June 19, 2007 *Via* e-mail

California Air Resources Board
1001 I Street
Sacramento, California 95814
Attn: Alexa Malik, Clerk of the Board
http://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=sip07&comm_period=N

Subject: Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan; Agenda Item # 07-7-7[1]

Dear Board Members:

The Consumer Specialty Products Association (CSPA) appreciates the opportunity to comment on the Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan (Draft SIP), dated April 26, 2007. The Air Resources Board (ARB) strategy identifies a near-term regulatory agenda to reduce ozone by establishing enforceable targets to develop and adopt new measures for consumer products. When adopted by ARB, these items will be submitted to U.S. Environmental Protection Agency (EPA) as revisions to the California SIP for Ozone.

In the Proposed SIP, ARB commits to promulgate new regulations for consumer products in two phases. The first phase of regulations would be adopted in 2008, with new standards implemented by 2010. The second phase of regulations would be adopted between 2010 and 2012, with new limits effective by 2012-2014. These two measures combined would seek to obtain 30-40 tons per day in statewide VOC reductions by 2014 (12.9 tons per day in South Coast and 3.2 tons per day in the San Joaquin Valley).[2]

On March 30, 2007, CSPA submitted to ARB extensive written comments on the Draft Proposed SIP released for comment on January 31, 2007. We ask that those comments be included in the record for this 2007 SIP Revision. CSPA's March 30th comments focused primarily on the Draft ARB SIP, but also addressed the Proposed Modifications to the Draft South Coast Air Quality Management Plan (AQMP), whose additional measures present grave concerns to CSPA and its members. The District's AQMP incorporates commitments for additional reductions in VOCs in consumer products found in the ARB's Proposed 2007 State Strategy for the California SIP, but also proposes to include very significant additional consumer product VOC reduction commitments among the District measures. CSPA continues to believe that these additional reduction commitments proposed by SCAQMD exceed the District's legal authority and are infeasible and unnecessary. The South Coast Draft Final AQMP released in May and adopted by the District on June 1 continues to include these consumer products measures. Since ARB adoption of the South Coast AQMP has been deferred, however, we will focus these comments only on the Proposed State Strategy released April 26, 2007.

[1] The Proposed 2007 State Strategy for the California State Implementation Plan and related materials are posted on the ARB's web site at: http://www.arb.ca.gov/planning/sip/2007casip.htm.

[2] *See* Proposed 2007 State Strategy for the California SIP, pages 64 and 129-130.

STATEMENT OF INTEREST

CSPA is a voluntary, non-profit national trade association representing approximately 260 companies engaged in the manufacture, formulation, distribution, and sale of chemical specialties products for household, institutional, commercial and industrial use. CSPA member companies' wide range of products includes home, lawn and garden pesticides, antimicrobial products, air care products, automotive specialty products, detergents and cleaning products, polishes and floor maintenance products, and various types of aerosol products. These products are formulated and packaged in many forms and are generally marketed nationally.

During the past 18 years, the ARB has promulgated seven comprehensive sets of regulations that set nearly 200 emission standards affecting more than 80 categories of consumer products. Since 1989, CSPA and the consumer products industry have worked cooperatively with ARB staff to do our part in helping improve California's air quality through reductions in the volatile organic compound (VOC) content of consumer products, while maintaining beneficial and effective products. Two of those rulemakings, in 2004 and 2006, were promulgated in response to the 2003 California SIP, under Measures CONS-1 and CONS-2.

As a result of the ARB's actions to date, significant reductions have been made. According to the Draft SIP, "Without these actions, [VOC] emissions from these products would be roughly 60% greater in 2010."[3] This is a remarkable achievement. CSPA applauds the significant progress that the ARB, working with the consumer products industry, has made in improving California's air quality. To achieve these mandated reductions, the consumer products industry has spent many hundreds of millions of dollars to reformulate its products to meet the ARB's stringent technology-forcing standards. These efforts continue today as CSPA member companies work toward complying with recently adopted VOC limits that are coming into effect over the next few years. CSPA hopes to continue to work with the ARB as it implements commercially and technologically feasible and necessary standards to achieve further reductions in VOC emissions while maintaining our industry's ability to supply effective products that also contribute to the health, safety, and quality of life for all California residents.

COMMENTS

I. Comments on the Proposed Consumer Products Measures and Reduction Goals

A. 30-40 TPD Represents an Ambitious Goal for Further Reductions by 2014.

Based on the challenges we faced in the two most recent rulemakings in 2004 and 2006 in seeking to achieve reductions of VOC emissions of approximately five and ten tons per day, respectively, we cannot help but be concerned about the feasibility of achieving 30 to 40 tons per day in new regulations over the next five years. Additional reductions that are both feasible and cost effective are becoming increasingly difficult to identify. This fact is directly recognized in the Draft SIP in a statement that the ability to get further reductions in consumer product VOC emissions is "waning."[4]

[3] Proposed 2007 State Strategy for the California SIP, page 40.
[4] *Id.* at page 129.

Seeking to meet these new reduction goals will require ARB to re-regulate dozens of consumer product categories that have already been regulated, sometimes two or three times since 1990. Most of these product categories were regulated in the ARB's two Midterm Measures in 1997 and 2000, with limits coming into effect between 2001 and 2005, and/or in the measures adopted in 2004 or 2006 with limits going into effect 2006 to 2010. These VOC limits were established based on the "maximum feasible reduction" criterion set forth in Section 41712 of the Health and Safety Code. Therefore, CSPA has serious concerns that the ARB and the industry will be unable to identify technologically and commercially feasible reductions of 30-40 tons per day, since this goal is twice the combined amount of reductions achieved in the two most recent rulemakings completed since the 2003 SIP revision.

CSPA is also concerned that when new surveys are conducted, the ARB will once again find that VOC emissions are less than those being projected for many categories due to various changes in products and levels of sales. (This occurred for many categories in the 2001 Consumer Products Survey and the 2003 Consumer and Commercial Products Survey.) Thus, there is a significant probability that it will be very difficult to meet the ambitious reduction goal of 30-40 tons-per-day. We will comment further on inventory issues in the next section.

Although we have strong concerns about the feasibility of these targeted reductions, CSPA will continue to work cooperatively with ARB staff to evaluate the potential for establishing technologically and commercially feasible VOC limits (mass-based or reactivity-based) for currently-unregulated product categories to achieve necessary reductions to meet this SIP commitment. We also urge, however, as we discuss later in these comments, that ARB work with industry to now seek to develop a voluntary reduction program based on an updated Alternative Control Plan (ACP) regulation to contribute toward this reduction goal. CSPA could also support adoption of reactivity-based limits instead of mass-based limits for specific individual product categories in future rulemaking proceedings. Finally, CSPA urges the ARB to consider expanding the current Innovative Product Provision[5] to include an option for using reactivity to allow a change in a product's formulation that would result in equal or lesser ozone impact.

B. The ARB Must Also Make Appropriate Corrections to the VOC Emissions Inventory for Consumer Products.

After the previous comprehensive California SIP revision in 1994, CSPA worked closely with the ARB to implement the significant Mid-Term Measure commitments for VOC emissions reductions from consumer products that were based on the estimated inventory at that time. The Mid-Term Measures were originally aimed at obtaining targeted tonnage reduction goals through a 50 percent reduction in the emissions of consumer products not yet regulated. Comprehensive surveys of various categories of consumer products, both unregulated and already regulated, however, found significantly less VOC emissions than anticipated, especially among unregulated products. This led to the development of two Mid-Term Measures rules that obtained reductions primarily from products that had already been regulated previously by the ARB.

[5] *See* Cal. Code Regs. Title 17, Subchapter 8.5, Article 4, § 94511.

To address this problem, CSPA attempted to work closely with ARB staff between 1999 and 2001 to correct the consumer products inventory. These efforts resulted in only limited success. The work on the 2003 SIP revision and the subsequent ambitious schedule for rulemaking after the 2001 Survey, which supported the CONS-1 rulemaking in 2004, and the 2003 Survey, which supported the CONS-2 rulemaking in 2006, left no time for ARB and industry to work together to correct and update the inventory. We believe that the current inventory continues to significantly overstate the potential impact of consumer products VOCs both on terms of the tonnage emitted and the species profiles that establish the relative reactivity as they relate to ozone formation potential.

Based on our past work on the inventory, CSPA believes that the consumer products VOC emissions inventory significantly overestimates actual VOC emissions associated with consumer products and their impact on ozone formation due to the following factors:

- When consumer product manufacturers reformulate products to meet new VOC limits, they sometimes find ways to formulate below the limit to ensure that they fully comply with ARB's very stringent standards. SIP reduction credits are obtained only for the amount of VOC reduced between the previous survey and the limit. When a new survey is conducted and new limits then set, the credit for the "over-reduction" is lost. This "over-reduction" constitutes additional emission reduction tonnage for which ARB should be able to take credit. (An ACP-based voluntary reduction program, as described later in these comments, might be able to capture some of these reductions on an ongoing annual basis.)

- CSPA data on consumer products sales over the past decade clearly establishes that some of the largest VOC-emissions categories were not growing at a rate equal to population growth. Some of these categories were resurveyed in the recently completed 2001 and 2003 surveys. As these categories continue to be resurveyed over the next few years, lower than projected sales could result in a significant drop in the emissions inventory.

- During all recent surveys, ARB decided to add extra VOC tonnage into each category surveyed to represent unreported products. Each surveyed category was increased by 10 percent or more, depending on how many non-reported products were found on retail shelves. Many of these, however, were products not produced in the survey year, or brands with negligible sales. The two most recent surveys had extremely high levels of participation by marketers of the products surveyed. Inappropriately high "corrections" thereby have resulted in overestimated emissions for many categories.

- CSPA worked with the ARB in 1999 and 2000 to look at the use of low vapor pressure (LVP) hydrocarbon mixtures in consumer products. CSPA studies concluded that there were approximately 20 tons per day used, but virtually all was never emitted due to alternative environmental fates. Nevertheless, we believe that significant tonnage of LVP solvents that do not result in emissions to ambient air are currently in the emissions inventory.

- ARB has yet to correct other categories for alternative environmental fates as well, mostly relating to VOCs that go down the drain and are biodegraded, or are combusted

during use. Full correction for these fates would result in very significant reductions in the consumer products emissions inventory.

- Significant tonnage in the statewide emissions inventory may still consist primarily of miscellaneous categories from the 1990 EPA survey that included products that no longer exist or are duplicated in categories since surveyed by ARB.

- CSPA sought during 1999-2001 to correct a number of errors in the speciation profiles for consumer products, especially those used to characterize hydrocarbon mixtures used as solvents in some products. We were unable to complete a comprehensive review and update of those profiles. We believe that some of the current speciation profiles overestimate the reactivity of the solvents currently used in consumer products.

Another inventory correction issue relates to the manner in which consumer products emissions are projected to future years using population growth projections. The 2003 State and Federal Strategy for the California SIP used a 1.4 percent population growth factor to project growth in the consumer products inventory.[6] The 2003 South Coast AQMP, however, indicated that the following population growth factors should be used for growing emissions in the South Coast: 1.4 percent between 1990 and 2000, 1.2 percent between 2000 and 2010, and 1.0 percent between 2010 and 2025.[7] We remain concerned with this inconsistency, which appeared to indicate that the ARB might be over-estimating the growth of consumer products emissions in future years. The manner in which consumer product emissions growth is projected should be fully reviewed. It is also arguable that the use of many consumer products should ***not*** be expected to increase in exact proportion to increases in the state's population, but could best be projected using other factors, such as housing growth.

CSPA therefore urges the ARB to continue to work with CSPA and other industry representatives to assure that data from past and future surveys, as well as other appropriate scientific data and modeling, are used to correct the consumer products emissions inventory, and to do so in a manner that does not prevent meeting the reduction goals set in this SIP.

C. <u>ARB Staff Should Seek Alternatives to New VOC Limits such as Using the Alternate Control Plan (ACP) as the Basis for a Voluntary Reduction Credit Program for Consumer Products</u>.

As noted earlier, ARB and our industry is finding it harder with each new rulemaking to identify feasible and cost effective further VOC reductions using the traditional command-and-control approach of setting percent-VOC limits. In addition, reactivity-based limits are not appropriate for many categories, and since most categories of consumer products are already of very low relative photochemical reactivity, only very minimal reductions could be achieved.

We therefore urge ARB to evaluate potential alternatives to further command-and-control regulations setting new VOC limits. We believe that ARB could achieve some or all of the

[6] Proposed 2003 State and Federal Strategy for the California SIP, Section III – Consumer Products, Vapor Recovery, and Pesticides, at page III-A-3.

[7] SCAQMD, "2003 Air Quality Management Plan," Introduction, Table 1-1 at pp. 1-5 (Aug. 1, 2003).

reductions targeted for consumer products through voluntary incentive programs that encourage consumer products manufacturers to make continued progress toward emission reductions in California that are verifiable and creditable by the state. There are many potential forms that this type of program could take, but we believe that one potential basis for such a program exists now in terms of the Alternative Control Plan (ACP) Regulation.[8]

CSPA believes that the ACP regulation provides a reasonable incentive for product manufacturers to continue to reduce the VOC content of their products (beyond the applicable category limits). We therefore urge ARB staff to evaluate amendments to and expansion of the current ACP regulation to serve as the basis of a Voluntary Reduction Credit Program for Consumer Products. Specifically, CSPA recommends that the ACP regulation be revised to provide more useful value to the surplus emissions reduction credits (SERCs) that are generated in such plans, for both manufacturers and ARB. Since many of those SERCs are retired, thus creating quantifiable environmental benefits for the State, an expanded ACP could serve as a continuing source of further reduction credits under the SIP. CSPA is willing to work with ARB staff to develop necessary enhancements to the regulation to maximize the number of SERCs that manufacturers would likely generate.

Therefore, CSPA strongly urges the ARB to specifically commit in this SIP that the ARB will continue to evaluate amendments to and expansion of the ACP regulation (or other innovative approaches) that can produce documented additional reductions while providing manufacturers with a reasonable amount of compliance flexibility. The facts clearly demonstrate that the ACP regulation provides an environmental benefit to California by encouraging millions of pounds of excess VOC emission reductions.[9] Thus, it is both reasonable and appropriate for ARB staff to complete the work necessary to expand and enhance this proven market-based incentive as a viable option for achieving the stringent and ambitious emission reductions targeted by 2014.

II. Comments on the Long-term Strategy

A. CSPA Supports the Process Proposed by ARB for Identifying Long-Term Emission Reductions.

In the Proposed SIP, ARB outlines a process to identify potential further "black box" emission reductions between 2014 and 2023 to assure that ozone attainment is reached in the South Coast and San Joaquin Districts. To accomplish this, "ARB staff proposes to take the lead in a coordinated government, private and public effort to establish emission goals for critical emission source categories."[10] CSPA supports the process now proposed for ARB to coordinate a science-based process to determine the best and most cost-effective further reductions to assure ozone attainment in these districts.

[8] Cal. Code Regs. Title 17, Subchapter 8.5, Article 4, §§ 94540-55.

[9] For example, one company has an ACP agreement that has been in force since 1995. During the 10 year period between 1995 and 2005, ARB certified 7,171,747 pounds of excess emission reductions (note: the 2006 emissions reductions have not yet been certified).

[10] Proposed SIP, at page 55

B. ARB Should Consider the Low Ozone Formation Potential of Consumer Products when Evaluating Long-Term Concepts.

In the section on "Potential Long-Term Concepts" for consideration after 2014, one of the "Ideas Requiring Further Exploration" is to "pursue additional emission reductions from consumer products."[11] CSPA urges the ARB to consider the low ozone impact of consumer products when evaluating potential measures to be considered under "Long-Term Strategies."

CSPA strongly supports the overall ozone attainment strategy proposed in the Proposed SIP, which bases attainment on achieving greater reductions of nitrogen oxides **(**NOx). Numerous regional ozone modeling studies in recent years, in California and elsewhere, have provided clear and convincing evidence that the low ozone levels needed for the new ozone standard can only be attained and maintained under very low NOx conditions.

Prior to the implementation of significant NOx reductions around 1990, the high NOx to VOC ratios in the South Coast, and much of California, kept tropospheric conditions very VOC-limited (*i.e.*, the amount of ozone produced was generally limited by the level of VOCs). As NOx levels are reduced, more areas of the state are moving into transition between being VOC-limited and NOx-limited. Significant biogenic VOC emissions make it very difficult or even impossible to maintain low ozone levels under anything but NOx-limited conditions, which is the natural state of the troposphere. Therefore, attaining NOx-limited conditions through significant NOx reductions provides the most sound and robust strategy for reaching the low ozone levels required to attain the new eight-hour ozone standard.

Between 1999 and 2005, CSPA participated in the Reactivity Research Working Group, a broad coalition of government, industry and academic scientists that funded significant policy-relevant research on ozone attainment. The modeling studies designed and co-funded in this initiative provided significantly improved understanding of the relative roles of NOx and VOCs, as well as the role that relative reactivity plays in the impact of VOCs. Those studies demonstrated that most of the U.S. already is NOx-limited or transitional most of the time, with the exceptions mostly being small urban cores with high NOx emissions, and that even California is moving from VOC-limited toward NOx-limited conditions. This NOx-limited condition is the natural state of the atmosphere; if all anthropogenic air emissions were eliminated, all areas would be NOx limited and relatively insensitive to marginal increases or decreases in VOC emissions.

The very significant NOx reductions now being proposed will assure that virtually the entire region is NOx-limited virtually all of the time. In other words, the region will move from ozone levels being *very sensitive* to VOC emissions to ozone levels being *relatively insensitive* to VOC emissions, especially very low-reactivity VOC emissions such as consumer products.

[11]Proposed SIP, at page 57.

C. The Low Reactivity of Consumer Product Emissions May Make Further Reductions Unnecessary.

The Proposed SIP recognizes the low photochemical reactivity of consumer product VOCs, noting that their reactivity is one third that of motor vehicle exhaust.[12] CSPA agrees with this assessment and indeed believes that the low reactivity and low ozone impact of the VOC emissions from consumer products may make it *unnecessary* to further reduce those VOC emissions beyond 2014 to attain the ozone standard in the South Coast.

Scientific studies funded by our industry strongly suggest that a mass-based inventory approach overestimates the actual impact of consumer product VOC emissions on ozone attainment in the South Coast and other areas of California. In 2002, CSPA, along with the Cosmetic, Toiletry and Fragrance Association (CTFA), contracted with Sierra Research, Inc., in Sacramento, to create a reactivity-weighted VOC emissions inventory for the South Coast. Sierra Research used the official emissions inventory for South Coast in 2000 and the official speciated emissions profiles, as well as the official ARB estimates for "maximum incremental reactivity" (MIR) for each species of VOC emission, to create an estimate of the maximum ozone formation potential attributable to each major category of anthropogenic emissions of organic gases in the region. This type of MIR-weighted inventory provides a much more scientifically accurate assessment of the relative ozone impact of various emissions sources than any mass-based VOC emissions inventory.

The results of that MIR-weighted VOC inventory project can be seen in *Attachment 1* to these comments. The study found significant differences between the total mass emissions and the ozone formation potential of those emissions, and these differences are due solely to the differing weighted MIR for the species of VOCs that make up the specific source emission. Some emissions sources therefore have a much higher ozone formation potential than their mass emissions suggest, while other emissions categories have a much lower ozone formation potential than suggested by their mass emissions. Consumer products are among the emissions categories with below average reactivity, and therefore lower ozone impact than would be expected based on mass of emissions alone.

The MIR scale provides an estimate of the maximum amount of ozone potentially formed from a VOC emission under the tropospheric conditions where ozone is most sensitive to VOCs. The conditions in the ozone attainment run are far less sensitive to VOC emissions, but although absolute VOC reactivity will decrease significantly, the relative reactivity differences between various VOCs will remain relevant.

As shown in the data in Attachment 1, VOCs from consumer products have a weighted-average MIR of 1.5, well below the average for all emissions sources. Many mobile sources of VOCs have very high reactivity, including Aircraft (6.8). Farm Equipment (5.4), Heavy Duty Diesel Urban Buses (5.5), Heavy Duty Diesel Trucks (5.5), Light Duty Diesel Trucks (5.5), Medium Duty Diesel Trucks (5.5), Ships and Commercial Boats (5.3) and Trains (5.5). VOC emissions from these sources cause three to five times as much ozone formation pound-per-pound as

[12] Proposed 2007 SIP, at page 129.

consumer product VOCs. The VOC sources with the largest potential ozone impacts in 2000 also exhibited very high reactivity profiles, including Light Duty Passenger Cars (3.7), Light Duty Trucks (3.8), and Off-Road Equipment (4.6).

The data from this study provide important evidence that very significant differences exist between the relative ozone impacts of equal amounts of VOC emissions from various sources. Generally speaking, mobile source VOC emissions create three to five times as much ozone as equal amounts of VOC emissions from most stationary and area sources, including consumer products. These significant differences in relative photochemical reactivity of various VOC sources must be taken into account in choosing and implementing effective, workable and cost-effective ozone attainment strategies.

Earlier studies also clearly demonstrated the minimal impact of consumer product VOCs on ozone non-attainment in California. Subsequent to the statewide revision of the California SIP in 1994, CSPA and CTFA funded an air quality modeling study to determine the specific role of consumer products in ozone attainment in both South Coast and in Sacramento regions. That study, "Impact of Consumer Products on California's Air Quality" [13] used the exact Urban Airshed Model (UAM), inventories and meteorology utilized in the attainment demonstrations for the 1994 SIP.

The study compared UAM outputs for two scenarios in the South Coast air basin:

- The attainment demonstration in the SIP, which included an 85 percent reduction in the VOC emissions from consumer products, and demonstrated attainment with the one-hour ozone standard in 2010; and,

- The exact same modeling run with only a 30 percent reduction in consumer products VOC emissions (the reduction already obtained by ARB regulations adopted prior to 1994).

The results showed that both scenarios demonstrated attainment of the one-hour ozone standard of 0.12 ppm in both South Coast and Sacramento. In both airsheds, the additional consumer product emissions, despite their very significant mass, had such small impacts on peak ozone formation that insufficient ozone was formed to cause non-attainment. This result was attributed to both the low reactivity of the consumer product emissions, and the geographic distribution of those emissions that lessened impacts on peak ozone levels. Aerosol consumer products exhibit especially low reactivity, since aerosol propellants tend to among the least reactive of all VOCs in the emissions inventory.

Unfortunately, CSPA was not able to obtain the underlying data from South Coast to conduct a similar study using the computer model, inventories and meteorology utilized in the attainment demonstrations for the District's 2003 AQMP (which was only made available in April 2003), but we believe that a similar result would have been obtained, especially considering that

[13] Sierra Research Report No. SR97-07-01 (July 1997) and addendum Report No. SR98-03-01 (March, 1998).

regulations promulgated by the ARB since 1994 provided additional reductions in consumer products VOC emissions.

Our 1997 attainment remodeling study was conducted under 2010 attainment conditions that remained highly sensitive to overall VOC emissions. Therefore, the results of the study demonstrated that even under highly VOC-limited conditions where ozone formation is highly sensitive to overall VOC levels, ozone formation was *not* at all sensitive to consumer product VOC emissions. The attainment demonstration modeling for this 2007 AQMP, on the other hand, is under atmospheric conditions that are far more NOx-limited, and far less sensitive to overall VOC emissions. We therefore had reason to expect that consumer product VOC emissions should have even less relative impact on ozone attainment in this 2023 attainment scenario.

To determine whether this was indeed the case, CSPA contracted earlier this year to conduct a remodeling study, co-funded by nine national consumer product industry associations, to determine the ozone sensitivity of consumer product VOC emissions in the South Coast in 2023, and determine what level of emission reductions might actually be necessary. The remodeling was recently completed by our contractor, and the results clearly demonstrate that ozone attainment status in the South Coast district would not be impacted in 2023 if no further reductions in consumer product VOC emissions are made after 2014. The preliminary data show that the 50 tons per day of additional statewide consumer products VOC emissions reductions suggested in the South Coast AQMP would have no impact on ozone attainment anywhere in the South Coast. These VOC emission reductions would likely cost the consumer products industry more than $1 billion just to determine their feasibility, despite not being necessary for ozone attainment. We will be providing the results of this study to ARB prior to the consideration by ARB of the final South Coast AQMP.

CSPA believes that the results of these types of studies provide important information to support the development of effective ozone attainment strategies. It is important that the control measures in the SIP be focused primarily on those emissions sources (both VOCs and NOx) that play a significant role in ozone non-attainment in the South Coast.

The need to carefully consider the relative ozone impacts of various emission sources provides further reasons for the allocation of emissions reductions in the “Black Box” to remain unspecified in this SIP revision. This would allow further data to be developed to show what emissions sources and reductions are actually necessary for ozone attainment.

III. Summary and Conclusions

CSPA appreciates the opportunity to comment on the Proposed 2007 State Strategy for the California SIP. We support the ARB’s goal to provide healthy air quality for all California residents. The consumer product measures in this proposed SIP that commit to further reductions of VOC emissions for consumer products represent a significant challenge to our industry, and to the consumers and businesses in the state who rely on our products to help provide a clean and healthy environment in which to live and work.

CSPA and the consumer products industry take seriously the environmental health and safety benefits of its products, and continuously seek to improve them. Thus, the consumer specialty products industry worked constructively and cooperatively with ARB staff for 18 years to lower VOC content in consumer products in California. We hope to continue to work in a cooperative manner with the ARB to improve air quality in California while maintaining our industry's ability to supply effective products that consumers can rely upon to contribute positively to their health, safety, and quality of life.

The low reactivity and low ozone impact of consumer product VOC emissions significantly attenuate the need for further VOC reductions for ozone attainment in California. CSPA believes that the Proposed SIP's target of 30-40 tons per day in additional VOC reductions for consumer products by 2014 represents a very ambitious goal that may or may not prove to be feasible. CSPA and its members are willing, however, to continue to work cooperatively with ARB in an effort to identify opportunities for technological and commercially feasible reductions.

In addition, CSPA urges ARB in today's comments to:

- Achieve some of the targeted reduction commitment through voluntary incentive efforts such as an updated ACP regulation.

- Work with industry to make appropriate corrections to the consumer products VOC emissions inventory.

- Consider the low ozone impact of consumer product VOCs when allocating the further "black box" reductions needed for ozone attainment in the South Coast and San Joaquin Valley between 2014 and 2023.

CSPA will be providing further information to ARB regarding the results of our SIP modeling study prior to ARB's consideration of the final South Coast AQMD, and also will provide further comments at that time.

We would welcome the opportunity to further discuss the concerns about the proposed SIP that we raised in these comments. If you have any questions, please contact us at (202) 872-8110.

Respectfully submitted,

D. Douglas Fratz
Vice President, Scientific & Technical Affairs

Joseph T. Yost
Director, State Affairs

cc: Catherine Witherspoon, Executive Officer, Air Resources Board
Lynn Terry, Deputy Executive Officer, Air Resources Board
Linda Murchison, Air Resources Board, Planning and Technical Support Division
Kurt Karperos, Air Resources Board, Planning and Technical Support Division
Robert Fletcher**,** Air Resources Board, Stationary Source Division
Robert Barham, Air Resources Board, Stationary Source Division
Janette Brooks, Air Resources Board, Stationary Source Division
David Mallory, Air Resources Board, Stationary Source Division
CSPA Air Quality Committee
Laurie Nelson, Randlett / Nelson Associates

Attachment 1

Reactivity-Weighted Emissions
Volatile Organic Compounds (VOCs)
South Coast Air Quality District
2000

Major Category of VOC Emissions	Total Emissions (tpd)	% of Total Inventory	O3 Form. Potential (tpd)	% of Total O3 Formation Potential	MIR (O3/VOC)
ADHESIVES AND SEALANTS	13.67	0.86%	22.83	0.65%	1.7
AIRCRAFT	8.59	0.54%	58.08	1.65%	6.8
ARCHITECTURAL COATINGS	51.03	3.23%	95.60	2.72%	1.9
ASPHALT PAVING / ROOFING	0.85	0.05%	2.06	0.06%	2.4
CHEMICAL PROCESSES	21.31	1.35%	42.95	1.22%	2.0
COATINGS AND RELATED PROCESS SOLVENTS	43.55	2.75%	119.60	3.40%	2.7
COGENERATION (FUEL COMBUSTION)	6.62	0.42%	3.47	0.10%	0.5
CONSUMER PRODUCTS	137.56	8.70%	203.55	5.78%	1.5
COOKING	1.48	0.09%	2.21	0.06%	1.5
DEGREASING	71.06	4.49%	29.30	0.83%	0.4
ELECTRIC UTILITIES	6.84	0.43%	4.90	0.14%	0.7
FARM EQUIPMENT	1.48	0.09%	8.01	0.23%	5.4
FARMING OPERATIONS	128.58	8.13%	37.75	1.07%	0.3
FIRES	0.33	0.02%	0.49	0.01%	1.5
FOOD AND AGRICULTURAL PROCESSING (FUEL COMBUSTION)	0.41	0.03%	0.98	0.03%	2.4
FOOD AND AGRICULTURE (INDUSTRIAL PROCESSES)	6.05	0.38%	9.78	0.28%	1.6
FUEL STORAGE AND HANDLING	37.34	2.36%	77.19	2.19%	2.1

Major Category of VOC Emissions	Total Emissions (tpd)	% of Total Inventory	O3 Form. Potential (tpd)	% of Total O3 Formation Potential	MIR (O3/VOC)
GLASS AND RELATED PRODUCTS	0.08	0.01%	0.13	0.00%	1.6
HEAVY DUTY DIESEL URBAN BUSES	0.64	0.04%	3.54	0.10%	5.5
HEAVY DUTY GAS URBAN BUSES	1.09	0.07%	4.07	0.12%	3.7
HEAVY DUTY DIESEL TRUCKS	8.16	0.52%	45.10	1.28%	5.5
HEAVY DUTY GAS TRUCKS	4.35	0.27%	17.24	0.49%	4.0
INCINERATORS	0.88	0.06%	0.82	0.02%	0.9
LANDFILLS	149.18	9.43%	5.74	0.16%	0.04
LAUNDERING	9.05	0.57%	0.57	0.02%	0.1
LIGHT DUTY PASSENGER VEHICLES	294.79	18.64%	1104.50	31.37%	3.7
LIGHT DUTY TRUCKS	106.78	6.75%	400.54	11.38%	3.8
LIGHT HEAVY DUTY DIESEL TRUCKS	0.5	0.03%	2.76	0.08%	5.5
LIGHT HEAVY DUTY GAS TRUCKS	29.02	1.83%	110.40	3.14%	3.8
MANUFACTURING AND INDUSTRIAL (FUEL COMBUSTION)	34.08	2.15%	23.42	0.67%	0.7
MEDIUM DUTY TRUCKS	41.95	2.65%	164.71	4.68%	3.9
MEDIUM HEAVY DUTY DIESEL TRUCKS	1.51	0.10%	8.35	0.24%	5.5
MEDIUM HEAVY DUTY GAS TRUCKS	13.53	0.86%	53.00	1.51%	3.9
METAL PROCESSES	1.4	0.09%	2.48	0.07%	1.8
MINERAL PROCESSES	3.02	0.19%	6.77	0.19%	2.2
MOTOR HOMES	0.6	0.04%	2.39	0.07%	4.0
MOTORCYCLES	6.27	0.40%	24.56	0.70%	3.9
OFF-ROAD EQUIPMENT	60.64	3.83%	280.90	7.98%	4.6
OFF-ROAD RECREATIONAL VEHICLES	7.87	0.50%	34.90	0.99%	4.4
OIL AND GAS PRODUCTION (COMBUSTION)	18.47	1.17%	12.66	0.36%	0.7
OTHER (CLEANING AND SURFACE COATINGS)	3.93	0.25%	7.32	0.21%	1.9

Major Category of VOC Emissions	Total Emissions (tpd)	% of Total Inventory	O3 Form. Potential (tpd)	% of Total O3 Formation Potential	MIR (O3/VOC)
OTHER (FUEL COMBUSTION)	16.35	1.03%	9.08	0.26%	0.6
OTHER (INDUSTRIAL PRCESSES)	1.67	0.11%	3.30	0.09%	2.0
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.2	0.01%	0.27	0.01%	1.4
OTHER (WASTE DISPOSAL)	26.66	1.69%	25.15	0.71%	0.9
PESTICIDES/ FERTILIZERS	3.37	0.21%	5.22	0.15%	1.5
PETROLEUM MARKETING	82.23	5.20%	75.79	2.15%	0.9
PETROLEUM REFINING	15.18	0.96%	18.81	0.53%	1.2
PETROLEUM REFINING (FUEL COMBUSTION)	2.18	0.14%	4.76	0.14%	2.2
PRINTING	7.28	0.46%	10.21	0.29%	1.4
RECREATIONAL BOATS	41.27	2.61%	190.28	5.40%	4.6
RESIDENTIAL FUEL COMBUSTION	29.15	1.84%	54.67	1.55%	1.9
SCHOOL BUSES	0.26	0.02%	1.14	0.03%	4.4
SERVICE AND COMMERCIAL (FUEL COMBUSTION)	4.73	0.30%	4.86	0.14%	1.0
SEWAGE TREATMENT	0.18	0.01%	0.41	0.01%	2.3
SHIPS AND COMMERCIAL BOATS	3.84	0.24%	20.30	0.58%	5.3
TRAINS	1.53	0.10%	8.46	0.24%	5.5
WASTE BURNING AND DISPOSAL	11.2	0.71%	52.80	1.50%	4.7
WOOD AND PAPER	0.01	0.00%	0.04	0.00%	4.0
Grand Total	**1581.83**	**100.00%**	**3521.16**	**100.00%**	**2.2**

Data Source: Reactivity-Weighted VOC Emissions Inventory Project, completed for the Consumer Specialty Products Association by Sierra Research, October 2002.