Appendix J

Standardized Regulatory Impacts Assessment
and
Department of Finance Response

Standardized Regulatory Impact Assessment (SRIA)
Proposed Amendments to Truck and Bus Regulation

A. Summary

1. Statement of the Need of the Proposed Amendments (referred to as proposed Amendments)

On December 12, 2008 the Air Resources Board approved the Truck and Bus Regulation (referred throughout as Regulation). The Regulation applies to nearly one million diesel vehicles that annually operate in California with a manufacturer's gross vehicle weight rating (GVWR) greater than 14,000 pounds. This Regulation was designed to reduce exposure to diesel exhaust particulate matter (PM) and to provide nitrogen oxide (NOx) reductions to help achieve attainment with ambient particulate matter and ozone air quality standards. Effective December 14, 2011, the Board approved Amendments that restructured the Regulation in light of the economic recession that had effectively reduced emissions from regulated trucks and buses through lower vehicle activity.

The Regulation requires trucks and buses to meet PM filter requirements starting January 1, 2012, and NOx emission reduction (replacement) requirements starting January 1, 2015. Emissions reductions are achieved through the installation of verified diesel emission control strategies (PM filter) on existing engines; by replacing older vehicles with newer vehicles equipped with cleaner engines; or repowering vehicles with newer, cleaner engines. The Regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks. These options were designed to help provide more affordable compliance pathways for fleets. To assist in meeting these requirements, ARB and local air districts offer a variety of programs that provide grants and loans to help facilitate compliance.

While the 2010 Amendments took into consideration the recession, the trucking and other related industries encountered slower growth than anticipated. The recession, and its adverse effect on business finances, means some small businesses were unable to comply with the Regulation's requirements. Incentive programs providing financing to ameliorate the financial difficulties are almost all over-subscribed and unlikely to have much impact on the regulatory costs. Therefore the cost of compliance without delay would cause an undue burden on these businesses. The proposed Amendments intend to provide flexibility in compliance which would address the issue of financial ability to comply.

The proposed Amendments include the following changes:

- A longer-phase-in period for PM requirements in cleaner rural areas while continuing to ensure compliance with diesel risk reduction program goals.
- Additional time and a lower cost pathway for small fleets to achieve compliance with PM requirements, while re-opening opportunities for these fleets to apply for and receive incentive funding.
- A compliance pathway for owners currently unable to qualify for a loan to finance compliance.
- Adjusted schedules for low-use and vocational trucks that are less cost effective to clean-up and are not competitive in obtaining incentive funding.
- Recognition of fleets that took early action to comply by providing additional useable life for retrofit trucks and reducing near-term compliance obligations.

Compliance with the Regulation can be accomplished in multiple ways. A fleet operator can purchase newer vehicles, install filters, designate vehicle as low-use, downsize, or a combination of the previous to meet the mandated cap. Adding a filter to an older truck, as permitted by the proposed Amendments, becomes a less attractive option, as the annual cost relative to purchasing a used truck becomes higher as the compliance period of a retrofit shortens.

2. **Major Regulation Determination**

The proposed Amendments to the Regulation will exceed $50 million in economic costs through capital cost savings in the year 2015 compared to the existing Regulation. Additional flexibility and cost savings are achieved through a relaxing of the filter requirement for some vehicles and an extended compliance schedule for small fleets, certain rural fleets operating in counties that have made substantial progress towards cleaner air, and certain lower use fleets.

3. Economic Baseline

The existing Regulation requires trucks and buses to meet PM filter requirements starting January 1, 2012, and to upgrade to 2010 engines starting January 1, 2015. The baseline includes the requirements for installation of verified diesel emission control strategies on existing engines; by replacing older vehicles with newer vehicles equipped with cleaner engines; or repowering vehicles with newer, cleaner engines. The prices of PM filter retrofits should remain nominally steady through full implementation, but used truck prices will decline over time.

4. Public Outreach and Input

Staff conducted a series of statewide workshops and meetings to solicit comments from affected stakeholders regarding the proposed Amendments to the Truck and Bus Regulation. The affected businesses extensively participated in the workshops throughout the state and were supportive of delaying some of the compliance requirements as developed in the proposed Amendments. ARB continues to offer comprehensive outreach to assist and educate fleets on actions needed to comply with diesel fleet Regulations, and the financial incentive programs that are available.

B. Benefits:

Total savings from the proposed Amendments to the Regulation are a little over $400 million from 2015 to 2025. The expenditure reductions would result from the proposed Amendments, of which over $375 million is from postponed capital investments and lower cost of replacement trucks and approximately $25 million in maintenance cost reductions. The proposed Amendments would lower the overall cost of the Regulation by about 20 percent. The estimated annual costs are from deferring truck replacement or PM retrofits by a few years and the changes in the associated annual operating cost.

1. Individuals

The Regulation will not directly affect individual consumers. However, to the extent that any potential savings are passed on to the consumers, individuals may also benefit from the proposed Amendments.

2. Businesses

The proposed Amendments to the Regulation would affect about 60,000 fleets in such industries as for-hire transportation, construction, agriculture, manufacturing, retail and wholesale trade, truck leasing and rental companies, truck dealerships and truck maintenance firms, and bus lines. Of these affected businesses ninety percent are small businesses owning

10 trucks or less. Fleets with less than 10 heavier trucks that qualify for an amended option such as Work Trucks, NOx Exempt Area, Agricultural Mileage Exemption, Low Use exemption may see changes; all other fleets will see no change due to the proposed Amendments. For example, a typical fleet with 10 Low Mileage Construction Trucks in the adopted Regulation would be able to defer the PM filter requirement on 3 vehicles from 2015 to 2017 and on 4 vehicles from 2016 to 2018. If the PM filter cost is $18,000, the cost would be around $4,300 lower. However, if the owner planned to buy used trucks to comply, his cost reduction will be the money he saves by postponing the purchase of replacement trucks by two years and his replacement trucks could also be lower because they could be two years older. Similar larger companies would have similar effects per truck. These companies are larger by approximately a factor of 10 and should see 10 times the benefits as their smaller counterparts.

Table 1. Cost Savings Due to the Proposed Amendments to the Truck and Bus Regulation Calculations for A Small Business Owning 10 Trucks (Example)

Calendar Year	2015	2016	2017	2018	2019	Total Cost
Current Retrofit Requirement	33%	66%	100%			
Total Retrofits	3	4	3			
Retrofit Cost in 2014 Dollars	$54,000	$72,000	$54,000			$180,000
Maintenance Cost in 2014 Dollars	$1,500	$3,500	$5,000	$5,000	$5,000	$20,000
Reporting Cost in 2014 Dollars	$100	$100	$100			$300
						$200,300
Proposed Retrofit Requirement	33%	40%	60%	80%	100%	
Retrofits Required	3	1	2	2	2	
Retrofit Cost in 2014 Dollars	$54,000	$18,000	$36,000	$36,000	$36,000	$180,000
Maintenance Cost in 2014 Dollars	$1,500	$2,000	$3,000	$4,000	$5,000	$15,500
Reporting Cost in 2014 Dollars	$100	$100	$100	$100	$100	$500
						$196,000
Cost Per Retrofit	$18,000					
Annual Maintenance Cost per Retrofit	$500		**Total Cost Reduction**			$4,300
Annual Reporting Cost	$100		**Reporting Cost Increase**			$200

3. Retrofit Industry

Table 2 shows the number of PM filters expected to be operating each year in the fleet. The number of PM filters installed each year is expected to be lower than with the existing Regulation. Overall, the proposed Amendments are expected to result in installation of 8,420 fewer retrofit PM filters. The lower demand for filter installation and service would potentially result in downsizing of some PM retrofit manufacturers and services providers.

4. Emissions

Because the proposed Amendments would defer and/or relax some requirements for businesses and some small fleets in the near term, staff projects there would be a temporary delay in emission benefits, until 2020, compared to emission benefits that may have been

achieved absent the proposed Amendments. For instance, the Regulation reduced NO_x emissions in by 14%, whereas the proposed Amendments reduce by 13%. For PM, the reduction from the Regulation was 42%, and the proposed Amendments reduce by 39%. Emissions of diesel PM, and NOx would continue to trend down from today and it would ultimately result in essentially the same projected emissions after 2020.

Table 2. Incremental Changes in the Number of Retrofit and OEM PM Filters of the Current Regulation Compared to the Proposed Amendments

	Number of Retrofits		Number of OEM Filters	
CY	Current Regulation	Proposed Amendments	Current Regulation	Proposed Amendments
2015	5,454	0	42,222	19,114
2016	6,031	2,361	45,460	25,088
2017	398	1,102	8,898	11,692
2018	0	0	8,910	19,266
2019	0	0	9,650	10,401
2020	0	0	13,382	55,433
2021	0	0	19,286	11,611
2022	0	0	11,241	6,511
2023	0	0	2,115	2,092
2024	0	0	2,717	2,745
2025	0	0	2,972	2,989

Table 3. Statewide Emission Reductions of the Current Regulation Compared to the Proposed Amendments (tpd)

Year	NOx Reductions		PM2.5 Reductions	
	Existing Regulation	Proposed Amendments	Existing Regulation	Proposed Amendments
2014	57	52	6.0	5.6
2017	83	62	6.1	5.0
2020	63	70	4.2	4.2
2023	95	94	2.9	2.9

C. Costs and Cost Savings

None of the changes by the proposed Amendments would make the Regulation more stringent for the affected business. However, the proposed Amendments reschedule required expenditures to the future years yielding cost savings in some years, and deferred costs to the affected businesses (Tables 2 and 3). The costs and cost savings are amassed by the businesses and not individuals, unless the business is an individual.

1. Individuals

While there are no direct costs on consumers, there may be slight changes in health outcomes as a result of the proposed amendments. However, nearly all the health benefits are preserved while simultaneously providing relief mostly to low-use trucks that operate in the more rural

areas, where less people are exposed to diesel PM. Looking to the justification for the amendments adopted by the Board in 2010, staff estimated that 3,500 premature deaths (2,700 to 4,400, 95 percent confidence interval) would be avoided between 2010 and 2025 by implementation of the amended regulation.

The proposed amendments also would have little impact on the overall emissions benefits achieved; therefore, the health impacts are not expected to change significantly and are within the margin of error of the mortality calculations. As an example, over the life of the regulation, the proposed amendments cumulatively achieve 93 percent of the PM2.5 and NOx benefits, providing similar reductions in premature mortality (3,500 fewer deaths statewide attributable to PM2.5 exposure) as envisioned in the 2010 amendments, valued at billions of dollars in reduced health care costs. The proposed amendments result in an insignificant change in emissions compared to today's existing environmental conditions and would continue to meet the goals that were established when the regulation was initially adopted.

2. Businesses

The proposed Amendments to the Regulation would predominantly affect small businesses owning 10 trucks or less. Table 4 shows the total annual changes in expenditures. The amounts in parantheses are cost savings (reduction in expenditures), the others are costs (increase in expenditures). The cost saving calculations for the small businesses are presented in Table 1. Larger companies considered here tend to be 10 times larger than a small business as measured by truck ownership. The savings due to the amended compliance options can be seen in the following table in years 2015 and 2016, which are then incurred starting in 2017. Additionally, other costs and cost savings are distributed differently year to year based upon the type of truck and the corresponding requirement level and date. The businesses required to comply are throughout the state of California, while all regulated businesses can benefit from the compliance delays, the businesses that have already complied would not be affected. The complying businesses that are not affected are in the sectors listed in Table 6. Many of the low-use trucks that are currently non-compliant operate in rural areas. Counties in the NO_x Exempt Areas benefit from a delay of the initial compliance deadline by one year and delay in the final compliance deadline by four years. The proposed Amendments expand the definition of this NO_x Exempt Areas, adding Amador, Butte, Calaveras, Easter Kern, Inyo, Mariposa, Momo, Nevada, Northern Sutter, and Tuolomne counties; these counties will also get to use the aforementioned compliance delays (in total only about 3,000 businesses of the 60,000 will be using the aforementioned exemptions for the expanded NO_x Exempt Areas).

Table 4. Annual Expenditure Changes Due to the Proposed Amendments of the Truck and Bus Regulation

Year	Changes in Expenditures (Millions)
2015	($621)
2016	($841)
2017	$126
2018	$368
2019	$31
2020	$600
2021	($255)
2022	($78)
2023	$260
2024	$2
2025	$1
Total	($406)

The affected businesses will have ongoing reporting costs of about $100 because the proposed Amendments will require the owner of the affected businesses to file reports with the ARB on average for two years more than the current requirements.

Expenditures Vs. Compliance Costs/Savings

Table 5 shows annual changes in expenditures and compliance costs associated with the proposed Amendments. Expenditures represent changes in total capital costs and on-going costs that occur in each year while compliance costs represent changes in annualized capital costs and on-going costs that occur in each year. Annual expenditures are estimated for the purpose of the economic modeling while compliance costs are calculated for the purpose of estimating the cost-effectiveness. Cost-effectiveness is a ratio of annual compliance costs to annual emissions reductions. Since emissions occur annually, compliance costs need to be estimated on annual basis too in order to make a meaningful comparison of the costs and benefits of a regulation.

Compliance costs are estimated to spread out the costs that do not occur annually over the useful life of equipment using a capital recovery factor (CRF). For this amended regulation, we used a 7 percent discount rate and a useful life of 10 years to calculate the CRF). The 7 percent discount rate includes higher risk premium associated with affected businesses, which are 90 percent small business.

As shown in Table 5, the total expenditures and compliance costs attributed to the amendments are about $406 and $420 million lower in 2014 dollars than the existing regulation.

Table 5: Annual Changes in Expenditures and Compliance Costs Attributed to the Amended Regulation Compared to the Existing Regulation (millions in 2014 dollars)

Year	Change in Expenditures	Change in Compliance Costs
2015	($621)	($49)
2016	($841)	($116)
2017	$126	($107)
2018	$368	($71)
2019	$31	($58)
2020	$600	($5)
2021	($255)	($5)
2022	($78)	($20)
2023	$260	($4)
2024	$2	$13
2025	$1	$4
Total	($406)	($420)

D. Macroeconomic Impacts

1. Economic Analysis Methodology

The REMI model of the California economy was used to assess economic impacts of the proposed Amendments. The annual cost savings and the deferred costs were entered into the model. Multiple sectors are directly impacted: the Ag Forestry industry, Construction, Transportation and Warehousing, Manufacturing and Mining, Wholesale and Retail Trade, and Vehicle Licensing or Rental. The costs and savings were apportioned to these sectors based on truck fleet ownerships in these sectors. Table 6 shows the distribution of the annual costs and savings to the respective sectors.

2. Inputs and Assumptions

The major assumptions for the inputs into the REMI model assessment of the proposed Amendments are:

- The baseline economy grows at rates forecasted by California Department of Finance.
- 10 years of savings and costs were inputted into the model.
- Agriculture, Forestry, Construction, Transportation and Warehousing, Manufacturing & Mining, Other Services, Wholesale and Retail Trade, and Vehicle Leasing or Rental sectors are affected.
- The shares of the costs and cost savings are based on number of fleets affected and remains constant during the 10-year life of the proposed Amendments, as shown in Table 6. .
- The cost savings and costs were adjusted with the appropriate price deflators for the

corresponding impact year.

- Final demand for the sector related to the PM filter manufacturing and retrofitting was adjusted to account for the retrofit delays.

Table 6. The Economic Sectors Affected Cost Savings and Cost Shares

Sector	NAICS	Percentage Share
Agriculture, Forestry, Fishing, or Hunting	11	16
Construction	23	22
Transportation and Warehousing	48-49	27
Manufacturing & Mining	31-33, 21	12
Wholesale and Retail Trade	42, 44-45	15
Vehicle Leasing or Rental	5321	8

3. Impact Assessment Results

i. Competitiveness

When comparing the competitive advantage of businesses outside of California to those in California, no direct impact on competitiveness is projected. The proposed Amendments likely will only result in a positive impact on competitiveness, if any. The businesses identified in the proposed Amendments have indicated that the compliance requirements would negatively impact their ability to achieve the necessary profits to stay in business. The proposed Amendments are designed to provide the flexibility necessary to ensure these businesses are not eliminated. The REMI output suggests the proposal's strategy will be beneficial for California due to a favorable change in the trade balance between California and the rest of the world by about $245 Million.

ii. Job Impacts in California

The proposed Amendments to the Truck and Bus Regulation's compliance requirements may lower immediate demand for trucks and exhaust retrofit devices resulting in the elimination of some jobs associated with PM filter installation and maintenance. There will be no net loss in jobs over the life of the proposed Amendments. The changes in the number of jobs will be an increase in 8,900 in 2016 (highest savings year) and a reduction of about 3,600 in 2020 (the highest expenditure year). The cumulative total from 2015 to 2025 is an increase of about 13,000 jobs.

iii. California Business Impacts

The greater flexibility afforded by the proposed Amendments is expected to either have no change or significantly lower the compliance costs for many businesses. The cost savings from the proposed Amendments could allow some businesses that lacked adequate resources to comply in the short run, to continue their operations. ARB does

not expect any business elimination or creation in California. While some of the truck engine and PM filter retrofit manufacturers will experience lower demand, these manufacturers are not located in California. The businesses installing retrofits would experience lower demand. The affected businesses will continue to operate in California.

iv. Investment and Incentives

The REMI model predicts a change in investment as a result of the proposed Amendments. According to the model, about $250 million will be directed to investment because of the proposed Amendments.

There are several federal, state and local incentive funding programs currently. ARB's portfolio of incentive funding programs includes the Carl Moyer Program (including the Truck Improvement/Modernization Benefitting Emission Reductions (TIMBER) Program), on-road Voucher Incentive Program (including the California Hybrid Truck and Bus Voucher Incentive Project), the Goods Movement Emission Reduction Program (Prop 1B), Lower Emission School Bus Program, and the AB118 Air Quality Improvement Program. ARB also provides a loan assistance program to offer financial opportunities to on-road heavy-duty vehicle owners. While the proposed Amendments provide the opportunity for some businesses to delay compliance, there is no projected impact on available levels of these incentive funding programs. Currently, these programs are oversubscribed; the availability of compliance delays will not affect need or demand for these funds. While some currently qualified applicants, if they choose to delay compliance, may no longer qualify for funding, the current demand for these funds indicate that the funds will be used for other qualified applicants. Additionally, creating a longer compliance period, more applicants may be eligible to comply before their compliance dates. The distribution of funds to particular businesses may occur due to the proposed Amendments, however the overall funding levels will not change. The fiscal impacts should be quite insignificant. We do not believe there will be noticeable other impacts described in this document.

v. Personal Income

The direct and indirect impacts of the changes in the affected economic sectors also suggest a change in personal income: an increase of $500 million in 2016 (highest savings year), and decrease of $160 million in 2020 (highest expenditure year), with a cumulative increase of $950 million.

vi. Gross State Product

An increase in GSP of $830 million in 2016 (highest savings year), and decrease of $310 million in 2020 (highest expenditure year), with a cumulative increase of $1.5 billion.

vii. Incentives for Innovation in Products, Materials, or Processes

While no additional innovations are required to assist the businesses in meeting the current requirements, the proposed multi-year extended compliance timeframe may provide incentives for innovation in the manufacturing of heavy trucks to reduce PM and NOx during the interim years. Any incentives for innovations will likely be isolated to the hybrid market, and a potential increase in offerings of hybrid trucks may result. The Regulation gives credit to fleets that purchase a hybrid truck by exempting a non-complying truck. This incentive could promote innovation in the affected fleets.

4. Summary and Interpretation of Economic Impacts

These proposed Amendments will likely improve the California economy. Significant increases in Gross State Product and personal income lead to positive impacts throughout the economy. The later compliance costs enables businesses to compete and preserve job opportunities. The increased flexibility predominantly benefits small businesses, which represent 90% of the impacted businesses.

E. Alternatives

ARB staff believes there is only one reasonable alternative as explained below. One other alternative was submitted to the ARB but was deemed unreasonable. It proposed to exempt all trucks with annual driving miles of less than 65,000. The average affected truck by the Regulation drives about 40,000 miles per year. This proposed alternative would exclude more than half of the trucks currently regulated. The exclusion would make the proposed alternative unreasonable because the Federal SIP commitments would not be met.

1. Alternative 1

The first alternative proposed is to exempt all trucks with annual driving miles of less than 65,000.

i. Costs and Benefits

The compliance costs would be significantly cheaper for the businesses, however the benefits would be reduced dramatically. The cost savings would likely be in the hundreds of millions; this is because they would incur the cost savings, but not have to expend the money in the later years (this would be similar to the cost savings presented in table 4, years 2015 and 2016, and these same businesses not expending in 2017 and onward). This is because the majority of the trucks in the Regulation and the proposed Amendments drive less than 65,000 miles, and would therefore never have to comply. Additionally, the health impacts would be significant; this is because ARB would not meet the standards and emissions would remain at poor levels.

ii. Reason for Rejecting

The average affected truck by the Regulation drives about 40,000 miles per year. This proposed alternative would exclude more than half of the trucks currently regulated. The exclusion would make the proposed alternative unreasonable because the Federal SIP commitments would not be met.

2. Alternative 2

Stakeholders recommend that trucks in the attainment areas be exempted from the PM filter requirements of the Regulation as long as they remain in the attainment area, and that they be subject to annual smoke testing so that normal attrition would bring those fleets into compliance. These tests are currently used for fleets with three or more trucks, and this alternative suggests that the requirement be expanded to fleets with less than three trucks, with a no filter requirement. Opacity tests are designed to be simple tests to detect an engine problems but do not reduce emissions of a properly operating engine.

i. Costs and Benefits

This would cost less for each business as the Smoke tests are less expensive than a filter, however, for those trucks that cannot pass, they would still require a filter (after repairs are attempted). These businesses would only have to incur an approximately $50 test each year, and whatever repairs were required to meet the standards. These costs are difficult to quantify because they vary based upon the level of repair required, if any. These savings would be similar to the ones presented in the first alternative (and the health and emission impacts as well). Smoke tests cannot achieve PM reductions like a PM filter can. PM filters have been proven to reduce exhaust emissions by 99 percent, whereas smoke testing removes none.

ii. Reason for Rejecting

This alternative was rejected because smoke testing is not sufficient to meet the goals of the Diesel Risk Reduction Plan and does not adequately reduce exposure to diesel PM.

F. Fiscal Impacts

1. Local Government

The proposed Amendments do not affect local government.

2. Air Resources Board

There may be slight increases in staff hours required to complete the record-keeping requirements. These slight adjustments are projected to be absorbed into existing budgets.

3. Other State Agencies

There is no projected impact on other state agencies.

DEPARTMENT OF FINANCE

EDMUND G. BROWN JR. ▪ GOVERNOR

915 L STREET ■ SACRAMENTO CA ■ 95814-3706 ■ WWW.DOF.CA.GOV

February 28, 2014

Fereidun Feizollahi, Manager
Economic Studies Section, Research Division
Air Resources Board
Sacramento, CA

Dear Mr. Feizollahi:

Government Code section 11346.3 and California Code of Regulations, title 1, sections 2002 and 2003 require an agency promulgating major regulations to prepare and submit a Standardized Regulatory Impact Assessment (SRIA) to the Department of Finance (Finance) for comments. Finance must provide its comments on the SRIA regarding whether that SRIA adheres to Finance's regulations. The agency must summarize and respond to Finance's comments, and include them with the notice of proposed action it files with the Office of Administrative Law.

California Code of Regulations, title 1, section 2002(a)(1) requires that a SRIA be submitted to Finance not less than 60 days prior to the filing of a notice of proposed action with the Office of Administrative Law. We recognize that the full extent of the economic impact did not become clear until the Economic Impact Assessment was almost complete, and we appreciate you letting us know as soon as you realized the proposed trucking regulation amendments would meet the standard of a major regulation. To prevent this situation from recurring in future regulations, we are available to consult regarding estimated economic impacts.

As the regulation extends the time and gives additional flexibility to the trucking industry to comply with air quality regulations, we concur that reduced expenditures of at least $621 million will accrue to the regulated trucking businesses in 2015 as a result of this proposed regulatory amendment. This SRIA fulfills all the requirements set forth in Finance regulations, and we broadly agree with its conclusions. However, we have some suggestions that may provide a more complete discussion of the issues raised by the regulations.

There could be a section added on differences in calculated impacts using discounted amounts and the methodology required by Finance's regulations, which requires an examination of annual disaggregated impacts. We understand that for some of ARB's other regulatory requirements, discounted amounts are needed. However, this may be confusing for readers if there are different numbers presented in the SRIA and other regulatory material. The two approaches also show different aspects of the trade-offs, and it would be valuable to discuss both within the SRIA.

Discussion of the two alternatives would benefit from more thorough modeling of the effects. Ideally, investigation of the alternatives would include the same level of analysis that was applied to the proposed major regulation. If advance consultations had been possible, we would also have recommended alternatives be chosen to illustrate the trade-offs on both sides. Both alternatives discussed are less costly to industry, but do not have adequate air quality benefits. It would have been instructive to investigate an alternative that was more costly to industry but better for air quality. Additional public outreach in the future could aid in identifying a wider scope of alternatives.

The analysis would also have benefited from a more thorough discussion of the health impacts. When the regulation was initially promulgated, the main trade-off was between the health impacts of cleaner air and costs to industry. The SRIA discusses changes to industry costs, but does not discuss the decreased health benefits with as much detail. Some evidence is provided that the changes will be marginal. Cross-references to the calculations in the original regulatory material could also be provided for readers interested in these aspects.

We hope that our comments provide sufficient guidance for you to revise your analysis if necessary and for future analyses. Please let us know if you have any questions regarding how our comments should be summarized when submitting your regulatory package to OAL as required. Again, we appreciate your willingness to work with Finance to ensure that the SRIA provides information regarding the economic impact of the proposed regulations for the public and policymakers.

Sincerely,

Irena Asmundson
Chief Economist

cc: Ms. Panorea Avdis, Governor's Office of Business and Economic Development
Ms. Debra Cornez, Director, Office of Administrative Law
Mr. Michael Fitzgibbon, Air Resources Board
Mr. Reza Mahdavi, Air Resources Board
Ms. Chantel Crane, Air Resources Board

Note: Today's existing environmental conditions referenced to in this appendix includes the existing regulation.