State of California
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER ADOPTION OF PROPOSED AMENDMENTS TO THE CALIFORNIA CONSUMER PRODUCTS REGULATION AND THE AEROSOL COATINGS REGULATION

Scheduled for Consideration: November 17, 2006
Agenda Item No. 06-10-8

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I.

INTRODUCTION

On November 17, 2006, the Air Resources Board (the "Board" or "ARB") conducted a public hearing to consider amendments to the California Consumer Products Regulation and the Aerosol Coatings Regulation, sections 94507-94517 and 94520-94528, title 17, California Code of Regulations (CCR). An Initial Statement of Reasons for Proposed Rulemaking (ISOR) was prepared and made available to the public on September 29, 2006. The ISOR is incorporated by reference herein. This Final Statement of Reasons for Rulemaking (FSOR) updates the ISOR by identifying and explaining the modifications that were made to the original proposal. The FSOR also summarizes the written and oral comments received during the rulemaking process, and contains the ARB's responses to those comments.

At the hearing, the Board approved Resolution 06-42, which initiated steps toward final adoption of the proposed amendments. The approved amendments included modifications to the originally proposed language. All of the modifications to the original proposal are described in Section II of this FSOR entitled "Modifications Made to the Original Proposal." In accordance with Government Code section 11346.8(c), Resolution 06-42 directed the Executive Officer to adopt the modified regulations after making the modified regulatory language available for public comment, and to make such additional modifications as may be appropriate in light of the comments received.

A "Notice of Public Availability of Modified Text" together with a copy of the full text of the regulation modifications, with the modifications clearly indicated, were mailed on July 3, 2007, to each of the individuals described in subsections (a)(1) through (a)(4) of section 44, title 1, CCR. By this action the modified Consumer Products Regulation and modified Aerosol Coatings Regulation were made available to the public for a 15-day comment period from July 3, 2007 to July 24, 2007, pursuant to Government Code section 11346.8. The Executive Officer then determined that no additional changes should be made to the regulations, and subsequently issued Executive Order R-07-008, by which the modified Consumer Products Regulation and modified Aerosol Coatings Regulation were adopted.

As defined in Government Code section 11345.5(a)(6), the Board has determined that this regulatory action will not create costs or savings to any State agency, nor affect federal funding to the State. The Board has also determined that this regulatory action will not create costs or impose a mandate upon any local agency or school district, whether or not it is reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, title 2 of the Government Code; or affect other non-discretionary savings to state or local agencies. In preparing the regulatory proposal, the ARB staff considered the potential economic impacts on California business enterprises and individuals. A detailed discussion of these impacts is included in the ISOR. The adopted regulations are considered "major regulations" within the

meaning of Health and Safety Code section 57005 (enacted by Senate Bill 1082: Stats.1993, ch. 418), because the regulations will have an economic impact on the State's business enterprises in an amount of approximately 20 million dollars per year. During the 45-day and 15-day comment periods, no alternatives or combination of alternatives were submitted to the ARB which would be equally effective as the proposed regulations (i.e., no alternatives, or combination or alternatives, were submitted which would achieve at least the equivalent level of environmental protection within the same time frame as the proposed regulations.)

The Board has determined that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or which would be as effective and less burdensome to affected private persons or business, than the action taken by the ARB.

II.

MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

Various modifications to the original proposal were made in order to address comments received during the 45-day public comment period, and to clarify the regulatory language. These modifications are described below.

A. Section 94509(a) The effective date of the new 10 percent VOC limits for four product categories -- “Brake Cleaners,” “Carburetor or Fuel-injection Air Intake Cleaners,” aerosol “Engine Degreasers,” and aerosol “General Purpose Degreasers” -- was changed from December 31, 2008, to December 31, 2010. Interim 20 percent VOC limits, effective December 31, 2008, were added for three of the categories -- “Brake Cleaners,” “Carburetor or Fuel-injection Air Intake Cleaners,” and aerosol “General Purpose Degreasers.”

B. Sections 94508(a)(121) and 94523(a) The definition of “Rubber/Vinyl Protectant” and "Exemptions" of the Aerosol Coatings Regulation were modified to classify products used on vehicle tires as consumer products subject to the Consumer Products Regulation, and all other aerosol rubber/vinyl protectants as aerosol coating products subject to the Aerosol Coatings Regulation.

C. Sections 94508(a)(51) and 94523(a) The definition of "Fabric Protectant" and "Exemptions" of the Aerosol Coatings Regulation were modified to retain certain aerosol fabric protectants as consumer products subject to the Consumer Products Regulation, and all other aerosol products that protect or coat fabric, subject to the Aerosol Coatings Regulation.

D. Sections 94508(a)(39) and (123) The definitions of “Disinfectant” and “Sanitizer” were modified to exclude pre-moistened wipe or towelette products sold exclusively to medical, convalescent, or veterinary establishments.

E. Sections 94508(a)(39), (51), (52), (97), (121), (123); and 94512(a)(3) The definitions of “Disinfectant,” “Fabric Protectant,” “Fabric Refresher,” “Multi-purpose Solvent,” “Rubber/Vinyl Protectant,” and “Sanitizer” were modified to clarify overlapping label claims and applicable product categories. The “Most Restrictive Limit” provision was also modified to clarify this issue.

F. Sections 94508(a)(46), 94509(a) and (p) The effective date of the “Electronic Cleaner” VOC limit was changed from December 31, 2006, to December 31, 2007. The definition of "Electronic Cleaner" was modified to exclude products used to clean/degrease energized electronic equipment, and are labeled "Energized Electronic Equipment use only." Electronic cleaners labeled as energized electronic equipment use only, may not contain methylene chloride, perchloroethylene, or trichloroethylene exceeding 0.01 percent by weight.

G. Section 94508(a)(97) The definition of “Multi-purpose Solvent” was modified to clarify that the revised definition will apply only to products manufactured on or after January 1, 2008.

H. Section 94509(a) A word processing error in the ISOR Proposed Consumer Products Regulation was corrected. In the "Table of Standards," the note under "Electronic Cleaner" incorrectly specified section 94509(m) to contain requirements applicable to "Electrical Cleaners." The correction restored the words "Electronic Cleaners."

I. Miscellaneous Minor modifications, such as renumbering subsections, were also made in the regulatory language.

III.

SUMMARY OF COMMENTS AND AGENCY RESPONSES

The Board received numerous written and oral comments during the 45-day and 15-day comment periods for this regulatory action. A list of commenters is set forth below with the date and form of all comments that were timely filed. Following the list is a summary of each objection or recommendation made regarding the proposal with an explanation of how the proposed action has been changed to accommodate the objection or recommendation, or the reasons for making no change.

Comments Received During the 45-day Public Comment Period

Commenter Abbreviation	*Comment Number*	*Commenter/Testimony*
3M	(a65)	Catherine F. Jacobson, Ph.D., DABT Toxicology Specialist 3M written testimony: November 7, 2006
3R	(a31)	Douglas J. Raymond Raymond Regulatory Resources (3R) written testimony: October 23, 2006
3R	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing AGC Chemicals Americas, Inc., Claire, Dupont, Honeywell, National Aerosol Association, Radiator Specialty Company, and WD-40 Company) first oral testimony: November 17, 2006
3R	(b7)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Claire, Meguiar's, National Aerosol Association, and Stoner, Inc.) second oral testimony: November 17, 2006
AAIA	(a25)	Aaron M. Lowe Vice President, Government Affairs Automotive Aftermarket Industry Association written testimony: October 13, 2006

AAIA	(b22)	Norman Plotkin (representing Automotive Aftermarket Industry Association) oral testimony: November 17, 2006
ACCC	(a8)	John Quilter Association of California Car Clubs written testimony: October 6, 2006
AGC	(a66)	David Ferguson AGC Chemicals Americas, Inc. written testimony: November 9, 2006
AGC	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing AGC Chemicals Americas, Inc.) oral testimony: November 17, 2006
Anderson	(a6)	Eddie Anderson (citizen) written testimony: October 4, 2006
ASC	(a21)	Mark Collatz Director of Government Relations Adhesive and Sealant Council, Inc. written testimony: October 12, 2006
ASCCA	(a56)	Dan Fogle President Automotive Service Councils of California written testimony: October 30, 2006
Ashland	(a48)	Kenneth E. Forbes Analytical Chemist Ashland Distribution Ashland Inc. written testimony: October 30, 2006
Ashland	(a49)	Brian Holmes Ashland Distribution Ashland Inc. written testimony: October 30, 2006
Ashland	(b21)	Jason Williamson Valvoline Division Ashland Inc. oral testimony: November 17, 2006

ASPA	(a47)	Andrew R. Hackman On behalf of the ASPA Operating Committee and Board of Directors Automotive Specialty Products Alliance written testimony: October 27, 2006
ASPA	(a83)	Andrew R. Hackman On behalf of the ASPA Operating Committee and Board of Directors Automotive Specialty Products Alliance written testimony: November 14, 2006
ASPA	(b14)	Andrew R. Hackman Automotive Specialty Products Alliance oral testimony: November 17, 2006
AutoParts	(a15)	Steve Phillips Auto Parts Wholesalers written testimony: October 9, 2006
BAF	(a51)	Michael Bell Operation Manager BAF Industries written testimony: October 24, 2006
BerryProd	(b17)	John Ehlert Chief Operating Officer Berryman Products oral testimony: November 17, 2006
Bodine	(a24)	Bob Bodine (citizen) written testimony: October 14, 2006
BridgeAero	(a53)	Edward S. Piszynski Vice President Laboratory Services Bridgeview Aerosol, LLC written testimony: November 1, 2006
BridgeAero	(b15)	Edward S. Piszynski Vice President Laboratory Services Bridgeview Aerosol, LLC oral testimony: November 17, 2006

Byrem	(a4)	Skip Byrem (citizen) written testimony: October 4, 2006
CAFA	(a71)	Joel Ervice Associate Director Regional Asthma Management and Prevention (RAMP) Initiative Statewide Coordinator of Community Action to Fight Asthma (CAFA) written testimony: November 13, 2006
CAPCOA	(a64)	Larry R. Allen President California Air Pollution Control Officer's Association written testimony: November 7, 2006
CAWA	(b22)	Norman Plotkin (representing California Automotive Wholesalers Association) oral testimony: November 17, 2006
CCA	(c2)	Tim Carmichael Coalition for Clean Air written testimony: November 16, 2006
Celaya	(a43)	Fred Celaya (citizen) written testimony: October 27, 2006
Chase	(a27)	William Chase (citizen) written testimony: October 18, 2006
Claire	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Claire) oral testimony: November 17, 2006
Claire	(b7)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Claire) oral testimony: November 17, 2006

Claire	(b9)	Mark Kubiak (representing Plaze, Inc.) Manager, Research and Development Claire Manufacturing Company - Sprayway, Inc. oral testimony: November 17, 2006
Clorox	(a62)	Jim McCabe Senior Scientist The Clorox Company written testimony: October 31, 2006
CMCDA	(a87)	Johnathan Morrison Staff Counsel California Motor Car Dealers Association written testimony: November 14, 2006
CoastTruck	(a7)	Ron Christy Parts Manager Coast Counties Truck and Equipment Company written testimony: October 4, 2006
Cochiolol	(a13)	William Cochiolo (citizen) written testimony: October 9, 2006
Cochran	(a44)	Linda Cochran (citizen) written testimony: October 27, 2006
ContraCosta	(a69)	Robin Bedell-Waite Green Business Program Coordinator Contra Costa Hazardous Materials written testimony: November 13, 2006
CoSanLA	(a88)	Paul C. Martyn Head, Industrial Waste Section County Sanitation Districts of Los Angeles County written testimony: November 14, 2006
CRC	(b16)	Adam M. Selisker Vice President, Technology CRC Industries, Inc. oral testimony: November 17, 2006

CSPA	(a36)	D. Douglas Fratz Vice President, Scientific & Technical Affairs Joseph T. Yost Director, State Affairs Consumer Specialty Products Association written testimony: October 20, 2006
CSPA	(a81)	D. Douglas Fratz Vice President, Scientific & Technical Affairs Joseph T. Yost Director, State Affairs Consumer Specialty Products Association written testimony: November 14, 2006
CSPA	(b10)	Joseph T. Yost Consumer Specialty Products Association oral testimony: November 17, 2006
CSPA	(b23)	D. Douglas Fratz Vice President Consumer Specialty Products Association oral testimony: November 17, 2006
CTFA	(a74)	Elizabeth H. Anderson Executive Vice President - Legal & General Counsel Cosmetic, Toiletry, and Fragrance Association written testimony: November 14, 2006
Cunningham	(a41)	Tim Cunningham (citizen) written testimony: October 27, 2006
Dargavage	(a1-58)	Francis Dargavage (citizen) written testimony: October 30, 2006
Dewar	(a1)	Neal Jennings J.B. Dewar, Inc. written testimony: October 4, 2006
DHS	(a79)	Kevin Reilly, D.V.M., M.P.V.M Deputy Director Prevention Services California Department of Health Services (now California Department of Public Health) written testimony: October 30, 2006

Dupont	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing DuPont) oral testimony: November 17, 2006
Epperson	(a19)	David Epperson (citizen) written testimony: October 10, 2006
FastUndCar	(a76)	Bruce Douglass President and CEO Fast Undercar written testimony: November 14, 2006
FloridaChem	(a33)	Richard Pearl Regulatory Affairs Florida Chemical Company written testimony: October 19, 2006
FourStar	(a35)	Jerry Ulrich President Four Star Chemical written testimony: October 23, 2006
Haselhorst	(a38)	Kenneth Haselhorst (citizen) written testimony: October 24, 2006
Heiner	(a1-54)	Patrick Heiner (citizen) written testimony: October 27, 2006
Hirsch	(a29)	Robert Hirsch (citizen) written testimony: October 19, 2006
Honeywell	(a55)	Sean McNear Manager, Regulatory Affairs Consumer Products Group Honeywell written testimony: October 25, 2006

Honeywell	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Honeywell) oral testimony: November 17, 2006
Honeywell	(b20)	Sean McNear Manager, Regulatory Affairs Consumer Products Group Honeywell oral testimony: November 17, 2006
IRTA	(a60)	Katy Wolf, Ph.D. Executive Director Institute for Research and Technical Assistance written testimony: November 6, 2006
IRTA	(b4)	Katy Wolf, Ph.D. Executive Director Institute for Research and Technical Assistance oral testimony: November 17, 2006
ISSA	(a46)	Daniel S. Wagner Manager of Regulatory Compliance ISSA written testimony: October 27, 2006
ITW	(a68)	Sue Max Technology Manager ITW Chemtronics written testimony: November 10, 2006
JohnDiver	(a75)	Robert J. Israel, Ph.D. Director, Corporate Product Responsibility JohnsonDiversey, Inc. written testimony: November 13, 2006
JohnDiver	(b12)	Laurie E. Nelson Randlett Nelson Associates (representing JohnsonDiversey, Inc.) oral testimony: November 17, 2006 David Bower, Technical Director JohnsonDiversey, Inc. oral testimony: November 17, 2006

Julian	(a20)	Mark Julian (citizen) written testimony: October 10, 2006
Kahl	(a11)	Leonard Kahl (citizen) written testimony: October 8, 2006
Keystone	(c1)	Eileen A. Sottile Director, Government Relations Keystone Automotive Industries, Inc. written testimony: November 16, 2006
KraftFoods	(a37)	Joe Stout Director of Sanitation Kraft Foods written testimony: October 4, 2006
Kreis	(a1-53)	Tricia Kreis (citizen) written testimony: October 27, 2006
Meguiar's	(a39)	Gary Silvers Vice President Research & Development Meguiar's written testimony: October 23, 2006
Meguiar's	(b7)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Meguiar's) oral testimony: November 17, 2006
Moritsugu	(a17)	Robert Moritsugu (citizen) written testimony: October 10, 2006
Murray	(a14)	Robert Murray (citizen) written testimony: October 9, 2006
NAA	(a86)	David Shaw National Aerosol Association written testimony: November 15, 2006

NAA	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing National Aerosol Association) oral testimony: November 17, 2006
NAA	(b7)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing National Aerosol Association) oral testimony: November 17, 2006
Navarro	(a45)	Pat Navarro (citizen) written testimony: October 27, 2006
NicePak	(a78)	Herbert Estreicher Counsel to NicePak, Inc. Keller and Heckman LLP written testimony: November 13, 2006
NovaAuto	(a22)	Jerry Keuroghlian President Nova Automotive Inc. written testimony: October 5, 2006
NPCA	(a80)	Heidi K. McAuliffe, Esq Counsel, Government Affairs National Paint and Coatings Association written testimony: November 13, 2006
NPCA	(a84)	Heidi K. McAuliffe, Esq Counsel, Government Affairs National Paint and Coatings Association written testimony: November 14, 2006
OrangeCo	(a90)	Tahin Talebi Source Control Manager Orange County Sanitation District written testimony: November 15, 2006
Orcutt	(a54)	Richard Orcutt (citizen) written testimony: November 1, 2006

PaloAlto	(a77) [no letterhead, otherwise same as (a89)]	Phil Bobel Manager, Environmental Compliance Division Palo Alto Regional Water Quality Control Plant City of Palo Alto written testimony: November 14, 2006
PaloAlto	(a89) [with letterhead, otherwise same as (a77)]	Phil Bobel Manager, Environmental Compliance Division Palo Alto Regional Water Quality Control Plant City of Palo Alto written testimony: November 14, 2006
Peek	(a5)	Greg Peek (citizen) written testimony: October 4, 2006
Permatex	(a28)	Michael Zimmerman General Manager Permatex, Inc. written testimony: October 19, 2006
Permatex	(a67)	Denise Boyd Permatex, Inc. written testimony: November 10, 2006
Peters	(a23)	John Peters (citizen) written testimony: October 12, 2006
P&G	(a70)	Jennifer L. Counts, Ph.D. Section Head, Regulatory Affairs P&G Household Care The Procter & Gamble Company written testimony: November 13, 2006
PhilAuto	(a3)	Phil Fournier Phil's Auto Clinic written testimony: October 4, 2006
Plaze	(a40)	John A. Davis Technical Director Plaze, Inc. written testimony: October 26, 2006

Quint	(b5)	Julia Quint (citizen) oral testimony: November 17, 2006
RadSpec	(a59)	Larry G. Beaver, Ph.D. Vice President, Technology (Gunk) Radiator Specialty Company written testimony: November 3, 2006
RadSpec	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Radiator Specialty Company) oral testimony: November 17, 2006
RadSpec	(b19)	Larry G. Beaver, Ph.D. Vice President, Technology Radiator Specialty Company (Liquid Wrench, Gunk, Engine Brite, Solder Seal) oral testimony: November 17, 2006
ReckBen	(b11)	Eileen J. Moyer Director of Regulatory Relations Reckitt Benckiser, Inc. (Lysol, Old English, Easy-Off, Easy-On) oral testimony: November 17, 2006
Riker	(a9)	David Riker (citizen) written testimony: October 7, 2006
Rose	(a16)	Hugh Rose (citizen) written testimony: October 10, 2006
Rowley	(a12)	Adriel Rowley (citizen) written testimony: October 8, 2006
SanFran	(b6)	Virginia St. Jean, CIH Industrial Hygienist SFDPH Pollution Prevention Manager Occupational and Environmental Health Section Department of Public Health San Francisco City and County oral testimony: November 17, 2006

SanFran	(c4)	Virginia St. Jean, CIH Industrial Hygienist SFDPH Pollution Prevention Manager Occupational and Environmental Health Section Department of Public Health San Francisco City and County written testimony: November 16, 2006
SCAQMD	(c3)	Barry R. Wallerstein, D.Env. Executive Director South Coast Air Quality Management District written testimony: November 15, 2006
SCAQMD	(b2)	Elaine Chang Deputy Executive Officer South Coast Air Quality Management District oral testimony: November 17, 2006
SCAQMD	(c6)	Elaine Chang Deputy Executive Officer South Coast Air Quality Management District written testimony: November 17, 2006 (presentation “slides”)
SCAQMD	(b3)	Lee Lockie Director, Area Sources South Coast Air Quality Management District oral testimony: November 17, 2006
SCAQMD	(c5)	Lee Lockie Director, Area Sources South Coast Air Quality Management District written testimony: November 17, 2006 (presentation “slides”)
Scher	(a26)	David Scher (citizen) written testimony: October 17, 2006
SCJohn	(b25)	Chip Brewer Director, Worldwide Government Relations S. C. Johnson & Son, Inc. oral testimony: November 17, 2006

SEM	(a73)	Steve Gaver Technical Director SEM Products, Inc. written testimony: November 14, 2006
Shell	(b18)	Ron Fausnight Technology Shell Global Solutions (US) Inc. (Rain X, Blue Coral, Fix-a-Flat, Gumout) oral testimony: November 17, 2006
SherWill	(a52)	Gregory L. Johnson Director Legislative Affairs Diversified Brands Sherwin-Williams Company written testimony: October 30, 2006
SherWill	(b13)	Gregory L. Johnson Director Legislative Affairs Diversified Brands Sherwin-Williams Company oral testimony: November 17, 2006
ShieldPack	(a34)	Roger R. Vanderlaan General Manager Shield Packaging of California, Inc. written testimony: October 23, 2006
Smith	(a42)	Stephen Smith (citizen) written testimony: October 27, 2006
Stitt	(a30)	Timothy Stitt (citizen) written testimony: October 20, 2006
Stoner	(a50)	Harry Zechman Technology Manager Stoner, Inc. written testimony: October 26, 2006
Stoner	(b7)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing Stoner, Inc.) oral testimony: November 17, 2006

Stoner	(b8)	Harry Zechman Technology Manager Stoner, Inc. oral testimony: November 17, 2006
Sunnyside	(a63)	Henry E. Buchanan Director of Technical Services and Regulatory Affairs Sunnyside Corporation written testimony: October 23, 2006
Sunnyside	(a82)	Henry E. Buchanan Director of Technical Services and Regulatory Affairs Sunnyside Corporation written testimony: November 9, 2006
Sutton	(b26)	Patrice Sutton (citizen) oral testimony: November 17, 2006
Swauger	(a10)	Gary Swauger (citizen) written testimony: October 8, 2006
TechSpray	(a58)	Steve Cook Tech Spray written testimony: November 3, 2006
Tom	(a18)	Randel Tom (citizen) written testimony: October 10, 2006
Toups	(a32)	Jason Toups (citizen) written testimony: October 23, 2006
TurtleWax	(a57)	James P. Heidel Technical Director, R & D Turtle Wax, Inc. written testimony: November 1, 2006
US AutoPart	(a85)	Dan Askey Western Group Vice President US Automotive Parts Group written testimony: November 9, 2006

WD40	(b1)	Douglas J. Raymond Raymond Regulatory Resources (3R) (representing WD-40 Company) oral testimony: November 17, 2006
Woolsey	(a2)	Dave Woolsey (citizen) written testimony: October 4, 2006
WorkSafe	(a72)	Catherine Porter, Staff Attorney Mandy Hawes, Esq., Board Co-Chair WORKSAFE! David Pallack, Director of Litigation Josh Stehlik, Supervising Attorney, Community Development Unit Neighborhood Legal Services of Los Angeles County Betty Hung, Directing Attorney, Employment Law Unit Legal Aid Foundation of Los Angeles written testimony: November 13, 2006
WorkSafe	(b24)	Catherine Porter WORKSAFE! oral testimony: November 17, 2006

Comments Received During the 15-day Public Comment Period

Commenter Abbreviation	*Comment Number*	*Commenter/Testimony*
CSPA	(d92)	D. Douglas Fratz Vice President, Scientific & Technical Affairs Joseph T. Yost Director, State Affairs Consumer Specialty Products Association written testimony: July 24, 2007
Delta	(d91)	Christina Griffin Project Manager Delta Analytical Corporation written testimony: July 23, 2007
SCE	(d93)	Martin W. Ledwitz Manager, Air Quality Southern California Edision written testimony: July 25, 2007

A. 45-DAY COMMENTS

1. CATEGORIES FOR AUTOMOTIVE MAINTENANCE

The following comments and agency responses pertain to the categories for automotive maintenance: "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," "Engine Degreaser" (aerosol), and "General Purpose Degreaser" (aerosol).

a. Proposal in Staff Report Released September 29, 2006

A-1. Comment: Automotive "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," "Engine Degreaser" (aerosol), "General Purpose Degreaser" (aerosol) -- The proposed 10 percent VOC standard is not technologically or commercially feasible. [ASPA(a47), CSPA(a36), Permatex(a67)]

A-2. Comment: Radiator Specialty cannot support the proposed limit of 10 percent VOC. Our industry has no credible evidence that this level is technically feasible and would allow a product that meets our professional users' requirements for fast, safe, and effective cleaning of disassembled brake mechanisms. [RadSpec(a59)]

Agency Response to Comments A-1 and A-2: These comments are directed at the original proposal contained in the Staff Report, which is different from what the Board ultimately approved. Staff does not agree that the 10 percent Volatile Organic Compound (VOC) limits proposed in the Staff Report, (effective December 31, 2008) are technologically infeasible. However, to address some of the concerns raised by the Commenters regarding lead time to produce complying products, at the hearing staff suggested delaying the 10 percent limit to 2012 for the "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," and "General Purpose Degreaser" (aerosol) categories, and also proposed an interim limit of 20 percent effective in 2008. The longer timeframe provided would have allowed four additional years for research and development. The Agency Response to Comments A-52 through A-68 is incorporated herein. These Commenters agreed that with more time for research and development, the 10 percent limit was technologically feasible.

At the hearing, the Board agreed in part with staff's modified proposal and approved the interim limit of 20 percent effective in 2008 for the "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," and "General Purpose Degreaser" (aerosol) categories but changed the effective date of the 10 percent VOC limit to December 31, 2010. However, the Board also approved a single limit of 10 percent for the "Engine Degreaser" (aerosol) category, effective December 31, 2010.

A-3. Comment: Auto repair shops are already using products with low VOC content and the 10 percent VOC limit has been demonstrated in practice. [IRTA(a60)]

A-4. Comment: There is ample information showing that alternative, low-VOC cleaners are effective and that facilities can operate profitably with aerosol products with

very low VOC content. The Institute for Research and Technical Assistance (IRTA) conducted a technology development and assessment project for ARB, which focused on alternative automotive aerosol cleaning materials. The results of the IRTA/ARB project indicated that a 10 percent VOC limit for the four categories of cleaning could be met with safer products. In other projects, IRTA research also demonstrated that water-based cleaners are suitable alternatives for aerosol brake cleaners. [CCA(c2)]

Agency Response to Comments A-3 and A-4: The Board agreed and approved a 10 percent by weight VOC limit for aerosol automotive maintenance cleaning products effective December 31, 2010. The Agency Response to Comments A-21 through A-32 is incorporated herein.

A-5. Comment: Alternative low-VOC cleaners have proven to be effective substitutes for their high VOC counterparts, although they are not yet readily available in the San Francisco area in an aerosol form. Water-based, soy-based and acetone-based aerosol cleaners have been studied in Southern California and have been shown to be effective cleaners. [SanFran(c4)]

A-6. Comment: With respect to automotive cleaning categories, for example, many air districts in California have witnessed successful use of water, soy-based and other low-VOC cleaning materials in aerosol, as well as non-aerosol applications. This demonstrated technology, in particular, lends strong support to the achievability of ARB's proposed amendments to the brake cleaning, engine degreasing, general purpose degreasing and carburetor cleaning categories. [CAPCOA(a64)]

A-7. Comment: IRTA conducted the technology developed/assessment product for ARB that focused on alternative automotive aerosol cleaning materials. IRTA has also conducted a variety of other projects that focus on cleaning alternatives in auto repair facilities over the last several years. The alternatives that are being used by auto repair facilities include water-based cleaners, soy based cleaners and acetone based cleaners. [IRTA(a60)]

A-8. Comment: The South Coast Air Quality Management District (SCAQMD) also regulates aerosol cleaners when facilities use more than 160 fluid ounces (about 10 cans) of the cleaners in a day. The SCAQMD regulation primarily affects dealerships that use aerosol products extensively. Many of the dealerships in the South Coast Air Basin have been using 100 percent acetone aerosol products for the last few years. These products use carbon dioxide propellants and have essentially zero VOC. This demonstrates that the alternative low-VOC cleaners are effective and that facilities can operate profitably with aerosol products with very low VOC content. [IRTA(a60)]

A-9. Comment: I wanted to just reiterate that there are solutions that are available. There's been ample testimony to that effect. They're in use. The reductions have been achieved. So I would ask why would we not duplicate the success of the South Coast Air Quality Management District here? I would wonder what we would tell the families

and workers who have been harmed by these products for not taking the action as soon as possible for things that are totally achievable now. The government can actually be responsive to their needs right now and particularly in terms of automotive repair products. [Sutton(b26)]

Agency Response to Comments A-5 through A-9: Staff determined that low-VOC products have been in use for a number of years. As described in Chapter VI of the Staff Report, the proposed 10 percent by weight VOC limit is based in part on the IRTA Study that demonstrated that technologies used to comply with SCAQMD Rule 1171, "Solvent Cleaning Operations," could be transferred, developed, and repackaged into low-VOC and low-toxicity aerosol automotive maintenance products. Related to this project, the Agency Response to Comments A-33 and A-73 through A-77 is incorporated herein.

A-10. Comment: 3M is concerned that, if effective "Carburetor or Fuel-injection Air Intake Cleaners" are not available, technicians will resort to using gasoline, kerosene, or other 100 percent VOC solvents to fulfill that need. Doing so would be bad for worker health and safety and bad for the environment. [3M(a65)]

A-11. Comment: Bridgeview Aerosol, LLC is seriously concerned that these 10 percent VOC standards will result in the elimination of these essential product categories and lead to the use of non-regulated solvents, like gasoline, in these applications. As the effectiveness of the cleaning products declines, end users will seek out other materials that will work for them in these applications. [BridgeAero(a53)]

A-12. Comment: The automotive repair industry is extremely competitive, and while competent and ethical repair dealers will always seek to comply with applicable legal requirements, unscrupulous or incompetent repair shops, particularly those operating without licenses, often seek to cut corners to increase their profits. Such repairers may be unsatisfied with the effectiveness of the new products or increased repair times, and may turn to such toxic and flammable substances as paint thinner. These repairers may also seek to increase productivity by completing their repairs without adequately cleaning the parts. Given the increased drying time necessary to complete brake repairs, some repairers may use high-pressure blowguns to quicken the drying process, which would greatly increase the release of fine brake particulates into the repair shop and atmosphere, thus undermining the environmental quality gains sought by ARB. [CMCDA(a87)]

A-13. Comment: Florida Chemical is seriously concerned that these 10 percent VOC standards will result in the essential elimination of these product categories and the use of non-regulated solvents, like gasoline, in these applications. [FloridaChem(a33)]

A-14. Comment: This VOC reduction from 45 percent to 10 percent on already-regulated categories will cause the users of these products to either: 1) use more product, 2) seek alternative products, or 3) make do with poor performance (this is not a good option for brake work). [Permatex(a28)]

A-15. Comment: I believe that in an effort to find home-brewed solutions, people might use unsafe chemicals like gasoline, kerosene, and other dangerous solvents instead of safe, tested labeled cleaners available today, again, not only negating any benefit of reduced VOC products, but adding to the risk of fire and injury. [Riker(a9)]

A-16. Comment: Then there are safety issues with not using the correct cleaners and chemicals specifically designed to correctly clean and or lubricate sensitive parts on vehicles. [Woolsey(a2)]

Agency Response to Comments A-10 through A-16: Comments A-10 through A-16 are suggesting that the proposed VOC limit will cause users to switch to unsafe solvents and/or use unsafe operating procedures to complete tasks. Staff disagrees that this will happen, and no data have been provided to substantiate these claims. The Board approved VOC limits that will allow for the continued use of safe, effective products. Moreover, it is also unlikely that technicians would start to use unsafe solvents or unsafe procedures because doing so would be a violation of local air district rules.

A-17. Comment: Another concern of our dealers is the potential for increased acetone exposure to technicians due to the required reformulations of alternative brake cleaners. Exposure to high levels of acetone is known to cause several health hazards, and given the reduced effectiveness of acetone-based brake cleaners, technicians using such products may be tempted to use larger quantities and could be exposed to unhealthy quantities. Accordingly, many repairers will be extremely reluctant to use brake cleaners with higher concentrations of acetone. [CMCDA(a87)]

Agency Response: Increased use of acetone is not necessary to meet the VOC limits. If increasing the amount of acetone is chosen as the route of compliance, it is a solvent that has been widely used in this industry. While acetone is not without hazard, it is comparatively less hazardous than other solvents that it would likely be replacing. Unlike solvents such as hexane, xylene, and toluene, acetone is not a Toxic Air Contaminant (TAC). However, staff acknowledges that all of these solvents should be used with adequate ventilation.

A-18. Comment: We are also concerned that the proposed standards will increase costs to the automotive service industry and to consumers due to the additional time required for brake jobs and other degreasing operations as a result of the additional drying time required during cleaning and increased labor required because of less effective products.

[ASCCA(a56), BridgeAero(a53), Celeya(a43), Cochiolo(a13), FastUndCar(a76), FloridaChem(a33), Haselhorst(a38), Murray(a14), Navarro(a45), Orcutt(a54), Permatex(a28), Smith(a42), Woosley(a2)]

A-19. Comment: Conversations with our dealer members have confirmed the opinion that the new products require a substantial increase in the quantity of the product used. This increase of quantity will necessarily lead to increased VOC emissions from the alternative products—thereby undermining the purpose of the regulatory amendments. [CMCDA(a87)]

A-20. Comment: Alternatively, technicians may be forced to remove the component from the engine, disassemble it, and dip-soak it, greatly increasing the time and the cost of cleaning a carburetor or fuel-injection air intake assembly. [3M(a65)]

Agency Response to Comments A-18 through A-20: These comments express concern that the reformulated products will result in increased labor and/or cost to perform automotive repair. We do not agree that this will happen, and the Agency Response to Comments A-73 through A-77 are incorporated herein. The IRTA research showed that products meeting the proposed limit were as effective, or nearly as effective, as currently used products. In addition, the amount of cleaner used, the cost of ingredients used in the tested products, as well as the amount of time needed to perform cleaning, was shown to be comparable to current products. The results of this project, as well as staff's own economic analysis, demonstrate that the limits are cost effective.

A-21. Comment: I strongly support the staff proposal for automotive aerosol cleaning products of 10 percent VOC. [CCA(c2)]

A-22. Comment: We urge the Board to pass this legislation to reduce VOCs in aerosols to 10 percent as soon as possible. [SanFran(c4)]

A-23. Comment: San Francisco Department of Public Health strongly urges the Air Resources Board to adopt legislation to reduce the volatile organic compound (VOC) limits for automotive aerosol cleaning products in the Consumer Products Regulation to 10 percent VOC for the categories of brake cleaning, general purpose cleaning, engine degreasing and carburetor and fuel injection system cleaning. [SanFran(c4)]

A-24. Comment: In the Consumer Products Regulation that will be heard by the ARB Board on November 16 and 17, 2006 the ARB is proposing to establish lower VOC limits for automotive aerosol cleaning products. The staff proposal would reduce the VOC limit from about 45 percent to 10 percent for the categories of brake cleaning, general purpose degreasing, engine degreasing, and carburetor and fuel injection system cleaning. I am writing to urge the board to adopt this lower limit. [IRTA(a60)]

A-25. Comment: Industry says this can’t be done, the regulation passes, and then industry makes it happen. IRTA, headed up by Katy Wolf, does impeccable research. They are practical, working with the shops directly to identify possible, EFFECTIVE alternatives. They have done their homework and have found that the lower VOC alternatives work.

If there are practical, effective alternatives that have already been proven, why wouldn't we go ahead and lower the allowable VOC levels according to staff proposed amendments? I support the proposed amendments. [ContraCosta(a69)]

A-26. Comment: The results of the IRTA/ARB project indicated that a 10 percent VOC limit for the four categories of cleaning could be met with these safer products. [IRTA(a60)]

A-27. Comment: These reductions are critical. The California Air Pollution Control Officer's Association (CAPCOA) concurs with the conclusion in the Staff Report that the proposed new limits are achievable and that the technology is feasible. [CAPCOA(a64)]

A-28. Comment: We support the 10 percent VOC limit on auto aerosol cleaning products, and that should be implemented the sooner the better. 2007 for us would be preferable, but at least 2008. And we'd actually prefer an earlier implementation [WorkSafe(b24)]

A-29. Comment: I am writing in support of the proposed amendments to lower the VOC content in aerosol [*automotive cleaning products*] coatings products. [ContraCosta(a69)]

A-30. Comment: The VOC reduction that can be achieved by reducing the limit to 10 percent, seven tons per day, is very significant. I urge the Board to vote in favor of reducing the VOC limit to 10 percent at the November Board hearing. [IRTA(a60)]

A-31. Comment: Auto repair shops are already using products with low VOC content and the 10 percent limit has been demonstrated in practice. I urge you and the other Board members to vote in favor of the staff proposal in November 2006. [CCA(c2)]

A-32. Comment: CAPCOA wishes to express its support for ARB's proposed amendments to the Consumer Products Regulation. Consumer products is among the largest emission source categories and as such, emissions reductions from this category is of critical importance to the State's efforts to improve air quality. California is home to some 38 million people – more than 10 percent of the entire country – and our population continues to grow. While the existing Consumer Product Regulations are projected to achieve a 40 percent reduction in VOC by 2010, without additional controls, population growth is expected to reverse the downward trend of emissions from this source category. [CAPCOA(a64)]

Agency Response to Comments A-21 through A-32: At the November 17, 2006 hearing, the Board approved amendments to reduce the VOC content of the "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," and aerosol "General Purpose Degreaser" categories to 20 percent by weight, effective December 31, 2008. These categories, along with aerosol "Engine Degreaser," would be subject to a VOC

limit of 10 percent by weight, effective December 31, 2010. The Agency Response to Comments A-52 through A-68 is incorporated herein.

In Resolution 06-42 the Board further directed staff to perform a technical assessment of manufacturers' progress towards meeting the 10 percent VOC limits for the "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," and aerosol "General Purpose Degreaser" categories, at least eighteen months before December 31, 2010.

A-33. Comment: We are concerned that the ARB's proposed 10 percent VOC standards for "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," "Engine Degreasers," and "General Purpose Degreasers" could damage our ability to effectively clean and maintain vehicles.

We are also concerned that the ARB has not considered the potential hazards that may be caused by residues on brake parts automotive, or the safety benefits of effective brake maintenance and repair.

Further, we are concerned that the ARB did not consider the impact of these standards on vintage vehicles that still have carburetors and require effective products to ensure that they remain operational in the years to come.

We take pride in maintaining our vehicles and are concerned about negative impact that these standards may have on our ability to find products that work for a given project.

We are also concerned that the products that would be mandated by these standards could damage the sensitive components of vintage vehicles, or leave residues on vital vehicle systems.

Due to these concerns we urge the ARB to reconsider its 10 percent VOC standards, and finally consider a compromise that would not endanger effective maintenance of automobiles in California, to avoid the negative cost and performance consequences that could result for automotive enthusiasts and "do-it-yourself" consumers.

[AAIA(a25), ACCC(a8), ASCCA(a56), Anderson(a6), Ashland(a48), Bodine(a24), Byrem(a4), BridgeAero(a53), Celeya(a43), Chase(a27), CMCDA(a87), Cochiolo(a13), Cochran(a44), Cunningham(a41), Dewar(a1), Epperson(a19), FastUndCar(a76), FloridaChem(a33), Haselhorst(a38), Hirsch(a29), Murray(a14), Orcutt(a54), Permatex(a28), Peters(a23), PhilAuto(a3), RadSpec(a59), Riker(a9), Rose(a16), Rowley(a12), Scher(a26), Stitt(a30), Swauger(a10), Tom(a18), Toups(a32), USAutoPart(a85)]

Agency Response: These comments are directed at the proposal contained in the Staff Report, which is different than what the Board approved. They suggest that

“Brake Cleaners,” “Carburetor or Fuel-injection Air Intake Cleaners,” “General Purpose Degreasers" (aerosol), and "Engine Degreasers” (aerosol) may not remain effective and therefore safety would be compromised at the proposed VOC limit of 10 percent, effective December 31, 2008. Commenters also suggest that the quality of automotive maintenance and repair will be compromised and that residues will be a concern. In light of these concerns, the Commenter asks that a compromise be considered. Staff disagrees with these contentions. As explained in the Staff Report, as well as the Agency Response to Comments A-73 through A-77 incorporated herein, ARB contracted with the IRTA to identify, test and develop low-VOC, low-toxicity aerosol automotive cleaning products that could replace current aerosol products while maintaining their desired performance. The results indicated that, at levels of 10 percent VOC, products can be developed that perform comparably to those in use today. Because the products were comparable safety should not be compromised.

Low-VOC, non-aerosol cleaning products have been in use in the automotive sector for years. For example, SCAQMD Rule 1171 specifies a 25 gram per liter use limitation for these applications, which is about 3 to 4 percent VOC by weight. The staff’s proposal was partially based on a technology transfer of these bulk liquid products into aerosol form. We are not aware of any data that indicate these low-VOC products have compromised automotive maintenance and repair or that residue is an issue. Moreover, technicians using good operating practices, as they do now with currently available maintenance products, should ensure that brakes or other parts are clean and residue-free to ensure that safety will not be compromised. As further described in the Staff Report, Chapter VI, page 9, staff’s research showed that exempt solvents and water-based cleaners, including alkaline cleaners, are currently used in these applications. For these reasons, staff determined that a limit of 10 percent VOC is feasible. Relating to repair of "vintage vehicles," there is no evidence that the carburetor of a vintage vehicle would require different maintenance than carburetors in newer vehicles. Therefore staff concludes that maintenance of vintage vehicles will not be compromised.

In response to commenters’ request for reconsideration of the limit, staff had further discussions with industry. In these discussions, industry illustrated the challenges that would be encountered when reformulating to a 10 percent VOC limit, including the number of products that would need to be reformulated and the complexity of the new formulations. The Agency Response to Comments A-52 through A-68, which is incorporated herein, explains staff’s modified proposal.

After considering written comments and testimony at the hearing, the Board approved the 20 percent interim limits but changed the effective date of the 10 percent VOC limits for the “Brake Cleaners,” “Carburetor or Fuel-injection Air Intake Cleaners,” and “General Purpose Degreasers” (aerosol) categories to December 31, 2010. The Board also approved the staff’s modified proposal for "Engine Degreaser" (aerosol) of 10 percent VOC, effective December 31, 2010. In addition, the Board, through resolution, directed staff to conduct a technical assessment 18 months prior to the 2010 effective date on the “Brake Cleaner,” “Carburetor or Fuel-injection Air Intake Cleaner,”

and aerosol “General Purpose Degreaser” categories to ensure that they are on track to meet the limit on time. We believe industry should be able to meet this expedited timeframe by focusing research and development on a limited number of products and later introducing more of their reformulated product lines. Therefore, staff believes that, by December 31, 2010, the majority of the industry will be able to formulate and manufacture effective cleaners in order to meet market demand.

b. Staff's Modified Proposal in Attachment B to Resolution 06-42

A-34. Comment: In our initial comments submitted on October 27, ASPA argued that the proposed 10 percent VOC standard is not technologically or commercially feasible for Brake Cleaners. However, since filing those comments, ASPA and CSPA have continued to work with ARB staff to seek a resolution to our concerns and the need for stringent standards in California. As a result of those efforts and discussions, ASPA and CSPA have agreed to accept adoption of a 20 percent VOC limit effective December 31, 2008, and a 10 percent VOC limit effective December 31, 2012 for "Brake Cleaners." [ASPA(a83), CSPA(a81)]

A-35. Comment: Due to the uncertainty of this R&D effort, we request that the ARB initiate an assessment one year prior to the effective date to determine whether the standard is proving to be feasible, and make suitable adjustments if the limit is being found to be commercially ***or*** technologically infeasible. [ASPA(a47,a83), CSPA(a36,a81)]

A-36. Comment: We urge the Board to carefully consider the 20 percent VOC limit proposed by ASPA. We do believe that a safe, effective product meeting a 20 percent limit could be in the marketplace by December 31, 2008. [RadSpec(a59)]

A-37. Comment: On the four automotive products, CSPA has significant concerns with the proposed limit of 20 percent. It will be a very difficult target for us to meet. We need the additional time for the 10 percent limit. [CSPA(b10)]

A-38. Comment: We do support the two-step process in the automotive categories, the '08 and further reaching out to '12 compliance. [CRC(b16)]

A-39. Comment: Should the ARB move forward with any VOC limit below the current standard, it should set an implementation date far enough into the future so that scientifically valid assessments can be conducted regarding the commercial and technological feasibility of the adopted VOC limit. This would allow time to amend the adopted VOC limit if it is found to be infeasible, before it is implemented. [3M(a65)]

A-40. Comment: But we want to just stress that we have concerns that remain. We're hopeful that if anticipated hazards do arise, as many of our folks in the field believe there will be hazards associated with reduced levels of brake cleaner, if the anticipated troubles do arise, that the Board will have another look at this situation and re-visit it. [AAIA(b22)]

A-41. Comment: We support the review of these regulations 18 months prior to the adoption of the standards. We believe that this additional time for the 20 percent and 10 percent standards are absolutely necessary because for small and medium-size companies -- and I know we had a list of larger companies that are seen as having the resources. But we do have a significant majority of members that are small, medium size that are going to have to shift research and development technology capabilities from our parts of our operations to reformulate an entire line of products. For some companies, this is their entire line of products. And they are a small company and have to deal with this in a very expeditious manner. [ASPA(b14)]

A-42. Comment: It is a great concern of ours that if we do not put in the correct research and development over the longer extended time frame that the staff has proposed that we may come up with a product that is less effective and more material to be used in the end application.

We're very willing to continue to explore the options necessary to meet the difficult standards set forth in this proposal for these and other products. However, we must recognize that it will not be an easy task. It will take a large investment of time and money to achieve this goal. We do hope to continue to work on this. And if it becomes apparent from the technical reviews or from other discovery with the ARB staff these limits are not feasible, that they be reconsidered at a later date. [Ashland(b21)]

A-43. Comment: These categories mean a lot to our company. They represent a significant piece of our business. These challenges are immense. They're not easy. We do support the recommendations of the staff. We believe we can get there given some additional time. And we again believe that through the allowance of that time we can get to products that will maintain the performance, because it is extremely important, whether it's brake cleaners stopping that vehicle, the liability to us if those products don't work. And we have a constituent that happens to have a product that doesn't perform, an accident happens, we face the liability issues.

The same thing certainly holds true on carburetor and choke body cleaners. If those products don't work, an accelerator sticks because we didn't properly clean that product, all of a sudden we have a serious accident on our hands. And again we face the liability issues.

We are committed to making this happen. Our research and development team is working on it. We can get there given this additional time. But without the time, we would have a serious problem. [BerryProd(b17)]

A-44. Comment: We have presently been, as has been pointed out, at a certain VOC level. And we see there are very major challenges present in order to provide the efficacy and usefulness for these products to the end user. Each one of these categories will produce a specific requirement to maintain that the end user is satisfied with the performance of the product and the challenges and the re-education that will be

necessary in the marketplace is going to be significant. It is our belief as formulators and packagers that staff has properly approached this situation and that we feel that we will necessarily need all of the time that is being proposed in order to provide the benefits of the products to our end users and to continue with the technology requirements in the future. [BridgeAero(b15)]

A-45. Comment: We believe that going from 45 percent to 20 percent is a huge challenge. And we'll make that challenge in 2008. And we believe it's an even bigger challenge to go from 20 percent to 10 percent. We are committed to do that. We are committed to do that to reduce VOCs. We are committed to do that to reduce the use of toxic air contaminants. We do need that R&D time. Someone mentioned from staff earlier we're one of the companies that have product in many of these categories. We have to spread out our R&D resources over all the categories to do the reformulation. It's very important that we have the time to do it right and do it right the first time. [CRC(b16)]

A-46. Comment: The new VOC limits proposed are very, very challenging. It would require us -- it's going to require industry to have 1,000 to 1,200 products reformulated most in the next two years. There will be 100 companies trying to do this. Those companies include many small and mid-size companies that have very limited R&D staff. There's going to have to be significant staffing in these companies. It's going to cost overall according to your staff's estimates around $200 million for our industry to do this. This is not a small commitment we're making to work with you on this.

There are very significant challenges specific to these various products, given obviously the automotive maintenance products have to maintain safety and effective maintenance. All of our products have various, special benefits that have to be maintained. We can't fail.

We have to also keep our brand names strong. For many of our companies, their brand names are their most important asset. So we're taking on this very significant undertaking, and we don't know that we're going to succeed. But we are committing to work as hard as we can to succeed. And if we do fail, then we will come back to you and work out -- want a commitment to work out how we can both succeed in this endeavor. [CSPA(b23)]

A-47. Comment: We support the resolution as it is. It's basically a win-win situation. The State will eventually get its 10 percent. But originally we will get the 20 percent which is needed for the emission reductions up front. The same thing for the WD-40 company with the general purpose degreaser. The time was needed. They can meet the original 20 percent in two years, but they need the extra four years for the 10 percent. [RadSpec(b1)]

Agency Response to Comments A-34 through A-47: Comments A-34 through A-47 are in support of the revised proposal staff presented at the Board hearing, provided that a technical assessment be conducted prior to the revised

effective date of the 10 percent limits. The revised proposal and the rationale for this modification are described in the Agency Response to Comments A-52 through A-68 which is incorporated herein.

c. Technical Assessment of Staff Proposals

A-48. Comment: We ask you to as part of your adoption resolution to direct the staff to consider 2.5 percent, similar to what we have in our South Coast AQMD Rule 1171 for general cleaning. We have had that 2.5 percent in place since 2003, and we have found no problems. [SCAQMD(b2), SCAQMD(c6)]

A-49. Comment: I would suggest that the Board consider a future amendment that would reduce the VOC content to two and a half percent. Thank you. I appreciate the opportunity. [IRTA(b4)]

Agency Response to Comments A-48 and A-49: These comments suggest that a VOC limit of 2.5 percent, by weight, be considered for automotive maintenance products. The results of the IRTA Study and staff's evaluation indicate that a VOC emission standard of 10 percent is the lowest technologically and commercially feasible limit that can be set at this time for "Brake Cleaners" (aerosol), "Carburetor or Fuel-injection Air Intake Cleaners" (aerosol), "Engine Degreasers" (aerosol), and "General Purpose Degreasers" (aerosol). With regard to the Commenters' suggestion that the Board consider a future amendment that would establish a VOC limit of 2.5 percent for these categories, as a matter of course, staff will follow technology advances and reevaluate the potential for further reductions in VOC emissions from these categories. Staff's evaluation of future data will indicate if a VOC emission standard of 2.5 percent is technologically and commercially feasible. The Agency Response to Comments A-69 through A-71 is incorporated herein.

A-50. Comment: Eighteen months before the implementation deadline there would be a check-in with industry. I'm wondering what the purpose of that check-in is. And my concern is the purpose will end up being listening to the continued challenges of the manufacturers in coming up with a low VOC limit and the deadline would be extended even further. [WorkSafe(b24)]

A-51. Comment: I'm concerned about the tone of the industry comments. Since this compromise with the staff was reached, the industry says that they will comply with the 20 percent interim limit and the 10 percent limit, but only if it's demonstrated that this can be achieved in practice. That seems to me that it gives them an out to say that it hasn't been demonstrated in practice. And we know that's not true from the South Coast experience. [IRTA(b4)]

Agency Response to Comments A-50 and A-51: The Board approved amendments which limit the VOC content to 20 percent for aerosol "Brake Cleaners," aerosol "Carburetor or Fuel-injection Air Intake Cleaners," and aerosol "General Purpose Degreasers," effective December 31, 2008, and 10 percent VOC by 2010,

including aerosol “Engine Degreasers.” These amendments to the Consumer Products Regulation will reduce VOC emissions by about 9.4 tons per day statewide by the year 2010, which equates to a reduction of approximately 4.0 tons per day in the South Coast Air Basin by 2010.

However, in Resolution 06-42, the Board directed staff to conduct a technical assessment prior to the effective date of the 10 percent VOC limit. Part of the assessment will include industry consultation on the reformulation progress, but will also include research and an evaluation of technologies and existing complying products. Based on all data, staff will independently determine if the limit can reasonably be expected to be met in the time frame provided. The Agency Response to Comments A-52 through A-68 are incorporated herein.

A-52. Comment: I am writing in support of the original staff proposal to lower VOC limits for automotive aerosol cleaning products to 10 percent. [CCA(c2)]

A-53. Comment: I strongly support the original staff proposal for reducing the VOC content of automotive aerosol cleaning products to 10 percent and to keep the effective date of 2008. [IRTA(a60)]

A-54. Comment: We believe 2008 is achievable and ask you not to delay the category specifically related to general degreasing and automotive cleaning for the 10 percent. [SCAQMD(b2), SCAQMD(c6)]

A-55. Comment: We're here supporting the staff's original recommendation for a VOC limit of 10 percent that would be implemented in at least 2008. [WorkSafe(b24)]

A-56. Comment: I wanted to strongly urge you to support the original recommendation to reduce the VOC content in automotive repair to below 10 percent in 2008 or sooner, as Catherine Porter had just mentioned. [Sutton(b26)]

A-57. Comment: I want to urge the Board if possible to adopt the original proposal of 10 percent VOC by 2008. [Quint(b5)]

A-58. Comment: I strongly support the original proposal that the staff put forth which was to phase the VOC content from 45 percent to 10 percent by 2008. [IRTA(b4)]

A-59. Comment: I would just urge the Board to adopt the original proposal that phases the VOC content down to 10 percent by 2008. [IRTA(b4)]

A-60. Comment: I just wanted to say that hazardous work can be made less hazardous, and your making the automotive repair VOC content below 10 percent by 2008 or sooner can actually make a hazardous job safer for the people who are exposed.

So I urge you to support the original proposal. You have the capacity to improve public health, and I urge you to take it. Thank you so much. [Sutton(b26)]

A-61. Comment: Since there are already products in the market that comply with the 10 percent limit there is no reason to delay this reduction until 2012. It is our understanding; however, that staff is considering weakening their proposal. The original proposal requests a reduction of the VOC limit from the current level of about 45 percent to 10 percent by the end of 2008. The weaker proposal would give the industry an interim limit of 20 percent and then a final limit of 10 percent by the end of 2012.

We oppose any efforts to relax or weaken this regulation. Given how much still needs to be done to attain national health based air quality standards, ARB must maximize the pollution reduction for every new regulation. [CCA(c2)]

A-62. Comment: I strongly oppose extending the deadline and increasing the limits. [Sutton(b26)]

A-63. Comment: We believe this is a time to maximize the reductions and at the earliest possible date. The delay will cause approximately three tons per day of VOC emissions in the South Coast Air Basin alone. [SCAQMD(b2), SCAQMD(c6)]

A-64. Comment: Additionally, because of the SCAQMD regulation of aerosol cleaners, many auto shops in the South Coast Air Basin have been using 100 percent acetone aerosol products for the past few years. These products [are] essentially zero VOC. [CCA(c2)]

A-65. Comment: With respect to automotive aerosols, many large dealerships within the SCAQMD are required by Rule 1171 – Solvent Cleaning Operations, to use aerosol brake cleaners, carburetor cleaners, engine degreasers and general purpose degreasers that have a VOC content less than the Boards' proposed limits. These dealerships have used the ultra-low VOC products for more than a decade. While using these products, they have maintained the quality work their customers expect and remained competitive and profitable. We are also aware of several independent studies demonstrating the effectiveness of low-VOC aerosol and non-aerosol products used in automotive repair shops for brake cleaning, carburetor cleaning, engine degreasing, and general purpose degreasing. Based on this direct experience, we see no need for interim limits or delayed implementation dates. [SCAQMD(c3)]

A-66. Comment: Allowing the delay will exacerbate an environmental justice issue. Many of the solvents that are used in the high VOC aerosol products that are being used today are also classified as toxic air contaminants, such as toluene and xylene, methyl alcohol and hexane. Many of the workers in auto repair facilities are people of color. And many of the people who live in communities surrounding the auto repair facilities are people of color and they are low income. They are being exposed on a

daily basis to these materials, and they pose a toxic risk. By going down to 10 percent in 2008, you would actually reduce or eliminate this toxic risk. [IRTA(b4)]

A-67. Comment: Over the last 10 years or so, IRTA has worked with hundreds of auto repair shops on low-VOC, low-toxicity cleaning alternatives. Most of the workers in auto repair shops are people of color who have low income. The people who live in communities surrounding auto repair facilities are also generally people of color. Many of the VOC solvents used today in auto aerosol products are classified as Toxic Air Contaminants as well as VOCs. By reducing the VOC limit for these cleaning products, ARB will also reduce the toxic risk and achieve a substantial environmental justice benefit to workers and community members. [IRTA(a60)]

A-68. Comment: I strongly oppose the staff/industry compromise that would allow an interim of 20 percent and extend the compliance date out to 2012, which is more than six years from now.

I oppose the extension and phase down. As you heard from Elaine Chang and Lee Lockie from the SCAQMD, there are many facilities in the South Coast Air Basin that are already meeting the 10 percent limit. In fact, it's a much lower limit they are meeting, a limit of 25 grams per liter or about 2.5 percent. [IRTA(b4)]

Agency Response to Comments A-52 through A-68: The Comments A-52 through A-68 are related to staff's initial proposal contained in the Staff Report, released September 29, 2006. As described in the Staff Report, staff originally proposed to reduce the allowable VOC content to 10 percent by weight VOC effective December 31, 2008, for aerosol automotive maintenance products in the categories of "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," "Engine Degreaser" (aerosol), and "General Purpose Degreaser" (aerosol). The 10 percent VOC limit was proposed based on staff's review of existing or emerging technologies and on results of a research project (IRTA Study) funded by ARB. Using "real world" scenarios, the IRTA Study demonstrated that non-aerosol technologies currently being used to comply with local rules could be transferred, developed, and repackaged into effective, low-VOC and low-toxicity aerosol automotive maintenance products.

In continued discussions with industry after release of the Staff Report, staff learned more about the challenges involved in developing 10 percent VOC products.

To alleviate these technical issues, staff reconsidered the original proposal and proposed a two-step phase-in with a VOC limit of 20 percent by December 31, 2008, and the 10 percent VOC limit effective December 31, 2012. Staff further proposed delaying the effective date for aerosol "Engine Degreasers" to meet the 10 percent limit until December 31, 2010. Staff's modified proposal would have achieved the majority of the emission reductions in the near term, while still providing additional time for industry to address technical issues such as the number of products that need to be reformulated and the research and development necessary to reformulate entire product lines. Given that most of the companies affected manufacture products in every

category, staff believes that additional time is warranted to allow companies sufficient time to reformulate their full line of products. Transitioning from an organic solvent based technology to a low-VOC or water based technology will also likely involve a training component. While these products will work, staff acknowledges that they are likely going to work differently. It will take time to develop the technical literature and product information necessary to convey to the end user how to effectively work with these new products. Industry generally concurred with this approach being feasible.

While it was clear that industry should be provided some additional lead time beyond December 31, 2008 to reformulate their products, the main issue was how much additional time was necessary.

Staff's modified proposal presented at the Board hearing would have given manufacturers until December 31, 2012 to achieve the 10 percent VOC limit for "Brake Cleaners," Carburetor or Fuel-injection Air Intake Cleaners," and General Purpose Degreaser" (aerosol). This would have provided an additional four years as compared to the December 31, 2008 effective date originally proposed in the Staff Report. One of the main rationales for this four years of additional time was to cushion the economic impact on some manufacturers, such as those manufacturers who had many noncomplying products that would need to be reformulated to meet the 10 percent standard. Staff believed that not all manufacturers needed this much lead time to reformulate their entire product lines, since some manufacturers had fewer products to reformulate or more experience in the necessary reformulation technology. But staff proposed a full four years of lead time so that the economic impact would be lessened on the industry as a whole.

At the Board hearing, the Board heard testimony from a number of commenters that four years of lead time was unnecessary. After considering this testimony, the Board approved an accelerated timeframe for meeting the 10 percent VOC limit, with an effective date of December 31, 2010. However, to mediate the transition to low-VOC technologies, the Board agreed in part with staff's proposed interim VOC limit of 20 percent for "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," and (aerosol) "General Purpose Degreasers," with an effective date of December 31, 2008. Staff believes that the effective date of December 31, 2010 is technologically and commercially feasible because by this date manufacturers should be able to reformulate a sufficient number of complying products to meet the basic market demand in each product category. Some manufacturers may choose to expend their resources on accelerated research and development in order to reformulate all of their product lines by this date. Other manufacturers may choose to save money by focusing their research and development dollars on a limited number of their products, so that these products can be reformulated by December 31, 2010, and defer reformulation of other products until after the effective date. Since there is a three-year sell-through period for products manufactured before the effective date, some manufacturers may choose to sell products manufactured before this date until they can finish their reformulation efforts for these products. Other manufacturers may choose to temporarily or permanently discontinue selling some of their products (e.g., products with low sales

volume) in order to concentrate their resources on other priorities. This is an economic decision that each manufacturer must make. It is likely, however, that most manufacturers will concentrate first on reformulating those products that generate the majority of their sales and profits. It is very likely that such market forces will ensure that a sufficient number of complying products are available to meet the basic market demand in each product category, even though it is possible that not all of the currently marketed products will be available after the December 31, 2010 effective date.

A-69. Comment: Some facilities have policies that forbid the use of aerosols in their shops. One such company is Midas Muffler. In Southern California, where stringent VOC regulations apply to cleaners used in equipment, the Midas Muffler shops are using water-based brake cleaning systems.

Other facilities have decided to forego the use of aerosols and are using spray bottles with water-based cleaners for all of their cleaning.

In other projects, IRTA demonstrated that water-based cleaners used in small, portable pieces of equipment and in spray bottles are suitable alternatives for aerosol brake cleaning.

The examples cited above indicate that aerosol cleaners with 45 percent VOC are not necessary for auto repair operations. Shops can use aerosols with 10 percent VOC or they have various options for using low-VOC materials in equipment or spray bottles. [IRTA(a60)]

A-70. Comment: Furthermore, because of the availability of low-VOC cleaners, some facilities have adopted policies that forbid the use of aerosols in their shops. One such company is Midas Muffler. Southern California Midas Muffler shops are also using water-based brake cleaning products. Other facilities have decided to forego the use of aerosols and are using spray bottles with water-based cleaners for all of their cleaning.

The examples cited above indicate that aerosols with 45 percent VOC are not necessary for auto repair operations. Shops can use aerosols with 10 percent VOC or other low-VOC alternatives in equipment or spray bottles. [CCA(c2)]

A-71. Comment: Many shops are phasing out aerosols completely, finding adequate substitutes (particularly water-based brake cleaning). [ContraCosta(a69)]

Agency Response to Comments A-69 through A-71: While staff acknowledges that automotive repair facilities use a variety of low-VOC, non-aerosol technologies, section 41712(c) of the California Health and Safety Code (HSC), specifically precludes ARB from adopting a regulation that would require the elimination of a product form. Aerosol products constitute a "product form." At this time 10 percent VOC is the lowest limit commercially and technologically feasible for aerosol automotive maintenance products in the categories of: “Brake Cleaners,” “Carburetor or

Fuel-injection Air Intake Cleaners," "Engine Degreasers" (aerosol), and "General Purpose Degreasers" (aerosol).

d. Violations With Non-California Products

A-72. Comment: What you will force is companies that have locations outside California will ship the non-California products in their own trucks to locations within California. [AutoParts(a15)]

Agency Response: This would be a violation of the Consumer Products Regulation. Section 94509(a) of the Consumer Products Regulation provides that no person shall sell, supply, or offer for sale in California any consumer product which contains volatile organic compounds in excess of the limits specified in the Table of Standards. We do not believe that companies would risk enforcement action by violating the regulation, especially since supplying illegal out-of-state products in their own trucks would involve considerable effort and expense. Also, these businesses would be subject to enforcement actions of local air districts (such as the South Coast AQMD) that have adopted rules prohibiting the use of high-VOC products.

e. Reliability of IRTA Study

A-73. Comment: A thorough, controlled study of the efficacy of the proposed reformulations has yet to be completed. The data obtained on the alternative automotive cleaners used in the 2005 IRTA Assessment Wolf Study primarily employed soy oil/acetone blends, Simple Green and water based blends. The study itself appears to be cursory, incomplete and uncontrolled. [Ashland(a48)]

A-74. Comment: ASPA and our members continue to have serious reservations about the research and conclusions drawn by IRTA on the project entitled, "Alternatives to Automotive Consumer Products that Use Volatile Organic Compounds (VOC) and/or Chlorinated Organic Compound Solvents." Therefore, our members vigorously oppose the resulting proposed limits of 10 percent VOC content for automotive "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," and "Engine Degreasers" (aerosol). [ASPA(a47), CSPA (a36)]

A-75. Comment: We have been a member of the ARB Technical Advisory Committee on the IRTA Study from its inception and we have continually voiced our concern regarding the infeasibility of the formulations that were regarded as "satisfactory" by IRTA. Our internal investigations of these products have not produced results that we believed would lead to marketable products. We had proposed that a standard methodology be used to evaluate the formulations. We have shown in presentations to staff that the results obtained from that methodology shows that the technical performance requirements were not being met. If the products do not meet performance requirements, then they certainly cannot and will not be commercially viable. [BridgeAero(a53)]

A-76. Comment: We are concerned that the basis for many of these proposed changes was a fundamentally flawed study conducted by IRTA entitled "Alternatives to Automotive Consumer Products that Use Volatile Organic Compounds (VOC) and/or Chlorinated Organic Compound Solvents." This study was not peer reviewed, is highly subjective, and generally biased toward water based products that typically do not have acceptable performance, customer acceptance, or adequate safety when packaged in aerosol form. [RadSpec(a59)]

A-77. Comment: Because of our continued serious concerns about the subjective and incomplete technical analysis presented in the IRTA report and the drastic impact the proposed standards would have on the affected product categories, ASPA and CSPA commissioned Sierra Research Inc., to conduct an independent, third-party, scientific review of the IRTA research and Final Report. Sierra Research's report entitled, "Analysis of IRTA Report on Water-Based Automotive Products," Report No. SR2006-08-02, dated August, 2006, is included as Appendix B to these comments. Among the study's conclusions are:

- IRTA failed to prevent bias in this research for both field testing participants and IRTA personnel;

- IRTA did not collect complete data and did not sufficiently analyze the data that was collected;

- IRTA failed to conduct a controlled study to compare alternative and solvent-based cleaners; and

- The results of the IRTA study do not support the conclusions that have been drawn regarding the commercial and technological feasibility of 10 percent VOC content in automotive cleaning and maintenance products.

Sierra Research's impartial and thorough review of the IRTA research project provides a credible analysis that seriously undermines the foundation of the conclusions made in IRTA's Report and in subsequent staff proposals for category standards. [ASPA(a47), CSPA (a36)]

Agency Response to Comments A-73 through A-77: Comments A-73 through A-77 question the reliability of the research conducted by IRTA. The results of this study are a partial basis for the justification of the proposed limits. We disagree that the research was flawed, cursory, incomplete, biased, or uncontrolled. ARB staff, along with a technical review committee (TRC), monitored the study and provided input during all phases of the project. ARB staff and other members of the TRC also participated in a site visit to monitor the field study portion of the project. The TRC included these Commenters, as well as representatives from other governmental agencies, automotive maintenance personnel, and product formulators. In this study, IRTA was able to demonstrate effective aerosol automotive maintenance products. The products were used by technicians at several automotive maintenance facilities. Under these "real

world" scenarios, the technicians found the products to perform as well, or nearly as well as, existing solvent-based products. As with all ARB sponsored research, the final report was reviewed and approved by the RSC on February 28, 2005. The Research Screening Committee (RSC) consists of scientists, engineers, and other individuals who are knowledgeable, technically qualified, and experienced in air pollution problems. The RSC is mandated to advise the Board on scientific issues and research needs. In approving the final report, the RSC determined that the study was valid and had fulfilled the contract as proposed. We do acknowledge that these Commenters provided comments during the research project and on the final report. These comments, which were similar to those submitted and summarized here, were considered by the RSC prior to their approval of the report.

The Commenters offer no evidence that the product formulations will not perform adequately. We note that the basic premise of the research was to determine if technology currently in wide use in bulk liquid form could be transferred and used successfully in an aerosol form. There is no reason to believe that low-VOC liquid cleaners would no longer clean when packaged in aerosol form. Staff's own research, as described in Chapter VI of the Staff Report, found feasible methods of formulating low-VOC products by including "LVP-VOC" solvents, exempt compounds, as well as water-based cleaning technologies such as alkaline cleaning. This information, as well as the results from the IRTA Study, formed the basis for proposing that a 10 percent VOC limit for the categories of "Brake Cleaner," "Carburetor or Fuel-injection Air Intake Cleaner," "Engine Degreaser" (aerosol), and "General Purpose Degreaser" (aerosol) is commercially and technologically feasible.

A-78. Comment: The basic premise was that if any complying product existed in the marketplace and the IRTA Study showed feasibility, then the limit was set to approach the lowest VOC limit currently in the marketplace. This premise is flawed because complying product has demonstrably lower performance and poorer consumer acceptance. This premise also does not differentiate between the needs of the professional mechanic and the homeowner. A 10 percent VOC product found acceptable for occasional household use is not acceptable for a professional mechanic that demands a high performance, fast acting product at the most reasonable cost. [RadSpec(a59)]

Agency Response: Staff disagrees that the premise of the study is flawed. We note that low-VOC liquid products have been used for years in several air districts by professional mechanics. For example, SCAQMD Rule 1171 specifies a use limit of 25 grams per liter, approximately 3 to 4 percent VOC by weight, for General Repair and Maintenance Cleaning. This must be met by existing automotive shops. An important aspect of the study was to determine if a technology transfer, from bulk liquid to aerosol formulations, could be made while maintaining product efficacy. A more thorough account of the IRTA project is given in the Agency Response to Comments A-73 through A-77 incorporated herein.

Staff acknowledges that the VOC limit was set as low as feasible, in accordance with State law. In contrast to what this commenter indicates, staff believes that professional users are more likely to be using low-VOC materials on a daily basis to comply with district rules, such as Rule 1171. In addition, professional technicians assisted IRTA's research project by field testing products and provided input on the quality of the products. These professionals have the expertise required to determine whether the alternatives were effective. This Commenter also acknowledged that the proposed 10 percent limit could be met, given additional time for research and development.

A-79. Comment: How much effort was used in each location, with each cleaner, to exact a degree of cleanliness? How "clean" was "clean" in the cleaning descriptions, which appear to be somewhat subjective? Were there controls for each cleaning situation? Was it a double-blind study? How much residue was left in each "cleaning" compared to solvents in use now? Were cleaners with other VOC-exempt compounds such as parachlorobenzotrifluoride (PCBTF) and methyl acetate looked at?

If not, then why not? These are also effective non-VOC solvents that were not used with soy oil in the study. These questions do not appear to be answered in this study. They should be answered prior to any VOC content amendments for automotive consumer products. [Ashland(a48)]

Agency Response: The Commenter is questioning the validity of the IRTA Study, which is a partial basis for the Staff Report proposal. The Agency Response to Comments A-73 through A-77 is incorporated herein. The RSC approved the final report, at their February 28, 2005 meeting. Thus, we disagree that these questions need to be answered further.

To respond to the questions related to the use of cleaners with other VOC-exempt compounds such as PCBTF and methyl acetate, these compounds were not evaluated due to potential toxicity concerns. The objective of the study was to develop low toxicity, low-VOC alternative products. However, nothing in the regulation precludes the Commenter from formulating with these exempt compounds if they believe they can be used safely.

A-80. Comment: Has a single study been conducted on the effectiveness of the products which would have to replace those current products not meeting this proposed standard? [Julian(a20)]

A-81. Comment: To remove effective cleaners for safety-sensitive equipment used on California roadways without fully studying the safety and reliability aspect in an effort to achieve a relatively minor reduction in VOC emissions is unwise, unacceptable to those who presently formulate safe and highly-effective cleaners, and not in the best interests of Californians who depend on the quality products from respected manufacturers like Valvoline and Aervoe Industries, who have already reduced VOCs on these products once before.

More study is clearly needed with a more detailed look into safety, efficacy and a true cost-benefit analysis. [Ashland(a48)]

A-82. Comment: Before pushing the automotive repair industry toward the use of water-based brake cleaners, ARB should commission a safety study that investigates whether the use of water-based brake cleaners may increase the risk of dangerous braking system malfunctions. Without further information regarding these concerns, ARB may be mandating the use of potentially unsafe products. [CMCDA(a87)]

A-83. Comment: We are also concerned that ARB has not fully considered the impact of these standards and has not conducted significant long-term testing to ensure that the resulting products will not endanger vehicle safety or consumer preferences. [FastUndCar(a76)]

Agency Response to Comments A-80 through A-83: Comments A-80 through A-83 suggest that further research is needed to demonstrate that effective "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," aerosol "Engine Degreasers," and aerosol "General Purpose Degreasers" can be formulated at the proposed limit of 10 percent VOC by the originally proposed effective date of December 31, 2008. As detailed in Chapter VI of the Staff Report, as well as in the Agency Response to Comments A-73 through A-77, which are incorporated herein, a two year research project was conducted. The results showed that effective products could be formulated at 10 percent VOC. Moreover, in further discussion with the industry, we learned that with additional time for research and development, they believed the 10 percent limits to be achievable without compromising safety. Further detail is provided in the Agency Response to Comments A-52 through A-68, incorporated herein. We also note that the water-based bulk systems have been used in automotive maintenance shops for years. There is no evidence of safety being compromised by using these bulk liquid cleaners. Part of the IRTA Study was done to repackage these bulk products as aerosols. It is not logical that the conversion of these products to aerosols would render them unsafe.

A-84. Comment: We've surveyed our members and also feel like in the South Coast area we've seen product sales decline after the adoption of Rule 1171 and the application of this standard... [ASPA(b14)]

A-85. Comment: One of the things that I'd like to mention is we too offer in the South Coast area compliant product. In the last few years, we've lost about 40 percent of our sales volumes on that material. It's in danger of being cut as well. [Ashland(b21)]

A-86. Comment: The overall effectiveness of water-based and high-concentration acetone-based products is another concern. We have had conversations with representatives from SCAQMD who have advised us that while both of these products are effective in cleaning dust and fingerprints, neither cleans grease and grime at a level comparable to the current products used elsewhere in the state. [CMCDA (a87)]

A-87. Comment: The last thing I wanted to say is in response to the South Coast issue, we are one of the manufacturers that has a South Coast product. We've had it for approximately five years. The feedback we get and our easiest feedback is by sales. Our sales have decreased in that product by almost 50 percent in five years. At the current rate, we would probably discontinue that product.

The reason for discontinuing that product is the feedback we get is the product does not work. It is an idling charged acetone product. Acetone as we've heard earlier is commonly used, and we need to do different technology. We need to come up with new ways to meet the 10 percent, because we're not getting the market acceptance this product deserves. [CRC(b16)]

A-88. Comment: …about the products in South Coast, we, as most of the other manufacturers, introduced a product. It's virtually acetone. Acetone simply is not working. Our product is also diminishing rapidly in acceptance and overall sales. And it's on the verge of being eliminated… The acceptance is not there, because acetone will not perform the job that can be performed by some of the other solvents that are currently used in the broader-based lower VOC acceptance product. [BerryProd(b17)]

A-89. Comment: My esteemed colleagues have mentioned that sales have dropped as an indication of consumer discomfort with the new formulas or dislike of the new formulas. The folks in my lab talk to customers every day. We're almost the first stop when they have a complaint. I've spoken to customers personally that have used our acetone-based ultra-low VOC product, and they don't like it. It doesn't work. They have to use too much of it to get the job done. So you trade a low-performing product, push it into the marketplace, and they just use more of it. And it becomes even more of an issue. So, we see here a case, I believe based on customers that I've personally talked to where we've legislated an inferior product, forced it on a customer who doesn't like it. We don't want to do that again. [RadSpec(b19)]

A-90. Comment: The way the Rule 1171 is structured, if a facility uses more than 160 fluid ounces of an aerosol product per day, they have to then comply with the 25 grams per liter standard. So not all facilities go above that 160 fluid ounces per day. We're talking about larger facilities that are using those products. And we believe that the standard itself, we've seen a decline in sales for those companies that have tried to remanufacture products for those specific areas. We don't believe that the standard is in effect being applied fully across the region because of the 160 fluid ounces. [ASPA(b14)]

Agency Response to Comments A-84 through A-90: Comments A-84 through A-90 suggest that companies are unable to formulate effective aerosol products at the 25 grams per liter limit specified in SCAQMD Rule 1171 and are seeing their sales in Southern California decline because of it. While these comments are not directed at the proposed amendments, staff disagrees that effective products cannot be formulated at 10 percent VOC.

As shown by the IRTA Study, and staff's own analysis, effective aerosol products can be developed at 10 percent VOC. This conclusion is not invalidated simply because the particular formulations sold by these commenters have not been as successful as other formulations. At the hearing, the Commenter agreed that, with additional time, development of 10 percent VOC products appears feasible. As mentioned in the Agency Response to Comments A-52 through A-68 incorporated herein, the Board directed staff to conduct a technical assessment 18 months prior to the 2010 effective date to ensure that progress is being made towards developing complying products.

A-91. Comment: Please be sure to review the safety conditions of moving from a nonflammable material (chlorinated) to one that is extremely flammable (acetone). This will compromise many of the shops that will have to move from a "safe" solvent blend to a highly flammable blend. As a comparison, you may want to look at the furniture industry that was forced by regulation to make a similar move and the fires at their establishments that this caused. Many were put out of business --others probably faced much higher insurance costs. [Ashland(a49)]

Agency Response: The proposed amendments do not require switching from nonflammable to flammable solvents as the Commenter suggests. Use of chlorinated products has been prohibited since December 31, 2002. We also note that during the development of the Automotive Maintenance & Repair Air Toxics Control Measure (AMR ATCM) to prohibit the use of chlorinated toxic air contaminants, a search of statewide and national databases as well as inquiries to fire departments and associations across the state were unable to locate any reports of fires, injuries, or other incidents related to the use of non-chlorinated products in AMR facilities. These findings have shown that flammability is sufficiently addressed by the use of good operating practices on the part of facility owners, mechanics, and technicians. ARB staff found that most facilities treat all aerosols as flammable and use safety precautions when using them. Lastly, acetone is only one of the pathways to meeting the proposed limit. Another reformulation option is water-based technology, which is nonflammable.

f. Comments on Specific Categories for Automotive Maintenance

Brake Cleaners

A-92. Comment: Existing water-based brake cleaners are problematic in that they leave a residue on brake parts. Although we are aware of no scientific studies examining the effects that this residue has upon brakes, we have been advised by a number of dealer members in the SCAQMD, where the use of low-VOC brake cleaners have been mandated for several years, that water-based brake cleaners cause oils to rise to the surface of brake parts and leave deposits in brake pads. [CMCDA(a87)]

A-93. Comment: We have been advised that current versions of water-based brake cleaners leave brake parts more-susceptible to rust problems, particularly flash rust. If

brake rotors become excessively rusted, the veins used to help cool the rotors during braking can become plugged, thereby increasing the risk of braking failure. [CMCDA(a87)]

Agency Response to Comments A-92 and A-93: These comments are questioning the safety of using water-based brake cleaners. Staff is unaware of any studies showing that residue has any effect on brake function and no data have been provided to substantiate the claim that there would be any effect. Issues of rust, and/or residues, should be resolved through use of good operating practices because liquid water-based cleaning products have been used in this industry for years and neither residue nor rust have been issues.

It is also important to note that staff's proposal does not require using water-based formulations. The use of water-based technologies is only one pathway to meet the limit. Other reformulation options include the use of exempt VOC solvents as well as use of "LVP-VOCs."

A-94. Comment: Please reconsider your proposal on the limits you propose for the VOCs on the brake cleaners. The last change that was made eliminating the chlorinated brake resulted in twice the amount of non-chlorinate product being used with less than satisfactory results. The proposal you have would further limit our ability to do the job properly for our customers and could affect the braking systems on passenger cars creating an unsafe condition. [CoastTruck(a7)]

Agency Response: This comment is directed at the staff's original proposal as presented in the Staff Report, which is different than what the Board approved. As suggested by the Commenter, the limits were reconsidered. The modified approved proposal is described in the Agency Responses to Comments A-33 and A-73 through A-77, which are incorporated herein. With regard to cleaning effectively, the Agency Response to Comments A-73 through A-77 is incorporated herein. Moreover, our data do not show that sales of "Brake Cleaner" have doubled since the use of perchloroethylene was prohibited.

Carburetor or Fuel-injection Air Intake Cleaners

A-95. Comment: ARB has failed to consider current limitations to "Carburetor or Fuel-injection Air Intake Cleaner" formulations due to United States Environmental Protection Agency's (U.S. EPA's) required registration of fuel additives. [FloridaChem(a33), BridgeAero(a53)]

Agency Response: Manufacturers' ability to meet the proposed VOC limits will not be impacted by the U.S. EPA's registration requirement of fuel additives. To meet this requirement, manufacturers are required to provide a summary of existing scientific literature on their products and their components, a discussion of the potential population exposures to these products, and the basic registration data (40 CFR Part 79). These are not onerous requirements. Staff's proposed VOC limit

should not have any effect on the ability of a “Carburetor or Fuel-injection Air Intake Cleaner” to meet the requirement.

A-96. Comment: 3M believes that it will be extremely difficult, if not impossible, to formulate a safe, effective, commercially feasible "Carburetor or Fuel-injection Air Intake Cleaner" below the current limit. [3M(a65)]

A-97. Comment: As cleaning efficacy is reduced, pollution from poorly operating emissions systems will increase. [ASCCA(a56)]

A-98. Comment: In addition, the ARB has not considered the inappropriateness of low-vapor pressure (LVP) ingredients used to reformulate these products and the negative impacts that oily residues present in air intake systems where soils from the air can build up and collect. [BridgeAero(a53), FloridaChem(a33)]

A-99. Comment: By lowering the VOC on the carburetor cleaner, our business will suffer and give a detrimental blow to our sales. Lowering the VOC will ultimately decrease the effectiveness of the product and hence its usage by the users, be it professional mechanics or simple do-it-yourselfers. [NovaAuto(a22)]

A-100. Comment: Further, I am concerned that the ARB did not consider the impact of these standards on vintage vehicles that still have carburetors and require effective products to ensure that they remain operational in the years to come. Carburetors that are allowed to become dirty and clogged would cause more pollution than the proposed limits would prevent. [Riker(a9)]

A-101. Comment: My particular concern is the "Carburetor or Fuel-injection Air Intake Cleaner" aerosol product. Our experience is that consumers will typically spray these products directly into a running engine to use them. This allows consumers to clean the throttle body or the carburetor without disassembling the actual engine. The disassembling is very time consuming and also beyond the capability of many of our customers.

It's critical that the products clean deposits inside the air intake system without building deposits further into the fuel system. Cleaning deposits in the throttle body and moving them into the intake ports or the intake valves does not necessarily result in the clean running engine that the consumer desires. The consequences of increased deposits in these areas can include increased carbon monoxide emissions, increased hydrocarbon emissions, and reductions in fuel economy. These reductions in fuel economy also translate into higher carbon dioxide emissions.

It's important that the product formulation components not only clean effectively with low VOCs, but they also get through the combustion process within the engine without building additional deposits. Low-VOC components by their nature tend to burn less readily, so that creates a lot of formulation difficulties. It is critical that the formulations are tested for performance and cause no harm in actual operation. This

requires engine testing which is both very expensive and very time-consuming. And that is, it's not simply mixing a formula and giving a quick spray to watch it clean. There's an involved testing process that must be met.

There's a substantial conflict between the three goals, burning completely without creating issues further in the engine, and providing low VOCs in the actual initial cleanup itself. We've heard how parts cleaner processes and elbow grease can solve some of these issues, but that doesn't address the cleaning within the engine when it's not disassembled. We've also heard how larger companies and auto makers support these products, but we've also seen that additive products are specifically not recommended by many auto makers, but also sell the same additive product. That doesn't necessarily tell the whole story. [Shell(b18)]

Agency Response to Comments A-96 through A-101: Comments A-96 through A-101 are directed at the original proposal, as presented in the Staff Report, and question the ability to make an effective “Carburetor or Fuel-injection Air Intake Cleaner” at the proposed VOC limit of 10 percent. While staff agrees that cleaning is important, we disagree with these comments. Staff believes, as one option, "LVP-VOC" ingredients may be blended with exempt VOC solvents to make efficient and effective products for use on modern, and vintage, vehicles. The IRTA Study demonstrated that this type of blend will effectively clean carburetor or fuel injection air intake systems without leaving an oily residue. We therefore believe that none of the problems suggested by the commenters will occur.

As explained in the Agency Response to Comments A-52 through A-68, the original proposal was modified to allow for more time for research and development. Industry generally agreed that with more time, the VOC limits were feasible.

g. Other Comments on Categories for Automotive Maintenance

A-102. Comment: And I've heard many times -- in fact, most manufacturers’ representatives that have gotten up here have said something about this standard being challenging to them. I'm also wondering what sort of input staff received from health organizations, worker organizations, environmental organizations on these VOC limits. I've heard lots of manufacturers talk about how they're grateful for staff working so closely with them, for taking all their phone calls. I think there needs to be an effort made to make sure that the whole panoply of interests are included during this regulatory process.

Maybe I'm missing out on information that in fact they have connected with a lot of organizations and have gotten input on this issue.

And I'd like to question whether there's anything in the regulation that says that whether a standard is challenging should be the basis of a regulatory decision. My understanding is it has to do with technical feasibility, which there's been a lot of

evidence today here talking about that, in fact, a VOC limit 10 percent in these products, automobile aerosol cleaning products is in fact possible now. [WorkSafe(b24)]

Agency Response: Staff made an extensive effort to contact all stakeholders affected by the proposed regulation and solicit their involvement in the process. Four public meetings of the Consumer Products Regulation Workgroup and one Public Workshop were conducted from January 2006 through September 2006. The meetings were held in Sacramento, California with teleconference available. Participation in meetings was open to any member of the public.

ARB maintains a website with information on workshops and regulation development documents. In addition, ARB regularly updates the consumer products program website with pertinent information specifically related to consumer products. We have also established an electronic list-server (for bulk notification by e-mail) to allow subscribers to receive pertinent information affecting consumer products. The consumer product list-server currently has over 1,300 subscribers, including, environmental organizations, manufacturers, public citizens, government agencies and trade associations.

We agree with the commenter's assertion that a regulatory action should not be based simply on whether a standard is "challenging." The Board adopted the lowest limits that are commercially and technologically feasible in accordance with State law. However, in instances where the reformulation is challenging (for example, switching from an organic solvent-based technology to a low-VOC or water-based technology) manufacturers may need sufficient lead time to comply with these limits. The Agency Response to Comments A-52 through A-68 are incorporated herein.

A-103. Comment: And I want to just say briefly that the reason I have joined others that have come here to give these comments is that I started to realize the benefits to workers of VOC reductions and pollution prevention in general after some mechanics suffered nerve damage when n-hexane was formulated into brake cleaners as it had never been done before. And we had auto mechanics suffering peripheral neuropathy. It was at that point I started working with the California Environmental Protection Agency (Cal/EPA), U.S. EPA, IRTA, and SCAQMD to make sure this unintended consequence never happened again.

And we have successfully collaborated. I participate on technical advisory groups. And we had a U.S. EPA sponsored project in automotive repair and disseminated information promoting the use of water-based and less toxic solvents in aerosol products. So I think the benefit although it isn't the mandate of ARB or any Environmental Protection Agency to consider workers, it's not by mandate either in the work I do on a daily basis to consider outside air. But I do now, because I think integrating those two concepts is extremely important and ultimately will benefit small employers, because these are very technical issues. [Quint(b5)]

Agency Response: This comment is not directed at the proposed amendments, but for completeness staff responds as follows: Occupational Safety and Health Administration (OSHA) is the agency responsible for ensuring worker safety by performing on-site emissions testing for worker exposure. Our data does not indicate that there has been an increase in the use of n-hexane in brake cleaning products. Instead, the more recent data show a substantial decline in the use of n-hexane in automotive maintenance products. The 20 and 10 percent VOC limits for aerosol "Brake Cleaners," aerosol "Carburetor or Fuel-injection Air Intake Cleaners," aerosol "General Purpose Degreasers," and aerosol "Engine Degreasers" should prevent any appreciable future use of n-hexane in reformulated products.

A-104. Comment: We remain committed to working with you to reduce VOC emissions from automotive aerosol cleaning materials, and encourage the use of non-toxic, non-smog forming alternatives to protect the health of all Californians. [CCA(c2)]

A-105. Comment: During the course of our day to day compliance inspections, we have noticed a resistance to reduce the amount of aerosol product usage and we are concerned with the health hazards of the ingredients currently in these products. We feel regulatory action is required to achieve a necessary emissions reduction in VOCs and this reduction would benefit human health and the environment.

The principal human health and environmental benefits from a reduction to 10 percent VOC will occur due to reductions in ground level concentrations of ozone outdoors and levels of VOC exposure indoors. The solvents of most concern include, but are not limited to toluene, xylenes, n-hexane, ethyl benzene, benzene, and various other petroleum hydrocarbons, all of which are neurotoxins and most of which are Proposition 65 listed chemicals and cause chronic health effects or are classified as Toxic Air Contaminants. At high concentrations, VOCs have noticeably toxic effects, some which vary by composition, but which include neurological effects in all cases. Chronic exposure to VOCs can be linked to cancer, liver and kidney damage. Direct toxicity from VOCs is primarily an indoor air pollution and occupational hazard. Reductions in VOC's in cleaners will help reduce the excess exposure of workers, thereby reducing acute and chronic health problems for the workers exposed. [SanFran(c4)]

A-106. Comment: The health impacts of these high VOC solvents affect not only the workers indoors, but also the neighboring communities. In such an urbanized setting such as San Francisco, it is common to have businesses adjacent to residences, thus potentially impacting the air quality of the entire neighborhood. Community health impacts are of particular concern in environmental justice neighborhoods where we see many service oriented businesses such auto repair shops. In low levels, the health effects of VOC include dizziness, respiratory irritations and nausea. Persons with respiratory problems such as asthma, young children, elderly, and persons with heightened sensitivity to chemicals may be more susceptible to illness from VOC exposure. In San Francisco, high rates of asthma tend to geographically coincide with

the location of industrial and light industrial businesses. By lowering limits of VOCs in aerosols, exposure concentrations that lead to negative health outcomes could be averted along with the associated medical cost to our public health care system. [SanFran(c4)]

A-107. Comment: Of the many asthma triggers in the environment, air pollution is one of the few that can be influenced by policies and regulations. The amendments to the Consumer Products Regulation and the Aerosol Coatings Regulation would achieve VOC emission reductions overall, which would have an impact on improving indoor air quality and reducing asthma triggers. These improvements directly impact the health of many who work to manage their asthma on a daily basis. [CAFA(a71)]

A-108. Comment: Asthma coalitions throughout the state, as part of the CAFA Network, are working to improve both indoor and outdoor air quality. In some communities, for example, coalitions are working to implement and enforce indoor and outdoor air quality asthma policies and programs in schools while others are building awareness of air quality problems through inventive community collaborations and partnerships. Regardless of the particular approach, however, coalitions recognize that they can't fix the air quality problem on their own, and that appropriate regulations must be in place to protect the public's health – particularly the health of children. Amendments to the Consumer Products Regulation and the Aerosol Coatings Regulation will go a long way to providing much needed assistance to working toward a solution. [CAFA(a71)]

A-109. Comment: I'd also like to raise the issue of the challenge to health, the challenge to environment, and the huge costs that our system bears when workers are sick, when community members are sick, the costs our health systems bear, the costs our government systems bear when people are sick or when the environment is sick. [WorkSafe(b24)]

A-110. Comment: And I just wanted to refocus the direction of this meeting in terms of a group of end users who have not been well represented. That's actually the communities and the workers who are exposed to the toxic substances that is really the subject of this discussion, people who are harmed by these products. And while you can measure -- the thing that you have the ability to do is VOCs can be measured in the environment. But we have very limited ability to actually measure health impacts to workers and communities from these substances. So you have an opportunity to make a strong regulation that will actually improve public health. [Sutton(b26)]

Agency Response to Comments A-104 through A-110: The Board approved amendments which limit the VOC content to 20 percent for aerosol "Brake Cleaners," aerosol "Carburetor or Fuel-injection Air Intake Cleaners," and aerosol "General Purpose Degreasers," effective December 31, 2008, and 10 percent VOC by 2010, including aerosol "Engine Degreasers." These amendments to the Consumer Products Regulation will reduce VOC emissions by about 9.4 tons per day statewide by the year 2010, which equates to a reduction of approximately 4.0 tons per day in the South

Coast Air Basin by 2010. The reduction in VOC emissions from consumer products will lead to a statewide reduction in the formation of ground level ozone, which will benefit all of California. However, Environmental Justice communities may see the greatest benefit from the reduction in VOCs emitted from aerosol automotive maintenance products.

Regarding toxic air contaminants, the 20 and 10 percent VOC limits for aerosol automotive maintenance products will preclude the use of large amounts of toxic air contaminants in the reformulated products. With regard to worker safety and exposure, the California Division of Occupational Health and Safety Administration (Cal/OSHA) is the agency responsible for regulating indoor air quality and worker safety. However, reducing the VOC content of "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," aerosol "Engine Degreasers," and aerosol "General Purpose Degreasers" should have the added benefit of reduced worker exposure.

A-111. Comment: At what point is the gain of reduced VOC emissions countered and/or defeated by the increase in NOx, HC, and CO emissions? [ASCCA (a56)]

A-112. Comment: I am writing to tell you I am against changes forcing the suppliers of aftermarket automotive cleaners to dilute their products. There have been no reliable studies that I have been able to find which shows that this will impact air quality in any way... [Moritsugu(a17)]

Agency Response to Comments A-111 and A-112: These comments question the benefit of reducing VOC emissions in consumer products. As described in Staff Report, Chapter IV, page 1, VOC emissions from consumer products contribute to the formation of both ozone and fine particulate matter (PM). Research has shown that, when inhaled, ozone and PM can cause respiratory problems, aggravate asthma, impair the immune system, and cause increased risk of premature death. Any reduction in PM or ozone precursors, such as VOCs, results in improving air quality and public health in California. Because the reformulated products will perform adequately, there is no reason to believe NOx, HC, and CO emissions will increase.

A-113. Comment: As your staff pointed out, consumer products is the single largest category in the South Coast, also in the state, but also I'd like to point out to you when you compare the second largest, the passenger vehicle category, consumer products is almost twice as big as the second largest. In fact, based on your latest and 2007, the second category of 51 tons becomes 34 tons. It's almost three times. Only one-third of consumer products. [SCAQMD(b2), SCAQMD(c6)]

A-114. Comment: California air districts are currently in the process of developing their air quality management plans for the State Implementation Plan (SIP) revisions required in June 2007. As you are aware, a large percent of the emission reductions needed to demonstrate attainment with the new federal and State 8-hour ozone standards originate from sources outside air district jurisdiction and under State or federal authority.

Consumer products accounted for approximately 260 tons per day of VOC emissions in 2005, which represents about 11 percent of the total anthropogenic VOC emissions statewide. The proposed 2006 amendments are designed to reduce this inventory by 11 tons per day and meet the 2003 SIP commitments from this source category. In 2007, further amendments to this regulation will be discussed to secure emissions reductions beyond what was earmarked in the 2003 SIP.

In conclusion, we urge your Board to adopt the staff recommendations for the 2006 amendments to California's Consumer Products Regulation. Keeping in mind however, the 11 tons per day VOC reduction to be achieved statewide with these amendments represent only a fraction of the total inventory for consumer products, we also urge the Board to direct staff to aggressively pursue additional reductions in other consumer product categories for your Board's consideration in 2007. These actions are essential to local and State efforts to reach attainment of State and federal air quality standards and to further protect the health of all Californians. [CAPCOA(a64)]

A-115. Comment: The next issue is regarding our 2003 AQMP amendment. As staff indicated to you, this proposed rule is to fulfill your 2003 Air Quality Management Plan commitment. You have to commit 169 tons VOC and NOx combined. As of today, you achieved 51 tons, about one-third of the commitment needed by 2010. Today's five tons per day will help close the gap somewhat. But if you look at the specific commitment for consumer product, you are short nine tons per day. Today's five tons will help to close the gap again, but should be done before 2010.

If we look beyond the 2010 commitment, if you look at potentially the ozone reduction needed by 2020, we need to get 50 percent beyond what's currently already adopted. So significant is the challenge ahead of us that we need to seek the opportunity to do the reduction soon. [SCAQMD(b2), SCAQMD(c6)]

Agency Response to Comments A-113 through A-115: The Board approved amendments to the Consumer Products Regulation that will reduce VOC emissions by about 11.4 tons per day statewide by the year 2010, which equates to a reduction of approximately 4.9 tons per day in the South Coast Air Basin by 2010. As outlined in the SIP, we agree further reductions from consumer products are needed and we have committed to achieve significant additional emission reductions from this source category. The Agency Response to Comments A-52 through A-68 is incorporated herein.

2. RUBBER/VINYL PROTECTANTS

a. Process for Developing Staff's Proposal

B-1. Comment: The process for making the proposed change has not been ARB staff's typical open and transparent process driven by data and factual information that has been shared with all parties. ARB staff has continually notified the industry that the

"Rubber and Vinyl Protectant" definition would be changed, but staff did not provide any data on the extent of the change. Staff also has not shared the data and information it says forms the basis for the proposed change and staff has not assessed the impact such a proposed change would have on the impacted companies. [3R(a31)]

Agency Response: We disagree. The current clarification regarding the "Rubber/Vinyl Protectant" definition is not a regulatory change to achieve further emission reductions with a new VOC limit. The change is proposed to preserve emission reductions already claimed from a prior rulemaking. The data are used for evaluating industry progress and compliance with a VOC limit already in effect, and to determine the degree of emission reductions being lost due to a few companies not reformulating their products. Because there is no new VOC limit being proposed, there is no need to provide supporting data since that was done nine years ago during rulemaking for the VOC limit. The purpose of the definition clarification is to maintain the way products have historically been considered by most marketers and the ARB, and to recover lost emission reductions. We have provided a transparent process by informing industry about the issue and the proposed modifications to the definition in informal workshops, and in the ISOR and Technical Support Document. Other than clarifications to ensure that a few companies comply with the existing VOC limit in effect since January 1, 2005 for aerosol rubber/vinyl protectant products, the impact is anticipated to be minimal. In addition, the originally proposed language was modified to avoid inappropriately regulating certain aerosol coatings as "Rubber/Vinyl Protectants." These modifications are explained in the response to Comments B-17 through B-19.

B-2. Comment: Rubber and Vinyl Protectants (Aerosols) Excluded From the 2003 Survey **"**Rubber and Vinyl Protectants" (aerosols) were specifically excluded from the 2003 Consumer & Commercial products survey package distributed to industry in November 2004. On page V-5 under "21000 Miscellaneous Household Products," "Rubber and Vinyl Protectant (Aerosol)" have three asterisks in the survey code box. The asterisks denote "Do not report products falling under this category; category proposed for the 2005 survey." Thus, industry was not required to report products, sales information, or formula data. [3R(a31)]

Agency Response: The commenter is correct -- the aerosol products were originally scheduled for review during the next regulatory cycle (after the 2003 survey-regulatory cycle). After the 2003 survey began, however, ARB staff became aware that a few companies believed they did not need to comply with the existing VOC limit in the Consumer Products Regulation, because of the category definition and overlap with categories in the Aerosol Coatings Regulation. ARB staff then decided, because of the urgent need to address an unfair market advantage issue, to obtain selected data for evaluation. This data was used to determine if manufacturers had reformulated their products to comply with the existing VOC limit for aerosol "Rubber and Vinyl Protectant." The data confirmed that other companies are complying with the current VOC standard in the Consumer Products Regulation, thereby confirming that the VOC limit is feasible. Again, the collected data are not used to develop any new

VOC limit, so there was no need to provide any such additional supporting data as the commenter suggests.

B-3. Comment: Staff Did Not Share Results From 2005 Early Survey or Analysis of Data On page V-8 of the TSD, ARB staff "requested marketers to early-submit survey data for aerosol products for sales year 2005." Did this request go to every marketer of products which are affected, every aerosol coating manufacturer, every consumer product company manufacturing protectants, and every automotive product company manufacturing protectants and coatings? Was there a formal request by ARB staff? Which marketers were requested to early submit? In 1998, there were one-hundred and forty products reported under "Rubber and Vinyl Protectants" for all forms. Of those products, eighteen were aerosols produced by fourteen manufacturers. Were all of the original fourteen surveyed? If not, why not? Also, it is reasonable to assume that some manufacturers discontinued items and other manufacturers began formulating these products. Did ARB staff request any industry associations to request early survey data? ARB staff did not release any data as to who was contacted for the early-submittal of survey data. [3R(a31)]

Agency Response: The commenter appears to be suggesting that it is necessary to answer all of his questions in order to support staff's proposal. We do not agree. Because we are not proposing a new VOC limit, additional supporting data are not needed. As discussed above, the purpose of requesting the supplemental aerosol data was simply to determine whether companies (other than the ones identified by a representative as not complying) were generally on track to comply with the existing 10 percent VOC limit for aerosol products. The data showed that many companies were able to comply with the 10 percent VOC limit. This was particularly compelling when considering that 2005 was the first year of the three-year sell through period for the January 1, 2005 effective date of the VOC limit. ARB staff, therefore, determined that there was sufficient data to demonstrate that the existing limit is technologically and commercially feasible. Consequently, we believe that those companies that do not comply with the VOC limit have no compelling reason not to comply, and should not be allowed to have an unfair market advantage. We have clarified the definition to ensure that all companies with products for vehicle tires will comply with the applicable VOC limit. The non-tire rubber/vinyl products will be reviewed in the next regulatory update to the Aerosol Coatings Regulation and the Consumer Products Regulation. (See Agency Response to Comments B-17 through B-19).

B-4. Comment: On page V-8 of the TSD, staff states that the 2005 survey data provided information for the current definition. The only data released is on page 11 of the executive summary under Table 4 which shows no change in emissions. To date there has not been a release of any specific survey data for the "Rubber and Vinyl Protectants" from ARB staff. Information such as total VOC emissions or sales weighted averages or financial impact for the category was not released. [3R(a31)]

Agency Response: Again, we are not proposing to change the current VOC limit, as stated on page 11 of the Executive Summary, so no new emission reductions

are expected. Additional supporting data are not needed for a limit that was approved in 1997; and there is no need to release sales or emissions data at the present time. The requested data was necessary to determine if emission reductions were lost from the few companies not complying with the VOC limit in the Consumer Products Regulation for aerosol products. Since only a few companies are not in compliance, their sales and emissions data are confidential and we can not release them. It is not necessary to perform a new financial impact determination. The financial impact was appropriately estimated during adoption of the current VOC limit nine years ago. The commenter represents the few companies opposing the proposed changes, and he provided us with the confidential product formulations, sales data, and resulting VOC emissions from those companies. Data the commenter is suggesting be released should already be known to him, since the lost emission reductions and associated formulation and sales data collected pertain essentially to those few companies.

B-5. Comment: Proposed Definition Change is a Substantial Change While ARB staff has not quantified what the effect of the change will be, this could be a substantial change for some manufacturers.

ARB staff states on page V-13 of the TSD,under response to question 2, "that feasibility and impacts of the regulatory change are not substantial." Due to the lack of process, as described earlier, ARB staff cannot determine how substantial this change might be on currently marketed products. [3R(a31)]

Agency Response: We disagree that there was a "lack of process;" see Agency Response to Comments B-1 through B-4. The definition clarification is proposed to ensure that the companies, mainly represented by the commenter, will comply with the existing VOC limit, and to preserve the emission reductions expected from them through rulemaking nine years ago. We believe this timeframe afforded ample opportunity for these companies to comply years ago, as other companies clearly understood as indicated by their comment letters (see Comments B-34 through B-37). The clarification is proposed to be consistent with the way other companies consider their products, and how ARB staff historically intended to regulate them. The current VOC limit remains unchanged.

B-6. Comment: In the same response (to question 2, page V-13 of TSD), ARB states that "the proposed definition should not include additional products". In the last sentence of the same response the ARB staff states "We will work with industry on a case-by-case basis to resolve specific compliance issues." This statement clearly implies that some compliance issues will arise from this action. If a company has any compliance issues with their products due to this change, then the change would be considered a substantial change. ARB staff has not presented any data to support the non-substantial change statement or any technical analysis of the impacts of the proposed change to marketers of such products. [3R(a31)]

Agency Response: All rubber/vinyl protectant products are currently subject to either the Consumer Products Regulation or the Aerosol Coatings Regulation. This

proposal does not subject any previously un-regulated product to regulation. However, we believe that companies might have questions regarding which regulation their product is subject to. In part this determination may depend on the particular claims that each product makes on the product container. Therefore, should issues arise we will resolve them on a case-by-case basis.

b. Overlap Between Consumer Products Regulation and Aerosol Coatings Regulation

B-7. Comment: Clarification of Overlapping Regulations The attempt by ARB staff to clarify the overlap between the Consumer Products Regulation and the Aerosol Coating Regulation is a complicated issue. However in your attempt to provide clarification, the proposed amendment is inconsistent with the most recent previous rulemaking and will inappropriately include aerosol coatings in the Consumer Products Regulation. [3R(a31)]

Agency Response: We disagree that the proposed amendments are inconsistent with the previous rulemaking. The specific purpose of the clarifying amendment is to ensure that those "Rubber/Vinyl Protectant Products," that the commenter claims to be subject to the Aerosol Coatings Regulation, will be regulated by the Consumer Products Regulation as ARB staff had historically intended. This intention is clearly supported by documentation from the 1997 rulemaking. In addition, the response to Comments B-17 through B-19 explain why the proposed language will not inappropriately regulate other types of aerosol coatings.

B-8. Comment: Prior rulemaking properly separated resin or pigment containing aerosols from other products Protectants and coatings both protect and enhance appearance. ARB staff has dealt with this issue successfully in past rulemakings. In the most recent rulemaking CONS-1, ARB specifically exempted aerosol products that apply resin or pigment to leather or fabric substrates from the definition of "Footwear or Leather Care Products." In the document released on May 7, 2004 titled "Initial Statement of Reasons For The Proposed Amendments To The California Aerosol Coating Products, Antiperspirants and Deodorants, And Consumer Products Regulations, Test Method 310, And Airborne Toxic Control Measure For Para-Dichlorobenzene Solid Air Fresheners And Toilet/Urinal Care Products" the document states "as previously discussed, resin-containing aerosol products for leather substrates, such as "protectant" products that form a sometimes invisible film,… are considered separately as "Vinyl/Fabric/Leather/Polycarbonate Coatings," and are already regulated as "aerosol coating products." Clearly, ARB staff intended to separate aerosols containing a resin or pigment from other products. We concur with this approach. [3R(a31)]

Agency Response: When the newly created category of "Footwear or Leather Care Product" was adopted during the preceeding rulemaking, the intent was to regulate products that had not been previously regulated. When drafted, the category definition was written in part as a "fill-in" category, to exclude products that were already

covered by related categories as they were already defined in the regulations. Therefore, the definition of "Footwear or Leather Care Product" was worded to explicitly exclude "Vinyl/Fabric/Leather/Polycarbonate Coatings," which already covered certain aerosol products for leather. Staff had decided at that time to avoid any possibility of regulatory overlap, since this aerosol coatings category included products for leather, and optionally with any of the other three substrates -- vinyl, fabric, or polycarbonate. On the other hand, the "Rubber and Vinyl Protectant" definition, adopted in 1997 and unchanged up to the current rulemaking, did not have wording to exclude "Vinyl/Fabric/Leather/Polycarbonate Coating" or any other "Aerosol Coating Product."

There is no basis for the assertion that all products containing either resin or pigment cannot qualify as a consumer product under the Consumer Products Regulation. There is no such restriction in the Consumer Products Regulation. While the Aerosol Coatings Regulation defines "Aerosol Coating Product" to include certain products containing pigment or resin, this does not preclude the Consumer Products Regulation from regulating products containing pigment or resin.

B-9. Comment: In the TSD released on September 29, 2006, ARB staff does not use the same logic (see previous comment for context). ARB focuses solely on the substrate. For example, the following statement is on page V-11. "However, if a product is labeled for any other non-specified substrate (e.g. for rubber or for plastic—which includes hard plastic and non-vinyl plastic other than polycarbonate), that would make the product ineligible as "Vinyl/Fabric/Leather/Polycarbonate Coating." A strict interpretation of this statement will result in the inclusion of aerosol coatings as "Rubber and Vinyl Protectants," which contain a resin or pigment and claim to coat rubber or plastic. [3R(a31)]

Agency Response: The comment is misleading. ARB staff was restating the scope of the current "Vinyl/Fabric/Leather/Polycarbonate Coating" category: the category includes products for application to these four substrates exclusively, as specified by the definition in section 94521(a)(72). If the product is labeled for application to any other type of substrate (such as rubber, wood, or generalized plastic that includes non-polycarbonate plastic), it would not qualify for regulation under this specialized aerosol coating category. However, the product could qualify as a "general coating" under more stringent VOC limits as "Clear Coating" "Flat Paint Product" or "Nonflat Paint Product" in the Aerosol Coatings Regulation. Since our current proposal for "Rubber/Vinyl Protectant" would not include pigmented products, the only possible overlap would be "Clear Coating." "Clear Coatings," products for rubber/vinyl substrates associated with construction, reconstruction, modification, structural maintenance or repair, are excluded from "Rubber/Vinyl Protectant," and hence would be "Aerosol Coating Products."

B-10. Comment: The document further states that "An aerosol coating (either clear or pigmented) for rubber and vinyl, which is currently considered a "clear coating," a "nonflat coating," or a "flat coating," (not qualifying as "Vinyl/Fabric/Leather/Polycarbonate Coating" because of other substrates such as

rubber, metal, wood), would be subject to the "Rubber/Vinyl Protectant" limit in the Consumer Products Regulation. These products may avoid this overlap by removing the word, "rubber," from the label." This means that this proposed change will impact products which are currently marketed as aerosol coatings which contain a resin or pigment. For example products such as clear coatings and vinyl sprays that are now subject to the Aerosol Coatings Regulation will now become subject to the Consumer Products Regulation. [3R(a31)]

Agency Response: The ISOR and TSD referred to products which do and do not qualify as "Vinyl/Fabric/Leather/Polycarbonate Coating" in the Aerosol Coatings Regulation, and are labeled for use on both vinyl and rubber. If the product label is recommended for "rubber," it is not one of the "exclusive" substrates. If the product label was changed so that the product is no longer recommended for "rubber," it then may qualify as "Vinyl/Fabric/Leather/Polycarbonate Coating," and hence may not be subject to the "Rubber/Vinyl Protectant" limit, as specified in proposed section 94508(a)(121)(B). Pigmented products are explicitly excluded. "Clear Coating" products for rubber/vinyl substrates associated with construction, reconstruction, modification, structural maintenance or repair are excluded, and hence would be "Aerosol Coating Products."

B-11. Comment: Aerosol tire coatings do not modify with the substrate [*sic*] as was intended for protectants While protectants and coatings perform similar functions, the products achieve the results in different ways. This is explained by "Air Resources Board Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation," dated June 6, 1997. In review of the 1997 document, it appears that the intent of the products to be regulated as protectants, alter the physical composition of the substrate, either rubber or vinyl. This document states that these products are intended "to extend the life" and "to revitalize the appearance." The protectant products, as stated in the document, replace components which become inactive over time. The document goes on to state that the protectants "restore gloss and oils lost to evaporation." In further making this point, the document states that if a surface is particularly sun-faded, it is sometimes beneficial to apply the protectant and allow it to sit on the substrate overnight, and then to buff it the next day in order to provide extra protection. This statement implies an absorption-like activity as well as a change to the composition of the substrate. Throughout the document there are references to replacing oils, renewing substrates, and restoring flexibility. Additionally, there is no mention of resins of any kind in the document. The formulation section in the document describes the active ingredients as "these active ingredients include silicone oil which remains on the surface to provide a shiny appearance, plasticizers which restores the flexibility of plastic as it ages and protects vinyl against premature cracking and drying and ultra-violet (UV) protectants to provide protection from the sun's UV rays." Use of resins was not mentioned.

The apparent intent of the "Rubber & Vinyl Protectant" definition is to include products which perform any of these characteristics -- protect, shine, clean, renew, restore, revitalize, enhance gloss and rejuvenate. There is an intent that the regulated

products alter the product substrate via absorption of the compounds in the product. Aerosol tire coatings are a different product than was intended to be regulated. Aerosol tire coatings do protect, and enhance the appearance of the substrate. However, an aerosol tire coating does not clean, revitalize, rejuvenate or restore the substrate. Aerosol tire coatings simply coat the surface of the tire. [3R(a31)]

Agency Response: The current definition of "Rubber and Vinyl Protectant" broadly includes products that provide "protection." The definition does not specify the type of protection nor the specific mechanism for protection. In other words, the current definition does not require that products must penetrate or alter the substrate. Also, the current definition does not exclude products that contain resin, since many "protectant" products protect substrates using resin. Since tire "coatings" are intended to protect tires, generally made of rubber, they are "Rubber/Vinyl Protectants."

The intent of the 1997 ARB-adopted definition was to broadly include products that "protect" rubber/vinyl. The 1997 report and rulemaking covered all product forms. Some products, notably liquid and pump spray protectant products (i.e. non-aerosols), do penetrate or provide substances that penetrate into substrates, as described in the 1997 report. However, the report does not exclude from the category rubber-coating aerosol protectant products containing resin without a claim for penetrating or modifying the rubber. The 1997 report did discuss tire protectant products which were included for regulation in the category.

Regarding whether a product for tires has a cleaning function, the definition excludes cleaning products that that do not leave any protective substance on the tire. This means the category includes tire products that leave behind a protective substance (such as a wet or dry film), whether or not the product also cleans. Also, a product that leaves a protective substance on tires is a "Rubber/Vinyl Protectant" irrespective of whether the product is marketed as a tire dressing, a tire shine, or a tire coating.

B-12. Comment: Inconsistencies with Definition The definition is inconsistent with the "Effect of Proposed Definition Changes" section detailed on V-11. In the proposed amended definition, ARB staff removed the word "plastic" from the definition. This is a proper change. The "Initial statement of reasons for Proposed Amendments to the California Consumer Products Regulation" released on June 6, 1997 which describes Rubber and Vinyl Protectants supports this change. In this document there was not any specific discussion of plastic protection, thus the word plastic was removed by ARB staff as it should be. Conversely, on page V-9 ARB staff states that "Also, the definition had always included products used to protect plastic substrates (e.g. hard plastics)… When considering what products are included in the category, we believe that most marketers had been consistent with ARB staff interpretation." This statement is inconsistent with the ARB staff action to remove the word "plastic" from the definition.

There are other inconsistencies referring to "plastics" on pages V-11 and V-12. On these pages, ARB staff refers to "hard plastics and non-vinyl plastics other than polycarbonate." Polycarbonate is a hard plastic. How is a manufacturer supposed to

differentiate between every type of plastics? If the word plastic is removed from the definition, then all references to plastics in the TSD should be removed. [3R(a31)]

Agency Response: While the current definition of "Rubber and Vinyl Protectant" does specifically include products for "plastic" substrates, staff deleted the word "plastic" from the definition. The commenter supports this change. However, this definition change is different from and does not affect the "exclusion" based on the definition of "Vinyl/Fabric/Leather/Polycarbonate Coating." The ISOR and TSD described the exclusion which covers only one type of hard plastic, polycarbonate, in accordance with the existing definition of "Vinyl/Fabric/Leather/Polycarbonate Coating." Since other types of hard plastic are not covered by this definition, the exclusion does not either, so hard plastics other than polycarbonate would have been "Vinyl and Rubber Protectant" if the product is labeled for either vinyl or rubber. As discussed above, pigmented products are explicitly excluded. Also, clear products, for rubber/vinyl substrates associated with construction, reconstruction, modification, structural maintenance or repair, are excluded, and hence would be aerosol coatings.

B-13. Comment: Protectants and coatings are similar and produce similar results such as protection and enhanced appearance. These two product categories however affect the surfaces being treated in completely different ways. Accordingly, the products need to remain separate. [3R(a31)]

Agency Response: We agree that protectants and coatings produce similar results, but disagree that the two are distinct simply because they produce these results using different modes of action. As previously discussed, protectant products that contain resin and that are not intended to modify nor alter the substrates are not automatically excluded from the Consumer Products Regulation. We do agree that there is need to separately evaluate some types of aerosol products as explained in the response to Comments B-17 through B-19.

B-14. Comment: Products containing a resin or pigment should be considered coatings. [3R(a31)]

Agency Response: We agree that aerosol products for rubber/vinyl containing pigment (sufficient to change color) should be considered aerosol coatings, and have provided wording to exclude pigmented products from "Rubber/Vinyl Protectant" starting on December 31, 2008. However, as discussed in the Agency Response to Comments B-8 and B-11, we do not agree that all products containing resin should be considered aerosol coatings. Historically there are many aerosol consumer products containing resin, such as hairspray, with distinctly different characteristics compared with aerosol spray paint. Whether a product contains resin is simply not a valid basis to decide which regulatory standard apply.

B-15. Comment: To date there has not been any data released on companies affected, on emissions, a list of products impacted by this change, or a financial impact to companies that now make these products. Until ARB staff releases information on

this category to provide for a transparent process driven by factual data, the ARB staff should not move forward on this change. [3R(a31)]

Agency Response: See Agency Responses to Comments B-1 through B-4. As discussed in these responses publicly releasing the data (much of which is confidential data known to the commenter) is not necessary to support staff's regulatory proposal.

B-16. Comment: The current proposed definition and TSD contain many inconsistencies and contradictory statements which further confuse this issue. The proposed definition and supporting TSD need to be consistent with the full intent of the regulation, currently this is not the case.

ARB staff has not quantified what the effect of this change will be. This could be a substantial change for some manufactures.

ARB staff should refrain from making any changes to this definition until a thorough review on the affected products is completed and shared with all parties. This issue will be fully reviewed in next year's survey process and that is the appropriate time to consider any potential definition changes. [3R(a31)]

Agency Response: As discussed above in Agency Response to Comments B-1 through B-15, we believe the information presented in the ISOR and TSD support the proposed changes. We need to promptly address this compliance issue with the tire products to minimize the lost of emission reductions and to mitigate the unfair market advantage taken by a few companies. It is therefore not appropriate to wait until sometime in the future. See Agency Response to Comments B-17 through B-19.

B-17. Comment: While the proposed amendments to the Consumer Products Regulation do not typically impact spray paint products, there is significant overlap in the products that could be included in the" Rubber/Vinyl Protectant" (aerosol) category of the Consumer Products Regulation, and the aerosol coatings products that are subject to the Aerosol Coatings Regulation. Historically, aerosol coatings products have been, and continue to be, formulated to protect and beautify. Consequently, label claims made by these two types of products will be very similar.

To address this overlap, ARB staff has proposed amendments to the definition of "Rubber/Vinyl Protectant" and certain amendments to the Aerosol Coatings Regulation. We agree that this overlap should be clarified; however, the language that was proposed in the ISOR does not clarify this overlap and could be interpreted to be applicable to many products that are appropriately regulated as an aerosol coating, including clear aerosol coatings.

We have agreed with ARB staff for an alternate strategy to address the overlap. The strategy is as follows:

1. ARB withdraws the proposed amendments relevant to the "Rubber/Vinyl Protectant" category, and to the Aerosol Coatings Regulation;

2. ARB would work with affected industry to explore additional language that would eliminate any remaining overlap between the two regulations and insure that all products are properly categorized; and

3. Such "modified language" would be available for public comment during a 15-day period.

Addressing the overlap issue under the 15-day comment period process is appropriate for the following reasons:

1. There will be sufficient time for discussion under the 15-day comment process as ARB staff has up to one year to submit changes to the proposed language; and

2. Interested manufacturers will be aware and will make themselves available to work towards a reasonable solution.

ARB has proceeded to the proposal stage without adequately surveying this category, analyzing the data, and distributing a data summary to the public, as is their common practice. Rulemaking activities must be predicated upon reliable survey data, distributed to the regulated community for review and comment. ARB staff should renew its commitment to this principle and if necessary during the 15-day comment period, take steps to gather the requisite data regarding the Rubber/Vinyl Protectant category and any related aerosol coatings categories so that modified language can be supported by survey data. [NPCA(a80)]

B-18. Comment: Substantial Change ARB staff states on page V-13 of the TSD, under response to question 2, "that feasibility and impacts of the regulatory change are not substantial." Due to the lack of process (discussed below) ARB staff cannot determine how substantial this change might be on currently marketed products. The change in the definition is not simply a change from "Rubber and Vinyl Protectant" to "Rubber or Vinyl Protectant," as ARB staff has stated throughout the proposal. The proposed definitional change will affect other products not traditionally considered protectants, such as aerosol coatings. We have a long history of dealing with aerosol coating issues and was the first association to support the ARB in developing the technically sound reactivity based regulation for these products. We are concerned with any changes which will effect the Aerosol Coatings Regulation.

The proposed wording would consider products which are in an aerosol package, contain a resin and produce a film to be subject to a protectant category. This conflicts with the Aerosol Coatings Regulation which defines a coating in the same manner.

ARB staff has not presented any data to support the non-substantial change statement or any technical analysis of the impacts of the proposed change to marketers of such products.

Lack of Process We do not support the proposed change to the definition. The process for making this proposed change has not been ARB staff's typical open and transparent process driven by data and factual information. ARB staff has continually notified the industry that the Rubber & Vinyl definition would be changed, but staff did not provide any data on the extent of the change. No data or information that the ARB staff received to form the basis for the proposed change has been shared with the Industry. The ARB staff has not assessed the impact of the proposed change on the companies currently selling aerosol coatings which under this change will be recategorized as protectants. Until a comprehensive assessment of the impact on products, companies and costs of this proposed change is completed; ARB staff should refrain from making any changes to the definition.

Lack of Clarification for Overlapping Regulation We do not support the proposed change to the definition. In an attempt to provide clarification, the proposed amendment is inconsistent with the most recent previous rulemaking and will inappropriately include aerosol coatings in the Consumer Products Regulation. In the most recent rulemaking in 2004, ARB specifically exempted aerosol products that apply resin or pigment to leather or fabric substrates from the definition of "Footwear or Leather Care Products." In the document released on May 7, 2004 titled "Initial Statement of Reasons For The Proposed Amendments To The California Aerosol Coating Products, Antiperspirants and Deodorants, And Consumer Products Regulations, Test Method 310, And Airborne Toxic Control Measure For Para-Dichlorobenzene Solid Air Fresheners And Toilet/Urinal Care Products" the document states "as previously discussed, resin-containing aerosol products for leather substrates, such as "protectant" products that form a sometimes invisible film,… are considered separately as "Vinyl/Fabric/Leather/Polycarbonate Coatings," and are already regulated as "Aerosol Coating Product." Clearly, ARB staff intended to separate aerosols containing a resin or pigment from other products. We concur with this approach.

The current proposed rule development contradicts this approach. The current document states that "An aerosol coating (either clear or pigmented) for rubber and vinyl, which is currently considered a "Clear Coating," a "Nonflat Coating," or a "Flat Coating," (not qualifying as "Vinyl/Fabric/Leather/Polycarbonate Coating" because of other substrates such as rubber, metal, wood), would be subject to the "Rubber/Vinyl Protectant" limit in the Consumer Products Regulation. This means that this proposed change will impact products which are currently marketed as aerosol coatings which contain a resin or pigment. For example products such as clears and vinyl sprays that are now subject to the Aerosol Coatings Regulation will now become subject to the Consumer Products Regulation.

We do not support the proposed change to the definition. The current proposed definition and TSD contain many inconsistencies and contradictory statements which further confuse this issue. The proposed definition and supporting TSD need to be consistent with the full intent of the regulation, currently this is not the case. ARB staff has not quantified what the effect of this change will be. Thus this could be a substantial change for some manufacturers. ARB staff should refrain from making any changes to this definition until a thorough review on the effected products is completed and shared with all parties.

This issue will be fully reviewed in next year's survey process and that is the appropriate time to consider any potential definition changes. [NAA(a86)]

B-19. Comment: According to the TSD, the proposed change is to clarify and correct ambiguity in the existing definition. The current definition uses the word "and" instead of "and/or" which creates confusion for products such as tire protectant that are only used on one type of substrate.

Although this seems like a simple change, in fact, it is very complicated and the necessary due diligence to make such a change has not been performed. The proposed definition would result in some very serious market consequences. It has been proposed without proper data gathering or significant industry involvement, and the basis for this change was not communicated to all affected parties. This category was excluded from the 2003 survey used for this rulemaking. It was specifically proposed for the 2005 survey to be used in the next rulemaking involving aerosol coatings. Some of the aerosol coatings companies are not involved in the current consumer product negotiation and would be completely blindsided by this change.

Staff indicated in the TSD that a voluntary early survey was conducted. The data from that survey was not shared with industry. The proposed definition would cause numerous aerosol coatings currently regulated under the aerosol coatings regulation to be inappropriately pulled into the rubber/vinyl protectant category. The limited early survey could not have been sufficient to gauge the impact of such a change. We are the largest manufacturer of aerosol coatings in the country. Our aerosol coatings were not included in the early survey. However, recent communication with staff indicates our products will be seriously impacted by the proposed change.

There is a significant difference between products designed merely to protect and products designed to coat. Although the end result is similar, products containing resin or pigment originally designed as aerosol coatings should not be subject to the rubber/vinyl category merely due to their application on certain types of substrates.

We request this proposed definition change be postponed until such time that it can be adequately investigated and properly developed. [SherWill(a52)]

Agency Response to Comments B-17 through B-19: The Agency Response to Comments B-1 through B-16 address most of the issues raised by the commenters in Comments B-17 through B-19.

The commenters also raise the concern that the originally proposed amendments would inappropriately "pull-in" some aerosol coating products into the 'Rubber/Vinyl Protectant" category of the Consumers Products Regulation. In other words, the commenters suggest that the ARB did not do a good enough job of drafting the originally proposed amendments to the definition of "Rubber/Vinyl Protectant," with the unintended result that some non-tire products currently regulated under the Aerosol Coatings Regulation would become "Rubber/Vinyl Protectants" and be subject to the 10 percent VOC limit in the Consumer Products Regulation.

ARB staff agrees that this is a potential concern and has addressed it by modifying the originally proposed "Rubber/Vinyl Protectant" definition to specifically exclude all aerosol products--other than those labeled to be used on vehicle tires—that meet the definitions specified in the Aerosol Coatings Regulation for either "Clear Coating" or "Vinyl/Fabric/Leather/Polycarbonate Coating." These two aerosol coating categories encompass all aerosol products that might be inadvertently categorized as "Rubber/Vinyl Protectants," and the modified language will therefore insure that no such products are "pulled in" to the Consumer Product Regulation—except for those products labeled to be used on vehicle tires, which the ARB specifically wants to "pull-in" to the Consumer Products Regulation for the reasons discussed in the Agency Responses to Comments B-1 through B-16.

Staff is not aware of any "aerosol spray paint" product applicable to tires, and considers all aerosol tire protectant products to be "Rubber/Vinyl Protectants." Other aerosol products for use on rubber/vinyl will continue to be regulated under the Aerosol Coatings Regulation until such time as staff has completed a review of all these products, as requested by industry, and decided if it is appropriate to recategorize some of them. As mentioned by the commenters, staff originally intended to work with industry after the November 2006 to draft language that would more clearly distinguish among a wider variety of products. The intention was to include such language in the modifications made available for public comment during the 15-day comment period for this rulemaking action. Staff did in fact have numerous discussions with industry on this issue, but determined that drafting appropriate language was considerably more difficult than we initially thought. Staff therefore determined that the best course of action was to solve the immediate problem by making the modifications discussed above (i.e., to clarify that products labeled to be used on tires are "Rubber/Vinyl Protectants') and defer more complicated revisions until a detailed industry survey can be conducted. Staff plans to conduct this survey this year. This approach should address the issues raised by the commenters.

B-20. Comment: Section 94508(a)(121) This revised definition, to be effective December 31, 2008, appears to be intended to clarify the definition to include products that protect only rubber or only vinyl (thereby including additional products in the

category and making them subject to this VOC limit), as well as to move some products from this category to the "Vinyl/Fabric/Leather/Polycarbonate Coating" subcategory under Section 94521(a) of the Aerosol Coatings Regulation. This is a category of products that was deferred from the 2003 Consumer and Commercial Products Survey, and there is therefore inadequate data to review the impact of this modification at this time. The voluntary and very limited survey reported in the Staff Report as having been conducted earlier this year is not sufficient to evaluate this modification.

We recommend that this modification be deferred until the 2006 Consumer and Commercial Products Survey is conducted next year to provide the data needed to assess this modification as part of the final phase of the ARB's CONS-2 commitment *(i.e.,* rule adoption scheduled for 2008 with implementation in 2010). [ASPA(a47), CSPA(a36)]

B-21. Comment: Sections 94523(a) and 94508(a)(121) The proposed revision appears intended to remove ambiguity that the definition includes products that protect only rubber or only vinyl (thereby including additional products in the category and making them subject to this VOC limit). The proposal appears to move some products from the "Vinyl/Fabric/Leather/Polycarbonate Coating" subcategory under Section 94521(a) of the Aerosol Coatings Regulation, to this category. These products were deferred from the 2003 Consumer and Commercial Products Survey, and therefore inadequate data exist to review the impact of the proposal at this time. The voluntary and very limited survey reported in the ISOR and TSD is not sufficient to evaluate this modification.

We recommend this modification be deferred until the next Consumer and Commercial Products Survey is conducted (now proposed to cover the 2006 sales year), to provide data needed to assess this modification. [ASPA(a83), CSPA(a81)]

B-22. Comment: Page V-7 to V-13 and V-15, TSD Voluntary, "early submit" survey data from a limited number of manufacturers can not be considered "adequate data" upon which to base consumer product regulatory changes. ARB should delay consideration of how to separate rubber/vinyl products into those covered in the Consumer Products Regulation and those covered in the Aerosol Coatings Regulation until complete survey data are available for all products potentially impacted. [CSPA(a81)]

B-23. Comment: We do not support the suggested revisions to the definition of "Rubber/Vinyl Protectant." Sufficient information has not been presented by ARB staff to justify the proposed changes. Sufficient study has not been made of ramifications to this category in the Consumer Products Regulation or to similar categories regulated by the Aerosol Coatings Regulation. [RadSpec(a59)]

Agency Response to Comments B-20 through B-23: See Agency Response to Comments B-1 through B-19, which address the issues raised by the commenters.

c. Aerosol Products Labeled As Tire Coatings

B-24. Comment: Our tire coating is compliant with the Aerosol Coatings Regulation. In the "Initial Statement of Reasons For The Proposed Amendments To The California Aerosol Coating Products, Antiperspirants and Deodorants, And Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure For Para-Dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products," release date of May 7, 2004; under the "Footwear or Leather Care Product" description, ARB staff states "as previously discussed, resin-containing aerosol products for leather substrates such as "protectant" products that form a sometimes invisible film...", "...are considered separately as Vinyl/Fabric/Leather/Polycarbonate Coatings, and are already regulated as "aerosol coating products." In addition, under the "Footwear or Leather Care Product" description, (specifically in the "aerosols" section), the May 7, 2004 document states the following: "...aerosol products containing resin or pigments, such as "protectants" and "color-renew," are not in this category. This means that aerosol products containing resins or pigments, regardless of whether the product performs the same function, are not subject to the Consumer Products Regulation. Using this reasoning tire coatings should be given the same treatment as aerosol products in the "Footwear or Leather Care Product" and regulated under the Aerosol Coatings Regulation.

The current process for making this change has not been staff's typical open and transparent process driven by data and factual information. Other product categories are being acted upon in November 2006. In those cases, a formal survey was performed; the data was compiled, and released for public review. Furthermore, four public meetings were held to discuss the results of the surveys involving these other product categories. For example, products impacted, companies responding to the survey, VOC emissions released, and companies affected have been key elements of the recent public review. In contrast to this open sharing, no data has been shared publicly for the "Rubber and Vinyl Protectant" category. To date, there has not been any data released on emissions, a list of the products impacted by this change, or the financial impact to companies that now make these products. ARB has stated that a supplemental survey was done. The supplemental survey results were not publicly noticed nor, as stated above, has any data been released.

Our tire dressing should remain regulated by the Aerosol Coatings Regulation as has been done for similar products in other categories (i.e. "Footwear or Leather Care Products"). Next the due process of this regulation has not been open and transparent as in other rulemakings.

We request that ARB defer this action until a full and complete assessment of the issues surrounding this change is complete. [Meguiar's(a39)]

B-25. Comment: We have a product that will be substantially affected by this proposed change. Our product is a tire coating and currently subject to the Aerosol Coatings Regulation. This product contains a resin and produces a continuous film.

Tire Coatings are Not Tire Dressings Tire coatings are a relatively new type of product that has evolved since the introduction of the original tire dressings in the 1990s. Tire coatings are products that coat the tire with a continuous, flexible film to provide a satin or high gloss finish. ARB staff states that tire dressings were to be considered in the “Rubber and Vinyl Protectant” definition originally. Tire coatings are uniquely different from typical tire dressings. The “Air Resources Board -- Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation” dated June 6, 1997 describes tire dressings. In reviewing the document from 1997, which addresses “Rubber and Vinyl Protectants,” there are subtle differences in the reasoning used to regulate specific products. On August 25, 2006, staff released definitions and reasoning for the changes. Staff explained that the proposed definition would clarify that a product that protects either rubber or vinyl solely is covered. Staff further writes that tire coatings qualify as “Rubber & Vinyl Protectants.” This last statement is in error. The 1997 document states that "Tire Dressings" are included in the Rubber & Vinyl Protectant" category. Tire Dressings are defined as "products designed and labeled to clean and shine automobile tires ..." Aerosol tire coatings do not claim to (nor do they) clean the tire. Tire coatings are only meant to coat the surface of the tire.

Through further review of the 1997 document, it appears that the purpose of the products (to be regulated as protectants) is to alter the physical composition of the substrate, either rubber or vinyl. This document states that these products are intended "to extend the life" and "to revitalize the appearance". The protectant products, as stared in the document, replace components in the substrate which become inactive over time. The document goes on to state that the protectants "restore gloss and oils lost to evaporation". In further making this point, the document states that if a surface is particularly sun-faded, it is sometimes beneficial to apply the protectant and allow it to sit on the substrate overnight. and then to buff it the next day in order to provide extra protection. This statement implies an absorption-like activity as well as a change to the composition of the substrate. Throughout the document, there are references to replacing oils, renewing substrates, and restoring flexibility.

There is no mention of resins of any kind in the document. The formulation section in the document describes the active ingredients as "these active ingredients include silicone oil which remains on the surface to provide a shiny appearance; plasticizers which restores the flexibility of plastic as it ages, protects vinyl against premature cracking and drying; and UV protectants to provide protection from the sun's UV rays." Use of resins was not mentioned.

The apparent intent of the “Rubber & Vinyl Protectant” definition is to include products which perform any of the following characteristics -- protect, shine, clean, renew, restore, revitalize, enhance gloss, rejuvenate. More importantly, there seems to be intent that the regulated products somehow alter the product substrate via absorption of the compounds in the product. Therefore, aerosol tire coatings are a different product than was intended to be regulated. Aerosol tire coatings do protect and enhance the

appearance of the substrate. However, an aerosol tire coating does not clean, revitalize, rejuvenate, or restore the substrate. Aerosol tire coatings simply coat the surface of the tire.

Lack of Due Process ARB has not fully assessed the impact of this proposed change. While ARB staff performed a small survey of these products from some marketers, the large entire industry was not notified or surveyed. Furthermore, no results relating to VOC emissions sales weighted averages or products, and financial impact to companies was ever released on the supplemental survey that the staff performed. This is not the typical open and transparent process that ARB uses to adopt regulations.

Inconsistencies of TSD The definition proposed is inconsistent with the TSD. The definition removes the word "plastics"; however, the TSD references the word "plastic" several times. The word "plastic" should be removed to clarify the issue and is supported by the 1997 document which did not originally support the addition of the word "plastic".

Conclusion Aerosol tire coatings are not tire dressings, thus tire coatings should be regulated as aerosol coatings. ARB has not released information to support their position on this proposed change. The inconsistencies between the definition and the TSD need to be corrected to provide clear reasoning for this change.

Staff should defer this action until a new survey is completed. This will allow for an informed decision to be made. [Stoner(a50)]

B-26. Comment: We have a product that will be substantially impacted by this proposed change. Our product is “More Shine Long-Lasting Tire Coating.” This product is a tire coating and is currently subject to the Aerosol Coatings Regulation. The product meets the definition of a coating since it contains a resin and produces a contiguous film. Tire coatings are a new type of product to meet market needs since the introduction of the original tire dressings in the 1990s. Tire coatings are products that coat the tire with the contiguous flexible film to provide a satin or high gloss finish.

ARB staff states that tire dressings were to be considered in the rubber and vinyl definition originally. Tire coatings are uniquely different from typical tire dressing.

The apparent intent of the “Rubber and Vinyl Protectant” definition is to include products which perform any of the following characteristics: protect, shine, clean, renew, restore, revitalize, enhance, gloss, or rejuvenate. More importantly, there seems to be intent that the regulated products somehow alter the product's substrate by absorption of compounds in the product. Aerosol tire coatings are a different product than was intended to be regulated. Aerosol tire coatings do protect and enhance the appearance of the substrate. An aerosol tire coating does not clean, revitalize, rejuvenate, or restore the substrate. Aerosol tire coatings simply coat the surface of the tire.

Many aerosol products exist for footwear and leather care. Several are and have been classified as aerosol coatings and not consumer products. Our product is very similar to these products, except it is applied to tires.

Aerosol tire coatings are not tire dressings. Tire coatings should continue to be regulated as aerosol coatings. ARB has not released information to support their position on this proposed change. The inconsistencies between the definition and the TSD need to be corrected to provide clear reasoning for the change. Staff should defer this action until a new comprehensive survey is completed. This will allow for an informed decision to be made. [Stoner(b8)]

B-27. Comment: We manufacturer tire coatings which are different from tire dressings in that they contain a resin and form a film. These products are an enhancement of the tire dressing and should be considered under the "maximum incremental reactivity" limit of the Aerosol Coatings Regulation. Tire coatings also expel much less product to get the same effect as tire dressings. The change in the definition will ban these products.

We were not notified of any survey on this category. This change should be deferred until the aerosol coating categories are surveyed next year. We look forward to working with staff on possible rewording of the rubber and vinyl protectants definition. [Claire(b9)]

B-28. Comment: The proposed definition change in the TSD will have a substantial impact on tire coating products. Tire coatings should be regulated as aerosol coating products using the MIR limit in the Aerosol Coatings Regulation because tire coating product unlike typical tire dressings contains a resin and produces a film. Current tire coating products can not be produced at the VOC limit for "Rubber and Vinyl Protectant," thus this change will ban products already in commerce.

We request that this issue be deferred until the next survey as originally posted in 2003 survey document. [BAF(a51)]

B-29. Comment: We oppose the "Rubber and Vinyl Protectant" definition change. The process used was inconsistent and lack clarity. ARB staff listed numerous tasks in the regulatory process. The process was not clear. It was not transparent. There were numerous facts missing. For example, the definition change does not list what products are impacted. It does not list what companies are impacted.

Staff did do a survey. That information showed that only eight manufacturers were surveyed on this issue. In the survey for the 1997 rulemaking when this issue originally came up, there were 14 manufacturers with 18 products that were actually surveyed. Now there's only eight. There is a lot of information that is not here.

This regulation is inconsistent. When the staff came to the Board for the 2004 rulemaking, they treated “Footwear or Leather Care Products” in aerosol form and containing a resin, as aerosol coatings.

The Aerosol Coatings Regulation is the only regulation to date that is based on photochemical reactivity, which is the only proper way to deal with the VOC issue. Putting these products into the Aerosol Coatings Regulation is proper.

The 2004 staff report clearly stated that any aerosol product containing resin and that produced a sometimes invisible film was considered under the Aerosol Coatings Regulation. That is exactly what we're talking about here with the tire coating product. The aerosol footwear and leather care protectant product compared to the tire coating product, are almost identical in terms of formulation. Now they are being treated separately.

The staff has acknowledged that there has been a drafting error. The proposed definition change would bring in a lot of other categories. We would also like to see the word "tire coating." This resolution almost does it. The fact that it says tire coatings are considered tire dressings is inappropriate and not consistent with the 1997 TSD.

[3R(b7) second oral testimony representing: Claire(b7), Meguiar’s(b7), NAA(b7), Stoner(b7)]

Agency Response to Comments B-24 through B-29: Comments B-24 through B-29 raise the same issues that were raised in previous comments. All of the issues raised in Comments B-24 through B-29 are addressed in the responses to Comments B-1 through B-19.

d. Aerosol Products for Repair/Modification of Automotive Interiors

B-30. Comment: We manufacture coatings for the automobile industry, with emphasis on coatings for the interior components of automobiles. These coatings (aerosol and non-aerosol) are primarily designed for repair of existing interior surfaces, and also for changing colors, or coating an uncoated replacement component being installed in the automobile.

The proposed definition may categorize some of our products, which are aerosol coatings, as a protectant. On page V-12 of the TSD, the statement that “All products for “Vinyl” (e.g. for car interiors) would be “Rubber/Vinyl Protectant” clearly encompasses our product. Our product lines – Colorcoat and Classiccoat - have been in the Aerosol Coatings Regulation since its adoption.

This proposed change will substantially affect our current product. This proposed change does not add clarity, it confuses the issue. If this change is adopted, products like ours will be re-categorized as protectants without due process. Our products are film forming coatings used to repair or refurbish automotive interior components.

Aerosol coatings will be in the next survey, and we request that this issue be deferred until that time. [SEM(a73)]

Agency Response: The language of the "Rubber/Vinyl Protectant," definition excludes products for "construction, reconstruction, modification, structural maintenance or repair" as well as "pigmented products ... for coloring." While we have not examined the product label for the commenter's product, it seems highly likely that this definitional language would exclude the product from being regulated as a "Rubber/Vinyl Protectant." The product would therefore continue to be regulated under the Aerosol Coatings Regulation. In addition, it is apparent from the commenter's description that the product is not labeled to be used on vehicle tires. As explained in the Agency Response to Comments B-17 through B-19, the modifications made to staff's originally proposed language should insure that such non-tire products are not regulated as "Rubber/Vinyl Protectants."

e. Notification of Aerosol Filling Companies

B-31. Comment: We are an aerosol filler (a manufacturer of aerosol products for other companies that market the products under various labels) with locations in Massachusetts and California. We produce consumer products in many of the categories (Hair Care Product, Automotive Products, Lubricants, Cleaners and Degreasers) that are currently regulated, as well as some aerosol coatings regulated under the Aerosol Coatings Regulation.

The proposed "Rubber and Vinyl Protectant" definition appears to encompass additional products that are now considered aerosol coatings. The proposed definition does not clarify the issue; on the contrary the proposed definition further complicates the issue. Also, the TSD describing "Rubber and Vinyl Protectants" infers that "plastics" are covered under "Rubber and Vinyl Protectants." Plastics should not be included in the "Rubber and Vinyl Protectants."

The TSD states ARB staff requested an early submittal of 2005 survey data from marketers. We were unaware of this request and are concerned that some of our customer companies were not properly notified and failed to submit data.

We are concerned that this change will adversely affect the products we manufacture and the companies we manufacture for, without their knowledge. It was our understanding that "Rubber and Vinyl Protectants" would be included in the next survey. We believe that when the formal survey is done then that would be the best time for a definition change.

We request that this issue be deferred until the next survey is performed. At that time all companies that will have products affected will be afforded the opportunity to provide input into this process. [ShieldPack(a34)]

B-32. Comment: We are a small-business filler of aerosol products in California. We formulate and manufacture products for other companies that market the products. Our customer companies rely on us to provide effective and efficient products for consumer use.

The proposed change for the "Rubber and Vinyl Protectant" definition will have a substantial impact on our tire coating product. The proposed change will classify our coating product as a protectant. Our coating product will not be effective at the lower VOC level required for protectants. Currently our coating product meets the Aerosol Coatings Regulation definition of containing a resin and producing a film. If the proposed definition is not revised, our product will be banned.

We believed that the "Rubber and Vinyl Protectant" (aerosol) subcategory was not to be surveyed until the next survey. However, the TSD states that some marketers reported early. Was there a formal notice of this survey? We were unaware of this opportunity. We request this issue be postponed until the next survey, as previously noticed. [FourStar(a35)]

B-33. Comment: We are an aerosol filler of consumer products and aerosol coating products. We manufacture tire coating products that are different than the typical tire dressing product. Tire coatings do not clean as many tire dressings claim. There is much less product expelled to accomplish the same performance as a tire dressing.

We manufacture aerosol products containing a resin and produce a film. These products should be considered coatings. The tire coating product is an enhancement over the tire dressing product and should be considered under the maximum incremental reactivity (MIR) limits of the Aerosol Coatings Regulation.

ARB staff states that a supplemental survey was performed. When and who was involved with this survey? We were not notified of any supplemental survey by ARB or any of the associations in which we are active.

We request this issue be deferred until the next survey. At that time all companies that will have products affected will be afforded the opportunity to provide input into this process. [Plaze(a40)]

Agency Response to Comments B-31 through B-33: See Agency Response to Comments B-1 through B-30, which address most of the issues raised by the commenters.

In addition, an "aerosol filler" that manufactures but does not market a product may not be directly notified by ARB staff about a survey. ARB surveys are primarily directed at marketers, who are expected to hold the sales data. However, a marketer may or may not have product formulation data if the marketer contracts with another company (such as a contract packager, notably "aerosol filler") for manufacture of the product. That other company may also hold the product formulation data. In this

situation, the marketer typically notifies the other company and requests them to provide the formulation data either directly to ARB staff, or indirectly through the marketing company to ARB staff.

f. Current Compliance With Consumer Products Regulation and Support For Clarification

B-34. Comment: There are numerous products for rubber/vinyl substrates. Some manufacturers have chosen to formulate to comply with the Aerosol Coatings Regulation. Other manufacturers have chosen to formulate to comply with the "Rubber/Vinyl Protectant" category in the Consumer Products Regulation, and these regulations have two different types of standards. One is reactivity-based with an MIR (maximum incremental reactivity) limit and the other is a mass-based with a VOC limit.

When we looked at this definition in the "Rubber/Vinyl Protectant" category, the intent was to cover products that enhanced tires and protect rubber. Tires were specific. We manufacture products that met the "Rubber/Vinyl Protectant" category's 10 percent VOC limit. And even though we are the largest aerosol coatings manufacturer in the country, we did not try to develop an aerosol coating tire product, because we did not feel it met the intent of the category or the regulations.

We support the staff resolution to clarify this definition. We look forward to working with them to straighten this issue out. We believe that the VOC limit for "Rubber/Vinyl Protectant" in place now is appropriate, and we have manufactured products to meet that limit. We do not intend to make such products as coatings to comply with the Aerosol Coatings Regulation limit.

We make a large number of clear coating products that are aerosol coatings. We do not market any of them specifically for tires. We do not want those products pulled into the "Rubber/Vinyl Protectant" category. [SherWill(b13)]

Agency Response: We appreciate the efforts of the Sherwin-Williams Company (Diversified Brands Division) to develop low-VOC products to comply with the Consumer Products Regulation and the Aerosol Coatings Regulation. As discussed in the Agency Response to Comments B-17 through B-19, the 15-day changes and upcoming updates of the Aerosol Coatings Regulation and the Consumer Products Regulation should alleviate any concern about inappropriately "pulling-in" some aerosol coating products into the Consumer Products Regulation.

B-35. Comment: We have always considered that the definition of the "Vinyl and Rubber Protectant" category included tire dressings (i.e.: products for either or both vinyl and rubber surfaces) in section 94508(a)(123). Tires are made of rubber and rubber, after all, is mentioned in the category title. At the time that the definition was written, many products were described for use on both vinyl and rubber, including tires.

Products designed for use on either or both surfaces should be included in this category. For that reason, we designed and engineered consumer products to be compliant with both VOC limits for “Rubber and Vinyl Protectants,” for aerosols (effective date January 1, 2005) and for non-aerosols (December 31, 2002). This included extensive research and reformulation of several products (both aerosol and non-aerosol) for over a year leading up to the effective dates. [TurtleWax(a57)]

Agency Response: Comment noted.

B-36. Comment: We manufacture and sell in California a number of products whose intended use is to clean, shine and protect tires. These products leave behind an appearance enhancing protective substance. These products clearly fall under the regulated product category, "Rubber and Vinyl Protectant." [Clorox(a62)]

Agency Response: Comment noted.

B-37. Comment: We manufacture and distribute specialty automotive maintenance and repair products, including tire care products. While the relationship with this product category between the Consumer Products Regulation and the Aerosol Coatings Regulation is not totally clear, it has been our understanding that the tire care products would be regulated by the former. Accordingly, we have reformulated our products to meet the 10 percent VOC limit in the Consumer Products Regulation. We do not believe that we are the only manufacturer that has taken this interpretation. [Permatex(a67)]

Agency Response: Comment noted.

B-38. Comment: We do not object to the clarification in the Consumer Products Regulation that protectant products labeled only for use on rubber or only for use on vinyl are included. [CSPA(a81)]

Agency Response: Comment noted.

3. DISINFECTANTS/SANITIZERS

C-1. Comment: The proposal to limit equipment sanitizers to 1 percent alcohol would have significant implications for our plants' microbiological environmental control programs. As a sanitizer, 1 percent alcohol would be ineffective. Since Alpet D-2, which is 58 percent alcohol, is the only 'dry' sanitizer currently available, we would be forced to switch to a 'wet' sanitizer that would introduce additional moisture into our manufacturing environment. Adding moisture to the environment is contrary to a good microbiological control strategy during operations. The additional moisture can be a contributing factor to the movement of microorganisms from one area to another. As a key member of the food industry, Kraft would urge you to grant an exemption to alcohol based sanitizers as this current proposal will be a step backward in our

efforts to effectively control microorganisms in the manufacturing environment. [KraftFoods(a37)]

Agency Response: Based on the description of the product and the manner in which the commenter uses it, Alpet D-2 is likely not subject to the proposed 1 percent VOC limit for the “Sanitizer” category. Sanitizer products that are used to control microorganisms in a facility that processes animal or plant crops are excluded from VOC limits as specified in the “agricultural use” definition in the Consumer Products Regulation.

In addition, the Board modified the definition of "Disinfectant" and "Sanitizer" adding exclusions "F" to "Disinfectant" and "G" to "Sanitizer." These exclusions state that the definitions do not include "... products which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food..." These modifications should also address the commenter's concerns. As discussed in Chapter VI of the TSD and in the Agency Response to Comment C-3 below, staff developed the ISOR proposal and the modified text after considering the public health comments and recommendations from the California Department of Health Services (now the Department of Public Health).

C-2. Comment: We are concerned that this category, as currently defined, will encompass a variety of "Sanitizers" and "Disinfectants" that are already subject to VOC restrictions for another regulated category under the Most Restrictive Limit provision of Section 94512(a). We are concerned that the potential exists for the Most Restrictive Limit to apply the more stringent proposed VOC limit of 1 percent for "Sanitizers" or "Disinfectants" to these products, which are technologically infeasible. Suggestion is to exclude FIFRA-registered products that carry a claim of “disinfectant” or “sanitizer” but which are subject to VOC limits specified in Section 94509(a) for other product categories based on claims on the principal display panel from the VOC limits for "Disinfectants" or "Sanitizers." [CSPA (a81), CSPA(b10), P&G(a70)]

C-3. Comment: We support the VOC limit proposed for the "Sanitizer" category. However, the "Disinfectant" and "Sanitizer" definitions would create a compliance problem if not remedied. We are happy to hear a commitment by staff to do that. [SCJ(b25)]

C-4. Comment: We support the 70 percent VOC limit for aerosol "Disinfectants." Our company has been working for many years to find a way to reduce the VOC content in our disinfectant spray to have a product that emits less VOCs, but is just as efficacious as the product we are currently selling. So we do think the 70 percent VOC limit is a viable limit that will help to protect the home user as well as the institutional user. We have the same concern that CSPA does with the one percent VOC limit. While we accepted the one percent VOC limit based on the premise it would apply only to liquid "Sanitizers" and "Disinfectants" that were manufactured specific for that purpose, we did have the concern with the most restrictive limit provision. We will continue to work with ARB staff during the 15-day modification period. I think everyone

understands the issue -- that the limit is not feasible for products that both disinfect and clean (or have other purposes).

The majority of the products that serve only to disinfect or sanitize are sold in the institutional market. The consumer market has exceptionally few products that only serve that purpose. You have our disinfectant spray and you have a few liquid products. But what the proposal would do is bring in a lot more products from other categories. I don't think you will see manufacturers change the demand, because the demand is different in the two marketplaces, from the institutional janitorial market and from the consumer market. And consumers like products that do more than one purpose, particularly when it comes to cleaning and disinfecting. So you're not seeing those sole-use products in the retail consumer market as you are in the institutional market. I think the ARB survey bore that out as well.

We have very good proposals in the categories our company has an interest in, and we look forward to continuing to work with staff during the 15 day modification period and in future regulatory processes. [ReckBen(b11)]

Agency Response to Comments C-2 through C-4: Staff's intent was not to include products which make disinfecting or sanitizing claims that are subject to another regulated category as "Disinfectants" and/or "Sanitizers." To address the Commenters' concern staff proposed further modification to the "Disinfectant" and "Sanitizer" definitions to exclude products which are labeled as "Bathroom and Tile Cleaners," "Glass Cleaners," "General Purpose Cleaners," "Toilet/Urinal Care Products," "Metal Polishes," "Carpet Cleaners," or "Fabric Refreshers" that may also make disinfecting or anti-microbial claims on the label. Additional clarification was also made to the Most Restrictive Limit provision, section 94512(a)(3), to exclude products labeled as "Bathroom and Tile Cleaners," "Glass Cleaners," "General Purpose Cleaners," "Toilet/Urinal Care Products," "Metal Polishes," "Carpet Cleaners," or "Fabric Refreshers" that may also make disinfecting/sanitizing or anti-microbial claims on the label. These changes were circulated for public review in the July 3, 2007 Notice of Public Availability of Modified Text.

C-5. Comment: The California Department of Health Services (DHS) recommends that ARB exempt from the proposal, hard surface disinfectants and sanitizers, that are used on food processing equipment and utensils by manufacturers; and reusable heat sensitive critical and semi-critical medical devices and non-critical medical devices and equipment surfaces. [With these changes] DHS does not oppose the ARB proposals affecting food sanitizers and disinfectants. [DHS(a79)]

Agency Response: Staff agrees and the ARB adopted modifications to both "Disinfectant" and "Sanitizer" definitions to exclude the products which are labeled to be used on heat sensitive critical or semi-critical medical devices or medical equipment surface; products which are pre-moistened wipes or towelettes sold exclusively to medical, convalescent or veterinary establishments; and products which are labeled to

be applied to food-contact surfaces and are not required to be rinsed prior to contact with food.

C-6. Comment: The proposed 1 percent VOC content limit for non-aerosol "Disinfectants" and "Sanitizers" would effectively ban from sale or distribution in California, NicePak's Sani-Wipe No-Rinse Hard Non-porous Surface Sanitizing Wipes (Sani-Wipes), which contains 5.48 percent isopropanol as an active ingredient. Sani-Wipe is one of only two products recognized by the FDA as appropriate for use as a no-rinse spot sanitizer on food contact surfaces. A companion to the Sani-Wipe product, Sani-Cart Wipes, which is sold to grocery stores for use by store customers on shopping cart handles and child seats that may be contaminated by dirty hands, dirty diapers, and leaky fresh meat or poultry packages, also would be banned by the 2006 amendments to the California Consumer Products Regulation because of isopropanol. Neither Sani-Wipe nor Sani-Cart can be reformulated to remove the isopropanol and still retain their unique benefits to the consumer. NicePak respectfully requests that ARB provide an exemption from the 1 percent VOC content limit for such products. [NicePak(a78)]

Agency Response: Staff agrees in part. In response to this comment and others, the ARB adopted further modification to the "Disinfectant" and "Sanitizer" definitions to exclude products that are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food. However, at this time we have no data to suggest a higher VOC content is needed to support an exemption for shopping cart sanitizing wipes. Therefore, no exemption for such products was provided.

C-7. Comment: The new VOC limits proposed are very, very challenging. There are very significant challenges specific to these various products. The "Disinfectants" and "Sanitizers" have to kill the pathogenic organisms that are needed for the various surfaces. All of our products have various special benefits that have to be maintained. We can't fail. [CSPA(b23)]

Agency Response: Staff agrees and proposed VOC limits that, while challenging, are commercially and technologically feasible. The limits are also designed to ensure health benefits are maintained. However, to ensure health protection, the "Disinfectant" and "Sanitizer" definitions were modified to provide exemptions for products which are labeled to be used on heat sensitive critical, or semi-critical medical devices, or medical equipment surfaces; products which are pre-moistened wipes, or towelettes sold exclusively to medical, convalescent, or veterinary establishments; and products, which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food.

4. ELECTRONIC CLEANERS

D-1. Comment: One of our chemical specialty compounds is used in the electronic industry. We are limiting our comments to the "Electronic Cleaner" proposed definition change. AGC is in support of this proposed definition change. Furthermore, AGC is requesting that products used in the aviation maintenance and on energized components also be included in the exemption in the definition. These additional uses were uses for the compound HCFC 141b, which has been phased out of production. AGC requests that these two other uses be incorporated into the definition. [AGC(a66)]

D-2. Comment: We support the proposed change to the category definition for "Electronic Cleaner". This change recognizes the industry need for a professional-quality product sold only through non-retail channels to original-equipment-manufacturer (OEM) users. [RadSpec(a59)]

D-3. Comment: Tech Spray is a manufacturer of chemical cleaners for the manufacture and rework of electronic products. Tech Spray's products have historically been non-flammable, plastics compatible, cost effective, efficient cleaners with good evaporation rates. We have marketed a product containing HCFC 141b for precision cleaning tasks as prescribed by the U.S. EPA, for example, for airline maintenance. The compound HCFC 141b has been phased out due to ozone depletion issues. Currently, the replacement compounds which exhibit similar characteristics are the HFC's and HCFC, which are not exempt from the VOC definition. Tech Spray requests that these other uses be incorporated into the definition. [TechSpray(a58)]

Agency Response to Comments D1 through D3: These comments are directed at a proposed amendment to the "Electronic Cleaner" definition. A VOC limit for these products was to become effective on December 31, 2006. As part of a technical assessment, routinely conducted prior to limits becoming effective, staff was made aware of certain niche electronic cleaning products that manufacturers were having difficulty reformulating to meet the limit. These products were formulated with HCFC-141b. HCFC-141b is an exempt VOC solvent; however, production is no longer allowed because of its stratospheric ozone depleting potential. In further consultation with the affected industry, staff learned that these niche products were generally used in a manufacturing setting, and were not available, at retail, to the general household consumer. In light of this, rather than exempting products designed for specific end uses, staff proposed, in the Staff Report, to exempt "Electronic Cleaners" sold exclusively to establishments which manufacture or construct goods or commodities and are labeled "not for retail sale."

After further investigation, staff learned that these niche products were also used in applications which are not considered manufacturing settings. Therefore, to fully understand and work with industry to address these essential niche use products, at the hearing staff proposed delaying the effective date of the VOC limit, one year, to December 31, 2007. The Board agreed and approved the amendment extending the effective date for "Electronic Cleaners," and directed staff to work with the affected

industry, prior to release of the 15-day notice, to determine if exclusions from the "Electronic Cleaner" category were warranted.

As a result of these continued discussions with industry, staff learned that the products of concern were those used to clean or degrease electronic equipment where cleaning and/or degreasing must be accomplished when electrical current exists, or when there is a residual electrical potential from a component. Therefore, in the 15-day notice, staff proposed to exempt "Electronic Cleaners" used in applications where electrical current or a residual electrical potential exists, as long as the product is labeled "Energized Electronic Equipment use only." This proposal replaced the previous change that would have exempted those products sold exclusively to establishments which manufacture or construct goods or commodities and are labeled "not for retail sale." These changes were circulated for public comment during the 15-day comment period and were subsequently adopted by the ARB. We believe that these modifications satisfy the concerns raised by the commenters.

D-4. Comment: We support the proposed revision to the "Electronic Cleaner" definition to exclude products used in a manufacturing setting. Additionally, two other use scenarios should also be excluded. These are aviation maintenance, and energized electronic cleaning; past products for these uses contained the compound HCFC 141b which was an exempt VOC compound. However, HCFC 141b has been phased out of production due to upper-atmospheric ozone depletion. There is a need for replacement products that have similar characteristics to HCFC 141b. Currently, certain HFC's and HCFC exhibit these characteristics of HCFC 141b, but these compounds are not presently VOC exempt in California. For that reason, we request additional time to formulate products to meet these other use scenarios. [NAA(a86)]

Agency Response: Related to extending the effective date, the Board agreed and approved an amendment extending the effective date of the VOC limit for "Electronic Cleaners" until December 31, 2007. Related to the comments on modifying the definition, staff incorporates the Agency Response to Comments D-1 through D-3.

D-5. Comment: I'm here on behalf of AGC Solvents, DuPont, and the Honeywell Company to support the 15-day resolution. [3R(b1)] first oral testimony representing: [AGC(b1), Dupont(b1), Honeywell(b1)]

D-6. Comment: In the electronics cleaning area, as I mentioned earlier, we do agree with moving that out. There are some definitional issues we need to get through, and we think we'll have the time to do that proper reformulation by the end of '07. [CRC(b16)]

D-7. Comment: CSPA supports the proposed revision to the definition for "Electronic Cleaner" to exclude products that are not for retail sale and sold only to manufacturers. However, we believe that it would be a better solution to simply extend the effective date of the limit for this category in Section 94509(a) by one year to December 31, 2007. This obviates the need for labeling and allows companies that

produce these products to determine what alternative formulation technologies might be available to replace HFC-141b**.** [CSPA(a81)]

Agency Response to Comments D-5 through D7: These comments are directed at the staff's proposal presented at the hearing to extend the effective date for "Electronic Cleaners" to allow time to determine if an exemption for certain niche products was appropriate. At the hearing, the Board agreed and approved an amendment extending the compliance date until December 31, 2007.

D-8. Comment: Pages ES-12 to ES-13 of Executive Summary The explanation in this section regarding the need for the revision to the definition of which "Electronic Cleaners" are subject to the 75 percent VOC limit fails to note that this problem is due to a delay in the approval of exemption in California of VOC ingredients that are needed as replacements for HCFC-141b that are already exempted from the federal definition of VOC by U.S. EPA due to their negligible photochemical reactivity. When these key HCFC-141b replacement ingredients are exempted in California, the 75 percent limit should be feasible for all products in the category. [CSPA(a81)]

Agency Response: ARB staff acknowledges that the HCFC-141b replacement compounds mentioned by the commenter are being evaluated for possible VOC exemption, and would provide a viable reformulation option in this category. However, the appropriateness of these exemptions has not yet been determined. To address the commenter's concerns, staff proposed at the hearing, and the Board approved, to extend the effective date for "Electronic Cleaners" until December 31, 2007. The Agency Response to Comments D-1 through D-3 is incorporated herein.

D-9. Comment: We request an exclusion of electronic cleaning products when these products are sold to establishments that manufacture, install or repair goods or commodities (and are labeled "not for retail sale"). This is an expansion of the current wording to include rework and repair products that are sold to professionals involved in installation and repair services. This is based on the negative impact the Consumer Products Regulation would have on these businesses if this change is not approved. Without the appropriate cleaning products, the function and performance of electronics can be severely affected, ultimately resulting in failure and additional electronic waste. [ITW(a68)]

Agency Response: This comment supports the staff's proposal contained in the Staff Report related to "Electronic Cleaners." However, in further discussions with the affected industry, staff determined that more time was necessary to evaluate the category and whether exemptions were appropriate. Related to exempting certain electronic cleaning products, the Agency Response to Comments D-1 through D-3 is incorporated herein. [We note that during the July 3, 2007 15-day notice comment period this commenter did not indicate that these amendments would not address his concerns.]

5. MULTI-PURPOSE SOLVENTS

E-1. Comment: Specifically, my letter addresses the subject of multi-function products and the regulatory change which will be effective January 1, 2007. The change from use references on the principal display panel, to anywhere on the label, will affect many of our products. Most of the affected products are packaged in lithographed containers, and it will take some time to work through inventories of empty containers and lithographed plate. We are asking for a more reasonable phase-in time period for this change to enable us to make required label changes to these products. A three year sell through period, and a more realistic notification period would be helpful. [Sunnyside(a82)]

Agency Response: The regulatory change to which the commenter refers is an administrative change to the "most restrictive limit clause" of the regulation (section 94512(a)), which was adopted in 2004 as part of the regulatory amendments at that time. Though this comment is not directly applicable to the current regulatory amendments, we are addressing this comment because the new most restrictive limit clause is indirectly related to currently proposed changes to the definition of "Multi-purpose Solvent."

Many of the products affected by the updated most restrictive limit provision met the definition of "Multi-purpose Solvent" as well the definitions of other regulated categories. Therefore, a number of those companies have recently revised their products and labels to comply with the updated most restrictive limit provision that became effective January 1, 2007. In order to provide regulatory stability and give companies adequate time to adapt, if necessary, to the "Multi-purpose Solvent" definition revision proposed in the current rulemaking, staff modified the definition of "Multi-purpose Solvent" so that the new definition applies only to products manufactured on or after January 1, 2008. Staff believes that this lead-time is adequate for manufacturers to make label changes (if necessary) and that additional time is not needed. The sell-through provision applies to new VOC limits, but not definitional changes.

E-2. Comment: Section 94508(a)(97): CSPA has no objection to the proposed revision to the definition for Multiple [sic] Purpose Solvent that restricts the category to products that do not meet the definitions for other regulated consumer product categories. It is important to note, however, that this provision serves to change the classification of many current products, and the impacts of this change have yet to be fully assessed. CSPA will support the ARB's efforts to further assess this change when this category is considered for a potential VOC limit (which we believe must be reactivity-based) in the upcoming rulemaking (i.e., ARB's 2007 Amendments to the Consumer Products Regulation). [CSPA(a81)]

Agency Response: Comment noted. Staff intends to evaluate the "Multi-purpose Solvent" category and is exploring the feasibility of setting either a mass or reactivity based standard.

6. COMMENTS ON OTHER CATEGORIES

a. Automotive Windshield Washer Fluids (Type "A" Areas)

F-1. Comment: We support the currently proposed limit of 25 percent VOC. However, we still have concerns that the 25 percent VOC level may not provide adequate freeze protection against the lowest temperatures expected in some Type "A" areas. ARB should consider a study to determine the safety ramifications of this change. [RadSpec(a59)]

Agency Response: Staff disagrees that the 25 percent level may not provide adequate freeze protection. Based on information presented to staff regarding extreme temperatures in California, in combination with the freeze points that can be achieved by these products at the proposed VOC limit, staff determined that 25 percent VOC is an appropriate limit for this category. (See pages VI-1 through VI-3 of the Technical Support Document.)

F-2. Comment: Honeywell Consumer Products Group produces and distributes Prestone® De-Icer Windshield Washer fluid. Honeywell presented the information for the automotive windshield washer fluid category at the industry meeting on July 13, 2006 with you and your staff. Please find our comments below on the general reformulation costs associated with this proposed regulation.

In Appendix A under Table VII-5 there is an estimated onetime cost identified for the category of automotive windshield washer fluid (Type A). Both the low and high costs are identified as being the same at $8,648. This is an extremely low number that would not even cover a simple reformulation. Please see the attached chart that breaks out the research and development costs for both a simple and an extensive reformulation. The cost ranges from about $14,000 to as much as $68,000. The change from 35 percent VOC to 25 percent is not just the 10 percent reduction of the VOC. One point that is not very clear in your final proposed regulation is the fact that the proposed 25 percent VOC limit for this category does not provide the same freeze protection as the current 35 percent VOC limit. There is a loss of about 22 degrees Fahrenheit. In order to provide the maximum freeze point protection required, some amount of LVP solvents must be used. Also, to continue to provide the consumer with an effective product, we must add other beneficial components to the formulation. The loss of the freeze point protection must be compensated for by adding other visibility improvements such as precipitation and soil repellency, or refreeze protection, in order to add value back to the product. To not do so would result in loss of the competitive advantage our product has afforded Honeywell. These changes would be considered an extensive reformulation.

In Appendix F for the automotive windshield washer category, there were two formula comparisons, including a non-compliant formula (50 percent VOC) versus a proposed 25 percent VOC product. The 35 percent VOC limit has been in place for

many years. When comparing cost, a 35 percent VOC product would be the appropriate basis. In order to obtain a true cost comparison between the current and proposed formulas, a non-compliant formulation of 50 percent is not relevant. In the true comparison with the 25 percent product, there is a loss of 10 percent VOC which could be methanol. There is an increase in the LVP (to gain freeze point protection) and the inorganic ingredients that will out-weigh the saving from the methanol. In your example, methanol is $0.29 per pound. The cost per pound of a typical LVP could range from $0.40 - $0.80 and the cost of an inorganic component can be as much as $6.00 per pound. The two ingredients combined would cost more than the 10 percent methanol. In this scenario, it is possible to have a 25 percent product cost more than the 35 percent. I have included a formulation comparison of low and high costs. The low cost proposal illustrates that the cost is similar. In the high cost example where Honeywell and other known companies market products, there is an increase in cost from the 35 percent product to the 25 percent product.

As I have demonstrated, there is a significant cost to manufacturers to meet the proposed VOC limit for automotive windshield washer fluids. In a category that is very cost competitive, these extra costs erode the current low margins. Also, the new limit results in a loss of overall performance, which cannot be entirely recovered through other ingredients. Although there are formulation hurdles to overcome, Honeywell supports the proposed VOC limit of 25 percent for the automotive windshield washer fluid category in the Type “A” areas of California.

Automotive Windshield Washer Fluid

		Low Cost Formula				High Cost Formula			
Component	Material Cost $/lb	Current Wt %	Cost $	Proposed Wt %	Cost $	Current Wt %	Cost $	Proposed Wt %	Cost $
Methanol	0.29	35	0.10	25	0.07	35	0.10	25	0.07
LVP	0.41	0	0	0	0	2.5	0.01	5	0.02
Inorganic	5.46	0	0	0	0	0.5	0.03	2	0.11
Water	0	65	0	75	0	62	0	68	0
Total Cost/Pound			**0.10**		**0.07**		**0.14**		**0.20**
Total Cost/Gallon			**0.80**		**0.56**		**1.12**		**1.60**

Prestone® De-Icer Washer Fluid Reformulation Resources

Simple Reformulation (e.g., small change in active ingredient concentrations)

Test	Typical Resource Requirements (Days)	
	Non-exempt	Exempt
Formulating and Disposal	3	0
Freeze Point	1	0
Safety (Paint and wiper blade compatibility)	0.5	0
Foaming	2	0
Cleaning	3	1
Repellency	2	0
Label testing	0	0
"De-Icing" (Melting/ Refreeze)	3	0
Streaking (low temp)	1	0
Stability on product heels (2 wk - 3 mo. test)	0.5	0
Storage and Stability Tests (3 mo. test)	2	0
Fleet Test (1 mo. test)	5	10
Prepare Claims Substantiation	0.5	2
Trial Run	0	0
Prepare TPS & MSDS	1	0.5
Program Management (4 mo., 15 min/wk, 10 people)	0	2
Total Time	24.5	15.5
Value of Time*	$6,125	$6,781
Value of Materials	$1,000	--

Summed Expenses **$13,906**

Extensive Reformulation (e.g., new active ingredient to offset lost performance)

Test	Typical Resource Requirements (Days)	
	Non-exempt	Exempt
Technology searching and supplier contacts	0	10
Formulating and Disposal	10	0
Freeze Point	2	0
Safety (Paint and wiper blade compatibility)	0.5	0
Foaming	5	0
Cleaning	10	2
Repellency	5	0
Label testing	0	0
"De-Icing" (Melting/ Refreeze)	6	0
Streaking (low temp)	1	0
Stability on product heels (2 wk - 3 mo. test)	1	0
Storage and Stability Tests (3 mo. test)	2	0
Fleet Test (3 mo. test)	15	30
Prepare Claims Substantiation	0.5	2
Trial Run (5 N-e, 5 E, 2 days)	10	10
Prepare TPS, MSDS, and ADR	1	6
Program Management (12 mo., 15 min/wk, 10 people)	0	5
Total Time	69	65
Value of Time*	$17,250	$28,438
Value of Materials	$2,000	--
Artwork	$20,000	--
Summed Expense	**$67,688**	

*Using 240 work days, non-exempt = $40k/yr, exempt = $70K/ yr, benefits @ 50% of salary

[Honeywell(a55)]

Agency Response: As discussed in the Technical Support Document, staff believes that the 25 percent VOC limit is feasible and provides the adequate freeze protection. It is also likely that the additional ingredients mentioned by the commenter will enhance freeze protection. We also agree that the raw material costs for these enhancement chemicals will add to reformulation costs, both in terms of recurring formulation costs and research and development costs. For the particular reformulation approach chosen by this manufacturer, therefore, the costs will be greater than the estimated in the ARB staff report. The commenter is correct that the limit for "Automotive Windshield Washer Fluid," Type "A" areas, is 35 percent by weight, not 50 percent. Revising the data, however, does not change the staff's determination that the 25 percent VOC limit is both technologically and commercially feasible. Moreover, we note that the commenter supported the 25 percent VOC limit approved by the Board in their oral comments at the November 17, 2006 hearing (see Comment F-6 below).

F-3. Comment: Section 94509(a) The proposed 25 percent VOC limit for products used in Type "A" areas is likely to be technologically and commercially feasible. We intend to market effective products meeting this standard. [CSPA(a81)]

F-4. Comment: Section 94509(a) We have no objection to the proposed change to the category definition. [CSPA(a81)]

F-5. Comment: ASPA members support the 25 percent VOC emissions limit proposal which is a compromise from the originally proposed 15 percent VOC limit. [ASPA(a47)]

F-6. Comment: Although there are formulation hurdles to overcome, Honeywell supports the proposed VOC limit of 25 percent for the "Automotive Windshield Washer Fluid" category in Type "A." [Honeywell(b20)]

Agency Response to Comments F-3 through F-6: At the November 17, 2006 hearing, the Board approved the 25 percent VOC limit for "Automotive Windshield Washer Fluid" (Type "A" Areas), effective December 31, 2008.

b. Bathroom and Tile Cleaners

F-7. Comment: Section 94508(a)(21) CSPA has no strong objection to the proposed revision to the definition for "Bathroom and Tile Cleaner" to reference directly the defined category of "Toilet/Urinal Care Product." We are concerned, however, that this could present increased ambiguity in light of the new provision in Section 94512(a)(3) that states that products in a category excluded from the definition of another category may still be subject to the "Most Restrictive Limit" provision. We would ask for clarification in the record that all "Toilet/Urinal Care Products" will not be subject automatically to limits for "Bathroom and Tile Cleaners" simply due to toilets and urinals being "surfaces in bathrooms." [CSPA(a81)]

Agency Response: In consultation with industry, staff developed and the Board adopted language that addresses the commenter's concern. The language is incorporated in section 94512(a)(3).

F-8. Comment: Section 94509(a) CSPA member companies manufacturing these products believe that the 1 percent VOC limit proposed may be feasible for the non-aerosol form in this category. CSPA members therefore accept the proposed 1 percent VOC limit and will seek to market effective products meeting this new standard. [CSPA(a81)]

Agency Response: Comment noted.

c. Construction, Panel, and Floor Covering Adhesives

F-9. Comment: The proposed 7 percent VOC standard for "Construction, Panel, and Floor Covering Adhesives" is technologically and commercially feasible. However, some concern remains regarding the ability of some construction adhesives, such as subfloor adhesives, to effectively bond some of the new technological materials that have low surface energy or that have been chemically treated. [ASC(a21), NPCA(a84)]

Agency Response: We believe that a 7 percent VOC standard is technologically and commercially feasible for all products falling under the "Construction, Panel, and Floor Covering Adhesive" category. The emissions inventory for this category incorporates data on a wide variety of products, including subfloor adhesives. According to the product labels, they can be used on a wide variety of building materials, such as lumber, treated lumber, engineered lumber, metal, masonry, concrete, foil, drywall, plywood, waferboard and particleboard. Essentially the same claims are made on labels of low-VOC products that already comply with the proposed limit, and on labels of subfloor adhesives with higher VOC content. In addition, low-VOC products have much higher market share than higher VOC products, demonstrating clear consumer preference.

Staff has made efforts to determine if new subfloor adhesive products were introduced since 2003 that could specifically be used with new technological materials that exhibit low surface energy. We have not seen any evidence that manufacturers have introduced new products for these types of materials in California.

F-10. Comment: The South Coast Air Quality Management District supports the proposed VOC standard for the "Construction, Panel, and Floor Covering Adhesive" category and notes that the new limit will make the Air Resources Board limit and the SCAQMD limit for construction adhesives essentially equivalent, making the two agencies' requirements for this category more uniform. [SCAQMD(b3), SCAQMD(c3)]

Agency Response: Comment noted.

F-11. Comment: Allowing for the continued use of perchloroethylene, methylene chloride, and trichloroethylene in the manufacturing process through December 2008, with a sell-through provision of December 2011, is a reasonable approach to the eventual elimination of these compounds from the "Construction, Panel, and Floor Covering Adhesive" category. [ASC(a21)]

Agency Response: Comment noted; the commenter is supporting the proposed amendments.

F-12. Comment: The proposed amendments ban the use of chlorinated toxic compounds in construction adhesives. While the industry does not agree that any potential reformulation options should be prohibited, these compounds are not currently in significant use. [NPCA(a84)]

Agency Response: Comment noted. We believe that the prohibition on these compounds is justified for the reasons described in the Technical Support Document.

d. Fabric Protectants

F-13. Comment: Section 94508(a)(51) We do not object to the proposed revision to the "Fabric Protectant" definition, to clarify that film-forming products are excluded and are instead subject to the Aerosol Coatings Regulation. [CSPA(a81)]

Agency Response: After further review, staff has clarified the definition to restore the way fabric protectants were historically regulated under the Consumer Products Regulation.

While the "Vinyl/Fabric/Leather/Polycarbonate Coatings" definition (section 94521(a)(72) of the Aerosol Coatings Regulation) is currently worded broadly and may be interpreted to cover all aerosol coating products for fabric, including many "Fabric Protectants," the TSD for the February 3, 1995 ISOR, pp IV-102-106, described 1992 survey products used to restore or renew fabric substrates. None of those aerosol coating products were explicitly for protection against soil, dirt, or stains, the terms commonly used on labels for traditional "Fabric Protectant" products. Staff, therefore, differentiates those products based on label claims for protection from soil, dirt, and/or stain for regulation under the Consumer Products Regulation, from the clear coat aerosol products to renew or restore fabric, for regulation under the Aerosol Coatings Regulation. This clarification was included in the modified regulatory language for 15-day changes released July 3, 2007, and subsequently adopted into the Consumer Products Regulation and the Aerosol Coatings Regulation.

e. Floor Polishes or Waxes

Floor Polish or Wax: Commercial/Technological Feasibility and Subcategorization

F-14. Comment: As outlined in CSPA's initial comments filed on October 20, 2006, the 1 percent VOC limit for "Floor Polish or Wax" is not technologically or commercially feasible for all products in the category, despite the proposed implementation date of December 31, 2010. Therefore, in CSPA's initial comments, we urged ARB to establish a limited subcategory for "Floor Polish or Wax" products that must be regularly burnished and establish a 3 percent VOC limit for that subcategory, and provided the definitional changes needed for this new limit. [CSPA(a81)]

F-15. Comment: The proposed 1 percent limit for the "Floor Polishes or Waxes" category is not technologically or commercially feasible, however, and ARB should consider an alternative that will achieve reasonable reductions while allowing effective products in this all-important product category to continue to be sold in the State of California. Specifically, we support the proposal that has been offered by the Consumer

Specialty Products Association and others, which would create a sub-category for "Floor Polish or Wax" products that must be regularly burnished. [ISSA(a46)]

F-16. Comment: For "Floor Polishes or Waxes," CSPA believes the 1 percent limit is not technologically or commercially feasible for all product limits. Therefore, we ask the ARB to direct staff to continue to work with industry to develop a narrowly tailored sub-category for specialized products that in use will produce no more VOCs than products currently meeting the 1 percent limit. [CSPA(b10)]

Agency Response to Comments F-14 through F-16: Staff disagrees with the commenters' assertions that the 1 percent VOC limit (applicable to both resilient and nonresilient flooring materials) is not commercially or technologically feasible. A significant market share currently complies with the 1 percent standard. Staff carefully analyzed industry's proposal to subcategorize floor polishes based on burnishability, and found that subcategorization is not warranted, because a significant portion of industry-identified burnished products currently comply with the proposed 1 percent limit. Further, the proposed subcategorizations would be difficult to define because label claims and directions found on "must be burnished" and "may be burnished" products are in many cases identical. Without distinctions between products, this subcategorization would be difficult, if not impossible, to enforce effectively. In addition, the commenters were unable to provide us with information on how to meanfully separate products that "must be burnished" from products that "may be burnished."

Floor Polish or Wax: Alternative Compliance

F-17. Comment: CSPA continued to work with ARB staff to seek a resolution to our concerns. While we continue to believe that a subcategory with a 3 percent limit should be developed, CSPA and its members are now willing to accept the 1 percent limit proposed for the two subcategories of "Floor Polish or Wax" products, based on the willingness of ARB staff to consider submissions under the Innovative Products Provision for products whose burnishability and durability allow lower usage to maintain floors for a given time period, and therefore result in lower VOC emissions than a representative product that complies with the 1 percent VOC limit. It is vitally important, however, that these Innovative Products Provision applications be allowed based on a reasonable level of scientific evidence so that this regulatory alternative is cost-effective for companies. [CSPA(a81)]

F-18. Comment: Johnson Diversey, Inc, is willing to accept the staff proposal for the vast majority of "Floor Polish or Wax" applications. We however, request that you direct staff to continue to work with us to develop an appropriate mechanism to provide for specialized commercial floor polishes at the 3 percent VOC level that, in use, will emit no more VOCs than products meeting the 1 percent staff proposed limit. [JohnDiver(a75)]

F-19. Comment: While we continue to believe that a subcategory with a 3 percent limit should be developed, CSPA and its members are now willing to accept the

1 percent limit proposed for the two subcategories of "Floor Polish or Wax" products, based on the willingness of ARB staff to consider submissions under the Innovative Products Provision for products whose burnishability and durability allow lower usage to maintain floors for a given time period, and therefore result in lower VOC emissions than a representative product that complies with the 1 percent VOC limit. [CSPA(a81)]

F-20. Comment: Finally, and this is unfortunate, but we've been trying to work with the staff to develop a sub-category. And we have been unable to clearly differentiate between these two. So today we are not before you to ask to disapprove the 1 percent across the board, but we are asking for two things. One is it is our commitment to work with you and the staff to look at Alternative Compliance Plans, to look at the ACP, the Innovative Products Provision exemption. And secondly, to ask that should we be able to differentiate in the future, we're able to come back to the Board and to ask for the one percent/three percent split, or the ACP/IPP provisions are not feasible that we come before you again and have this discussion. [JohnDiver(b12)]

F-21. Comment: During the pendency of this review *[of subcategories]*, we agreed to work with -- accept the 1 percent across the board limit based on ARB staff willingness to consider submissions under the Innovative Products Provision and the product Alternative Control Plan. [CSPA(b10)]

Agency Response to Comments F-17 through F-21: Besides direct compliance with a consumer products VOC limit, manufacturers also have the option of taking advantage of the Innovative Products Provision (IPP; section 94511, title 17, CCR) or the Alternative Control Program (ACP; sections 94540-94555, title 17, CCR). The IPP allows out-of-compliance products to be sold if it can be demonstrated that the use of such products, because of some aspect of the formulation, packaging, or dispensing system, results in the same or less emissions than a typical product that complies with the limit. The ACP allows a company to balance excess emissions from out-of-compliance products with excess reductions from other products that overcomply with the applicable VOC limit for that product. Both options offer significant flexibility to companies with regulated products. The IPP and ACP both have specific application and reporting requirements, so companies that wish to achieve compliance with one or both of these plans should speak with ARB staff before taking action to that end. Staff encourages manufacturers to contact them for help with deciding whether the IPP or ACP may be appropriate for their situation. Staff has committed to work with affected companies to explore their options for complying with the Consumer Products Regulations.

Floor Polish or Wax: Other Comments

F-22. Comment: ISSA supports ARB's current proposal to set a December 31, 2010 effective date for the "Floor Polishes or Waxes" category. [ISSA(a46)]

Agency Response: Comment noted.

F-23. Comment: The survey data on "Floor Wax or Polish" clearly indicate that at least 245 of the 453 products reported will require reformulation to meet the proposed 1 percent VOC limit. That is more than half of all currently marketed products. All products in this category must undergo rigorous evaluations to assure their efficacy (durability, burnishability, shine retention, etc.) and safety (slip resistance). Reformulation of hundreds of products over a four year period represents a very significant challenge for companies that market these products for institutional, commercial, and industrial floors. If members must utilize the Innovative Products Provision for some products, this represents a potentially significant increase in time and cost. [CSPA(a81)]

Agency Response: Staff notes that the significant complying market share for the 1 percent limit for the "Floor Polish or Wax" categories, is similar or even higher than for other categories for which VOC limits have been approved in prior rulemakings. While many products will need to be reformulated, a significant number are already compliant. Further, many companies offer both complying and non-complying products, so in some cases, compliance may be achieved by a shift in focus of the company's marketing towards already-compliant products. Staff agrees that companies utilizing the IPP may incur costs, but those costs are likely comparable to or less than the cost of reformulating products to be compliant.

F-24. Comment: Floor polishes have to maintain both protection and a safe walkway surface. [CSPA(b23)]

Agency Response: Staff agrees and does not anticipate protection or safety will be compromised by a 1 percent VOC limit for the "Floor Polish or Wax" categories. Indeed, the high complying market share at 1 percent or less VOC in this category indicates that safety standards are currently being met.

f. Furniture Maintenance Products

F-25. Comment: CSPA supports the proposed revision to the definition for "Furniture Maintenance Product" that clarifies that furniture can be made of materials other than wood. We hope that this will decrease the ambiguity caused by the new provision in Section 94512(a)(3) that states that products in a category excluded from the definition of another category may still be subject to the "Most Restrictive Limit" provision. [CSPA(a81)]

Agency Response: Comment noted.

F-26. Comment: While the 3 percent VOC limit may be technologically feasible to achieve, it will add significant cost to many products, and could impact the commercial feasibility for some companies. We would recommend a slightly higher limit of 4 percent instead be adopted, which would provide some reduction below the current 7 percent limit (especially if a limit-to-limit assessment is done), and also provide more

efficacy in the cleaning nature of the products without a substantial cost increase. [CSPA(a81)]

Agency Response: A significant percentage of the market already meets a 3 percent VOC limit for non-aerosol products, thereby demonstrating commercial feasibility. As the commenter has stated, the 3 percent VOC limit is also technologically feasible. Therefore, the suggested modification is not warranted.

g. General Purpose Cleaners

F-27. Comment: Section 94508(a)(67) CSPA has no objection to the proposed revision to the definition for "General Purpose Cleaner" which would clarify the types of surfaces on which these types of products are used. [CSPA(a81)]

Agency Response: Comment noted.

F-28. Comment: Section 94509(a) CSPA member companies manufacturing these products believe that the 8 percent VOC limit proposed may be feasible for the aerosol form in this category. CSPA members, therefore, accept the proposed 8 percent VOC limit and will seek to market effective products meeting this new standard. [CSPA(a81)]

Agency Response: Comment noted.

F-29. Comment: We support the "General Purpose Cleaner" category proposed limit of 8 percent VOC. We believe the 8 percent VOC limit will let us produce an effective and efficient product. [Claire(b1)]

Agency Response: Comment noted.

F-30. Comment: We support the staff's position on the 8 percent VOC limit for the "General Purpose Cleaner" (aerosol) category. This limit will allow us to reformulate a product that will meet customer standards. [Claire(b9)]

Agency Response: Comment noted.

h. Laundry Starch/Sizing/Fabric Finish Products

F-31. Comment: Section 94509(a) The proposed 4.5 percent VOC limit for aerosol products may be feasible**.** We accept the proposed limit and intend to market effective products meeting this standard. [CSPA(a81)]

Agency Response: Comment noted.

F-32. Comment: Section 94508(a)(86) We do not object to the proposed revision to the "Laundry Starch/Sizing/Fabric Finish" definition, to clarify that sizing and fabric finish products are included. [CSPA(a81)]

Agency Response: Comment noted.

i. Nail Polish Removers

F-33. Comment: We wish to express our support of the ARB staff recommendation to modify the standard for nail polish removers from 0 percent VOC to 1 percent VOC. [CTFA(a74)]

Agency Response: Comment noted.

j. Oven Cleaners

F-34. Comment: Section 94509(a) The proposed 1 percent VOC limit may be feasible for the non-aerosol form in this category. Our members are therefore willing to accept a 1 percent VOC limit and work to reformulate non-complying products by December 31, 2008. [CSPA(a81)]

Agency Response: Comment noted.

7. OTHER COMMENTS

a. Need for Regulation and Air Quality Modeling

G-1. Comment: This Technical Support Document does not include any real assessment of the necessity of this regulation, and neither did the support documents for the State Implementation Plan for Ozone adopted in 2003 which set the general reduction goals for consumer products which this regulation seeks to implement. [CSPA(a81)]

Agency Response: Staff disagrees. California's State Implementation Plan for Ozone (SIP) is California's plan to meet stringent air quality standards mandated by the federal government. Both the Technical Support Document and the SIP contain a wealth of information to establish the necessity of the proposed amendments. Scientific data and rigorous atmospheric chemical modeling has demonstrated on multiple occasions, under varied meteorological assumptions, that VOC reductions are absolutely imperative to attaining the National Ambient Air Quality Standard (NAAQS) for ozone, as VOC is a precursor to tropospheric ozone. Because consumer products are one of the greatest sources of anthropogenic VOC emissions in California, reductions from this source category remain vital in reaching attainment of the NAAQS.

G-2. Comment: We believe that this cursory assessment on "The Need for Emissions Reductions" falls far short of the assessment that should be conducted to

assure that this regulation is “necessary to attain State and federal ambient air quality standards” as required by Section 41712(b)(1) of the Health and Safety Code. CSPA believes that a quantitative assessment of air quality benefits can and should be conducted for all proposed air quality measures. This assessment can be accomplished using the computerized air quality models that are currently used to establish carrying capacity (attainment inventories) for the State Implementation Plan for Ozone and fine particulate matter (i.e., PM-2.5). Such an assessment is needed to establish the actual air quality impact of the proposed regulation. This use of air quality models and other analytical techniques for this type of analysis was the basis of another California statutory requirement for a study to be conducted by ARB at least every three years. In pertinent part, Section 39609 of the Health and Safety Code requires that “On or before December 31, 1989, and at least every three years thereafter, the state board shall complete a study on the feasibility of employing air quality models and other analytical techniques to distinguish between emission control measures on their relative air quality impact.” The initial study developed under this section was released on December 31, 1989, entitled “Feasibility of Using Air Quality Models and Other Techniques to Distinguish between Emissions Control Measures.”

Regarding ozone, the study concluded that “currently available photochemical grid models are feasible for districts to use to help prepare their ozone attainment plans.” The study also concluded that assessing “ozone impacts due to small emissions sources is not feasible because the uncertainty associated with the model results may be greater than the changes in pollutant concentrations from a small increase or decrease in emissions,” but the report provides no indication regarding how large an emissions change would be necessary to make such assessments meaningful. We were not able to find any evidence that more recent studies have been conducted by ARB subsequent to this initial 1989 study, despite the legislative mandate. [CSPA(a81)]

Agency Response: Staff believes that the proper modeling assessments have been done to demonstrate that consumer products emission reductions are necessary to attain the NAAQS for ozone. All modeling results show that attainment will not be achieved in all areas of California without significant additional emission reductions from consumer products.

This portion of the ISOR the Commenter refers to is intended to provide an overview of California’s air quality problems, the health impacts, and the need for significant emissions reductions from all sources of air pollution. In the Ozone SIP referred to by the commenter, consumer products regulations are clearly necessary to attain the NAAQS. The Ozone SIP has specific commitments for consumer product measures and numerous other specified measures. There is also a large “Black Box” of unspecified measures needed to attain the standards. Emission reductions from all specified measures including those for consumer products were relied on for the attainment demonstration modeling. Emission reductions from the "Black Box" were also relied on for attainment modeling. Additional specific measures need to be identified to fulfill the Black Box emission reduction commitments. To suggest that the

consumer product measures may not be needed, especially with the large tonnage of yet-to-be-determined “Black Box” measures, is inconsistent with modeling results. It is also unfair to other source categories that would be required to reduce emissions further if consumer products are ‘excused’ from further regulation. Modeling results consistently show the need for all source categories to reduce emissions. Relative cost-effectiveness of various control measures on a dollar per pound VOC reduced is provided in Table VII-6 of the ISOR.

G-3. Comment: It is important to note that the 1996 ARB modeling studies for the South Coast Air Basin that showed reductions in both peak ozone concentrations and population exposure to ozone were conducted assuming no other reductions in ozone precursors, and, therefore, were not necessarily relevant to atmospheric conditions during attainment and maintenance of the ozone standard. Atmospheric conditions during ozone attainment necessarily will be very different than current conditions. Sierra Research conducted a similar modeling study in 1997 to assess the impact of consumer product VOC emissions on peak ozone levels under ozone-attainment conditions. That study, which used the same air quality model and emissions inventories used by ARB for the 1994 State Implementation Plan, found that differences in peak ozone levels in the South Coast and Sacramento Air Quality Management Districts that could be obtained through the further regulation of consumer products were too small to result in a change in ozone attainment status, and indeed too small to be measured by current ambient air quality monitors. [CSPA(a81)]

Agency Response: The 1997 Sierra Research studies are not particularly relevant to California’s air pollution problem or the ARB’s air pollution control programs. Many areas of the State currently do not attain the ozone standard. The modeling conducted in this study ignores the reductions needed to achieve attainment. The current Ozone SIP relies on significant emissions reductions from all pollution sources. Modeling studies conducted by the ARB demonstrate attainment can not be achieved without further consumer product reductions. The attainment demonstration requires achieving emission reductions from numerous specific measures, including consumer product measures, as well as substantial emission reductions from yet-to-be-determined "Black Box" measures.

G-4. Comment: The air quality environmental impacts regarding ground-level ozone are evaluated here only in terms of VOC mass reductions. CSPA continues to believe that evaluating and comparing impacts in terms of ground-level ozone formation is feasible and would provide a more accurate gauge of environmental impacts. One way to do this, as mentioned earlier, is through photochemical modeling. Another approach that should be considered is the use of Maximum Incremental Reactivity-weighted (MIR-weighted) emissions reductions, similar to the approach used in setting Product-Weighted-MIR (PW-MIR) limits for products. [CSPA(a81)]

Agency Response: The ARB's conclusion that reducing VOCs will lead to a reduction of peak ozone and population-exposure to ozone is based on the results of photochemical air quality modeling results conducted during development of current and

previous California SIPs. In addition, previous air quality modeling studies for the South Coast Air Basin have shown that reducing consumer product emissions led to reduced peak ozone concentrations and population-exposure to ozone (see Technical Support Document Appendix A, Section IV-11). Although previous modeling studies focused on the 1-hour ozone NAAQS, the conclusions of those studies should also be applicable to the 8-hour ozone NAAQS. Finally, ARB staff is considering the use of a reactivity approach to regulate certain consumer product categories. If feasible, this approach will be proposed in future rule making actions for appropriate product categories.

b. Technological and Commercial Feasibility

G-5. Comment: CSPA continues to disagree regarding some aspects of ARB's current interpretation of the statutory concepts of "technological feasibility" and "commercial feasibility" as they relate to consumer products. The simplistic view of technological feasibility presented in this section makes some limited sense, but only if it is assumed that the category of products under discussion are totally interchangeable in their usage. Virtually all of the product categories being regulated by ARB, however, are inevitably composed of a wide variety of products and uses. The concept also fails to consider the diversity of consumers and uses for products in the many categories of consumer products. Any concept that ignores the diversity of uses, performance and price can have only tangential connections to the evaluation of commercial feasibility. [CSPA(a81)]

Agency Response: Staff's interpretation of the terms "technologically and commercially feasible" is set forth in the ISOR. This interpretation is a longstanding one that has been used in every consumer products rulemaking since 1990. We believe the Legislature is satisfied with our interpretation because Health and Safety Code section 41712 has been amended numerous times since 1990, and none of these amendments have in any way indicated that the Legislature disagrees with our interpretation. It should be noted that in the past where staff have determined that subcategorization of a product category is warranted based on clear, unique product functions, different VOC limits, or exemptions have been provided where appropriate. In addition, staff often sets different VOC limits for different product forms within a given category.

c. Economic Impacts and Cost Data

G-6. Comment: Our industry indeed hopes that the total economic impact of these regulatory amendments will be as low as the approximately $200 million ($20 million per year over a ten year period) estimated here. [CSPA(a81)]

Agency Response: The current methodology for estimating economic impacts for the consumer products program has undergone refinement over the years, due to advancements in economic models, changing markets, and input from industry. Staff believes our current approach is accurate and quite conservative in its prediction of

"worst-case scenario" costs. Staff has found in the past that actual costs incurred are often lower than estimated costs disclosed in respective staff reports.

G-7. Comment: This proposed regulation will have a significant impact on CSPA member companies. CSPA member products represent 16 of the 18 categories proposed for new VOC limits, and those products represent the vast majority of products that will need to be reformulated. CSPA member companies have expended between $10-20 million to date in completing the massive 2003 Consumer and Commercial Products Survey, and for work during this rulemaking. The economic impact assessment reported in the ISOR estimates the cost of these regulatory amendments to our industry as almost $200 million. This estimate assumes that all of these new VOC limits will prove to be technologically and commercially feasible. If this turns out not to be true, our industry's loss in product sales could be many times that amount. [CSPA(a36)]

G-8. Comment: The proposed VOC limits, with related provisions, present a serious and costly reformulating and marketing challenge. In some instances, we have yet to identify feasible product technologies to meet the standards. We request that ARB work with us to reevaluate VOC limits in the future if they prove to be technologically or commercially infeasible. [CSPA(a81)]

Agency Response to Comments G-7 and G-8: Comment noted. Staff will conduct a technical assessment prior to the implementation of the newly adopted VOC limits to ensure manufacturers are aware of the VOC limits and are able to meet them.

G-9. Comment: The estimated raw material costs shown in Table VII-7 appear to vary considerably from the actual per-pound costs for the raw materials used to formulate these products by our industry. We have asked our members to provide to ARB, where possible, more accurate estimates of raw-material costs, to allow ARB to make more accurate estimates in the future for these important recurring costs. [CSPA(a81)]

Agency Response: Staff does not agree that the costs of the proposed amendments were underestimated. Staff used current raw material costs contained in the Chemical Market Reporter to estimate raw material costs. Sample formulations used in the analysis were shared with industry prior to conducting the analysis and very few comments were received on these formulations. Staff does not agree that these sample formulations are infeasible or would result in ineffective products because they were based on products reported by manufacturers in the 2003 survey. Non-recurring costs were assigned similarly as to what was done in virtually every other consumer products rulemaking since 1990. The methodologies employed were also the same or very similar to those in other consumer products rulemakings. Staff has many years of experience in conducting these analyses, and this experience indicates that accurate cost estimates have resulted from these methodologies in the past. We look forward to obtaining and evaluating current raw material costs from industry.

G-10. Comment: We understand that the non-recurring (one-time) costs shown on Table VII-2 and Table VII-5 were developed using standardized estimates for research and development costs. While this represents a reasonable and expeditious approach to develop rough overall estimates of economic impacts, in reality, every category type of consumer product presents its own unique requirements for additional research and development expenses, with different types of evaluations, laboratory testing, safety testing, and field evaluations. We have, therefore, asked our members to provide, where available, specific estimates of the usual costs to reformulate different types of products. We ask that ARB consider incorporating this information into future assessments, and also consider individual cost effectiveness calculations for various categories. [CSPA(a81)]

Agency Response: Your contribution is appreciated. We agree that each category has unique reformulation costs. Staff has estimated costs based on the best available information and uses conservative assumptions where necessary. Staff remains open to input from industry representatives regarding their actual costs.

G-11. Comment: This section contains 68 tables representing “low cost” and “high cost” options for reformulating various products and forms to comply with the proposed VOC limits. The generic nature of many of these formulations makes it difficult to assess what actual formulations are being proposed. [CSPA(a81)]

Agency Response: The sample complying formulas are deliberately vague because a number of reformulation options are possible within the sample suggestion. Furthermore, sample complying formulas are based on actual complying formulas. Explicitly suggesting a specific formulation could compromise the confidential nature of currently complying formulas. Therefore, staff has generalized most formulas.

d. Request For Technical Assessments

G-12. Comment: Developing new products that meet these standards will take a significant research and development (R&D) effort and it is still uncertain if the resulting products will be commercially or technologically infeasible. Therefore, we request that ARB commit to reconsider these limits in the future if they prove to be infeasible. [ASPA(a83)]

Agency Response: In Resolution 06-42, the Board specifically directed staff to perform a technical assessment of manufacturers’ progress towards meeting the 10 percent VOC limits for "Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," and "General Purpose Degreasers" (aerosols), at least eighteen months before the December 31, 2010, effective date of the limits. The Board also directed staff to monitor the progress of manufacturers in meeting the VOC limits for all product categories, and to identify any significant problems in achieving these limits and propose any future regulatory modification that may be appropriate.

e. Emissions Inventory For Consumer Products

G-13. Comment: CSPA continues to believe that both the estimates for current and projected future VOC emissions from consumer products are significantly over-estimated. Recent survey data has shown significant reductions in VOC content for many categories, and much of the VOC content in some products is not emitted into ambient air, and instead has an alternative environmental fate (Down-the-Drain and biodegraded, combusted, etc.). A comprehensive review and update of the consumer products VOC emissions inventory is, therefore, needed. [CSPA(a81)]

Agency Response: The emission inventory is based on the best available information. Staff plans to update the emission inventory with data obtained from the 2003 Survey in the last half of 2007. Survey data will be analyzed on a category by category basis to ensure that it is correct. The updated inventory will be used to determine reductions needed for future State Implementation Plans. Staff is willing to analyze any scientific data on the environmental fate of VOCs from specific consumer products that the commenter can provide.

G-14. Comment: CSPA believes that the "market coverage adjustments" currently being made to the results of survey data significantly overestimate total annual product sales, and therefore total VOC emissions, for most categories. [CSPA(a81)]

Agency Response: It is impossible to capture all surveyed products, despite staff and industry associations' best efforts. Store surveys and internet research routinely show that less than 100 percent of products available for purchase are reported in the Survey. The market coverage adjustment accounts for these products. Staff believes that staff default assumption of 90 percent coverage is a conservative one that does not overestimate product sales.

G-15. Comment: The comparison in Table V-3 between the 2001 and 2003 survey data for the "General Purpose Adhesive Remover," the aerosol "Graffiti Remover," and the non-aerosol "Graffiti Remover" product categories does not, we believe, necessarily reaffirm the technological and commercial feasibility of those VOC limits adopted in 2004. The comparison does demonstrate, however, that less market share in 2003 were in compliance than in 2001, and that more products are required to be reformulated than previously estimated. It is, therefore, very likely that the 2003 survey data could be used to estimate a larger tons-per-day emission reduction than was estimated (and credited) for those limits in the 2004 Amendments. ARB should be allowed to update that reduction estimate and obtain SIP credit for the additional emission reduction obtained. [CSPA(a81)]

Agency Response: Both the 2001 and 2003 survey data indicate that compliant products exist in the marketplace, demonstrating both technological and commercial feasibility. Transfer of technology will also be important in these categories, as low-VOC formulations for similar remover categories have demonstrated acceptance. We will re-evaluate our estimate of emission reductions when we prepare

a SIP submittal for U. S. EPA. The inventory will be updated with the latest emissions projections available.

G-16. Comment: CSPA looks forward to receiving an updated and corrected version of the final data summaries from the 2003 Consumer and Commercial Products Survey, and to working with ARB staff to use the survey data to update and correct the consumer products VOC emissions inventory for California. Based on the initial data summaries, it is clear that the current inventory significantly overestimates emissions for many of these product categories. [CSPA(a81)]

Agency Response: As mentioned in the responses to the previous three comments, the inventory for consumer products VOC emissions will be updated based on the 2003 survey data after careful analysis of the data received for the applicable product categories. During the development of the regulation staff continually furnished the commenters with updated, corrected product category specific information. Staff commits to continue to work with and share any updates of product category totals with the commenters. Staff will continue its past practice of sharing this information in a way that protects confidential business information submitted by consumer product manufacturers.

f. Prohibition of Perchloroethylene, Methylene Chloride, and Trichloroethylene in Certain Products

G-17. Comment: CSPA members are willing to accept the proposed prohibition (effective December 31, 2008) on the use of methylene chloride, perchloroethylene or trichloroethylene in these ("Bathroom and Tile Cleaners," "Construction, Panel, and Floor Covering Adhesives," "General Purpose Cleaners," and "Oven Cleaners") product categories. We are not aware of any current use of these chlorinated solvents in these products. [CSPA(a81)]

Agency Response: Comment noted.

G-18. Comment: We support ARB's proposed action prohibiting the use of perchloroethylene, methylene chloride, and trichloroethylene in "Construction, Panel, and Floor Covering Adhesives," "Oven Cleaners," "General Purpose Cleaners," and "Bathroom and Tile Cleaners." [CoSanLA(a88), OrangeCo(a90), PaloAlto(a77), PaloAlto(a89)]

Agency Response: Comment noted.

G-19. Comment: The proposed prohibition on perchloroethylene, methylene chloride, and trichloroethylene is necessary to mitigate potential adverse impacts that would result from implementing the VOC limits for "Construction, Panel, and Floor Covering Adhesives," "Oven Cleaners," "General Purpose Cleaners," and "Bathroom and Tile Cleaners" (i.e., to prevent possible reformulation using these compounds), and to

ensure a level playing field among all products. [CoSanLA(a88), OrangeCo(a90), PaloAlto(a77), PaloAlto(a89)]

Agency Response: Staff agrees.

G-20. Comment: We support the efforts of the ARB to more stringently regulate perchloroethylene, methylene chloride and trichloroethylene in consumer products. [PaloAlto(a77), PaloAlto(a89)]

Agency Response: Comment noted.

G-21. Comment: Section 94513(e) should be updated so reporting requirements are the same for perchloroethylene and methylene chloride. [CoSanLA(a88)]

Agency Response: Staff will consider this proposal in a future rulemaking. It should be noted that we intended to include methylene chloride in Section 94513(e)(4) and will propose amending the regulation to include this ingredient as a part of our next rulemaking. In the interim, we will treat methylene chloride in the same manner as perchloroethylene as described in Section 94513(e)(4). We can do this under the ARB's existing authority and under ARB's confidentiality regulations specified in title 17, CCR, sections 91000-91022. Therefore, in the interim it is not necessary to explicitly mention methylene chloride in section 94513(e)(4).

G-22. Comment: We believe that ARB should prohibit the use of perchloroethylene, methylene chloride, and trichloroethylene in all categories of consumer products. [CoSanLA(a88)]

Agency Response: Staff will continue to assess the use of toxic ingredients and evaluate substitutes and alternatives on a case-by-case basis. For each rulemaking staff will seek to prohibit the use of the toxic ingredients where unacceptable exposure exists.

g. General Concern/Opposition

G-23. Comment: I am opposed to the proposed ARB regulations to further reduce VOCs in consumer products. Please reconsider and find another alternative to these regulations. [Kahl(a11)]

Agency Response: As described in Chapter IV of the ISOR, VOC reductions from consumer products are necessary to achieve the emissions reductions goals outlined in the California State Implementation Plan. VOC emissions reductions from all sources are needed to meet the NAAQS for ozone and to ultimately protect public health.

G-24. Comment: The new VOC limits proposed are very, very challenging. [CSPA(b23)]

Agency Response: Comment noted. As described in Chapters III and VI of the ISOR, staff found all the proposed VOC limits to be technologically and commercially feasible. Staff also notes that for each category with proposed limits, there exist complying products in the marketplace.

G-25. Comment: CSPA supports many of the amendments proposed. The purpose of these comments is to identify those few specific areas where further modifications are needed prior to adoption. While almost all new VOC limits being proposed represent significant and costly reformulation challenges for our industry, several proposed limits are neither technologically nor commercially feasible. Some modifications to other proposed regulatory provisions are needed to avoid unintended adverse effects on the feasibility of complying with new or existing limits. [CSPA(a36)]

Agency Response: This general comment is noted. The commenter is also referring to specific issues that they have identified and discussed further in their letter. Each of these specific comments are summarized and responded to throughout this Final Statement of Reasons.

h. General Concurrence/Support

G-26. Comment: We concur with the conclusions in the staff report that complaint products are available for 18 of the 19 categories considered and that the proposed limits are cost effective and the emission reductions are substantial and significant. [SCAQMD(c3)]

Agency Response: Comment noted.

G-27. Comment: Community Action to Fight Asthma (CAFA), a statewide network of asthma coalitions working to reduce environmental triggers of asthma for school aged children, urges the ARB to support amendments to the Consumer Products Regulation and the Aerosol Coatings Regulation. [CAFA(a71)]

Agency Response: Comment noted.

G-28. Comment: We support the Board's proposed amendments to the Consumer Products Regulation. We concur that the proposed new limits are achievable and that the technology is feasible. Consumer products is among the largest emission source categories and as such, emissions reductions from this category is of critical importance to the state's efforts to improve air quality. California is home to some 38 million people – more than 10 percent of the entire country – and our population continues to grow. While the existing consumer product regulations are projected to achieve a 40 percent reduction in VOC by 2010, without additional controls, population growth is expected to reverse the downward trend of emissions from this source category. California air districts are currently in the process of developing their air quality management plans for the SIP revisions required in June 2007. As you are aware, a large percent of the

emission reductions needed to demonstrate attainment with the new federal and state 8-hour ozone standards originate from sources outside air district jurisdiction and under State or federal authority. [CAPCOA(a64)]

Agency Response: Comment noted.

G-29. Comment: The Board should adopt the staff recommendations. Keeping in mind however, the 11 tons per day VOC reduction to be achieved statewide with these amendments represent only a fraction of the total inventory for consumer products, the Board should direct staff to aggressively pursue additional reductions in other consumer product categories for Board consideration in 2007. These actions are essential to local and state efforts to reach attainment of State and federal air quality standards and to further protect the health of all Californians. [CAPCOA(a64)]

Agency Response: Comment noted. Staff will continue as required by the California Health and Safety Code to propose new measures as appropriate to achieve the maximum emission feasible emission reductions from consumer products.

G-30. Comment: With respect to household, building maintenance and general purpose cleaners, the SCAQMD concurs with the California Department of General Services' "Green Building" initiative Best Practices Manual which states that "many green or environmentally preferred cleaning products are as effective as traditional cleaners" and that "environmentally preferable cleaners are generally competitively priced." These cleaners include hand, glass, bathroom and general purpose cleaners, and floor care products. [SCAQMD(c3)]

Agency Response: Comment noted.

i. Miscellaneous Comments

G-31. Comment: NPCA urges the ARB to adopt the CSPA proposal for the Innovative Products Exemption. As the VOC limits for categories across the spectrum drop lower and lower, manufacturers need some flexibility in formulating products that will be considered compliant, even if they don't meet the ultra-low VOC standards. This proposal is appropriate and should be adopted as part of the consumer products regulation -- it is consistent with the goals of the consumer products regulation in terms of reducing ground level ozone and improving air quality. The benefits of regulating on a reactivity basis have already been debated by the ARB and there is no need to re-create these conversations. ARB should embrace this proposal and allow manufacturers to consider a "Reactivity IPE" when formulating or re-formulating products. [NPCA(a84)]

G-32. Comment: When considering VOC mass-based limits to achieve SIP reductions, you should recognize that a lot of the "low-hanging fruit" has already been picked in terms of VOC reductions. We have already attacked the major categories, and achieved major reductions. That has been a credit both to your regulatory efforts

and the research and development efforts of industry, but we need to be very cautious about what we can do in terms of VOC mass reductions for some of these categories in the future.

Reactivity-based reduction may be a promising area. You should be aware that industry has proposed an early draft of an innovative product exemption approach that would involve using reactivity in changing materials, based on reactivity to not necessarily decrease the mass VOC of a product, but to decrease the actual ozone forming impact of such products. We are hoping to continue discussions with staff about that. [SCJ(b25)]

Agency Response to Coments G-31 and G-32: Staff is still evaluating industry's proposal for amending the Innovative Products Exemption to allow consideration of reactivity. Complex technical issues still need to be resolved, however, before any regulatory proposal can be made. Therefore, staff is not ready to make a decision at this time and will continue its evaluation. It should be noted that staff will continue to pursue the maximum feasible mass-based reductions and consider reactivity-based limits where mass-based reductions cannot be achieved effectively.

G-33. Comment: Consumer products emissions are a very low reactivity source. [CSPA(b23)]

Agency Response: We acknowledge that the overall category of consumer products is less reactive than some other categories, but this does not lessen the need to achieve further VOC reductions from consumer products.

G-34. Comment: The sell-through notification requirements that are included in the CONS-2 proposal mimic provisions that were recently adopted in the CONS-1 rulemaking. These notification requirements are unnecessary and burdensome and there is no benefit to air quality. Adoption of this provision could still result in the constant flow of such "expiration notices" to distributors and retailers to the extent that these communications become meaningless. [NPCA(a84)]

Agency Response: Staff assumes the commenter is referring to section 94509(p)(3), which requires that distributors or retailers be notified of the expiration of the sell-through period six months prior to the end of the sell-through period for "Oven Cleaners," "Bathroom and Tile Cleaners," "Construction, Panel and Floor Covering Adhesives" and "General Purpose Cleaner" that contain percholoroethylene, methylene chloride, or trichloroethylene. This provision should not place an undue administrative burden on most companies because the majority of products are sold well before the final six months of the sell-through period, and many companies which do sell products within the final six months already notify their purchasers about the end of the sell-through period. Manufacturers can also minimize their notifications and the associated cost by not manufacturing excess amounts of product that may take up to three years to sell. ARB staff acknowledges that many companies have initiated positive changes to alleviate sell-through issues. Staff has

seen computer-based systems that notify customers that they will no longer be able to order or sell specific products in California. Memos, bulletins, or automated e-mails are sent out on a periodic basis notifying distributors and retailers of expired products. Companies may also note sell-through dates on invoices. This protects the manufacturers as well as the distributors and retailers from being caught unaware that they are selling non-compliant products. Unfortunately, some manufacturers and distributors have continued to sell products manufactured prior to the effective date of the VOC limit right up to the very end of the sell-through period. The provision is necessary to minimize the number of retailers and distributors that are either stuck with products they cannot sell or else unknowingly sell non-compliant products. Furthermore, the provision is consistent with notification requirements for other consumer products categories in which toxic air contaminants are prohibited.

G-35. Comment: Although it is not stated directly, Section IV(A)(2) of the TSD implies that the VOCs from consumer products can serve as precursors to PM10 (particulate matter 10 microns or less in diameter) and/or PM2.5 (particulate matter 2.5 microns or less in diameter). We know of no scientific data that demonstrates which, if any, of the VOCs used in consumer products contribute to particulate matter (i.e., secondary organic aerosol) formation in California. [CSPA(a81)]

Agency Response: As mentioned in Section VIII(D)(3) of the TSD, studies have shown that there is a mechanistic linkage between secondary organic aerosol (SOA) formation and ozone formation from a VOC. The photooxidation of a VOC can directly lead to SOA formation, or indirectly by contributing to the degradation of other VOCs in the ambient air. Data on the SOA potential of most VOCs is scarce; however, there is research underway to clarify the SOA potential of individual VOCs.

Like ozone, SOA results from the atmospheric oxidation of VOCs. While the oxidation of most VOCs results in ozone formation, SOA is generally formed only from the oxidation of compounds comprised of six or more carbon atoms. This is because the oxidation products must have vapor pressures that are sufficiently low to enable them to partition into the aerosol phase. Many ingredients such as d-limonene and aromatic organic compounds are known SOA precursors and exist in consumer products. Therefore, some VOCs used in consumer products contribute to particulate matter formation (e.g. PM10/PM2.5) in California.

G-36. Comment: CSPA fully supports the exemption of tertiary-butyl acetate as a VOC, and urges ARB to include this exemption in the VOC definition for consumer products in the 2007 Amendments to the Consumer Products Regulation. [CSPA(a81)]

Agency Response: This compound is still under consideration for exemption as a VOC. While it has a low photochemical reactivity, it is a potential carcinogen. ARB staff is still working on exposure scenarios for specific consumer product uses to determine if it is health protective to exempt tertiary-butyl acetate, and, therefore, indirectly encourage its use. Until these issues are resolved it is not appropriate to propose an exemption.

G-37. Comment: CSPA submitted comments during the rulemaking process in 2006, and we ask that these comments be made part of the rulemaking record as well. Comments were submitted January 13, February 7, April 10, June 16, August 11, and September 22, 2006. [CSPA(a36)]

Agency Response: The commenter CSPA is referring to six letters that CSPA submitted before the start of the 45-day comment period. CSPA did not submit copies of these letters to the ARB during the 45-day comment period, so these letters are not included in the administrative record for this rulemaking action. In addition, the comments made in these earlier letters were made on preliminary drafts of the proposed amendments. The preliminary drafts were extensively revised as staff further developed the amendments. As a result, many of the comments in these earlier letters are simply not germane to the amendments that were ultimately proposed by staff. Moreover, industry's views on some issues changed during the development of the regulation, so it is unclear which, if any, of these earlier comments still represent the commenter's ultimate position. CSPA submitted two very detailed comment letters during the 45-day comment period, and these letters included new comments as well as both verbatim and revised versions of germane comments made in their earlier letters. Staff, therefore, believes that because we responded in detail to the two comment letters submitted by CSPA during the 45-day comment period, it is unnecessary to respond to each of the comments contained in their January 13, February 7, April 10, June 16, August 11, and September 22, 2006 comment letters.

G-38. Comment: ASPA requests our comments submitted earlier this year (June 16, 2006 and January 17, 2006) also be included in the public record of this rulemaking. [ASPA(a47)]

Agency Response: See Agency Response to Comment G-37.

G-39. Comment: CSPA concurs with ARB's conclusions that increased use of HFC-152a and HFC-134a propellants is not likely to result for the automotive cleaners being proposed for regulation. The additional costs that would be incurred represent a significant barrier. [CSPA(a81)]

Agency Response: Comment noted.

G-40. Comment: CSPA has no strong objection to the proposed revision to the definition for "All Other Forms" to clarify that liquid-impregnated towelettes are considered subject to VOC limits for the liquid product form. [CSPA(a81)]

Agency Response: Comment noted.

B. 15-DAY COMMENTS

1. CATEGORIES FOR AUTOMOTIVE MAINTENANCE AND REQUEST FOR TECHNICAL ASSESSMENTS

H-1. Comment: Effective Dates for VOC Limits In our November 14, 2006 comments, and our November 17, 2006 testimony, CSPA urged the Board to approve a staff proposal to extend the effective date for new 10 percent VOC limits for three categories of aerosol automotive maintenance products—"Brake Cleaners," "Carburetor or Fuel-injection Air Intake Cleaners," and "General Purpose Degreasers"—from December 31, 2008, to December 31, 2012, as well as extending the effective date for "Engine Degreasers" from December 31, 2008, to December 31, 2010. Unfortunately, the Board only approved extensions to December 31, 2010, for all four categories of products. We also asked in our comments and testimony that ARB commit to a technological review of these limits prior to their implementation date and reconsider the limits if they prove *not* to be technologically and commercially feasible.

Our review of the Modified Text and Resolution 06-42 finds them to be consistent with the result of the November 17, 2006 hearing. The 2010 effective date for these new limits present a significant challenge for our industry, especially the three categories for which CSPA sought 2012 effective dates. The technical assessment for these categories, to occur at least 18 months prior to the effective date, is appropriately reflected on page 5 of Resolution 06-42. CSPA member companies who market these products are indeed beginning to identify problems with products reformulated to meet the new 10 percent VOC limits. It is very likely that we will seek the initiation of these technical assessments some time prior to mid-2009, as provided in the Board Resolution. [CSPA(d92)]

Agency Response: Comment noted. See Agency Response to Comment G-12.

2. RUBBER/VINYL PROTECTANTS AND FABRIC PROTECTANTS

I-1. Comment: Revised Definitions CSPA supports the clarifications in definitions aimed at assuring that no products are considered to be subject to limits in both the Consumer Products Regulation and Aerosol Coatings Regulation. We continue to believe that all product categories in these two regulations should be clearly defined to be mutually exclusive, and no product subject to both a consumer products limit and an aerosol coatings limit. [CSPA(d92)]

Agency Response: Comment noted.

3. DISINFECTANTS/SANITIZERS

J-1. Comment: Delta Analytical is particularly concerned that the public health benefits of antimicrobial consumer products, including disinfectants, are properly

weighted against the reductions in VOC emissions sought by the ARB through the Consumer Products Regulation, as the California Legislature intended when it added subsection (e) to section 41712 of the California Health and Safety Code (HSC):

Prior to adopting regulations pursuant to this section governing health benefit products, the state board shall consider any recommendations received from federal, state, or local public health agencies and medical experts in the field of public health.

"Health benefit products" are defined as "an antimicrobial product registered with the Environmental Protection Agency," and include disinfectants. Delta Analytical was thus quite pleased to learn that the modified regulatory language proposed by the ARB carves out an exemption from both the disinfectant and sanitizer product categories (and their corresponding VOC content limits) for "products which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food."

We are unaware, however, of any disinfectant or sanitizer intended for such use whose labels do not also bear claims that the products disinfect or sanitize non-food contact surfaces. For example, KIMTECH® Surface Sanitizer Wipes are advertised as suitable for use on hard, non-porous food contact surfaces, as well as non-food contact surfaces such as toilet seats and rims, towel dispensers, hand railings, showers, tiled walls, and door knobs. This is just one of many examples that we have identified. Indeed, we note that unlike the exemptions provided for disinfecting or sanitizing products intended for use on humans or animals; agricultural products; or for use in swimming pools, therapeutic tubs, or hot tubs; the ARB is not requiring products labeled for use on food-contact surfaces without rinse to be "labeled solely" for such use in order to be exempted from the disinfectant or sanitizer product categories.

Accordingly, Delta Analytical requests confirmation that the Consumer Product Regulation's "most restrictive, limit" rule will not apply to no-rinse products making food contact surface disinfecting or sanitizing claims if the product labels also contain claims that the product disinfects or sanitizes other, non-food contact surfaces. It seems clear from the modified disinfectant and sanitizer definitions that no-rinse, food-contact disinfectants and sanitizers do not have to be labeled solely for such use to be exempt from the VOC content limits for sanitizers and disinfectants. Moreover, such a reading is necessitated by the statutory interest in giving due and careful consideration to the public health benefits of disinfectant and sanitizer products. [Delta(d91)]

Agency Response: Staff has reviewed the example product and confirms that the products of concern to the commenter are excluded from the "Disinfectant"/"Sanitizer" definitions, as modified, and hence are not subject to the "Disinfectant"/"Sanitizer" VOC limits. Exclusion "F" of "Disinfectant" and exclusion "G" of "Sanitizer," as modified, state that the definitions do not include "... products which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food..." As noted by the commenter, the word "solely" is not used, so, along with the modification to section 94512(a)(3) of the Most Restrictive Limit Provision, a product would be eligible for this exclusion whether or not the product is

also labeled for use on "non-food" contact surfaces. As discussed in Chapter VI of the TSD and in the Agency Response to Comment C-5, staff developed the ISOR proposal and the modified text after considering the public health comments and recommendations from the California Department of Health Services (now the Department of Public Health). This public health agency was the only agency/medical expert to provided comments and recommendations during the rulemaking for "Disinfectant"/"Sanitizer."

J-2. Comment: Revised Definitions CSPA supports the modified text for the definitions of "Disinfectant" and "Sanitizer" which clarifies the exclusion of some critical health-benefit products, assures that no product can be subject to the VOC limits for both categories, and better clarifies that cleaning products with antimicrobial claims are not subject to the new VOC limits for "Disinfectants" and "Sanitizers." [CSPA(d92)]

Agency Response: Comment noted.

4. ELECTRONIC CLEANERS

K-1. Comment: Southern California Edison Company (SCE) is concerned that your current Consumer Product Regulation is severely limiting, or denying, our ability to provide safe electrical service to our customers. Our workers must use clean non-conducting tools to work on energized and non-energized (at that time) electrical equipment. The tools and electrical equipment need to be clean, dry, and without residue after the cleaning process. There is a real need for limited use of denatured alcohol. Since you have opened the Consumer Product Regulation, we believe this is the time for regulatory relief.

Denatured alcohol, at this time, is the only solvent we have available for use in cleaning electrical equipment and the cleaning of tools etc. used in the repair and maintenance of our electrical equipment. SCE can use the product we have on hand, in aerosol format, for a limited use through period according to Title 17. We request an exemption be put into the ARB regulations similar to the one in SCAQMD Rule 1171. The ARB restriction on the use of solvents less than 45 percent VOC by weight for Electrical Cleaning in Title 17 is detrimental and unsafe for our employees. The exemption that is requested would be based on SCAQMD Rule 1171 (h) (4):

We suggest it should read:

"Cleaning with aerosol products shall not be subject to the 45 percent VOC by weight restriction if 160 fluid ounces or less of non compliant aerosol products are used per day, per facility."

Denatured alcohol is needed for the cleaning of our electrical apparatus because it does not damage electrical component insulation systems, it displaces/eliminates and does not add moisture which can cause the insulation systems to fail, and it does not leave a residue which can cause high voltage electrical tracking

which leads to equipment failure. We do not have a substitute clean up with these features.

Continuity of electricity supply, and minimization of electric equipment failure, is too critical to the economy of California, compared to the marginal air quality benefit to be obtained from elimination of the VOCs from denatured alcohol used in critical cleaning of the utility infrastructure.

At this time there is a serious conflict between the definitions of VOC, the regulations, and exemptions between ARB and the local air districts. Most of our concern is in the SCAQMD, although we operate in nine districts across the state. We also are having trouble with manufacturers of VOC solvent and coating compounds in getting them to design and provide usable compliant product. California utilities make up a small share of the market and we do not have leverage to force research and production of the coatings and solvents needed peculiar to our industry.

We, therefore, request that ARB include in your VOC definition all of the "exempt compounds' found in the SCAQMD Rule 102 VOC definition. This would hopefully allow manufacturers to produce more low-VOC compliant "green" chemical products for the California market without the current conflicting regulations at the state/local levels. [SCE(d93)]

Agency Response: The Commenter has presented concerns and recommendations outside the scope of the issues open for public comment in the July 3, 2007 "Notice of Public Availability of Modified Text" and associated "Modified Regulatory Language for 15-Day Public Comment Period." The category of "Electrical Cleaner" is not being considered at all in this rulemaking. For completeness, staff responds as follows.

The ARB's 45 percent by weight VOC limit for "Electrical Cleaners" was approved by the Board in June 2004, was subsequently adopted, and became effective on December 31, 2006. We agree with the Commenter that cleaning of energized electrical equipment warrants special consideration, and did not set a VOC content limit for these products as long as the product is labeled "energized equipment use only." We disagree with the Commenter that use of alcohol is appropriate for use on energized electrical equipment, considering its flammability. Therefore, staff does not believe that the alcohol-based aerosol product mentioned by the Commenter would be considered an "Energized Electrical Cleaner." Thus, the aerosol product would be subject to ARB's 45 percent by weight VOC limit. As is routinely done, staff solicited input from the regulated community, prior to the limit becoming effective, to insure that manufacturers were successful in their reformulation efforts. Staff received no comments related to issues with reformulating to meet the 45 percent by weight limit.

We further note that this Commenter's compliance concerns are primarily related to the provisions of SCAQMD Rule 1171, "Solvent Cleaning Operations." Under this rule, cleaning of electrical equipment is to be accomplished using products containing

no more than 100 grams per liter (about 10 percent by weight VOC). This rule does contain an exemption for use of 160 ounces per day of aerosol products, as long as the aerosols comply with ARB regulations. ARB staff has found the 45 percent by weight limit for aerosol, as well as non-aerosol, electrical cleaners to be feasible. Therefore, the Commenter should consult with SCAQMD staff as to compliance and feasibility of the provisions of Rule 1171.

Related to providing an exemption similar to that in Rule 1171 for limited use of non-compliant aerosol products, with respect to electrical cleaners, the ARB Consumer Products Regulation applies to "any person who sells, supplies, offers for sale, or manufactures consumer products for use in the state of California" [see title 17, CCR, section 94507]. It does not apply to the end-user of the product. Therefore, the exemption suggested by the Commenter is neither necessary nor appropriate. Moreover, the end-user is not subject to the sell-through provision contained in section 94509(c), as the Commenter suggests. Again, the Commenter should consult with the local air district as to compliance concerns with Rule 1171.

The Commenter also suggests that the ARB's definition of VOC should be modified to match that of the SCAQMD's. This comment is also unrelated to any aspect of this rulemaking. However, for completeness, staff responds as follows. Staff is aware that the definition in the ARB Consumer Products Regulation is different from that of SCAQMD's, primarily due to differences in compounds considered to be exempt. ARB staff is in the process of conducting a thorough multi-media environmental impacts analysis to determine if additional VOC exemptions are appropriate. Exemption of one or more of additional compounds would harmonize the two definitions. The Commenter may choose to request VOC exemption of a particular compound as long as the necessary data are provided to support the exemption.

K-2. Comment: Effective Date for VOC Limit and Definition CSPA supports the one-year extension of the effective date for "Electronic Cleaners" (from December 31, 2006 to December 31, 2007) as well as the modified definition to exclude electronic cleaners labeled for use only on Energized Electronic Equipment. We continue to urge, however, that ARB expedite approval of the VOC exemptions needed for all "Electronic Cleaners" to comply with this VOC limit. If ARB is not able to take final action to approve these necessary exemptions before December 31, 2007, CSPA will ask ARB to either: (1) provide additional time for companies to comply with the new VOC limit for Electronic Cleaners, or in the alternative, (2) exercise a reasonable degree of "prosecutorial discretion" in enforcing this new standard. [CSPA(d92)]

Agency Response: Comment noted. Besides adopting the current changes in the Consumer Products Regulation to accommodate the delay, staff will consider and initiate other regulatory relief options if needed and justified.

5. MULTI-PURPOSE SOLVENTS

L-1. Comment: Revised Definition CSPA is willing to accept this modification of the definition for "Multi-purpose Solvent," an as-yet unregulated category defined to exclude products from currently regulated categories. It is our understanding that this new definition, to become effective on January 1, 2008, could serve to define a category of products that will be considered for a new VOC limit — possibly a reactivity-based limit — in the upcoming 2008 Amendments to the Consumer Products Regulation. [CSPA(d92)]

Agency Response: Comment noted.

6. FABRIC REFRESHERS

M-1. Comment: Revised Definition CSPA supports the revision of this definition, in conjunction with changes in the "Sanitizer" definition, to assure that sanitizing "Fabric Refreshers" are not considered subject to the new VOC limit for "Sanitizers." [CSPA(d92)]

Agency Response: Comment noted.

7. MOST RESTRICTIVE LIMIT PROVISION

N-1. Comment: CSPA strongly supports the modification of section 94512(a)(3) to clarify that the provision relating to product category definition exclusions does not impact a number of antimicrobial cleaners, polishes, and refreshers. [CSPA(d92)]

Agency Response: Comment noted.

8. GENERAL CONCURRENCE/SUPPORT

O-1. Comment: CSPA has reviewed the Board Resolution and modified text and has found it to be consistent with the Board instructions to staff at the November 17, 2006 hearing. CSPA supports all of the modifications released for 15-day public comment. [CSPA(d92)]

Agency Response: Comment noted.