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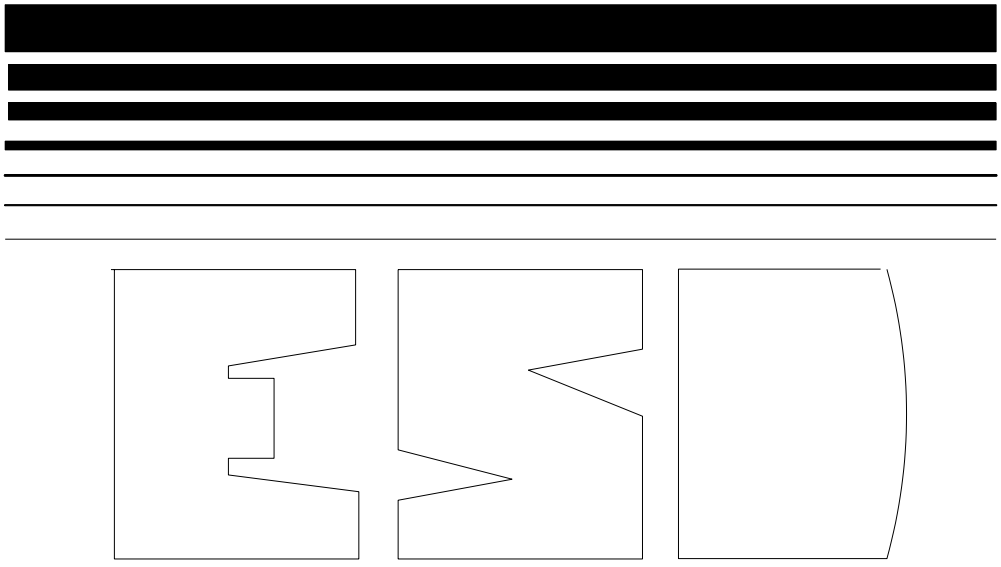
National Volatile Organic Compound Emission Standards For Consumer Products -- Background for Promulgated Standards



EPA-453/R-98-008b

NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR CONSUMER PRODUCTS -- BACKGROUND FOR PROMULGATED STANDARDS

Emission Standards Division

U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS

Docket number[a]	Commenter and affiliation
IV-D-01	J. Janeczek Jr., P.E. Capital Cities/ABC, Inc. New York, New York
IV-D-02	R.D. Elliott Executive Director Southwest Air Pollution Control Authority Vancouver, Washington
IV-D-03	S.R. Cornes Regulatory Compliance Specialist The Solaris Group San Ramon, California
IV-D-04	G.F. Tappan Section Chief Regulatory Affairs Block Drug Company, Inc. Jersey City, New Jersey
IV-D-05	H. Hironaka Vice President F-Matic of America American Fork, Utah
IV-D-06	A.W. Effinger, Esq. General Counsel American Pet Products Manufacturers Association, Inc. Greenwich, Connecticut
IV-D-07	W.M. Smiland Law Offices of Smiland & Khachigian Los Angeles, California
IV-D-08	S.C. Steinback Manager of State Legislative Affairs International Sanitary Supply Association, Inc. Lincolnwood, Illinois
IV-D-09	B.F. Mannix President Buckland Mill Associates Gainesville, Virginia

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-10	W.K. Lim President Aerosol Services Company, Inc. City of Industry, California
IV-D-11	B. Mathur Chief Bureau of Air State of Illinois Environmental Protection Agency Springfield, Illinois
IV-D-12	S.E. Dudley Vice President Director of Environmental Analysis, Economists, Incorporated Washington, DC
IV-D-13	B.A. Kwetz Director Division of Air Quality Control Commonwealth of Massachusetts Department of Environmental Protection Boston, Massachusetts
IV-D-14	R. Sedlak Technical Director The Soap and Detergent Association New York, New York
IV-D-15	D.I. Greehaus National Automobile Dealers Association McLean, Virginia
IV-D-16	R.G. Sliwinski, Chief Stationary Source Inventory and Planning Section Division of Air Resources New York State Department of Environmental Conservation Albany, New York
IV-D-17	W.F. Holman, Association Director Laundry & Cleaning Products Procter & Gamble Company Cincinnati, Ohio

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-18	D. Stringham, Director Regulatory and State Government Affairs Safety-Kleen Elgin, Illinois
IV-D-19	D. Raymond Division Director of Regulatory Affairs Sherwin-Williams Diversified Brands, Inc. Solon, Ohio
IV-D-20	Chlorobenzene Producers Association Washington, DC
IV-D-21	E.J. Moyer Director of Regulatory Affairs Reckitt & Colman, Inc. Montvale, New Jersey
IV-D-22	K.W. Chilton, Ph.D. Director Center for the Study of American Business Washington University in St. Louis St. Louis, Missouri
IV-D-23	G.A. Green Division Administrator Air Quality Department of Environmental Quality State of Oregon Portland, Oregon
IV-D-24	D.F. Theiler, Director Bureau of Air Management Department of Natural Resources State of Wisconsin Madison, Wisconsin
IV-D-25	P.M. Meehan Director of Product Safety Environment and Regulatory Compliance The Clorox Company Pleasanton, California

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-26	L.L. Calhoun Environmental and Health Regulatory Affairs and T.A. Threet Legal Department The Dow Chemical Company Midland, Michigan
IV-D-27	R.H. Roos Vice President & General Counsel Sally Beauty Company, Inc. Denton, Texas
IV-D-28	J.M. Spagnoli Agriculture Division Bayer Corporation Kansas City, Missouri
IV-D-29	D. Pearson Executive Director Texas Natural Resource Conservation Commission Austin, Texas
IV-D-30	L.A. Braem Director Environmental Law Schering-Plough HealthCare Products Liberty Corner, New Jersey
IV-D-31	W.D. Anderson Managing Director Resilient Floor Covering Institute Rockville, Maryland
IV-D-32	J. Gledhill The EOP Group Washington, DC
IV-D-33	R. Engel, President Chemical Specialties Manufacturers Association Washington, DC
IV-D-34	L.A. Spurlock, Ph., CAE Chemical Manufacturers Association Arlington, Virginia

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-35	R.E. Mitchell Chairman of the Board Dunn-Edwards Corporation Los Angeles, California
IV-D-36	D.K. Johnson Principal Facility Environmental Control Engineer Environmental Quality Office Ford Motor Company Dearborn, Michigan
IV-D-37	J. A. Word Associate Counsel Conair Corporation Stamford, Connecticut
IV-D-38	D.M. Adams Vice President-Quality Assurance Regulatory Affairs and Consumer Affairs American Home Food Products, Inc. Madison, New Jersey
IV-D-39	R.M. Horton Regulatory & Sales Support Manager Dragon Corporation Roanoke, Virginia
IV-D-40	F.N. Romano Chairman of the Board Chief Executive Officer Key West Fragrance & Cosmetic Factory, Inc. Key West, Florida
IV-D-41	W.C. Balek Director of Legislative Affairs International Sanitary Supply Association, Inc. Lincolnwood, Illinois
IV-D-42	I.S. Combe Chairman Combe Incorporated White Plains, New York

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-43	B. Costino Vice President Marianna Manufacturing & Distribution Center Omaha, Nebraska
IV-D-44	M.A. Dirzis Director Government Affairs Avon Products, Inc. New York, New York
IV-D-45	E.O. Sullivan State of Maine Department of Environmental Protection Augusta, Maine
IV-D-46	T.J. Donegan, Jr. Vice President-Legal and General Counsel The Cosmetic, Toiletry, and Fragrance Association Washington, DC
IV-D-47	P.T. Haluza Director Government Relations & Public Affairs and L. Hansen, Executive Secretary Automotive Chemical Manufacturers Council Washington, DC
IV-D-48	R.N. Hiatt Chairman Maybelline, Inc. Memphis, Tennessee
IV-D-49	G.T. Blair Haarmann & Reimer Corporation Springfield, New Jersey
IV-D-50	S.I. Sadove President Clairol Stamford, Connecticut

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-51	E. Zeffren, Ph.D. President Helene Curtis, Inc. Chicago, Illinois
IV-D-52	D.L. Stein Senior Specialist 3M Corporate Product Responsibility St. Paul, Minnesota
IV-D-53	R.N. Sturm Director Professional & Regulatory Services The Procter & Gamble Company Cincinnati, Ohio
IV-D-54	J.B. Hallagan Law Offices Daniel R. Thompson, P.C. Washington, DC
IV-D-55	F.H. Brewer Director of Government Relations SC Johnson Wax Racine, Wisconsin
IV-D-56	S.P. Risotto Director of Regulatory Affairs Halogenated Solvents Industry Alliance, Inc. Washington, DC
IV-D-57	T. Formby Manager Business and Regulatory Development Clean Air Action Corporation Tulsa, Oklahoma
IV-D-58	R. Miller Vice President, Technology CELLULOSE FOOD CASING, RAYON, CELLOPHANE, AND CELLULOSE ETHER Industries, Inc. Warminster, Pennsylvania

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-59	E.S. Piszynski Vice President Laboratory Services Hydrosol Incorporated Bridgeview, Illinois
IV-D-60	J.D. Dunlap, III Chairman Air Resources Board California Environmental Protection Agency Sacramento, California
IV-D-61	M.H. Michael Vice President Associate General Counsel and Assistant Secretary Avon Products, Inc. New York, NY
IV-D-62	R.A. Valentinetti Division Director Department of Environmental Conservation State of Vermont Waterbury, VT
IV-D-63	E.J. Moyer Director of Regulatory Affairs Reckitt & Colman, Inc. Montvale, NJ
IV-D-64	E.J. Moyer Director of Regulatory Affairs Reckitt & Colman, Inc. Montvale, NJ
IV-D-65	J.D. Sullivan General Counsel Cosmair, Inc. New York, NY
IV-D-66	A.O. Armstrong Chief Executive Officer Merle Norman Cosmetics Los Angeles, CA

TABLE 1-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR CONSUMER PRODUCTS (CONTINUED)

Docket number[a]	Commenter and affiliation
IV-D-67	M. Sweet Deputy General Counsel Unilever New York, NY
IV-F-1(a)	B. Mitchell Dunn-Edwards Corporation
IV-F-1(b)	M. Thompson Chemical Specialties Manufacturers Association
IV-F-1©	L. Allred S.C. Johnson Wax
IV-F-1(d)	T. Wernick Gillette
IV-F-1(e)	J. Zajac Sherwin-Williams
IV-F-1(f)	D. Stein 3M
IV-F-1(g)	B. Mercer Prestone
IV-F-1(h)	A. Effinger American Pet Products Manufacturers Association
IV-F-1(I)	S. Steinbeck International Sanitary Supply Association
IV-F-1(j)	B. Sabo Apollo Industries
IV-F-1(k)	G. Brown National Aerosol Association
IV-F-1(l)	C. Wills Mary Kay Company
IV-F-1(m)	C. Beckley Cosmetic, Toiletry and Fragrance Association

a The docket number for Consumer Products Rule is A-95-40.

2.0 SUMMARY OF PUBLIC COMMENTS

The EPA received a total of 67 letters and 13 public hearing comments on the proposed rule. This document contains summaries and responses to comments mainly concerning the provisions of the proposed consumer products rule. However, at the time of proposal of the rule, EPA specifically requested comment on certain topics concerning section 183(e) in general. Therefore, those comments and responses are discussed in this document as well. In order to avoid duplication, most comments that pertain to EPA's study, Report to Congress, and schedule for regulations under section 183(e) are discussed in a separate comment response document, Response to Comments on Section 183(e) Study and Report to Congress (EPA/_____) also referred to as the 183-BID.

2.1 LEGISLATIVE AUTHORITY

2.1.1 Application of the Section 183(e)(2)(B) Factors

Comment: The EPA requested comments on whether the Agency should use the five factors specified in section 183(e)(2)(B) during regulatory development for specific categories of consumer and commercial products, or only to set priorities for regulating these categories under section 183(e). One commenter (IV-D-13) stated that the Agency should consider the five factors throughout policy and regulation development because such considerations will provide more effective regulations. A second commenter (IV-D-33) endorsed what EPA did. They stated that EPA considered the five factors and the regulatory criteria developed under section 183(e) in regulating these consumer

products. As a result, the commenter asserted that EPA chose the best available controls for these 24 categories of products.

Response: Pursuant to section 183(e)(2)(A), EPA established eight criteria based on the five factors set forth in section 183(e)(2)(B) and other considerations to develop the list and schedule for regulation of consumer and commercial products under section 183(e). The EPA's interpretation of each of the five factors and the rationale and intent of each of the eight criteria are discussed in detail in the section 183(e) report to Congress. The eight criteria and the process of applying them are discussed in more detail in section 2.1.1.6 of the 183-BID. The EPA interpreted the statute to require that the five factors be used solely for establishing criteria for prioritizing product categories for regulation and that best available controls (BAC) for the category of product be used for development of regulations under section 183(e) of the Act.

The EPA requested comments on alternative interpretations of the statute and how the five factors could be used in the regulatory process. Only two responses were received. One responder supported EPA’s interpretation of the statute. The other responder made a general comment that the five factors should be considered throughout the regulatory process but did not provide feedback on how to take the five factors into account in a practical way during development of the regulations. As a result, EPA continues to believe that its interpretation of the statute is the most reasonable way to develop regulations for consumer and commercial products and will continue to base these regulations solely on what it determines to be BAC. When determining BAC, the Act requires EPA to consider technological and economic feasibility, and health, environmental, and energy impacts. This BAC authority allows EPA the flexibility to consider any potentially adverse

impact that is relevant including impacts related to any of the five statutory factors.

2.1.2 National Rule vs. Control Techniques Guidelines

Comment: A number of commenters (IV-D-01, IV-D-02, IV-D-04 to 06, IV-D-08, IV-D-10, IV-D-11, IV-D-13, IV-D-14 to 17, IV-D-19, IV-D-21, IV-D-23, IV-D-24, IV-D-28, IV-D-29, IV-D-33, IV-D-40, IV-D-42, IV-D-44 to 46, IV-D-48 to 56, IV-D-58 to 60, IV-D-65 to 67, IV-F-1(d), IV-F-1(j), IV-F-1(k), IV-F-1(l)) stated that they supported EPA's proposed national consumer products rule.

Several commenters (IV-D-05, IV-D-29, IV-D-42, IV-D-46, IV-D-48 to 51, IV-D-53, IV-D-56, IV-F-1(b)) stated their support for the national rule because it will ensure substantial reduction in volatile organic compounds (VOC) emissions from consumer products. One commenter (IV-F-1(b)) approved of the proposed rule because it allows significant reduction in VOC content and emissions without banning any product category or product form.

Response: The EPA believes that nationwide controls are an effective and efficient approach for regulating this industry. The EPA believes that a national rule for consumer products is the best method to obtain effective and enforceable reductions in VOC emissions from this category of product because content control will ensure reductions of VOC emissions. Efficiency is gained because States will not need to devote resources to develop individual State regulations. Similarly, companies that market consumer products across State lines will not have to comply with potentially different requirements from many States, thereby increasing efficiency for the regulated industries.

Furthermore, in contrast to traditional point source categories for which emissions principally occur at a few set locations, consumer product emissions occur wherever the products are used. Transportability of consumer and commercial products tends to decrease rule effectiveness due

to the likelihood of noncompliant products being bought in attainment areas and used in nonattainment areas. In addition, since the end-users include homeowners and other widely varied consumers, effective enforcement would be limited.

The EPA recognizes that in some cases control techniques guidelines (CTG) may effectively reduce emissions of VOC in nonattainment areas without imposing control costs on attainment areas. However, for small volume consumer products that are widely used, such as those covered by this rule, EPA believes CTGs may not be as effective at reducing VOC emissions because of difficulties in enforcement. In addition, industry has advised EPA that the cost of having different product lines for attainment versus nonattainment areas, as would potentially occur if the Agency chose to implement CTGs rather than rules, could be cost prohibitive because of the duplicative effort of product labeling, storage, and distribution management. Therefore, EPA expects that using CTGs would be less cost-effective than a national rule. Also, during the development of the proposed rule, industry representatives expressed concern that differences in State and local requirements for consumer products, as would occur under a CTG, could disrupt the national distribution network for consumer products. Based on these and other considerations, EPA has decided to promulgate the consumer products rule as a national rule rather than as a CTG.

2.1.3 Regulation of a Subset of Consumer Products

Comment: The EPA requested comment on setting emission limits for a subset of the 24 consumer product categories that were most cost-effective for regulation. One State commenter (IV-D-13) supported selecting the categories which provided the biggest emissions reductions for the least cost. The commenter contended that this was the most cost-effective way of implementing the consumer products rule. The commenter pointed to the Massachusetts rule which reflects this choice

through regulating only 10 categories. The commenter encouraged EPA to consider similar cost/benefit analyses at the national level. Another responder (IV-D-33) supported EPA regulating all 24 categories. The commenter pointed out that several states already regulate these products, requiring the consumer products industry to expend considerable resources to meet these state standards. The commenter expressed concern that any product not regulated nationally could be subjected to differing state regulations that could further reduce the cost effectiveness of controls.

Response: The EPA has concluded that the most reasonable approach is to promulgate rules for all 24 of the listed consumer product categories. Based on public comments, there are no adverse impacts of promulgating BAC for these products. While controls for some products may be more cost-effective than for others, EPA has concluded that a strategy of regulating a subset of these categories based on cost effectiveness would be counter-productive. The potential efficiency from a cost-effectiveness approach would be more than offset by the extra costs to the industry of inconsistent regulations across the States.

Representatives of the consumer products industry have expressed concern that differences in State and local requirements for consumer products could disrupt the national distribution network for consumer products. They have, therefore, urged EPA to issue rules for consumer products to encourage consistency across the country. Many States with ozone pollution problems are also supportive of an EPA rulemaking that will assist them in their efforts toward achievement of ozone attainment. At least 13 States have included anticipated reductions from the Federal consumer products rule as part of their State implementation plans to reduce VOC emissions. Without a comprehensive Federal rule, these States may also promulgate local consumer product rules. Thus, excluding any product from regulation would promote a

patchwork of regulations for that product that will further increase cost of compliance to manufacturers.

In addition, all 24 of these product categories are regulated somewhere. Eight States (California, Connecticut, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Texas) are currently enforcing VOC standards for various categories of consumer products. Therefore, resources are already being invested in the development of compliant products. A consistent Federal regulation will ensure the maximum environmental benefit for this investment. The absence of a Federal regulation will not save these product development costs and could result in even greater compliance costs for limited or no additional environmental gain.

2.2 PROPOSED STANDARDS

2.2.1 Applicability

Comment: Three commenters (IV-D-26, IV-D-33, IV-D-34) supported EPA's proposal to exempt organic compounds with little or no volatility from consideration in setting VOC content standards for consumer products.

Response: The EPA believes that for this rule regulating low vapor pressure VOC will result in insignificant VOC reductions and in significant increases in the recordkeeping and reporting costs of complying with the rule. The EPA has exempted organic compounds of little or no volatility from consideration in setting VOC content limits in the final consumer products rule. The basis for such an exemption is primarily the lack of an established test method for VOC content in consumer products. This contrasts with paints, for example, for which an accepted test method - Reference Method 24 - exists and is used to compare VOC contents of products and to determine compliance. Furthermore, every existing State consumer products rule incorporates an exemption for low vapor pressure VOC. Because of the lack of a test method, and to be consistent with established State rules, the EPA used the same approach as the States when comparing products,

determining best available controls, and setting VOC limits in the consumer products rule.

Comment: One commenter (IV-D-26) also requested that EPA exempt low vapor pressure compounds from the entire rule. The commenter requested that EPA exempt low vapor pressure compounds from § 59.204 which deals with innovative products as well.

Response: The EPA's intent was to exempt low vapor pressure compounds from the entire rule and the Agency has revised the final rule to indicate this exemption.

Comment: One commenter (IV-D-20) requested that EPA add an exemption for air fresheners that contain at least 98 percent paradichlorobenzene (PDCB). The commenter asserted that this would be consistent with the exemption for insecticides containing at least 98-percent PDCB. The commenter argued that the two products, insecticides and air fresheners, have similar product characteristics and that all States that have adopted consumer product VOC limitations have exempted both air fresheners and insecticides containing more than 98 percent PDCB.

Response: As the commenter mentioned, the proposed rule already included an exemption for some PDCB insecticides. These PDCB insecticides (e.g., "moth balls") and air fresheners (e.g., "toilet deodorant blocks") consist of nearly 100 percent PDCB formed into spheres and other shapes and, therefore, cannot be reformulated to lower VOC content. Consequently, in order to avoid banning such products, the EPA has added an exemption for air fresheners containing at least 98 percent PDCB to the final rule as the commenter suggested. This exemption is also consistent with the States that have adopted consumer product VOC limitations. Thus, EPA considers exemption of PDCB air fresheners to be BAC.

Comment: Two commenters (IV-D-25, IV-D-33) suggested that the proposed regulations exclude products manufactured

for use in the U.S. territories, such as Puerto Rico, Guam, etc.

Response: It is EPA's intent that the rule will apply not only in the 50 States, but in all the U.S. territories as well. The definition of "State" in section 302(b) of the Clean Air Act (Act) includes U.S. territories. When developing regulations, EPA strives to be consistent with other Federal regulations. Since new source performance standards that are already promulgated under 40 CFR 60 do not exclude U.S. territories from their regulations, EPA did not intend to exclude them from the consumer products standards. To make this clear, a definition of "United States" has been included in the final rule.

Comment: Two commenters (IV-D-13, IV-D-24) indicated that EPA should add additional product categories to the rule. One commenter (IV-D-24) suggested that EPA add a personal fragrance products category along with the California Air Resources Board (CARB) specified VOC limits to the final rule. Another commenter (IV-D-13) stated that EPA should include a definition and VOC limit for "insect repellant."

Response: The EPA did not select personal fragrances and insect repellants as product categories for regulation based on application of the criteria established by the Agency pursuant to section 183(e). These products did not rank within the top 80 percent of VOC emitting consumer and commercial products in ozone nonattainment areas. Therefore, EPA has not added personal fragrance and insect repellant categories to the final rule.

Comment: One commenter (IV-D-31) expressed concern that flooring seam sealers used for the installation of sheet vinyl flooring would be covered under the household adhesives category of the consumer products rule. The commenter further stated that the bonding qualities required for sheet vinyl installation make seam sealers with a low VOC content technically infeasible at this time. In addition, the

commenter noted that they are unaware of any commercially viable seam sealer products that are water-based or high solid products. The commenter argued that exempting flooring seam sealers would have no discernible adverse impact on EPA's objective of reducing VOC emissions from consumer products because the total amount of seam sealers used annually is not more than 10,000 gallons. The commenter asserted that banning seam sealers would eliminate a product that performs a crucial and unique function during the installation of sheet vinyl flooring. The commenter requested that seam sealers used to join and/or fill the seam between two adjoining pieces of sheet vinyl flooring either be exempt from the rule or subject to a separate VOC content limit of 90 percent.

Response: The commenter's interpretation of the rule is correct. Flooring seam sealers are an adhesive and would fall under the household adhesives category. Seam sealers consist of an emulsion of the wear layer of sheet flooring dissolved in solvent that fuses the adjoining edges of the flooring and, therefore, must be formulated with a solvent that is compatible with the sheet flooring. A high solvent content allows these products to effectively fuse the adjoining edges, which would not be possible with reduced VOC content. Furthermore, non-VOC solvents (e.g., acetone) may not be compatible with the sheet flooring, thereby making product reformulation impossible. The EPA's intent is not to ban or eliminate any crucial products and the Agency believes the VOC emissions reduction obtained from flooring seam sealers would be minimal. Thus, EPA considers exemption of flooring seam sealers to be BAC because there is no available control measure. As a result, EPA has added an exemption for flooring seam sealers to the final rule. This action is consistent with exemptions for other specialty products used nationally in small total annual volumes.

Comment: One commenter (IV-D-18) requested that EPA include an exemption for certain cleaning products, such as

engine degreasers, that are recycled and reused. The commenter stated that the applicability section of the proposed rule does not exempt VOC-containing products that are used in automotive parts cleaning operations where the used solvents are collected and recycled for reuse. The commenter stated that it believes that EPA did not intend to regulate products that are recycled after their use. The commenter suggested that the following statement be incorporated into the exclusions in § 59.201(d): "Any product that is not used up during its intended application and will be subsequently collected for recycling or other appropriate management method."

Response: Automotive parts cleaners that use bulk solvents, such as dip tanks, are not covered under the engine degreaser category of the consumer products rule. Automotive parts washers and the solvents used in them were among the 105 product categories that the EPA evaluated and scored based on the section 183(e) criteria. Because of their low score, parts washers and the solvents used in them did not rank high enough to warrant regulation under section 183(e). Therefore, the commenter's suggested exclusion is not necessary and has not been added to the rule.

Comment: One commenter (IV-D-54) supported the exemption for fragrances as stated in the proposed rule:

> "Fragrances incorporated into a consumer product up to a combined level of 2 weight-percent shall not be included in the weight-percent volatile organic compound calculation."

Response: The EPA has retained in the final rule the exemption for fragrance materials up to a combined level of 2 weight-percent from inclusion in the VOC content calculation.

Comment: One commenter (IV-D-55) recommended the addition of a specific exemption in § 59.201(d) for nonaerosol fabric moth protection products as follows:

> "(9) The requirements of § 59.203(a) shall not apply to non-aerosol moth proofing products that are principally for the protection of fabric from damage by moths and other fabric pests in adult, juvenile, or larval forms."

The commenter (IV-D-55) stated that this exemption is necessary so that consumers may have access to non-aerosol moth proofing products that do not use PDCB or naphthalene as the active ingredient.

Response: The EPA determined that the PDCB and naphthalene products could not be reformulated and still be an effective moth repellent. As a result, EPA added an exemption for these products. Because the nonaerosol fabric moth proofing products are expected to function the same as PDCB or naphthalene moth protection, EPA determined that an exemption granted for these products would be consistent with the exemptions granted for the PDCB and naphthalene products.

Comment: One commenter (IV-D-52) requested that EPA eliminate conflicts that arise when a product is used by both household consumers and industrial plants. The commenter requested establishing one 75 percent VOC limit that applies to all uses of aerosol adhesives including industrial, institutional, and household uses. If EPA is concerned about its authority to impose a 75 percent limit on industrial use, the commenter requested that EPA expand the 75 percent VOC limit to cover institutional as well as household uses (i.e., every use except those uses in which aerosol adhesives are incorporated into a product as part of manufacturing or processing). The commenter stated that regulations that vary depending on the end use place retail clerks in the untenable position of monitoring which products can be sold to household consumers and which can be sold to industrial and institutional users. The commenter stated that in one case a retailer returned products to the manufacturer and refused to sell them because of the confusing requirements.

Response: The EPA would like to clarify that industrial products are not regulated by the consumer products rule. Thus, the commenter's concern will not arise. Examples of industrial adhesives not subject to the rule include, but are not limited to, adhesives used in screen printing, platen adhesives in fabric printing and dyeing, and adhesives used in the manufacture of wood products, packaging, shoes, automobiles, tires, etc.

Comment: One commenter (IV-D-30) requested that EPA clarify that only antiperspirants and deodorants for the human axilla (the underarm) are regulated and that footcare antiperspirants and deodorants are not regulated under the consumer products rule. The commenter also requested that in table 2 of the proposed rule the adjective "underarm" be used as a descriptor for antiperspirants and deodorants.

Response: The EPA has added the word "underarm" as an adjective to table 2 of the final rule. This description will clarify any confusion with antiperspirants and deodorants used for other areas of the body. Other antiperspirants and deodorants such as footcare products and feminine hygiene products are significantly different than the underarm products. These other antiperspirants and deodorants were among the 105 product categories evaluated under the section 183(e) criteria, but did not rank high enough to be listed for regulation and, therefore, are not covered under the consumer products rule.

Comment: One commenter (IV-D-60) recommended that EPA consider amending its proposed regulation to limit the sell-through period for noncomplying products to 18 months. The commenter stated that limiting the sell-through period for noncomplying products results in greater emissions reductions because it discourages stockpiling of noncomplying products for sale after the effective date of a standard. The commenter believes that the 18-month period is more than adequate for the normal movement of inventory.

Response: The final rule retains the unlimited sell-through period and requires that products manufactured on or after the compliance date do not exceed the VOC limits in the rule. Given the current "just in time" inventory practices, EPA believes that companies will not stockpile enough products to warrant amending the rule to state a specific sell-through period. The EPA also believes that most companies lack sufficient storage space and will not invest in extra warehouse space just to stockpile noncomplying products.

Comment: One commenter (IV-D-34) requested that EPA clarify that the vapor pressure for hydrocarbon ingredients that are typically sold as blends will be determined in accordance with standard industry practice and will not be required on a speciated basis. The commenter stated that with few exceptions, the hydrocarbon solvents used in consumer products are complex mixtures of many different compounds, supplied on a specification basis. The commenter noted that suppliers provide their customers with information about the vapor pressure of the product being supplied (i.e., the hydrocarbon blend) and not the individual constituents of the blend. The commenter stated that it would be costly and difficult to conduct the analysis that would be necessary to identify the concentration of each component in each blend and to supply vapor pressure data for each such component.

Response: The EPA will not require producers to provide information about the vapor pressure of each component of a complex mixture. The EPA believes that the most important information is the vapor pressure of the hydrocarbon blend not the vapor pressure of each component. As a result, EPA has added language to § 59.203(j) which now reads:

> "For hydrocarbon solvents that are complex mixtures of many different compounds and that are supplied on a specification basis for use in a consumer product, the vapor pressure of the hydrocarbon blend may be used to demonstrate compliance with the VOC content limits of this section. Identification of the concentration and

vapor pressure for each such component in the blend is not required for compliance with this subpart."

Comment: One commenter (IV-D-34) requested that EPA clarify that there is not a specific test method for measuring vapor pressure. The commenter suggested that the final rule state explicitly that there is no required test method that regulated entities must use for measuring vapor pressure and that a consumer product manufacturer may use the vapor pressure information provided by the chemical producer as long as the producer uses a method that is generally accepted by the scientific community. The commenter also suggested that the final rule state that if in the future EPA wishes to use a specified method to measure vapor pressure for compliance determinations (or otherwise), it will first provide notice to the affected industries and provide an opportunity for public comment.

Response: Since a specific EPA test method has not been established for measuring vapor pressure, consumer product manufacturers may use the vapor pressure information provided by the chemical supplier as long as the supplier uses a method that is generally accepted by the scientific community. The final rule has been revised to reflect this change.

2.2.2 Definitions

Comment: Two commenters (IV-D-14, IV-D-26) requested clarifying changes to several definitions: aerosol cooking spray, carburetor and choke cleaner, double-phase aerosol air freshener, general purpose cleaner, household adhesive, nail polish remover, pump spray, and wax.

Response: The EPA has incorporated these changes where it determined that the changes were necessary to clarify the definitions. The EPA has revised the following definitions to clarify their meaning in the final rule:

Aerosol cooking spray means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be directly applied on food for the purpose of reducing sticking on cooking and baking surfaces, or both.

Carburetor and choke cleaner means a product designed to remove dirt and other contaminants from a carburetor or choke. "Carburetor and choke cleaner" does not include products designed to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor, or solvent use regulated under 40 CFR part 63, subpart C (Halogenated solvent NESHAP)

General purpose cleaner means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. "General purpose cleaner" includes products designed for general floor cleaning, kitchen or counter top cleaning, and cleaners designed to be used on a variety of hard surfaces.

Household adhesive means any household product that is used to bond one surface to another by attachment. "Household adhesive" does not include products used on humans or animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate.

Nail polish remover means a product designed to remove nail polish or coatings from fingernails or toenails.

Pump spray means a packaging system in which the product ingredients are expelled only while a pumping action is applied to a button, trigger, or other actuator. Pump spray product ingredients are not under pressure.

Wax means an organic mixture or compound with low melting point and high molecular weight, which is solid at room temperature. Waxes are generally similar in composition to fats and oils except that they contain no glycerides. "Wax" includes, but is not limited to, substances such as carnauba wax, lanolin, and beeswax derived from the secretions of plants and animals; substances of a mineral origin such as ozocerite, montan, and paraffin; and synthetic substances such as chlorinated naphthalenes and ethylenic polymers.

Comment: One commenter (IV-D-26) requested that EPA modify the definition of "aerosol product" to read as follows:

> Aerosol product means a consumer product characterized by a pressurized spray system that dispenses product ingredients in aerosol form by means of a propellant (i.e., a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container) or mechanically induced force. "Aerosol product" does not include pump sprays.

The commenter stated that the definition of "aerosol product" in the proposed rule is too broad because it has no size limit, is not restricted to consumer products, and does not say that the product must be dispensed in aerosol form rather than as a liquid or gas. The commenter suggested that a rail car full of refrigerant, the "utility nitrogen" system at a chemical manufacturing plant, and a drum pump could all be classified as aerosol products under the proposed definition.

Response: The EPA has added the commenter's suggested language "in aerosol form" to the definition of aerosol product. These clarifying changes exclude products dispensed by liquid or gas which are not intended to be covered by the final rule. The EPA has determined that the word "consumer" is not needed in the definition since the definition is describing a type of consumer product within the consumer products rule.

Comment: One commenter (IV-D-28) recommended that the definition of "agricultural use" specifically mention uses such as public gardens, parks, lawns, and grounds intended for aesthetic purposes or climatic modifications.

Response: Pesticides used in areas such as public gardens, parks, lawns, and grounds are included in the "institutional use" definition covered by this rule. Therefore, EPA has not revised the definition of agricultural use.

Comment: One commenter (IV-D-13) stated that the definition of "air freshener" needs clarification. The commenter asserted that institutional and industrial

disinfectants, if they are expressly represented for use as air fresheners, should not be excluded from the definition of “air freshener.” The commenter asserted that the definition creates an exclusion that will result in higher VOC emissions.

Response: Generally, the consumer products rule does not apply to disinfectants. The EPA determined that the “disinfectants” product category did not rank high enough based on application of the section 183(e) criteria to be listed for regulation. However, EPA believes that household spray disinfectants that are expressly represented for use as air fresheners should be covered by the rule, because they could be used as air fresheners. Accordingly, the definition of “air freshener” in the proposed rule allows for applicability of the rule to these products. The EPA did not intend for the rule to apply to spray disinfectants used only in institutional and industrial applications. The EPA has concluded that institutional and industrial facilities may require stronger air fresheners than products designed for household use; therefore, EPA did not revise the definition as suggested by the commenter.

Comment: One commenter (IV-D-18) recommended that EPA delete that portion of the definition for "engine degreaser and carburetor and choke cleaner" that provides that any solvent used for these purposes and that is subject to 40 CFR part 60, subpart JJ (NSPS for cold cleaning machine operations) is not subject to this consumer and commercial products rule. The commenter noted that since the Agency has not yet promulgated this subpart JJ, this part of the definition should be deleted. The commenter also recommended that an exclusion for cold cleaning operations that are subject to reasonably available control technology (RACT) operations be included in the engine degreaser and carburetor and choke cleaner definitions.

Another commenter (IV-D-26) suggested that EPA clarify the definition of "engine degreaser" by either eliminating or

modifying the phrase "other mechanical parts." The commenter stated that "other mechanical parts" is too broad because it could include carburetors and chokes, it is not limited to automotive parts or engine parts, and it could include large industrial degreasing machines.

Response: The EPA removed the reference to 40 CFR part 60, subpart JJ. The Agency has not included an exclusion for cold cleaning operations that are subject to RACT operations into the final rule, because EPA does not intend for this rule to apply to large degreasing systems. The EPA believes that the term "other mechanical parts" is necessary because these products are routinely used to clean other mechanical parts, not just engines.

Comment: One commenter (IV-D-28) requested that EPA clarify the definition of "consumer" and "consumer product" either to include or exclude products purchased by a person for commercial application. As examples, the commenter suggested products that a professional lawn care company or a professional pest control applicator might purchase for their use in a commercial context. Another commenter (IV-D-26) requested that EPA remove a perceived inconsistency in the definition of "consumer product" by discarding the first sentence and rearranging the second sentence as follows:

> Consumer product means, for the purposes of this subpart, any product listed in tables 1 or 2 of § 59.203.

The commenter stated that the first clause of the proposed definition was inconsistent with the second clause, thereby creating confusion by the apparent inclusion of products used in an institutional context and any product whose destruction could result in releases of VOC emissions.

Response: The EPA intends products that are designed for use for commercial or institutional purposes be covered by this rule. If a product is used by a professional lawn care company for use on a private or institutional lawn that

product is covered by this rule. The rule does not, however, include products that are incorporated into or used exclusively in the manufacture or construction of goods or commodities.

The EPA believes the definition of consumer product is appropriate. The inclusion of institutional products is necessary to cover all of the products regulated under this rule.

Comment: Three commenters (IV-D-26, IV-D-28, IV-D-55) requested clarification of the definition of "crawling bug insecticide" and one commenter (IV-D-26) requested clarification of the definition of "flea and tick insecticide." One commenter (IV-D-28) asked EPA if the definition of "crawling bug insecticide" applied only to products for use on household crawling arthropods, rather than those in nonhousehold contexts.

One commenter (IV-D-26) suggested that EPA clarify the definition of "crawling bug insecticide," "flea and tick insecticide," and "flying bug insecticide," by inserting "domesticated" in front of animals so that the definition will exclude products "designed to be applied directly to humans or domesticated animals." The commenter asserted that insects are “animals” so that excluding products designed to be used on animals would also exclude products designed to be used on crawling insects. Another commenter (IV-D-55) recommended that the definition be amended by the addition of the following parenthetical statement "(but not house dust mites)" because the control of house dust mites requires technology that is significantly different from the ant and roach sprays that are the core products of the crawling bug insecticide category. This commenter stated that the recommended modification will not impact emissions reductions anticipated under the regulation because there are virtually no crawling bug insecticide products being marketed today making claims against house dust mites.

Response: The definition of "crawling bug insecticide" has been changed in the final rule to reflect the clarifications suggested by the commenters. The EPA has deleted the word "household" before "crawling arthropods" so that the definition cannot be misinterpreted to mean that products used in other areas beside the household are exempted from the standard. The EPA also changed the definition to clarify that house dust mites are not included as one of the insects for which crawling bug insecticides are designed. The EPA determined that the clarification in the definitions of "crawling bug insecticide," "flea and tick insecticide," and "flying bug insecticide," to explain that the insecticides are not for use on "domesticated" animals is not necessary. The EPA believes that the common usage of the word "animals" does not include insects or arthropods and therefore does not need to clarify that insecticides are not for use on "domesticated" animals.

Comment: One commenter (IV-D-26) suggested that EPA clarify the definition of "distributor." The proposed definition excluded manufacturers which may be inappropriate as some manufacturers act as their own distributors. If EPA categorically excludes manufacturers from being considered as distributors, these "dual role" situations may not be appropriately addressed. Two commenters (IV-D-10, IV-D-52) recommended that EPA revise the definition of "manufacturer" to exclude distributors. The commenters stated that they have hundreds of independent distributors that are not retailers who would be unable to comply with code-dating requirements, test methods, or recordkeeping and reporting requirements. They do not have access to the manufacturer's information on product formulations or VOC contents. One commenter (IV-D-52) stated that it would be impractical for the manufacturer to provide this information to its independent distributors and could compromise the confidentiality of the manufacturer's

business information. The commenter recommended the following definition:

> Manufacturer means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

Response: The EPA considered these concerns and concluded that it would be more appropriate to revise the rule to clarify that the regulated entity is the manufacturer and the distributor if the distributor's name is on the label. The EPA did not revise the definition of distributor or manufacturer as suggested by the commenters. The EPA intends the definitions in the final rule to indicate that a manufacturer can be a distributor, that a distributor is not necessarily a manufacturer, and that either can be the regulated entity.

Independent distributors may not be required to comply with the code-dating, test methods, or recordkeeping and reporting requirements if they are not considered the regulated entity. According to the definition stated in the rule the regulated entity is the manufacturer, distributor or importer whose label is on the product. The regulated entity is the certified official with the responsibility of meeting the recordkeeping and reporting, test methods, and code-dating requirements. This official is required to have the records or designate someone to maintain records and provide them to the administrator upon request.

Comment: One commenter (IV-D-55) requested that EPA remove the word "moths" from the definition of "flying bug insecticide" in § 59.202 because these products are formulated principally against flies, mosquitoes, and gnats. This commenter suggested that the elimination of "moth" would have no impact on VOC emissions reductions generated under this regulation because all aerosol flying bug insecticides, including any which may make claims against adult flying moths, will continue to be regulated.

Response: The EPA changed the definition of "flying bug insecticide" to exclude moths, since most flying bug insecticides are for use on flies, mosquitoes and gnats exclusively.

Comment: One commenter (IV-D-25) suggested that EPA expand the definition of "insecticide fogger" to explain that foggers can kill a variety of pests. The commenter suggested that a clarification was necessary to explain that fogger products are subject to the VOC limits for "foggers" as opposed to the "other insecticide" categories in the regulation. The commenter suggested EPA expand the definition to read: "foggers may target a variety of pests, including, but not limited to, fleas and ticks; crawling insects; lawn and garden pests; and/or flying insects."

Response: The EPA clarified the definition of "insecticide fogger" to explain that fogger products are subject to the VOC limits for "foggers" and not "other insecticide" category. The final definition includes the above clarification sentence suggested by the commenter.

Comment: One commenter (IV-D-26) suggested that EPA clarify the definitions of "household product" and "household use." The commenter stated that if a professional electrician brings an expensive, sophisticated testing device into a home and uses it once, then takes it elsewhere the device should not be classified as a household product or in household use. The commenter requested EPA to clarify that these definitions only apply to products used by the people who live in the home, for personal or household (non-commercial) purposes.

Response: The EPA intended the definition of household product and household use to include products used not only by private individuals but also by commercial applicators in a home or its immediate environment. Since the rule specifies VOC limits for defined categories of household products, the situation described by the commenter cannot arise.

Comment: One commenter (IV-D-28) requested that EPA clarify the definition of "insecticide." The proposed definition excluded products for structural pest control. The structural pest control definition includes any application of pesticides that require a license under Federal law. Products that require a license under Federal law are classified as “restricted use.” The commenter inquired whether products that are for structural pest control that are not restricted use are included in the insecticide definition.

Response: The "structural pest control" definition was removed from the final rule because EPA believes that the information in the "structural pest control" definition is redundant with the definition of "restricted materials." Removal of the "structural pest control" definition will help eliminate the confusion the commenter encountered with the "insecticide" definition. If the materials are classified as “restricted use” pesticides by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (FIFRA, 7 U.S.C. 136-136y), then they are not included in the definition of insecticides under this rule. As a result, the restricted materials would not be regulated by the consumer products rule.

Comment: One commenter (IV-D-28) requested that EPA clarify if products used on commercial lawns or recreational areas are included in the definition of "lawn and garden insecticide." Also, the commenter stated that it is unclear if the intent of the definition of lawn and garden insecticide was to cover only products applied by homeowners or products applied to home lawns, including those applied by lawn care companies.

Response: The EPA does not intend the definition of "Lawn and Garden Insecticide" to include products used on commercial lawns or recreational areas. Any consumer products that are used for "agricultural use" or used in an industrial process to produce a product or used for nonhousehold uses are

not covered by this rule. All products applied by the homeowner or a professional lawn care company to a household lawn are included in the "lawn and garden insecticide" definition.

Comment: One commenter (IV-D-28) recommended that the Agency clarify the definition of "structural pest control" to describe more clearly the scope of the definition. The commenter recommended that if the intent of the definition is to include all professional structural pest control, then it should be revised to state: "...applications of pesticides by commercial pest control operators or certified applicators."

Response: The EPA decided to remove the "structural pest control" definition because it believes that the information in the "structural pest control" definition is redundant with the definition of "restricted materials" definition. The "restricted materials" definition applies to pesticides that are for restricted use under section 3(d) of FIFRA (FIFRA, 7 U.S.C. 136-136y). The FIFRA regulations state that restricted use materials can only be applied by certified applicators. As a result, EPA has determined that the "structural pest control" definition is unnecessary and has removed it from the final rule.

Comment: Two commenters (IV-D-26, IV-D-28) recommended that EPA clarify the definitions of "institutional product" and "institutional use." The commenters asserted that the definition of uses listed under "institutional product" are much broader than those specific sites listed under "institutional use." The commenters suggested that an institutional product should be one intended for institutional uses.

Response: The EPA has added the list of "establishments" from the "institutional product" definition to the "institutional use" definition to be consistent.

Comment: One commenter (IV-D-26) suggested that EPA eliminate the definition of "institutional product" from the

rule and define "institutional product" in the "general provisions" for part 59 or revise the last sentence of the definition to read as follows:

> Institutional product does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities that are produced by the establishment.

The commenter argued that any product used at a chemical manufacturing complex would be an "institutional product" which is probably inappropriate because materials used in manufacturing processes are generally called "industrial."

Response: The EPA has clarified that the definition of "institutional product" does not include those products that are used exclusively in the manufacture of the goods or commodities that are produced by the establishment. For example, products such as glass cleaners or floor waxes which are used at a plywood manufacturing facility would be subject to the rule, whereas adhesives used to manufacture the plywood are not covered by this rule.

Comment: Several commenters (IV-D-14, IV-D-17, IV-D-25, IV-D-33, IV-D-55) requested that EPA add a definition for "laundry prewash" to § 59.202. The commenters suggested the following language for the definition:

> Laundry Prewash means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

Response: The EPA included laundry prewash as a category of consumer product to be regulated but inadvertently left out a definition. The EPA has included the definition of "laundry prewash" recommended by the commenter in § 59.202. The EPA considered the definition recommended by the commenter and found it to be reasonable and consistent with existing State rules.

Comment: One commenter (IV-D-28) requested that EPA clarify the definition of "nonagricultural pesticide" to exclude those substances or mixtures of substances subject to FIFRA designed for agricultural use.

Response: The EPA believes that nonagricultural pesticides should not include any substances that EPA does not consider to be a pesticide under the FIFRA (FIFRA, 7 U.S.C. 136-136y). The exclusion was added to the nonagricultural pesticide definition.

Comment: One commenter (IV-D-26) suggested that EPA use the following definition of "product category:

> Product category means the applicable category which best describes the product as listed in tables 1 or 2 of this subpart.

The commenter stated that the product name may not always appear on the principal display panel in exactly the same words that EPA uses in this rule. Therefore, the commenter argued that including the product category listed on the product's principal display panel in the definition of "product category" may not be helpful.

Response: The EPA believes that the last part of the definition after subpart "...and which appears on the product's principal display panel." should not be deleted. The Agency has concluded that the product's principal display panel often describes in enough detail which product category listed, in tables 1 or 2, applies to the product. The EPA does not believe that any confusion will result in identifying into which product category a product falls.

Comment: Several commenters (IV-D-19, IV-D-26, IV-D-33, IV-D-41, IV-D-47, IV-D-58, IV-D-59) disagreed with the proposed definition of "regulated entity." Five of these commenters (IV-D-19, IV-D-33, IV-D-47, IV-D-58, IV-D-59) suggested that the definition as it appears in § 59.201(c) is more consistent with the intent of the proposal, and suggested that the definition in § 59.202 be modified to match

§ 59.201(c). Two commenters (IV-D-33, IV-D-59) went so far as to suggest that the term "regulated entity" be deleted from the definitions if it is not consistent. Other commenters (IV-D-26, IV-D-41) recommended that the definition be modified to exclude processors or distributors. Commenter (IV-D-41) stated that distributors should not be subject to these standards because coverage of distributors does nothing to further the purpose of the VOC limitations and places an additional regulatory burden on them although they are less capable of controlling the VOC content than manufacturers or importers.

Response: It was EPA's intent to regulate only the party with ultimate control over the product's compliance with the VOC content limits. In order to clarify this intent, the definition of regulated entity was revised to read as follows:

> "Regulated entity means the manufacturer, distributor, or importer named on the label of any consumer product offered for sale or distribution in the United States and subject to this subpart. Distributors whose names do not appear on the label are not regulated entities. If the distributor of the product is named on the label, the distributor is also a regulated entity."

The revised definition responds to the commenters' concerns by specifying that the regulated entity is the party named on the label.

For example, a product is manufactured by Company A, distributed by a retail chain, Company B, and carries the Company B label. Company A may or may not be listed on the label. In this case, Company B is a regulated entity, regardless of whether Company A is named on the label, because the product is manufactured for Company B who is named on the label.

In another case, a product is manufactured by Company A, and carries the Company A label. It is distributed to Company B, a retail chain. The name of the retail chain is

not listed on the label. Therefore, Company A is the regulated entity.

In all cases, distributors who are not named on the label are not regulated entities under the final rule.

Comment: One commenter (IV-D-26) suggested that EPA clarify the definition of "structural waterproof adhesive" by stating that the adhesive is intended for use on a structure. The commenter stated that otherwise any adhesive meeting certain technical specifications would be a structural waterproof adhesive, whether or not it is used for structural purposes.

Response: The EPA does not believe it is appropriate to add the word structure to the definition because the meaning could be interpreted as adhesive used only on a structure when the adhesive could be used on other items (e.g., furniture, etc.).

Comment: One commenter (IV-D-26) supported EPA's use of the definition of “VOC” or “volatile organic compound” from 40 CFR part 51 because it is specially tailored to focus on compounds that actually contribute to the formation of tropospheric ozone through chemical reactions in the atmosphere and to exclude substances that are not of regulatory concern. By using the part 51 definition, the commenter asserted that the Agency has chosen the proper definition and thus the proper regulatory focus because this approach follows the statutory command for EPA to regulate those consumer products that have the potential to contribute to nonattainment of the national ambient air quality standards (NAAQS) for ozone.

Response: The EPA agrees, and therefore has maintained the use of the “VOC” definition from 40 CFR part 51 to focus on compounds that contribute to the formation of tropospheric ozone.

2.2.3 Standards for Consumer Products

Comment: Two commenters (IV-D-46, IV-D-57) commented on the inclusion of emissions trading under the proposed Open Market Trading Rule (OMTR) or Guidance Document as an option for compliance with the proposed commercial and consumer product regulation. One commenter (IV-D-57) stated that open market trading could assure product quality while providing flexibility, cost savings, incentives for innovation, and increased environmental performance to both consumers and manufacturers of consumer products. The commenter asserted that open market trading could also increase the performance and effectiveness of the consumer products rule in achieving meaningful ozone reduction. The commenter further argued that open market compliance options assure that smaller manufacturers or marketers are not disadvantaged or put out of business by the implementation of the regulations, thus reducing competition and increasing consumer costs.

One commenter (IV-D-46) stated that consumer product credit trading is not appropriate for this regulation because market incentives, including allowance for trading of emission credits from consumer products, have not been adequately considered in this rulemaking action and consumer product credit trading is extremely controversial. This commenter noted that allowing the trading of emission credits can put some companies at an extreme competitive disadvantage because of the highly competitive nature of the consumer product market and the wide diversity of resources and product mix between consumer manufacturers and distributors.

Response: The consumer products rule will regulate products that typically are distributed nationally. The open market trading guidance (proposed August 25, 1995, 60 FR 44290) is for State-developed regional trading programs addressing the generation and use of discrete emission reductions within the non-attainment areas covered by the program. Additionally, as noted by commenter IV-D-46, EPA has neither fully considered nor proposed such market incentives

as part of this consumer products rule. The EPA believes it would be more appropriate to consider any market incentives for the consumer products rule separately from the open market trading guidance.

Comment: Three commenters (IV-D-24, IV-D-55, IV-D-60) requested that EPA adopt an Alternative Control Plan (ACP) similar to CARB's ACP. An ACP allows manufacturers that are unable to meet a specific VOC for one product to balance the emission from their non-compliant product with the reduction benefit from an over-compliant product. One commenter (IV-D-55) suggested that an ACP is essential for sound consumer product regulation because it provides the ability to reduce VOC emissions while retaining the flexibility of continuing to market a regulated product with a formulation that has superior performance. The commenter further stated that an ACP would provide an economic incentive to develop product technologies that are lower in VOC than the table of standards. The commenter suggested that EPA add an ACP provision to the national consumer products rule at the first opportunity, without delaying the adoption of the national rule.

Response: The EPA has not adopted an ACP in the final rule. The EPA is considering developing an ACP as a separate regulatory initiative. If warranted, EPA will develop an ACP following promulgation of the consumer products rule.

Comment: Four commenters (IV-D-26, IV-D-38, IV-D-39, IV-D-52) provided comments in support of a later compliance date. One commenter (IV-D-38) suggested that EPA should extend the proposed compliance date from September 1, 1996 to September 1, 1997. The commenter stated that the 5 month period between publication of the proposed regulation and the compliance date of September 1, 1996 would not allow sufficient time to identify the most cost-effective technology without cost burdens. Three commenters (IV-D-26, IV-D-39, IV-D-52) requested additional time to comply with the proposed

rule because they contended that the deadlines were unachievable for the industry. One commenter (IV-D-26) explained that their company would require 6 months to achieve compliance, a second commenter (IV-D-38) requested 12 months, while another commenter (IV-D-39) suggested 2 to 3 years following publication of the final rule to achieve compliance.

One commenter (IV-D-26) also requested a process to obtain an extension in cases where regulated entities cannot comply due to special circumstances that can occur with companies that are smaller and regionally-focused. Another commenter (IV-D-52) asked EPA to include at least a 3- or 6-month delay in the effective date of the final rule, whichever is sufficient to allow companies to apply for and receive variances from the requirements of the proposed consumer products rule.

Another commenter (IV-D-26) requested that EPA more clearly explain the different compliance dates. The commenter suggested that different compliance dates can be confusing unless EPA provides clearer explanations. The commenter suggested that all the compliance dates appear in the same section of the rule. Alternatively, the commenter requested that EPA summarize the various dates in a table in the rule so that regulated parties are less likely to miss or confuse compliance dates.

Response: Since proposal, EPA has extended the date of promulgation and the compliance date. The final rule gives regulated entities over 2 years from proposal and 3 months from promulgation to comply with the requirements of the final consumer products rule. The EPA believes that this schedule provides the majority of the regulated entities adequate time to come into compliance. Furthermore, regulated entities that cannot achieve compliance by the compliance date may request a variance of up to 5 years under §59.206.

The final rule more clearly states the different compliance dates for consumer products. The EPA has

determined that a table is not necessary to explain the compliance dates.

Comment: Eleven commenters (IV-D-01, IV-D-13, IV-D-26, IV-D-42, IV-D-46, IV-D-48 to 51, IV-D-53) commented on the stringency of the VOC limits of the proposed rule. Eight of the commenters (IV-D-26, IV-D-42, IV-D-46, IV-D-48 to 51, IV-D-53) supported the proposed VOC content limits. One commenter (IV-D-26) supported the proposed VOC content limits because they are in agreement with existing State and consumer product regulations. One commenter (IV-D-01) recommended that EPA regulate to the maximum levels possible wherever the technology exists to substitute or reduce the VOC content of consumer products. Another commenter (IV-D-13) stated that EPA's proposed rule should be more stringent and that the proposed limits are set at levels which have been met in four States for several years. The commenter did believe that the proposed VOC content limits represent the level of best available controls (BAC). In contrast, another commenter (IV-D-35) claimed that EPA did not propose a rule that is based on the best available technology because neither reformulation nor substitution allows for higher quality consumer products that may have higher VOC contents than allowed by the proposed rule.

Another commenter (IV-D-60) recommended that EPA consider including VOC standards that take effect in the future consistent with those adopted by CARB because many areas of the country will require additional long term reductions in VOC to attain or maintain the NAAQS for ozone. Two commenters (IV-D-23, IV-D-24) recommended that EPA adopt a biannual routine review policy of any regulatory changes made by CARB when pertaining to Phase II future VOC limits.

One commenter (IV-D-24) stated that CARB's Technical Support Documents indicated that current CARB VOC limits for consumer products are technologically feasible and achievable. The commenter also noted that CARB has identified several

alternative technologies available for new products to meet the specified limits. The commenter believes that EPA's limits should be at CARB's proven limits.

One commenter (IV-D-46) stated its belief that the proposed rule was technologically feasible because it incorporated elements of State VOC rules that have already been demonstrated. The commenter stated its belief that the proposed limits are economically feasible because many companies have already reformulated their products to meet the various State standards so the only additional economic cost would be to produce the requisite supply of a lower-VOC product to market nationally. This commenter stated that further reformulation of these product categories to meet lower VOC limits would come at exponentially higher costs and in some cases would require entirely new technology.

Response: The VOC content limits in the proposed rule represent what EPA has determined to be the level of BAC in accordance with the considerations set forth in section 183(e)of the Act. The EPA identified BAC based primarily upon EPA’s consumer products survey, an analysis of existing State rules for consumer products, and additional information gathered by the Agency during the study of the consumer and commercial products industry. The EPA believes that the limit proposed for each product category is currently demonstrated due to availability of complying products already on the market, and is consistent with most of limits currently enforced by States that have consumer products rules.

For some product categories, EPA’s analysis of the database developed from the consumer products survey suggested that lower VOC content limits might be technologically feasible. However, EPA has chosen to propose standards consistent with most of the currently enforceable limits set by States on the basis of consideration of all factors noted in section 183(e)(1)(A). The existence of these State standards, and the fact that some products are already

complying with these standards, provides stronger evidence that these levels are achievable for a wide range of product applications at current levels of product efficacy.

The EPA had to consider that a variety of different consumer products are used across the country and that regulating the product categories based upon existing standards from one region would not necessarily be appropriate for a national rule. As a result EPA has decided not to include future effective VOC standards consistent with those of CARB into the rule at this time. A periodic review of future rules is likewise not provided for in section 183(e) of the Act at this time.

The EPA concurs that the California Phase II limits are lower than the limits in the consumer products rule; however, California's Phase II limits take effect in 1998 and EPA does not have sufficient information to conclude that these lower limits can be applied nationwide. Therefore, the Act does not allow application of these limits.

The EPA recognizes that setting lower VOC content limits could have potential adverse effects on consumer choices and could eliminate certain product applications and efficacy levels from the market. The EPA does not have evidence or information to indicate that such impacts are warranted to achieve an additional level of emission reductions. The EPA notes that it has selected the VOC content limits after full consideration of the factors specified in section 183(e) and has made a determination that such levels are appropriate given consideration of these factors. Because the proposed limits reflect EPA's determination of BAC, EPA has maintained the limits in the final consumer products rule.

Comment: One commenter (IV-D-35) contended that the VOC reduction percentage imposed on consumer products by EPA is arbitrary and biased. The commenter argued that EPA must determine BAC as defined by statute, not by seeking a specific percentage reduction.

Response: The EPA determined the VOC content limits in this rule based on consideration of BAC as required by the Act. Percent VOC reduction was not the determinant for the VOC limits required by the rule. Instead, percentage reduction was estimated only after BAC VOC limits were established.

Comment: One commenter (IV-D-33) requested that EPA include in § 59.203(a) a reference to paragraph (b) as well as paragraph (d) as exemptions to the compliance with the VOC levels stated in table 1 of the rule. The commenter recommended EPA insert the following language: "...except as provided in paragraphs (b) and (d) of this subsection, §§ 59.204 and 59.206."

Response: The EPA made the change suggested by the commenter. The EPA determined that the change clarifies and explains the type of consumer products that are exempt from the VOC content limits.

Comment: Two commenters (IV-D-24, IV-D-29) recommended that EPA revise the proposed standards for several categories to reflect the more stringent existing emission requirements of the CARB rule. The commenters requested that the limit for air fresheners (single phase) change from 70 percent (VOC limit by percent weight) to 30 percent, for engine degreasers from 75 percent to 50 percent, for glass cleaners (non-aerosol) from 8 percent to 6 percent, and the limit for nail polish removers from 85 percent to 75 percent.

Response: The commenters did not provide enough information to determine if the recommended 30 percent limit for air fresheners (single phase) is technically feasible nationwide. As a result, the limit of 70 percent for air fresheners (single phase) stated in the rule will remain unchanged.

Survey and industry reports regarding product efficacy indicate that engine degreasers with lower VOC contents are significantly less effective and generally induce consumers

either: (1) to use greater quantities of product; or (2) to use substitutes such as kerosene or gasoline. Either of these actions would negate the benefits of lower VOC content in engine degreasers. Therefore, EPA determined at proposal that a VOC content limit of 75 percent was optimal for achieving VOC emission reductions. The limit of 75 percent for engine degreasers stated in the final consumer products rule will remain unchanged.

The EPA and Chemical Specialties Manufacturers Association (CSMA) data indicate that glass cleaner (nonaerosol) products with VOC contents lower than 8 percent do not meet performance requirements for commercial and high volume users. Liquid and pump spray products with less than 8 percent VOC generally result in use of greater quantities by consumers. The CSMA presented data at a workshop for the CARB (July 31, 1990) demonstrating that, for vinegar-based glass cleaners, a product with a VOC content of 6 percent requires significantly more product usage than an 8 percent product. Therefore, EPA has concluded that an limit of 8 percent will achieve greater emission reductions and represents BAC. The proposed limit of 8 percent for glass cleaners (nonaerosol) was unchanged.

The EPA believes a nail polish VOC limit of 75 percent does not allow for all the applications needed for nail polish removers. The EPA received data from the Cosmetic, Toiletry, and Fragrance Association (CTFA) that indicated that a substantial portion of the market for nail polish removers includes products that are intended to be used on artificial nails and do not contain acetone. Acetone has been recently taken off of EPA's VOC list and as a result some of the nail polish removers with acetone as a constituent can meet a VOC limit of 75 percent. The CTFA stated that some nail polish removers are formulated with ethyl acetate, an ingredient that meets the definition of a VOC under current EPA regulations. Acetone cannot be used in such products because acetone-based

products will destroy the artificial nails. As a result, EPA has determined that an 85 percent limit for VOC is necessary for nail polish removers.

2.2.4 Innovative Product Provisions

Comment: Two commenters (IV-D-46, IV-D-55) supported the innovative product provisions in the consumer products rule because they believe that it is essential to have a provision allowing for the development and approval of innovative products that may have a VOC content above the table of standards limit but in actual use have VOC emissions that are lower than similar products which are within the table of standards limits. One commenter (IV-D-46) strongly supported giving companies the choice of either submitting premarket innovative product approval applications with EPA or simply registering an innovative product instead.

Response: The EPA has maintained the innovative product provision in the final consumer products rule. A regulated entity intending to market an innovative product must submit a written request for the Administrator's written concurrence that the innovative product meets the requirements of § 59.204 (a). The regulated entity may submit the request at anytime up to the time the innovative product is available for sale or distribution to consumers.

2.2.5 Code-dating

Comment: One commenter (IV-D-29) offered an alternative to the current provision in § 59.205 that requires each consumer product container or package to display the day, month, and year of manufacture, or a code indicating that date. The commenter suggested that EPA change § 59.205 to state that the manufacturer could comply with § 59.205 by printing on the label that the product complies with the VOC limits effective after a certain date rather than indicating the day, month, and year that the product was manufactured.

Response: The EPA did not change the date coding provisions § 59.205 in the final consumer products rule. The

EPA requires a date code to be placed on the product in addition to the recordkeeping and reporting requirements in order to assure compliance and to aid in enforcement. The consumer products rule allows products manufactured before the compliance date to be sold indefinitely. Thus, both compliant and noncompliant products can be present together on the shelf. The date code would allow the EPA to determine whether a particular product on the shelf was subject to the rule (i.e., whether the product was manufactured on or after the compliance date). The EPA could then determine whether the product was in compliance by referring to the record of ingredients used to produce that particular batch of product. To determine compliance, EPA must check the formulation of the batch. Thus, EPA must be able to both determine that the product was manufactured on or after the compliance date and trace the product back to the formulation records used in its production. The EPA believes that the date code accomplishes these two purposes without imposing additional burdens. The commenter's approach of labeling the product as being compliant will not enable EPA to trace the product back to its particular batch.

2.2.6 Variances

Comment: One commenter (IV-D-34) supported the variance provision in the final rule. Another commenter (IV-D-13) did not support the variance provision because the proposed rule did not represent technology-forcing levels of VOC control and complying product formulations have been available for many years.

Response: The EPA has concluded that providing a variance procedure is appropriate. The Agency will grant a variance if the applicant demonstrates that compliance with the rule would result in an economic hardship, and that the benefit from granting the variance outweighs the public interest in avoiding any increased emissions or air contaminants that would result from issuing the variance. The

EPA recognizes that certain interruptions in the availability of raw materials and/or manufacturing processes may affect a manufacturer's ability to comply continuously with the standards. The EPA anticipates that this variance provision will help to mitigate potential adverse impacts to small businesses. Small businesses in the consumer products industry are likely to have fewer research and development resources, and therefore, will benefit from the allowed variance. The EPA further notes that the availability of a variance procedure should not necessarily be dependent upon the existence of "technology forcing" VOC limits, but rather upon the legitimate need for variances under the scenarios contemplated above.

Comment: One commenter (IV-D-52) requested that EPA revise the proposed variance section to allow "grandfathering" for companies that already have received variances from State agencies regarding similar provisions of State consumer product rules because the criteria for granting a variance are the same in State rules as they are in the proposed national rule. The commenter suggested the variance provision should allow EPA to issue an automatic Federal variance if a company applies and shows it already has been issued a variance from the same standard under a State consumer products rule. The commenter suggested that such "grandfathering" could be done for a limited transitional period, such as for at least 1 year following adoption of a final Federal consumer products rule. The commenter stated that a grandfathering provision would avoid substantial duplication of efforts and would recognize the work that States have done in implementing State consumer product rules. The commenter suggested that if EPA is concerned about public notice and opportunity for comment, EPA could streamline the variance provision by requiring a public hearing only if a member of the public requests a hearing at which time EPA could conduct a more detailed review of the request covered by the previously-issued State variance and

the manufacturer could submit more information in support of the variance at that time. The commenter suggested that in the event that EPA does not allow automatic grandfathering, companies should be allowed to use the application they submitted to a State for the application for the variance from the National consumer products rule.

Response: The EPA criteria for issuing a variance are not the same as those for all States. Because some States may have different criteria than the Federal standards, EPA has determined that automatic “grandfathering” would be inappropriate. Therefore, EPA has not changed the "Variances" § 59.206 to "grandfather" variances already issued by the states for similar consumer products.

Comment: One commenter (IV-D-52) requested that EPA add the following provisions in the variance procedures in § 59.206 to protect companies from enforcement action pending a decision on a variance:

> Where a person has applied for a variance, no notices of violation shall be issued during the period between the date of filing for the variance and the date of decision by EPA, for violations covered by the variance application.

The commenter believes it is unnecessary for EPA to consider possible violations during the variance period, because the penalties under existing law provide sufficient incentive for companies to comply before and after the pendency of the variance application.

Response: While the rule is silent on this issue, EPA will bear the commenter's concern in mind in reviewing such applications. It is generally not EPA's practice to take enforcement action against a source that has filed a variance request until the Agency has acted upon the request negatively.

2.2.7 Test Methods

Comment: One commenter (IV-D-33) supported the test methods provided in the proposed rule. The commenter

supported basing compliance with these standards on manufacturing records for all products except charcoal lighter materials.

Response: The EPA believes using manufacturing records for all products (except charcoal lighter materials) provides the most cost-effective and effective means for determining compliance and hence enforcement.

2.2.8 Charcoal Lighter Material Compliance Testing Protocol

One commenter (IV-D-25) stated that the South Coast Air Quality Management District (SCAQMD) regulates charcoal lighter materials and had granted equivalency for some of the test equipment in § 59.208. The commenter requested several modifications be made to the rule for the charcoal lighter material testing protocol to make it consistent with SCAQMD rule.

The commenter (IV-D-25) requested that certain equipment be granted equivalency such as: Omega strip recorder with a Strawberry Tree Data Acquisition System for continuous recording requirements stated in § 59.208(f)(3)(i), a Davis DTA 4000 vane anemometer to measure stack velocity, and a Ratfisch RS55 total hydrocarbon analyzer to measure organic vapor. The commenter also requested that the span of 70 ppm methane be changed to 90 ppm methane for the organic vapor monitor to be consistent with SCAQMD rule.

The commenter (IV-D-25) requested certain SCAQMD test methods and procedures be considered as equivalent: SCAQMD 25.1 test method for total non-methane hydrocarbon concentration (TNMHC) to EPA Method 25; baseline emission testing (using the electronic probe) may be applied to other test runs provided that the test runs occur within 4 months of the baseline testing to EPA's requirement of all runs must be conducted over 3 consecutive days or less; testing for impregnated charcoal since the lighter material and barbecue charcoal supplies both the lighter material and barbecue charcoal, they can apply the 9 grams/start of VOC emissions

from an electric probe compared to EPA's requirement to test both the untreated charcoal and treated charcoal.

The commenter (IV-D-25) also stated that EPA should specify a standard charcoal to be used for the test. The commenter stated that the Kingsford© brand charcoal from the west coast was used by SCAQMD to develop the baseline emission factor. If this charcoal is not used, the commenter asserted that the baseline emission factor may be invalid and may need to be revised.

Response: The EPA made the suggested changes in the final rule to be consistent with the SCAQMD test methods. Consistency with the SCAQMD test methods is necessary to ensure that test results are consistent for a given product. However, the EPA did remove the requirement to obtain charcoal from the “west coast” in order for the method to be practical for nationwide use.

Comment: One commenter (IV-D-25) stated that the Charcoal Lighter Material Compliance Testing Protocol § 59.208(b) which provided that: "The testing must demonstrate that subject VOC emissions resulting from the ignition of barbecue charcoal are less than or equal to 9 grams per start." should be replaced with "on average, less than or equal to."

Response: The EPA made the change the final consumer products rule as suggested by the commenter. The change of adding "on average..." before "less than or equal to" would ensure consistency with other State regulations (i.e. Oregon and Texas) as well as recognize that the test consists of at least six test runs.

Comment: One commenter (IV-D-25) requested EPA to make an addition to § 59.208(h)(ii) regarding the Pretest Procedure for the ignition of the VOC emissions tests. The section provides that the briquettes be randomly stacked in a pile with a bottom diameter of 22 centimeters and a maximum height of 13 centimeters. The commenter suggested EPA add the

stacking ring described in § 59.208(f)(ix) to the procedure for stacking the briquettes.

Response: The EPA inadvertently omitted this detail in the Pretest Procedure in § 59.208(h)(ii) of the proposed rule. The EPA has included the use of a stacking ring for the ignition of the VOC emissions tests in § 59.208(h)(ii) of the final consumer products rule.

2.2.9 Recordkeeping and Reporting

Comment: One commenter (IV-D-52) requested that EPA clarify in the final rule whether or not the rule's recordkeeping, reporting, code-dating, and test methods (i.e., everything but the VOC limitation requirements) apply to distributors. This commenter also requested that EPA clarify that facilities that fill consumer products are not considered processors for purposes of the consumer products rule because these facilities are independent and do not have the information requested by EPA in the proposed rule.

Response: Distributors and facilities that fill consumer products could be the party responsible for the recordkeeping, reporting, code-dating, and test method requirements if they are considered the regulated entity. As explained in section 2.2.2, the definition of “regulated entity” has be changed in the final rule. According to the revised definition, distributors who are not named on the product label are not considered regulated entities. However, if the product is manufactured by a company not named on the product’s label, the manufacturer of the product is a regulated entity.

With regard to concern about the regulated entity not having information on product formulations, the regulated entity may choose a designated agent (in this case, the custom filler) to maintain the records. If requested, the regulated entity must be able to supply copies of product records to the administrator within a reasonable amount of time.

Comment: One commenter (IV-D-03) recommended that EPA clarify the recordkeeping and reporting requirements in

§ 59.209 which stated that reporting for FIFRA products begins 1 year later than for non-FIFRA products. The commenter suggested the following language:

> (i) Records of formulation in use on or after September 1, 1996, for all consumer products subject to 59.203(a), or September 1, 1997 for all consumer products subject to 59.203(d) and..."

Response: The EPA made the suggested change in the final consumer products rule to provide any consumer products registered under FIFRA (7 U.S.C. section 136-136y) a 1 year extension from the compliance date stated in the final rule. The EPA added this extension to be consistent with the extension mentioned in § 59.203(d) of the final consumer products rule.

Comment: One commenter (IV-D-25) requested that EPA make changes to the recordkeeping requirements in § 59.209(c) to keep it consistent with § 59.203. The commenter requested EPA to add paragraph (c)(iii).

> (iii) Records of emission testing equivalent to that described in 59.208 submitted to a State or local regulatory agency.

The proposed regulation permitted manufacturers to demonstrate charcoal lighter material compliance using records submitted to State or local regulatory agencies.

Response: The EPA agreed and added the new paragraph to § 59.209(c). Modifications were made to incorporate this suggested change into the final rule.

Comment: Seven commenters (IV-D-14, IV-D-17, IV-D-25, IV-D-33, IV-D-36, IV-D-52, IV-D-59) stated that the initial notification report required in proposed § 59.209(d) was overly burdensome. The proposed initial notification report required each manufacturer or importer of a consumer product subject to this rule to submit a one-time notification report by September 1, 1996 or upon startup of a new manufacturing or distribution facility. Three commenters (IV-D-14, IV-D-25, IV-D-33) stated that locations of manufacturing and

distribution facilities change frequently because the consumer products industry relies on contract manufacturing facilities. One commenter (IV-D-33) stated that the proposed requirement was impractical because companies may have dozens to hundreds of facilities for manufacturing and distributing products and they produce rapidly changing product lines at various plants. The commenter noted that the proposed reporting requirements would be a significant paperwork burden for both EPA and industry. Three commenters (IV-D-14, IV-D-17, IV-D-33) recommended the following provisions regarding reporting requirements:

> (d) Each manufacturer or importer of a consumer product subject to this subpart shall submit by September 1, 1996 a one-time Initial Notification Report including the information specified in paragraphs (d)(1) through (d)(4) of this section.
>
> (1) Company name;
> (2) A list of product categories and subcategories, as found in tables 1 and 2, that are manufactured, imported, or distributed.
> (3) Description of date coding systems, clearly explaining how the date of manufacture is marked on each sales unit of subject consumer products; and
> (4) Name, title, and signature of certifying company official.

One commenter (IV-D-14) also recommended EPA add an additional subpart to § 59.209 as follows:

> (f) If requested by the Administrator, the following information shall be made available in a reasonable period of time:
>
> (1) Location of facility(ies) manufacturing, importing, or distributing subject consumer product:
>
> (2) A list of product categories and subcategories, as found in tables 1 and 2, that are manufactured, imported or distributed at each facility; and

(3) Location where VOC content records are kept for each subject consumer product.

One commenter (IV-D-36) requested that EPA allow at least 90 days following final promulgation before the initial notification report was required.

Response: In response to these comments, EPA agrees that some of the proposed recordkeeping and reporting requirements were unnecessary, based upon information provided by commenters. The EPA has simplified the recordkeeping and reporting section for the initial notification reporting requirements to reduce the amount of reporting required. Paragraphs (d), (f), and (g) of § 59.209 have been changed to read as follows:

(d) Each regulated entity shall submit by the applicable compliance date, or within 30 days of becoming a regulated entity, one-time Initial Notification Report including the information specified in paragraphs (d)(1) through (d)(4) of this section.

(1) Company name;

(2) Name, title, phone number, address, and signature of certifying company official;

(3) A list of product categories and subcategories subject to 203(a) and (d), as found in tables 1 and 2, for which the company is currently the regulated entity; and

(4) A description of date coding systems, clearly explaining how the date of manufacturing is marked on each sales unit of subject consumer products.

(f) If requested by the Administrator, the following information shall be made available in a reasonable period of time:

(1) Location of facility(ies) manufacturing, importing, or distributing subject consumer product;

(2) A list of product categories and subcategories, as found in tables 1 and 2, that are manufactured, imported or distributed at each facility; and

(3) Location where VOC content records are kept for each subject consumer product.

(g) Each regulated entity subject to the innovative product provisions in section 59.204 shall submit notifications as indicated in section 59.204(d) and (e).

The EPA believes that these changes to the final rule will make the reporting requirements less burdensome on the regulated entities without affecting EPA's ability to determine compliance. The initial notification report is due 90 days from the date of publication of the final rule or by the compliance date. The EPA believes that the reporting requirements are essential to ensure compliance and to permit enforcement as necessary, but has decided to simplify the requirements in a fashion that does not undermine these objectives.

Comment: One commenter (IV-D-33) noted that the automatic reporting of date-code changes required under proposed § 59.209(e) could be accomplished by regulated entities supplying updates upon request from EPA. The commenter based this suggestion upon its assertion that within one to 3 years almost all the products manufactured prior to the effective date will be out of the chain of commerce while the requirements of the rule will continue indefinitely.

Response: Contrary to the commenter’s assertion, EPA believes it is essential to be able to ascertain the date of manufacture of a product on the shelf, without regard to how long the regulation has been in effect. The EPA’s rationale for this position is discussed in detail in section 2.2.5 of this BID. Therefore, EPA has not changed the provision in the final consumer products rule.

Comment: Several commenters (IV-D-26, IV-D-27, IV-D-37, IV-D-43, IV-D-52, IV-D-59) expressed concern about the possibility of reporting requirements that would reveal trade secrets and proprietary formulations to competitors. One commenter (IV-D-26) requested that EPA clarify that consumer products manufacturers can comply with the rule without divulging trade secret information from their raw material suppliers. A second commenter (IV-D-43) requested that EPA modify the regulation so that private label distributors can arrange to have the necessary information reported by the contract filler. This commenter argued that this modification would assure confidentiality of proprietary information and avoid duplicative recordkeeping. Three of the commenters (IV-D-27, IV-D-37, IV-D-41) stated that since they do not manufacture the products they should not be required to understand the formulation of the products or have the reporting requirements of the manufacturers. One commenter (IV-D-27) described itself as a private label distributor. For marketing reasons, the commenter's name is on the package instead of the filler's. The commenter noted that the manufacturer might not want other companies to know that it is filling for multiple competitors.

One commenter (IV-D-33) supported the recordkeeping and reporting requirements and recommended that EPA modify § 59.209(a) that required certain manufacturing records to be maintained by each manufacturer or importer subject to the provisions of § 59.209(a). The commenter suggested that EPA use the following language:

> (a) Each regulated entity of a given product subject to the provisions of § 59.203(a) or (d) shall maintain records specified in (a)(I) and (a)(ii) of this section for a least 5 years, or assure that a designed agent maintain such records.

Two commenters (IV-D-41, IV-D-47) requested clarifications to amend § 59.209 to allow manufacturers to meet their recordkeeping requirements by having their contract packager

or designated agent maintain the required records. One commenter (IV-D-41) stated that the use of contract packagers is prevalent in the consumer product industry and allowing them to maintain the records for purposes of compliance will facilitate recordkeeping and still be consistent with the intent and purpose of the proposed VOC standard. The other commenter (IV-D-47) requested that EPA modify proposed 59.209(a) to include the "manufacturer or his agent" in order to recognize that the regulated entity does not need to physically possess the formulation and production records to comply with § 59.209(a)(i) and (ii). Another commenter (IV-D-41) also requested that EPA change the language that requires the party named on the label to maintain records. Four commenters (IV-D-10, IV-D-47, IV-D-52, IV-D-59) requested modifications to § 59.209(d). Two commenters (IV-D-10, IV-D-47) requested that EPA clarify the relationship between the regulated entity and the actual producer of the consumer product by modifying § 59.209(d) to specifically require that the location in (d)(2) is that of the regulated entity and that the location in (d)(4) can be that of the producer. One commenter (IV-D-10) stated that it should be sufficient that regulated entities who do not manufacturer the product they market maintain and provide information concerning the location of its contract fillers and have on file a letter of agreement from its fillers certifying that their product formulations and recordkeeping procedures comply with the national standard.

Response: It was EPA's intent that the regulated entity (the party with ultimate control over the VOC content of the product) also be responsible for the recordkeeping and reporting requirements. In response to the concerns raised about trade secrets and proprietary information, the recordkeeping and reporting requirements of § 59.209(a) were revised to indicate that the manufacturer may provide written

certification to EPA accepting responsibility for the recordkeeping requirements on behalf of the regulated entity.

Failure to maintain the required records may result in enforcement action by EPA against the certifying manufacturer in accordance with the enforcement provisions applicable to violations of these provisions by regulated entities. The certifying manufacturer may revoke the written certification by sending a written statement to EPA and the regulated entity giving at least 90 days notice that the certifying manufacturer is rescinding acceptance of responsibility for compliance with the recordkeeping requirements listed in this paragraph. Upon expiration of the notice period, the regulated entity must assume responsibility for maintaining the records specified in this paragraph. Written certifications and revocation statements, to EPA from the certifying manufacturer shall be signed by the responsible official of the certifying manufacturer, provide the name and address of the certifying manufacturer, and be sent to the appropriate EPA Regional Office at the address listed in § 59.210. Such written certifications are not transferable by the manufacturer.

Other changes were made to simplify the recordkeeping and reporting requirements. The location of each facility manufacturing, importing, or distributing a consumer product, and the VOC content records, need only be supplied upon request by the Administrator, rather than with each initial notification. Similarly, changes in the date coding system made after a 3 year period will only need to be submitted upon request, not automatically required within 30 days following the change.

Comment: One commenter (IV-D-13) stated that EPA should require additional information in the reporting requirements for consumer product manufacturers. For example, the commenter stated that EPA should request product content and labeling information in the reporting requirements. The

commenter does not believe that the information required by the proposed rule is sufficient to establish a firm foundation for compliance and enforcement actions. Another commenter (IV-D-34) stated that they support the reporting requirements stated in the proposal to provide formulation data to demonstrate compliance. The commenter believes it is the least costly way of ensuring compliance.

Response: The EPA believes that the requested amount of reporting will provide enough information to enable EPA to obtain VOC content information upon request. Requiring the regulated entities to submit VOC content information as part of the initial report would be excessively burdensome to both regulated entities and EPA and would not enhance EPA's ability to ensure compliance.

Comment: One commenter (IV-D-43) requested that EPA not require reporting for each batch of production because such a requirement would inundate EPA with a excessive and burdensome amount of paperwork. The commenter (IV-D-43) recommended that the manufacturers instead maintain these records and make them available to EPA for periodic audits, thereby eliminating paperwork and labor expense for both the manufacturers and EPA.

Response: The only report required from regulated entities is a one-time initial notification report that is due on or before the compliance date or within 30 days of when the manufacturer becomes subject to the rule. The report requires the company name; the name, title, phone number, address, and signature of certifying company official; a list of products categories and subcategories subject to the rule; and descriptions of date coding systems, clearly explaining how the date of manufacture is marked on each sales unit of subject consumer products. The regulated entities or their designated agents are not required to submit reports of each planned batch, but must maintain records of each batch of

production in a form suitable for expeditious inspection and review on request by the Administrator.

2.3 IMPACTS

2.3.1 Cost Effectiveness

Comment: Two commenters supported the EPA's traditional approach to measuring cost-effectiveness. One of these commenters (IV-D-11) supported the approach because air quality studies demonstrate that ozone and its precursors are being transported from region to region. The commenter also disagreed with the alternative method (of restricting the measure to nonattainment areas only) because it assumes that VOC reductions outside nonattainment areas have no value. The other commenter (IV-D-13) stated that EPA should maintain the traditional measure because it is commonly used for comparisons and will continue to provide meaningful comparisons. The commenter did not believe that the alternative measures discussed accurately reflect all the benefits provided by this particular rule. One commenter (IV-D-33) supported both approaches to measuring cost-effectiveness, since both calculations provide relevant information on the cost-effectiveness of the rule.

Four commenters supported the alternative approach to measuring cost-effectiveness. One commenter (IV-D-09) stated that the measurement should reflect the rule's express purpose - achieving compliance with the ozone NAAQS in nonattainment areas. The commenter, therefore, recommended using only those emissions expected to occur within ozone nonattainment areas. The commenter continued by suggesting that EPA only consider emissions expected to occur during the ozone nonattainment season or during the "chemically relevant" window preceding an expected noncompliance event, because emission reductions at other times will not help to achieve compliance with the NAAQS. Another commenter (IV-D-12) stated that cost-effectiveness analysis permits the comparison of regulatory alternatives and such calculations are used as a proxy for

benefits. The commenter stated that since the greatest benefits would be attributed to emissions reduced in nonattainment areas during the ozone season, the measure of cost-effectiveness should reflect emission reductions achieved (1) in nonattainment areas, and (2) during the ozone season. The third commenter (IV-D-22) stated that the national measure seems like a "bargain," but that a more appropriate measure would be cost-effectiveness of VOC reductions in nonattainment areas. The commenter agreed with the approach of using the ratio of population in nonattainment areas to determine the level of emission reductions to apply to the calculation, but points out that EPA used data from 1988-90 and that more recent population estimates in nonattainment areas would be much lower. The fourth commenter (IV-D-32) urged EPA to adopt the alternative approach proposed because the current approach created a bias against tailored, local, and seasonal regulatory approaches. The commenter stated that to have valid use in public policy analysis, EPA's cost-effectiveness measure must include the social benefits that flow from regulation and the resulting costs. The commenter stated that rather than assigning a zero value to all attainment area reductions, EPA should weight these emissions based on their relationship to improvements in public health. The commenter continued by stating that emission reductions outside the ozone season should be assigned a different weighting than those occurring during the ozone season. They suggested that EPA should provide consistent methodology to allow valid comparisons of the cost-effectiveness of (1) nationwide, year-round VOC control regulations; (2) nationwide, ozone season VOC controls; (3) nonattainment area-specific controls; and (4) nonattainment area, ozone season VOC controls.

Response: Cost effectiveness -- the cost per ton of emissions reduced -- is a measure used to compare the cost efficiency of alternative strategies for reducing pollutant emissions, or to provide a comparison of a new strategy with

historical strategies. EPA's established method of calculating cost effectiveness of a rule with nationwide applicability is to divide the total cost of the rule by total emissions reductions. After considering these comments, EPA does not plan to adopt the alternative approaches suggested to calculating cost effectiveness for rules with nationwide control requirements, for reasons that are presented below.

One issue raised by the comments is whether EPA's traditional measure creates a bias against strategies that apply in a limited geographic area (e.g. in nonattainment areas) relative to nationwide strategies, or against seasonal strategies relative to year-round strategies. This issue would arise if the Agency used cost effectiveness figures to compare the desirability of these dissimilar types of strategies. In fact, EPA did not use cost effectiveness estimates in this way in developing the consumer products rule and does not plan to do so for other rules or guidance being developed under section 183(e). In the case of the consumer products rule, EPA considered applying restrictions to consumer products only in nonattainment areas (either by rule or through control techniques guidelines for states). The Agency determined that geographically targeted restrictions for these nationally distributed consumer products would pose substantial implementation difficulties for government, would impose substantial compliance burdens on a large number of regulated entities, and would be less effective at reducing emissions than a national rule (see section 2.1.2 for further discussion). Given that a strategy applicable only to nonattainment areas is not practical or desirable for consumer products, EPA did not see a need to invest resources to pursue that strategy and calculate its cost effectiveness.

Another issue raised in these comments is whether the alternative methodology is appropriate for comparing nationwide and target geographic strategies to year-round and seasonal strategies for reducing ozone pollution. The EPA

believes that these alternative methodologies would not be appropriate for such comparisons. The EPA has the following concerns with the two alternative approaches:

- First, VOC emission reductions have benefits other than reducing ozone levels in nonattainment areas. As a result, EPA believes the cost effectiveness calculation for a nationwide, year-round rule should not exclude VOC emission reductions in attainment areas or outside the ozone season. EPA recognizes a primary objective of Section 183(e) of the Clean Air Act is to reduce VOC emissions in ozone nonattainment areas. However, as previously explained, in the development of the consumer products rule the EPA found that the best policy alternative is to implement a nationwide rule. Therefore, emission reductions from this rule will not only be realized in ozone nonattainment areas, but also in all other parts of the country in which consumer products are distributed and consumed.

  In general, the benefits of VOC reductions in ozone attainment areas include reductions in emissions of VOC air toxics, reductions in the contribution from VOC emissions to the formation of fine particulate matter, and reductions in damage to agricultural crops, forests and ecosystems from ozone exposure. Emission reductions in attainment areas help to maintain clean air as the economy grows and new pollution sources come into existence. Also, ozone health benefits can result from reductions in attainment areas. The closure letter from the Clean Air Science Advisory Committee (CASAC) for the recent review of the ozone NAAQS states that there is no apparent threshold for responses to ozone exposure [Source: U.S. EPA; Review of NAAQS for Ozone, Assessment of Scientific and Technical Information, OAQPS Staff Paper; document number: EPA-452\R-96-007]. In other words, reactions to ozone have been found at concentrations below the current standard (0.12, 1 hour), and the revised standard (0.08, 8 hour).

- Second, under either alternative approach, emission reductions in ozone attainment areas would not be included in the calculation of a rule's cost effectiveness. The implicit assumption is that emissions reductions in attainment areas do not contribute to cleaner air in nonattainment areas. In fact, NOx emitted long distances away can affect

> ozone levels in nonattainment areas. In some circumstances VOC sources outside nonattainment area boundaries contribute to ozone levels in nonattainment areas. As a result, a cost-effectiveness comparison based on the alternative approaches sometimes could create a bias against a nationwide rule relative to a strategy that applies in nonattainment areas only.
>
> The EPA also considers it impractical to apply a weighting factor to account for differences in the extent to which emissions inside and outside nonattainment areas contribute to ozone formation in nonattainment areas. EPA is concerned that in order to calculate cost effectiveness using this concept, the Agency would have to conduct extensive and costly air quality modeling to estimate ozone reductions resulting from each candidate control strategy and that this would require extensive data on the location of emissions. Such detailed analysis is appropriate for some policy decisions, but not for others. As a result, EPA is skeptical that this weighting approach would represent a generally useful analytical tool for decision making.

The EPA, of course, agrees that differences in the location and timing of emission reductions are a significant consideration in choosing among alternative strategies. The extent of ozone reductions and other benefits resulting from VOC emission reductions varies, partly based on location and season. In considering nationwide vs. geographically targeted controls, and year-round vs. seasonal controls, the Agency considers available information on the effectiveness of those strategies in reducing ozone -- as well as other health and environmental considerations, economic considerations, and other relevant factors -- in making a holistic assessment of which strategy is most desirable from an overall public policy standpoint.

There are instances where EPA does provide an estimate of cost effectiveness of a control strategy during the ozone season -- generally, when a control strategy is feasible to apply on a seasonal basis, or when limits are set on a

seasonal basis. Although these figures are useful for comparing different seasonal strategies, EPA does not plan to use cost effectiveness figures to compare seasonal and year-round strategies for the 183(e) program for the reasons presented above. In regard to the consumer products rule, EPA notes that the nature of consumer product emissions does not allow for control strategies that reduce emissions only during the ozone season to be an objective for consideration. One reason is that the shelf life and consumption rate of consumer products varies greatly and one cannot predict that a certain percentage of a product made with a specified formulation will be consumed and thus emitted during the ozone season. Due to the fact that reductions during the ozone season only is not a viable control strategy for consumer products, the EPA cannot endorse a seasonal approach to measuring cost effectiveness for the consumer products rule.

2.4 MISCELLANEOUS ISSUES AND CLARIFICATIONS

Comment: Two commenters (IV-D-06, IV-D-33) stated that if EPA does not promulgate before the end of 1996, the States would not be able to receive the 20 percent credit towards their State Implementation Plan (SIP). The commenters were concerned that States might need to develop their own consumer and commercial products rules if EPA does not promulgate before the end of 1996, and that varying State rules could result in conflicting or burdensome regulations for manufacturers and distributors of consumer products.

Response: The EPA's intent was to promulgate the consumer products rule before the end of 1996. The EPA recognizes that the States need to receive the 20 percent credit towards their SIP rate of progress demonstrations. This credit will be given even though the rule will be promulgated after 1996. The EPA believes this position is justified in light of the significant delays in promulgating the rule. The anticipated emission reductions associated with implementation of the rule are expected to remain unchanged.

The EPA anticipates that the promulgation of the final consumer products rule at this time will not force States to issue their own rules in lieu of the Federal consumer products rule in order to get SIP credit.

Comment: One commenter (IV-D-33) requested that EPA make sure the compliance date in § 59.201(a) agrees with the date in § 59.203(a).

Response: The EPA has clarified in the final rule that the compliance dates in §§ 59.201(a) and 59.203(a) will be 90 days after publication of the final rule.

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15. SUPPLEMENTARY NOTES

16. ABSTRACT

A final rule for the regulation of volatile organic compounds (VOC) from consumer products is being promulgated under the authority of section 183(e) of the Clean Air Act. This document contains summaries of comments received from the public, along with EPA's responses to those comments.

17. KEY WORDS AND DOCUMENT ANALYSIS

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