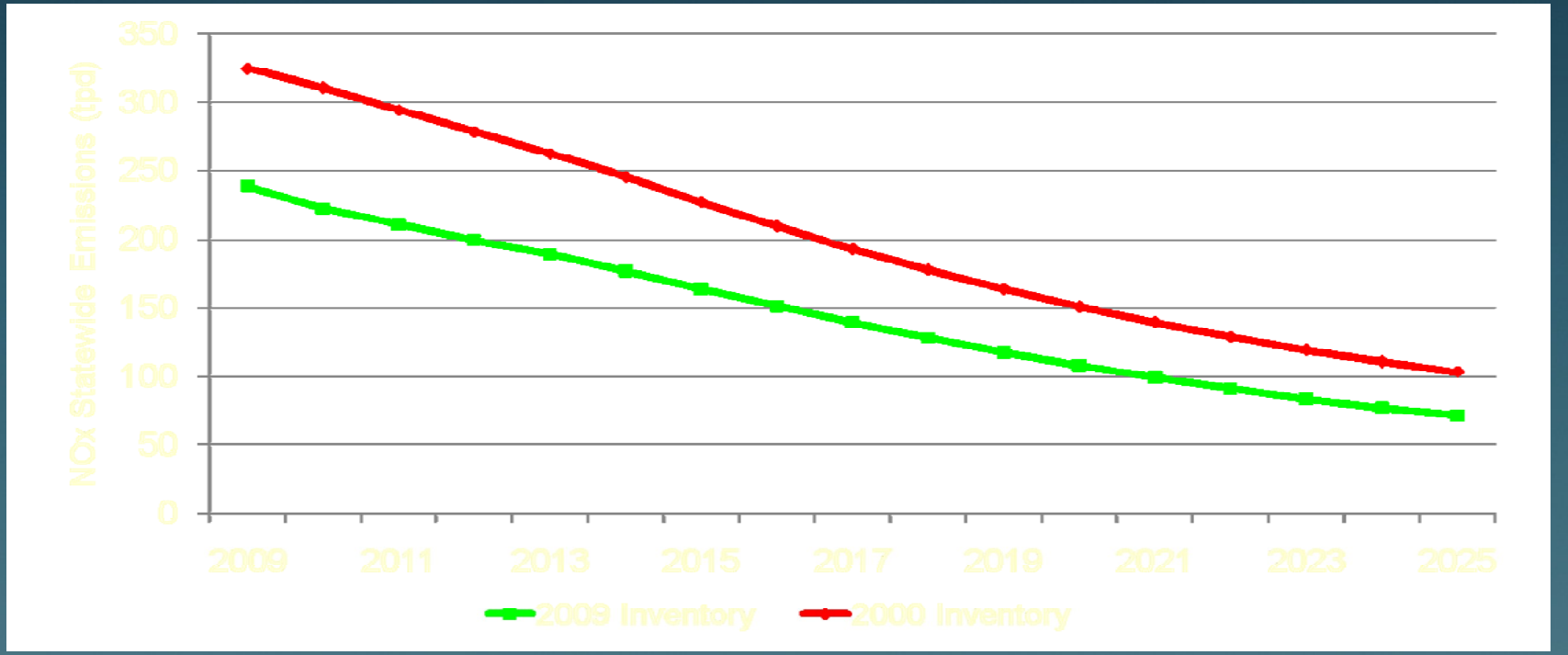
NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Similarities and Differences In the Results for NOx

- 2000 inventory also overstated rate of emissions in each year between 2010 and 2025, and cumulative total of emissions over same period
  - Overstated rate of emissions by 35.9% to 44.1%
  - Overstated cumulative total of emissions by 39.4% (355,000 tons)

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Comparison of Inventories for NOx



Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions in each year between 2009 and 2025 on the low side but not terribly wide of the mark
- Originally projected to drop 4.6% to 10.2% in each year from 2009 to 2025
- Now projected to drop 5.3% to 12% in each of these years

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions over entire period on the low side, but again, pretty close to the mark
- Originally projected to drop cumulative total of 76%
- Now projected emissions to drop cumulative total of 79%

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions between 2000 and 2009 quite wide of the mark
- Originally projected to drop 30% (from 25 tpd to 17.5 tpd) over these nine years
- Actually dropped 48.3% (from 25 tpd to 12.9 tpd) during this period
- 2000 inventory overstated rate of emissions in 2009 by 35.7% (4.6 tpd)

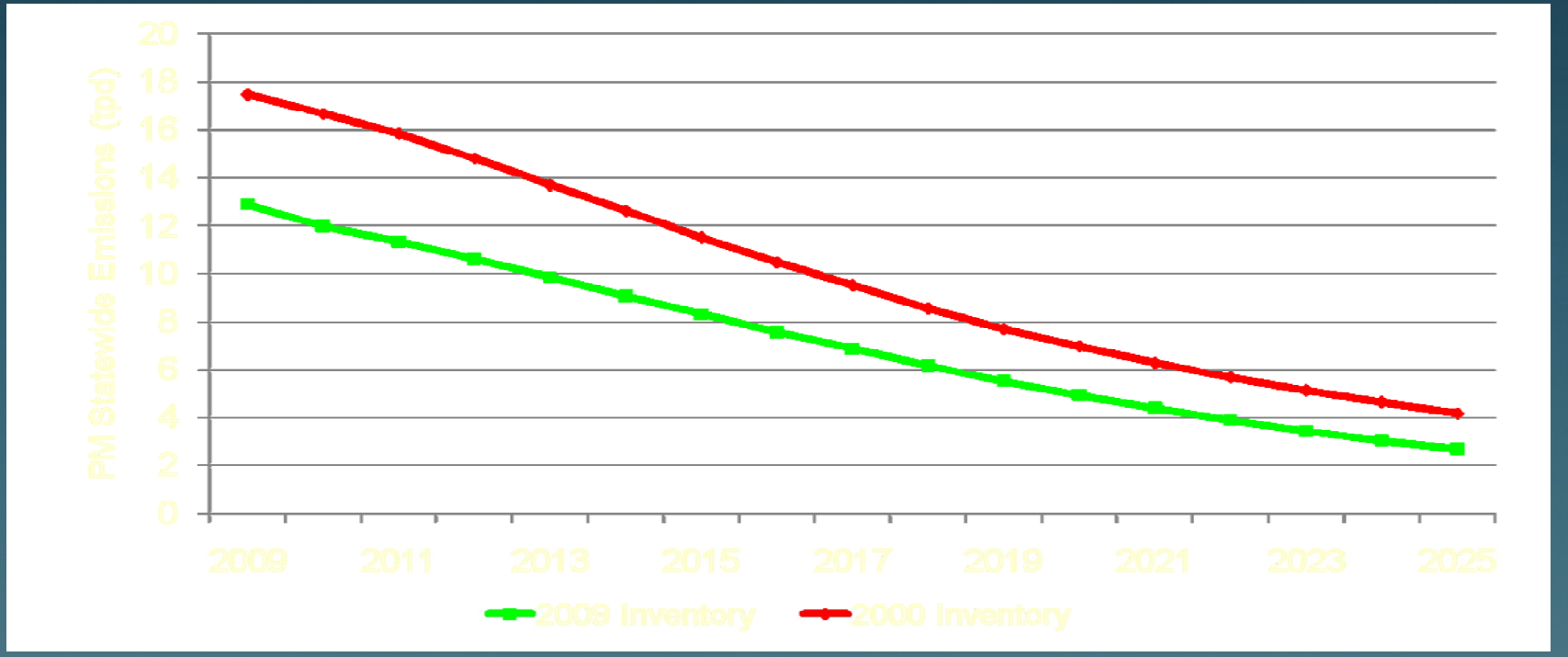
PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- 2000 inventory overstated rate of emissions in each year between 2010 and 2025, and cumulative total of emissions over same period
- Overstated rate of emissions by 35.5% to 53.9%
- Overstated cumulative total of emissions by 40.1% (nearly 18,000 tons).

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Comparison of Inventories for PM



Implications for the Rule

- Legal implications
- Necessary and cost effective?
- Anticipated future emissions?
- Potential adverse health effects?
- Economic feasibility?
- Less costly alternatives that would achieve the same increments of environmental protection within the same timeframe?

Implications for the Rule

The ISOR (in April of 2007):

"Between 2007 and 2009, construction valuation is expected to increase over 10 billion dollars . . . ."

The best evidence currently available:

By the end of 2008, real GDP originating in California's construction industry had already dropped $13B from its peak in 2006.

Implications for the Rule

The ISOR (in April of 2007):

"[T]he California construction industry is expected to add about 8,000 jobs per year from 2006 to 2014."

The best evidence currently available:

At the end of October of 2009, seasonally adjusted employment in the California construction industry was down to its lowest level since June of 1998. It had dropped for 31 consecutive months. The industry had lost 326,000 jobs, or 34.7 percent of its total workforce.

Implications for the Rule

The ISOR (in April of 2007):

"Staff expects many affected businesses would pass through the regulation's costs to their customers. This could be achieved, for example, through higher bids for construction projects . . . ."

The best evidence currently available:

The cost of construction is down. Competition is fierce, and in most cases, bids are significantly lower than owners expected two years ago. According to the U.S. Bureau of Labor Statistics, the cost of construction across the country dropped 7.4% from August of 2008 to August of 2009.

Implications for the Rule

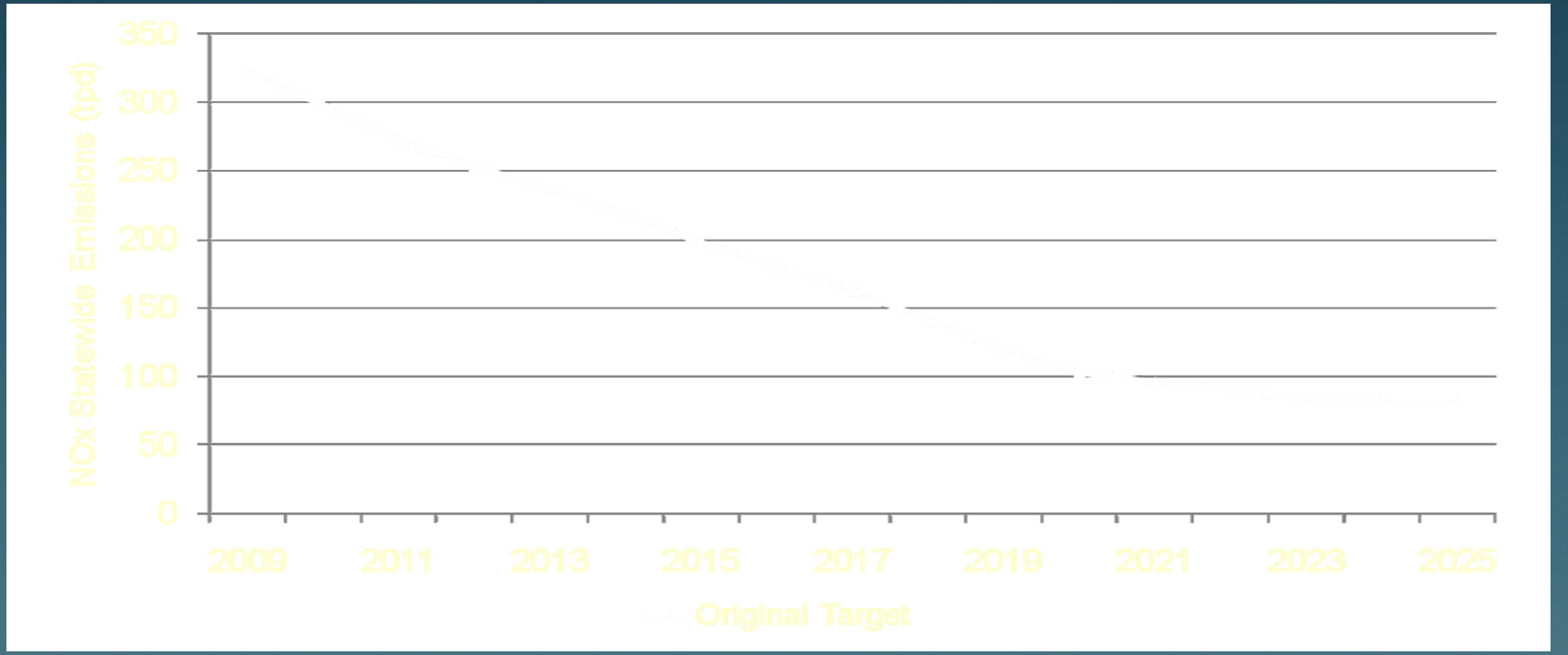
- Core policy questions
- How driven by the data?
- Opportunities that it presents?
- How to stay the course and still reduce the economic burden on a devastated industry?

Original Target for NOx

- Regulation calibrated to drop rate of NOx emissions well below originally expected levels
- Down to 323.3 tpd in 2009
- Down anywhere from 6.0% to 14.9% per year in each of next 14 years
- Down to 83.6 tpd in 2023 and subsequent years
- Down a cumulative total of 73.2% (to 83.6 tpd) between 2009 and 2025

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	Original Target
2009	323.3
2010	298.4
2011	273.3
2012	253.6
2013	236.9
2014	218.8
2015	198.0
2016	179.8
2017	162.5
2018	140.7
2019	119.7
2020	102.9
2021	95.5
2022	89.7
2023	83.6
2024	83.6
2025	83.6

Original Target for NOx

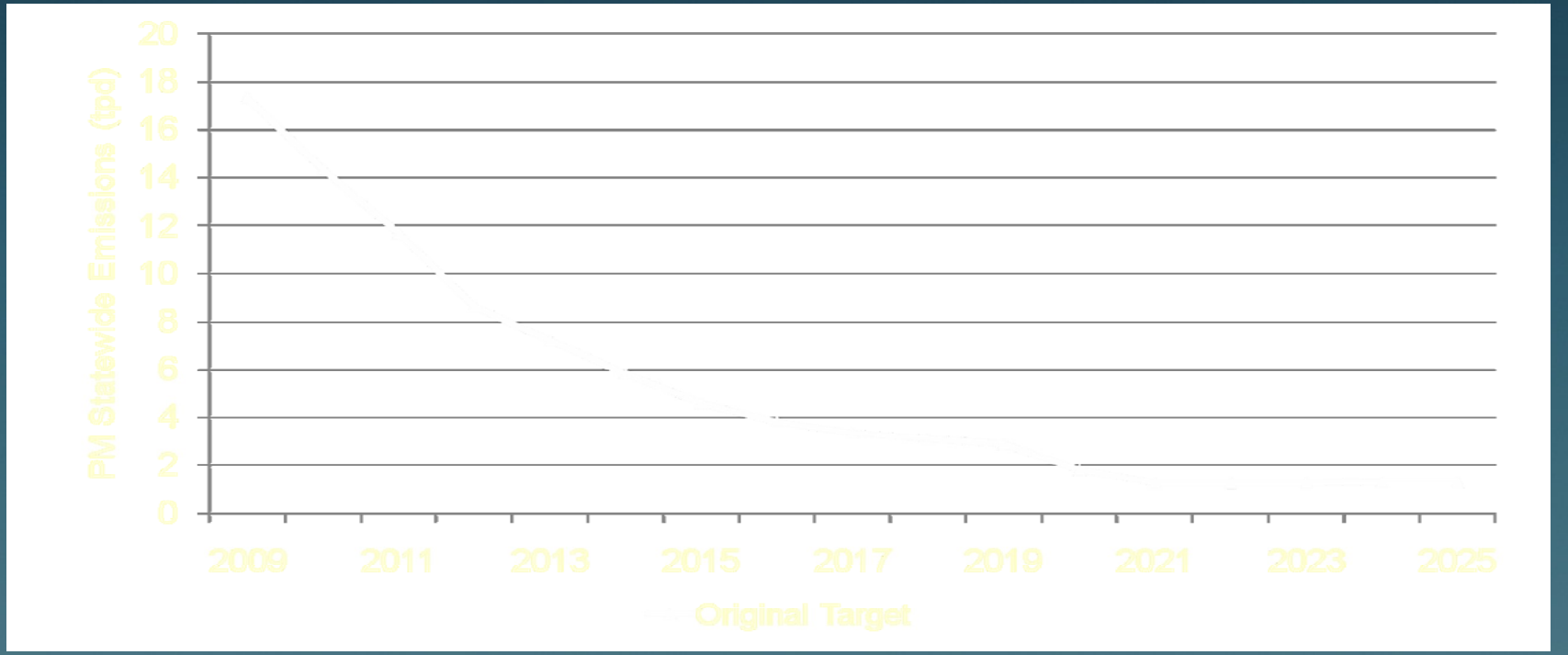


Original Target for PM

- Regulation calibrated to drop rate of PM emissions well below originally expected levels
- Down to 17.34 tpd in 2009
- Down anywhere from 6.6% to 37.3% per year in each of next 12 years
- Down to a low of 1.26 tpd in 2021
- Down a cumulative total of 92.4% (to 1.3 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	Original Target
2009	17.34
2010	14.35
2011	11.69
2012	8.62
2013	7.21
2014	5.84
2015	4.60
2016	3.83
2017	3.34
2018	3.09
2019	2.89
2020	1.81
2021	1.26
2022	1.28
2023	1.29
2024	1.30
2025	1.31

Original Target for PM



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with Original Target

- 2009 projections lower than targeted rates in 14 of 17 years between 2009 and 2025, including first 11 years
- Rate of emissions anywhere from 0.1% to 26% lower, but at least 14% lower in 10 of those 14 years

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	323.3	239.1	-84.2
2010	298.4	222.5	-75.9
2011	273.3	210.9	-62.4
2012	253.6	199.9	-53.7
2013	236.9	189.3	-47.6
2014	218.8	177.1	-41.7
2015	198.0	163.9	-34.1
2016	179.8	151.5	-28.3
2017	162.5	139.5	-23.0
2018	140.7	128.1	-12.6
2019	119.7	117.6	-2.1
2020	102.9	108.0	5.1
2021	95.5	99.3	3.8
2022	89.7	91.1	1.4
2023	83.6	83.5	-0.1
2024	83.6	77.1	-6.5
2025	83.6	71.6	-12.0

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with Original Target

- 2009 projections higher than targeted rates in only three years
- 2020 through 2022

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	323.3	239.1	-84.2
2010	298.4	222.5	-75.9
2011	273.3	210.9	-62.4
2012	253.6	199.9	-53.7
2013	236.9	189.3	-47.6
2014	218.8	177.1	-41.7
2015	198.0	163.9	-34.1
2016	179.8	151.5	-28.3
2017	162.5	139.5	-23.0
2018	140.7	128.1	-12.6
2019	119.7	117.6	-2.1
2020	102.9	108.0	5.1
2021	95.5	99.3	3.8
2022	89.7	91.1	1.4
2023	83.6	83.5	-0.1
2024	83.6	77.1	-6.5
2025	83.6	71.6	-12.0

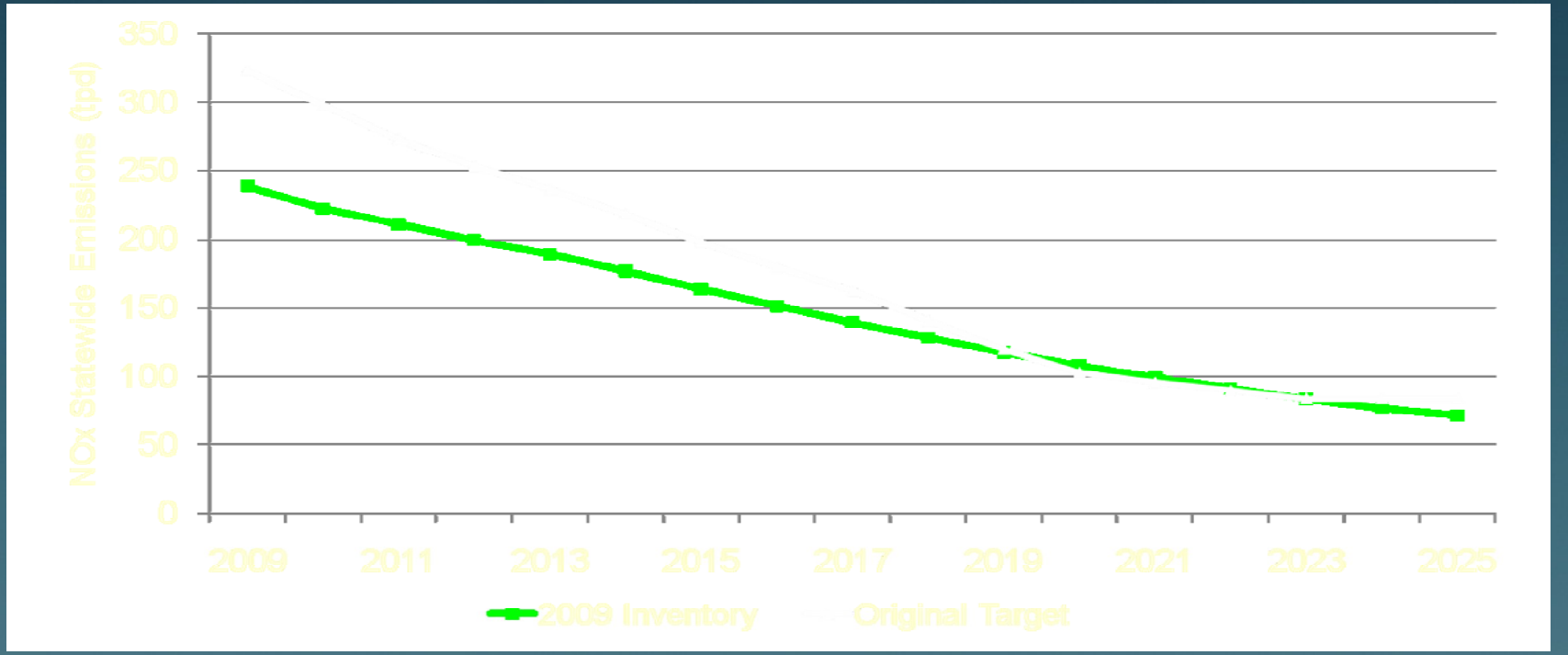
How 2009 Inventory for NOx Compares with Original Target

- Reductions still needed to meet targeted rates for those years are small fraction of reductions originally thought necessary
- Between 3.6% and 10.6%

NOx Emissions from Regulated Fleets (Tons Per Day)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-1.7	0.0
2010	-12.6	0.0
2011	-21.4	0.0
2012	-25.0	0.0
2013	-25.8	0.0
2014	-27.2	0.0
2015	-29.5	0.0
2016	-30.0	0.0
2017	-30.8	0.0
2018	-37.2	0.0
2019	-44.3	0.0
2020	-48.0	-5.1
2021	-44.1	-3.9
2022	-39.1	-1.4
2023	-35.7	0.0
2024	-27.1	0.0
2025	-19.6	0.0

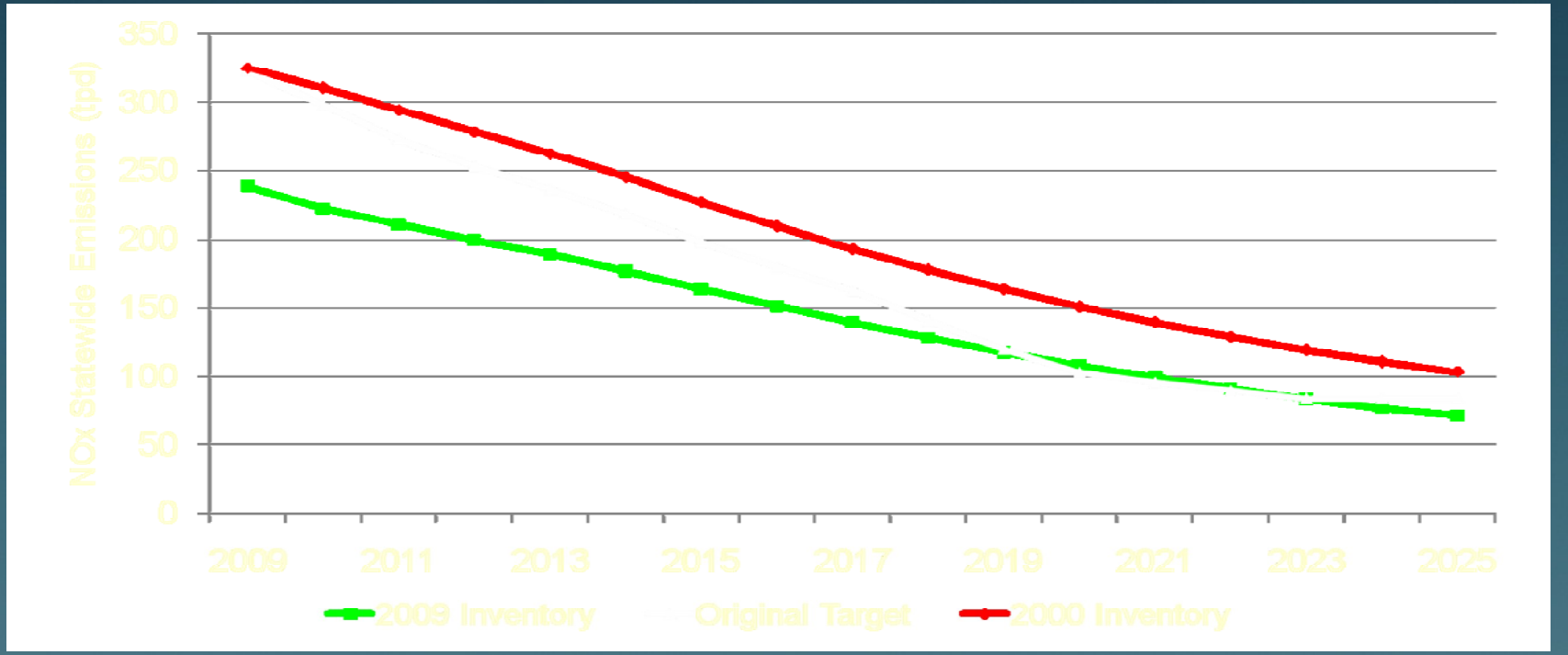
AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with Original Target



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with 2000 Inventory and Original Target



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions

- 2009 projections lower than targeted total of cumulative emissions in each and every year and in the aggregate
- 16.1% (173,000 tons) below targeted total by 2025

Cumulative NOx Emissions From Regulated Fleets (Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	118.0	87.3	-30.7
2010	226.9	168.5	-58.4
2011	326.7	245.5	-81.2
2012	419.2	318.4	-100.8
2013	505.7	387.5	-118.2
2014	585.6	452.1	-133.5
2015	657.9	512.0	-145.9
2016	723.5	567.3	-156.2
2017	782.8	618.2	-164.6
2018	834.1	665.0	-169.1
2019	877.9	707.9	-170.0
2020	915.4	747.3	-168.1
2021	950.3	783.6	-166.7
2022	983.0	816.8	-166.2
2023	1,013.5	847.3	-166.2
2024	1,044.0	875.4	-168.6
2025	1,074.6	901.6	-173.0

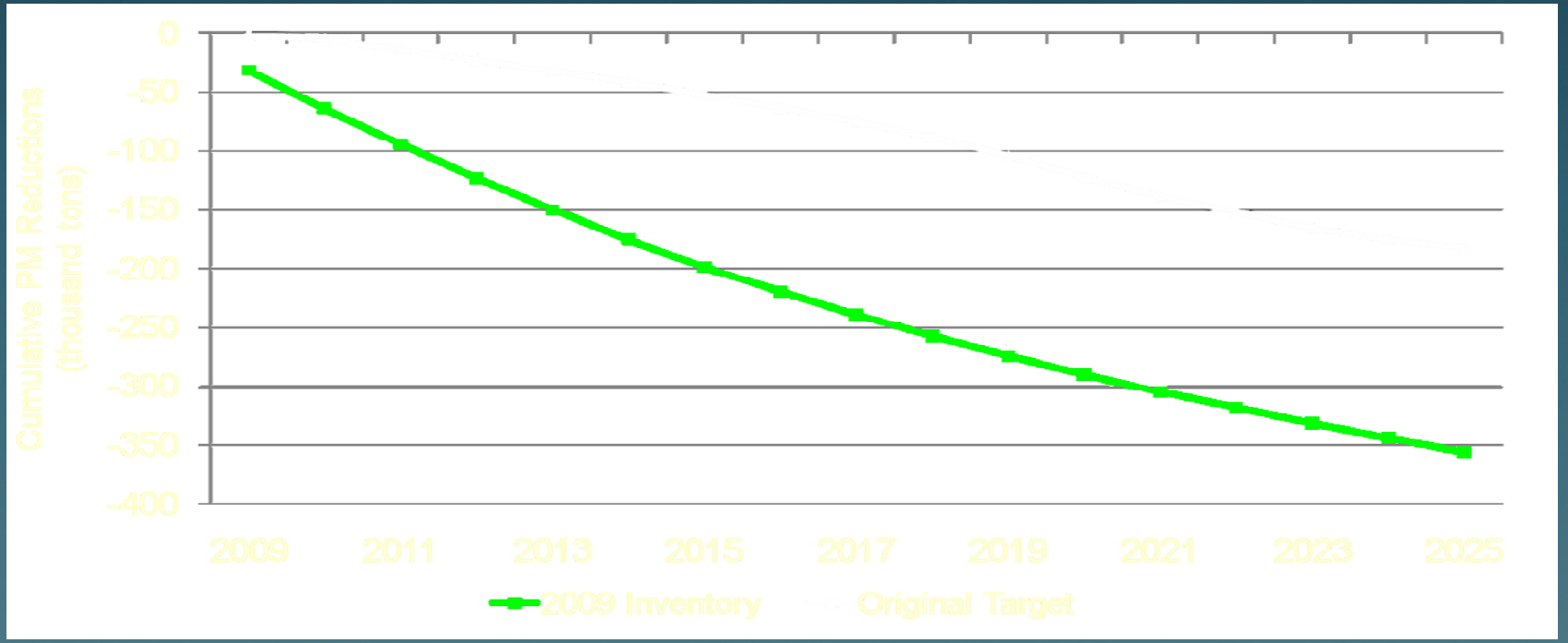
How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions

- Literally nothing needed to achieve targeted total of cumulative emissions for NOx

Cumulative NOx Emissions From Regulated Fleets (Cumulative Thousands of Tons)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.6	0.0
2010	-5.2	0.0
2011	-13.0	0.0
2012	-22.2	0.0
2013	-31.6	0.0
2014	-41.5	0.0
2015	-52.3	0.0
2016	-63.3	0.0
2017	-74.5	0.0
2018	-88.1	0.0
2019	-104.2	0.0
2020	-121.7	0.0
2021	-137.8	0.0
2022	-152.1	0.0
2023	-165.2	0.0
2024	-175.1	0.0
2025	-182.2	0.0

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for PM Compares with Original Target

- 2009 projections lower than targeted rate for first three years
- 25.4% lower in 2009
- 16.7% lower in 2010
- 2.9% lower in 2011

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	17.30	12.90	-4.40
2010	14.40	12.00	-2.40
2011	11.69	11.35	-0.34
2012	8.62	10.61	1.99
2013	7.21	9.85	2.64
2014	5.84	9.08	3.24
2015	4.60	8.32	3.72
2016	3.83	7.59	3.75
2017	3.34	6.87	3.53
2018	3.09	6.17	3.09
2019	2.89	5.53	2.64
2020	1.81	4.94	3.13
2021	1.26	4.41	3.15
2022	1.28	3.91	2.63
2023	1.29	3.44	2.15
2024	1.30	3.04	1.74
2025	1.31	2.71	1.40

How 2009 Inventory for PM Compares with Original Target

- 2009 projections still higher than targeted rates for subsequent years

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	17.30	12.90	-4.40
2010	14.40	12.00	-2.40
2011	11.69	11.35	-0.34
2012	8.62	10.61	1.99
2013	7.21	9.85	2.64
2014	5.84	9.08	3.24
2015	4.60	8.32	3.72
2016	3.83	7.59	3.75
2017	3.34	6.87	3.53
2018	3.09	6.17	3.09
2019	2.89	5.53	2.64
2020	1.81	4.94	3.13
2021	1.26	4.41	3.15
2022	1.28	3.91	2.63
2023	1.29	3.44	2.15
2024	1.30	3.04	1.74
2025	1.31	2.71	1.40

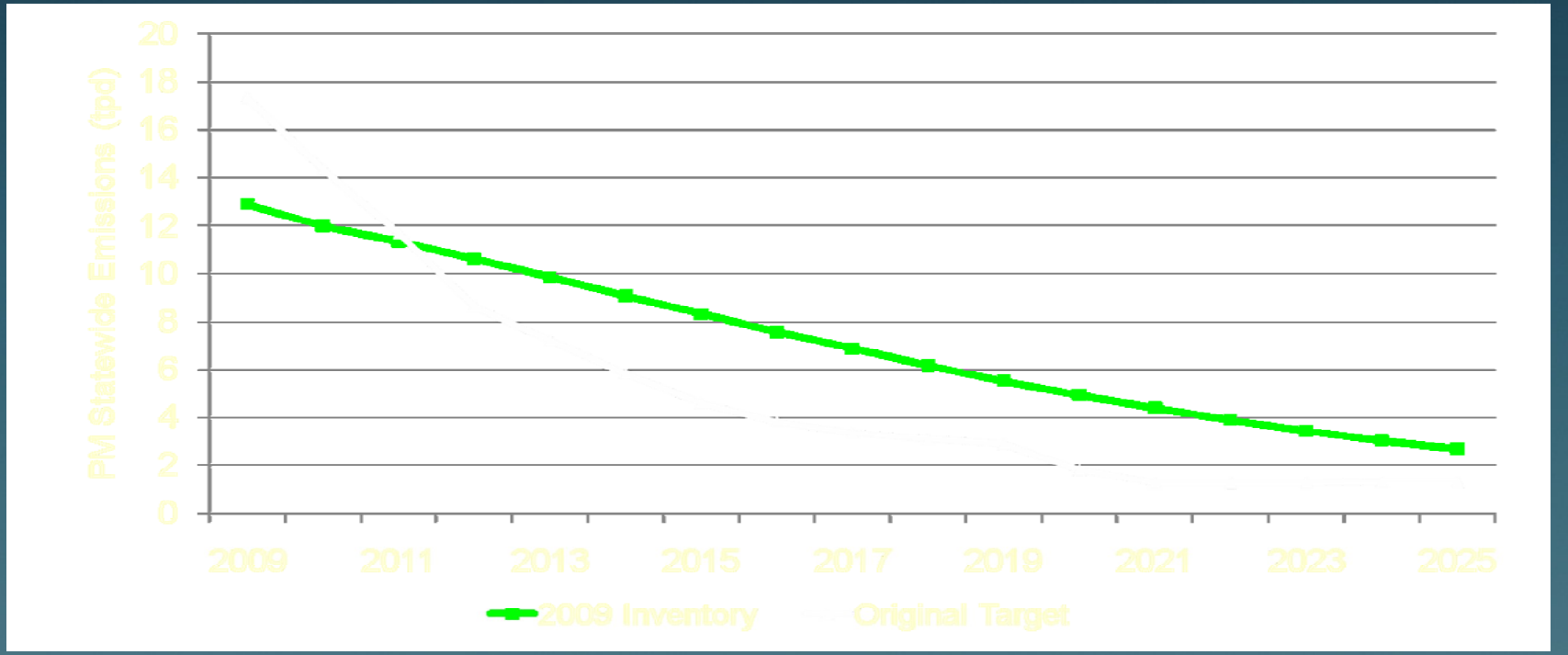
AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for PM Compares with Original Target

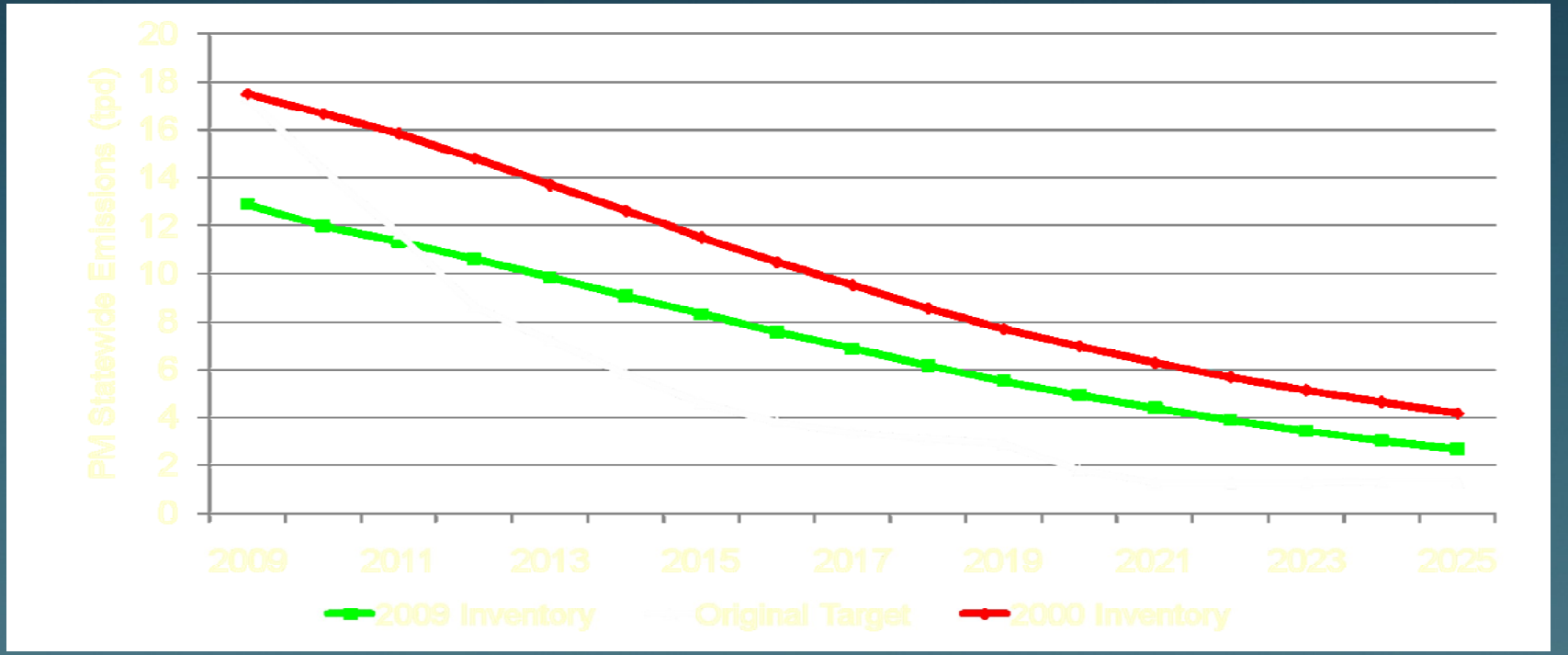
- But again, reductions needed to meet targeted rates are just a fraction of reductions originally thought necessary
- Less than half in 4 of these years
- Just over half (between 50% and 60%) in 8 of these years
- Closer to two-thirds (but never more than 63%) in only 2 of these years

Reductions in PM Emissions From Regulated Fleets (Tons Per Day)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.15	0.00
2010	-2.34	0.00
2011	-4.17	0.00
2012	-6.20	-1.99
2013	-6.50	-2.64
2014	-6.81	-3.24
2015	-6.94	-3.72
2016	-6.64	-3.75
2017	-6.20	-3.53
2018	-5.47	-3.09
2019	-4.83	-2.64
2020	-5.22	-3.13
2021	-5.03	-3.15
2022	-4.41	-2.63
2023	-3.85	-2.15
2024	-3.34	-1.74
2025	-2.86	-1.40

How 2009 Inventory for PM Compares with Original Target



How 2009 Inventory for PM Compares with 2000 Inventory and Original Target



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- 2009 projections lower than targeted total of cumulative emissions through 2013
- 25.6% lower in 2009
- 21.4% lower in 2010
- 16.5% lower in 2011
- 9.9% lower in 2012
- Still 4.2% lower in 2013

PM Emissions from Regulated Fleets (Cumulative Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	6.33	4.71	-1.62
2010	11.57	9.09	-2.48
2011	15.84	13.23	-2.61
2012	18.98	17.10	-1.88
2013	21.61	20.70	-0.91
2014	23.75	24.01	0.26
2015	25.42	27.05	1.63
2016	26.82	29.82	3.00
2017	28.04	32.33	4.29
2018	29.17	34.58	5.41
2019	30.22	36.60	6.38
2020	30.88	38.40	7.52
2021	31.34	40.01	8.67
2022	31.81	41.43	9.62
2023	32.28	42.70	10.42
2024	32.75	43.80	11.05
2025	33.23	44.79	11.56

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- 2009 projections higher than targeted total of cumulative emissions in subsequent years

PM Emissions from Regulated Fleets (Cumulative Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	6.33	4.71	-1.62
2010	11.57	9.09	-2.48
2011	15.84	13.23	-2.61
2012	18.98	17.10	-1.88
2013	21.61	20.70	-0.91
2014	23.75	24.01	0.26
2015	25.42	27.05	1.63
2016	26.82	29.82	3.00
2017	28.04	32.33	4.29
2018	29.17	34.58	5.41
2019	30.22	36.60	6.38
2020	30.88	38.40	7.52
2021	31.34	40.01	8.67
2022	31.81	41.43	9.62
2023	32.28	42.70	10.42
2024	32.75	43.80	11.05
2025	33.23	44.79	11.56

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

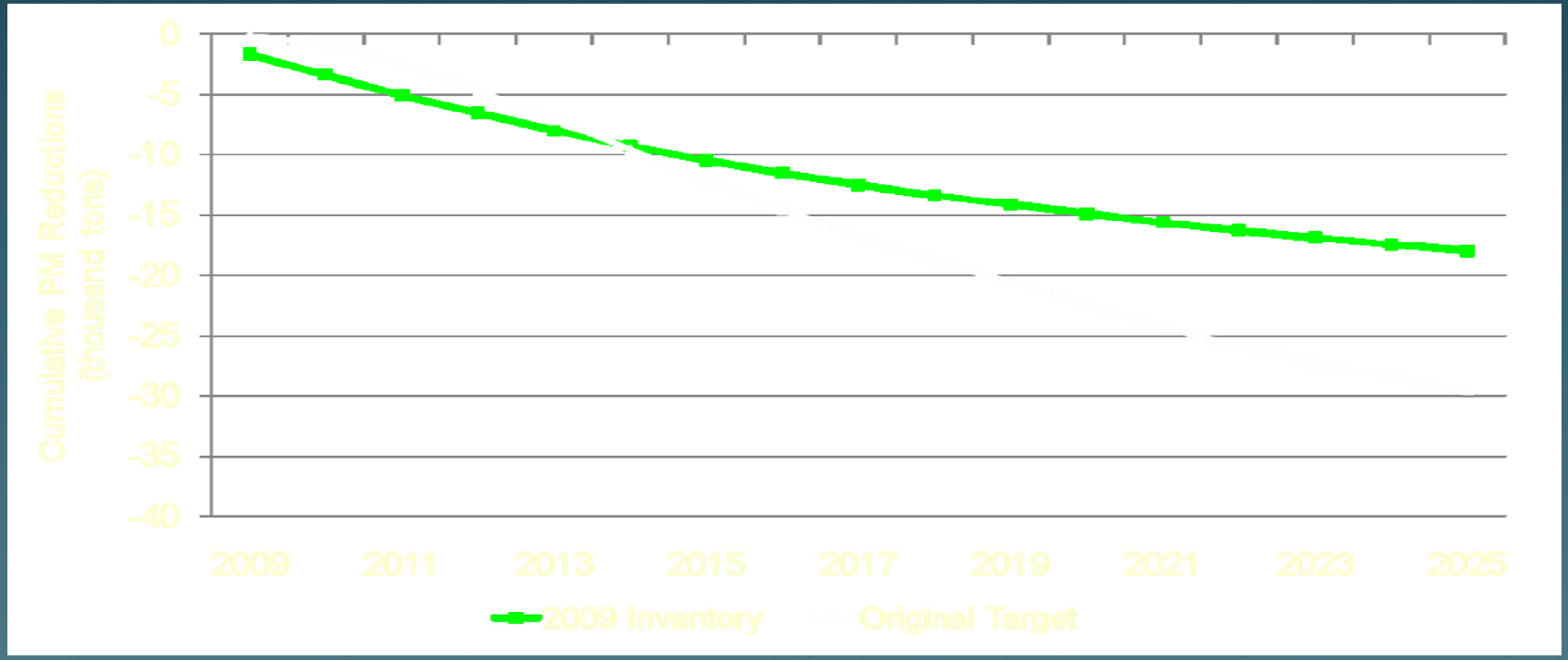
How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- But again, reductions still needed to meet original targets are just a fraction of reductions originally thought necessary
- Less than 3% needed to reach original target in 2014
- Less than one-third needed in each of next five years (through 2019)
- Significantly less than half (below 40%) needed in each of the remaining years

PM Emissions From Regulated Fleets (Cumulative Thousands of Tons)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.05	0.00
2010	-0.91	0.00
2011	-2.43	0.00
2012	-4.70	0.00
2013	-7.07	0.00
2014	-9.55	-0.27
2015	-12.09	-1.63
2016	-14.51	-3.00
2017	-16.77	-4.29
2018	-18.77	-5.41
2019	-20.53	-6.38
2020	-22.42	-7.52
2021	-24.26	-8.67
2022	-25.87	-9.63
2023	-27.27	-10.41
2024	-24.49	-11.05
2025	-29.53	-11.57

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

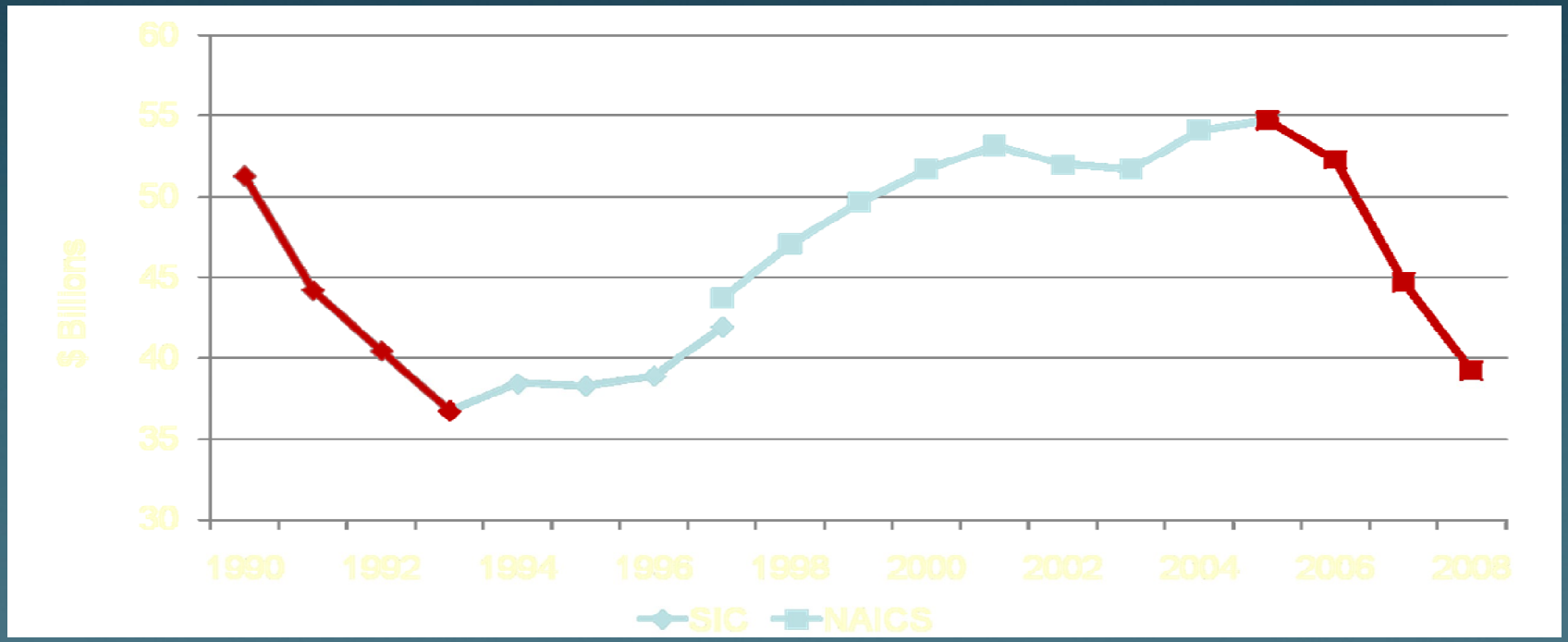


A Final Note on the Outlook for the Construction Industry . . .

- tends to lag behind the rest of the economy
- typically trails rest of economy both into and out of recession
- can take many years to recover from a serious downturn

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Real GDP Originating in California Construction Industry 1990-2008



Source: Bureau of Economic Analysis, U.S. Department of Commerce

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

A Final Note on the Outlook for the Construction Industry . . .

- Current downturn in the California construction industry already worse than 1990 -1993
- Real GDP originating in California construction industry expected to fall again in 2009
- Well into fourth year of declining employment
- Still looking for the bottom

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

A Final Note on the Outlook for the Construction Industry . . .

- Significant impediments to recovery
- huge government deficits
- risk of a collapse in commercial mortgage market
- Business opportunities difficult to identify

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.





Thank you.

Michael E. Kennedy, Esq.
General Counsel
Associated General Contractors of America
2300 Wilson Boulevard, Suite 400
Arlington, VA 22201
Direct: 703-837-5335 Email: kennedym@agc.org