

Clean Air Compliance for Consumer Products

A National Video Satellite Broadcast User's Manual
(Revised)



Produced by

U.S. Environmental
Protection Agency

 The University
of Tennessee

Disclaimer

This manual is not a legally binding document and is not meant to replace the published regulation titled “National Volatile Organic Compound Emission Standards for Consumer Products” (40 CFR pages 48819–48847 of the *Federal Register*, Vol. 63, No. 176, September 11, 1998, included herein as Appendix D). This document presents specific aspects of the regulation and may not cover all parts of the regulation. It is an elaboration of the appropriate legal document only. Final authority rests solely in the legal document.

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The Adhesive and Sealant Council
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International Sanitary Supply Association

Credits

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* The text of the consumer products rule is included in original, hard copies of this manual only. Those who access this manual via the Internet will find themselves directed to another site where they may read or download the rule as it appeared in the *Federal Register* of September 11, 1998 (Vol. 63, No. 176, pages 48819–48847).



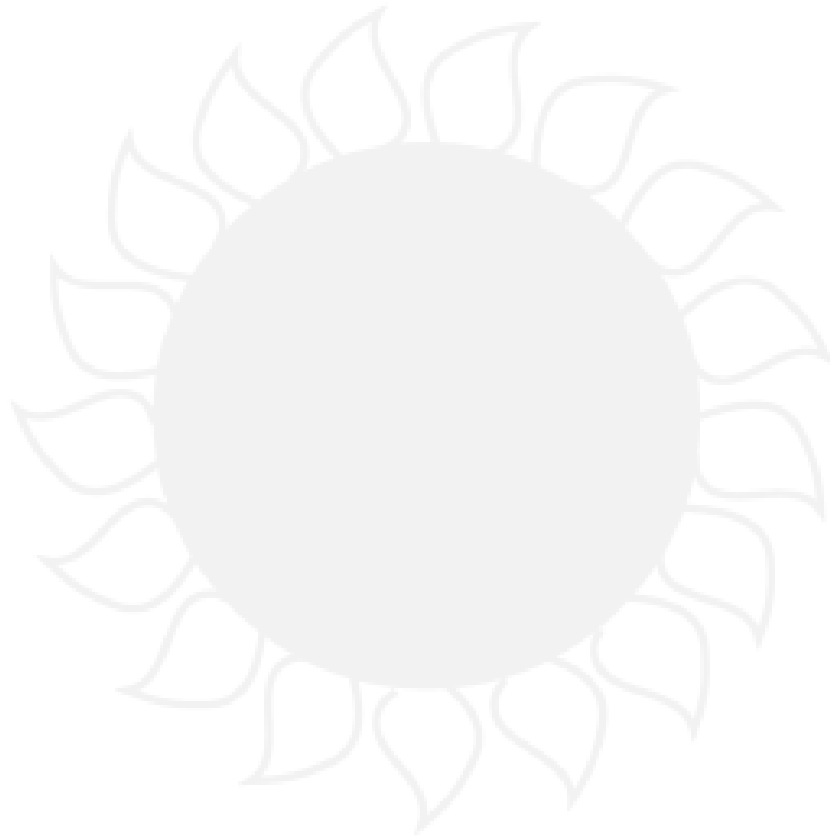
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1.0 Introduction

1.1 Am I subject to the consumer products rule?

The consumer products rule applies to the manufacturer or importer of any consumer and institutional product that is listed in Table 1 on page 1-8 and to any distributor named on the product label. The regulated entity (i.e., the manufacturer, importer or distributor) that is responsible for complying with various provisions of the rule varies depending on the product. For further explanation of this point, see Section 3.1, "How can I tell whether I am subject to this rule?"

Are there different requirements for small and large entities?

The national volatile organic compound emission standards for consumer products have the same requirements for all regulated entities, regardless of size. However, the rule does allow for some flexibility, such as the option to apply for a compliance date extension. This provision may help small entities in particular avoid unreasonable economic disruption as they seek to comply with the rule.

**The rule applies to
manufacturers,
importers and
(if named on the
product label)
distributors.**

1.2 When do I have to be in compliance?

All regulated products, except those subject to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), must comply with this rule by December 10, 1998. Regulated products subject to FIFRA must comply by December 10, 1999. The only exception to these dates are regulated products for which a variance has been applied or granted. Compliance deadlines are discussed more fully in Section 3.3; variances are discussed in Section 3.7.



Table 1. Product categories / limits regulated by the National Volatile Organic Compound (VOC) Emission Standards For Consumer Products

Product category	VOC content limit	Product category	VOC content limit				
Air fresheners		Hair styling gels	6				
Single-phase	70	Household adhesives					
Double-phase	30	Aerosols	75				
Liquids/pump sprays	18	Contact	80				
Solids/gels	3	Construction and panel	40				
Automotive windshield washer fluid	35	General purpose	10				
Bathroom and tile cleaners		Structural waterproof	15				
Aerosols	7	Insecticides					
All other forms	5	Crawling bug	40				
Carburetor and choke cleaners	75	Flea and tick	25				
Cooking sprays—aerosol	18	Flying bug	35				
Dusting aids		Foggers	45				
Aerosols	35	Lawn and garden	20				
All other forms	7	Laundry prewash					
Engine degreasers	75	Aerosols/solids	22				
Fabric protectants	75	All other forms	5				
Floor polishes/waxes		Laundry starch products	5				
Products for flexible		Nail polish removers	85				
flooring materials	7	Oven cleaners					
Products for nonresilient		Aerosols/pump sprays	8				
flooring	10	Liquids	5				
Wood floor waxes	90	Shaving creams	5				
Furniture maintenance products		Underarm antiperspirants	*60				
—aerosol	25	Underarm deodorants	*20				
General purpose cleaners	10	* Percent HVOC content by weight with vapor pressure greater than 80 mm of mercury when measured at 20 degrees Celsius.					
Glass cleaners		<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Product category</th> <th style="text-align: right;">Emissions limit</th> </tr> </thead> <tbody> <tr> <td>Charcoal lighter materials</td> <td style="text-align: right;">≤ 9 grams VOC per start</td> </tr> </tbody> </table>		Product category	Emissions limit	Charcoal lighter materials	≤ 9 grams VOC per start
Product category	Emissions limit						
Charcoal lighter materials	≤ 9 grams VOC per start						
Aerosols	12						
All other forms	8						
Hair mousses	16						
Hairs sprays	80						



1.3 How to use this manual

This manual is divided into three parts, with four appendices.

Part One contains information to help you determine whether you are subject to the requirements of the rule. It also provides information on what the manual does and does not cover.

Part Two provides an overview of the regulatory requirements. This section explains the environmental and health issues that this rule addresses as well as the rationale for addressing them. Part Two also explains how the consumer products regulation relates to other federal, state and local requirements.

Part Three includes step-by-step instructions on how to comply with this rule, including:

- ◆ Products covered by the rule;
- ◆ The dates by which you need to comply;
- ◆ Instructions on what to do to comply;
- ◆ How to know if your products are in compliance;
- ◆ Which records to keep to demonstrate product compliance;
- ◆ Which reports to submit, when to submit them, and who to send them to;
- ◆ Opportunities for flexibility in the rule; and
- ◆ Where to get additional help in understanding and complying with the rule.

Appendix A includes fact sheets for each of the regulated product categories, while Appendix B is a glossary of terms. Appendix C lists contacts and resources, and Appendix D is the text of the rule itself.



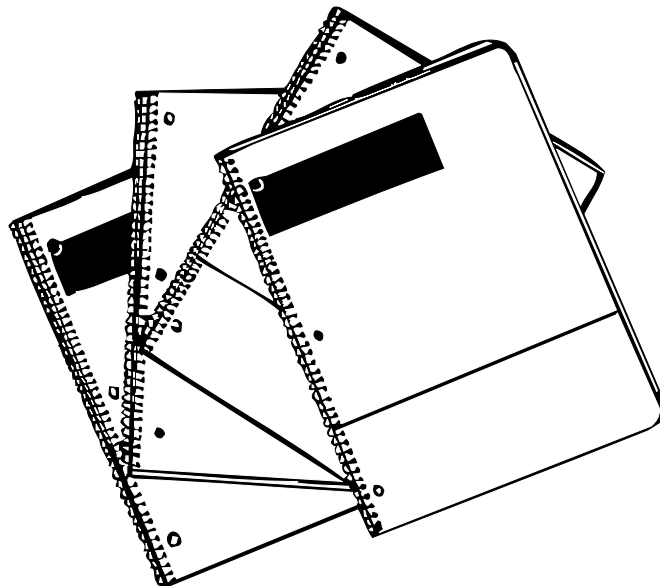
1.4 How to obtain a complete copy of the rule

See Appendix D for a complete copy of the rule as it was published in the *Federal Register*, Vol. 63, No. 176 (September 11, 198), pages 48819 through 48847. The rule and preamble will be codified in the Code of Federal Regulations at 40 CFR part 59, subpart C.

You may also obtain a copy of the rule through the US EPA's Technology Transfer Network (TTN) at "<http://www.epa.gov/ttn/oarpg/ramain.html>." The TTN provides information and technology exchange in various areas of air pollution control. You may also access the rule (in text or PDF format) via The University of Tennessee's teleconference website at "www.cis.utk.edu/teleconf.html." Click on "complete text of the consumer products rule."

**Access the US EPA's TTN
at [http://www.epa.gov/
ttn/oarpg/ramain.html](http://www.epa.gov/ttn/oarpg/ramain.html)**

Copies of the rule, along with all supporting documentation from the rulemaking process, including public comments and other official records, are available in Docket No. A-95-40, or by written or telephone request from the Air and Radiation Docket and Information Center, Room M1500, Waterside Mall, U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460. Tel.: (202) 260-7548, fax: (202) 260-4400. A reasonable fee may be charged for photocopying.





2.0 Overview of regulatory requirements

2.1 What environmental and health issues does this rule address and why is it important to address them?

Emissions of volatile organic compounds (VOC) have been associated with a variety of health and welfare impacts. The new EPA standards will reduce emissions of VOC from the use of certain categories of consumer products. These standards implement Section 183(e) of the Clean Air Act (the Act) and are based on the Administrator's determination that VOC emissions from the use of consumer products can cause or contribute to ozone levels that violate the national ambient air quality standards (NAAQS) for ozone.

Consumer and commercial products, while individually small sources of VOC emissions, collectively contribute significantly to the ozone nonattainment problem. In 1990, consumer and commercial products emitted approximately 6 million tons of VOC nationwide, or about 28 percent of all man-made VOC. The persistence of the ground-level ozone problem has caused state and local air pollution agencies to seek emissions reductions beyond those which have been gained by regulating the conventional mobile and stationary sources of emissions.

As a result, several agencies have adopted or proposed rules to regulate various household consumer products. Representatives of the consumer products industry, concerned that differences in state and local requirements for consumer products could disrupt their national distribution network, have urged EPA to issue rules for consumer products to provide consistency across the country. States that need further emissions reductions support this rule because it will help their efforts to meet the NAAQS for ozone.

2.1.1 Ground-level ozone formation

Volatile organic compound emissions, together with nitrogen oxides (NO_x), are precursors to the formation of tropospheric ozone. Ground-level ozone, which is a major component of "smog," is formed in the atmosphere by reactions of VOC and NO_x in the presence of sunlight. In order to reduce ground-level ozone levels, emissions of both VOC and NO_x must be reduced.



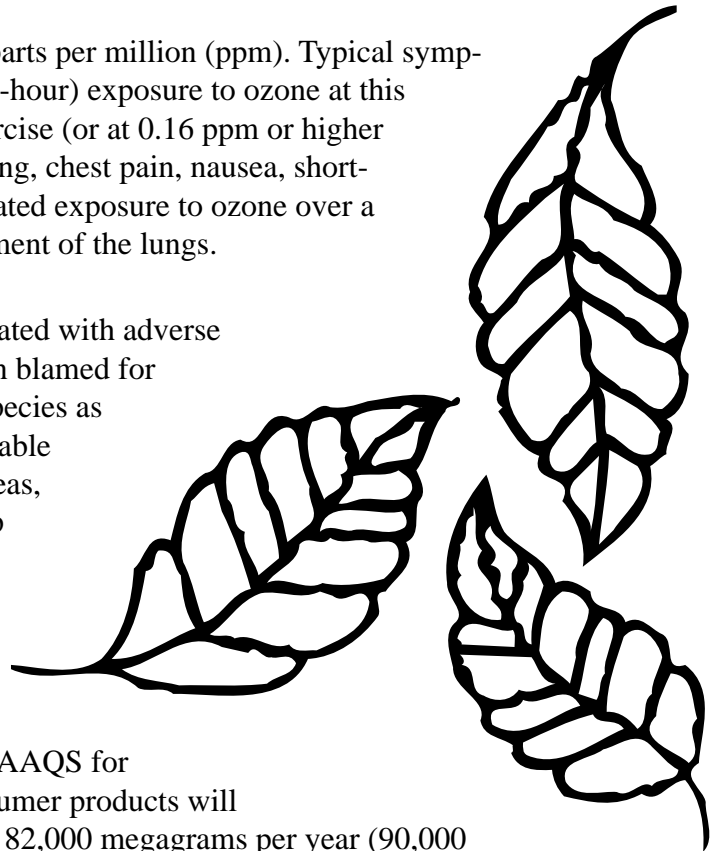
2.1.2 Health and environmental effects of ground level ozone

Exposure to ground-level ozone is associated with a wide variety of human health effects, agricultural crop loss and damage to forests and ecosystems. Though exposure to ozone is responsible for a series of health impacts, including altered lung capacity, eye, nose and throat irritations, malaise and nausea, and aggravation of existing respiratory disease, human exposure to ozone primarily affects the lungs. Ozone's most perceptible effects on human health are acute respiratory symptoms such as coughing and painful deep breathing.

Many studies have been conducted on the health effects of exposure to ozone at elevated levels during periods of moderate to strenuous exercise. These studies have looked at impaired lung function, symptomatic effects, and a lessened ability to engage in various levels of physical exertion.

The new NAAQS for ozone is 0.08 parts per million (ppm). Typical symptoms associated with acute (one- to three-hour) exposure to ozone at this concentration or higher under heavy exercise (or at 0.16 ppm or higher under moderate exercise) include coughing, chest pain, nausea, shortness of breath and throat irritation. Repeated exposure to ozone over a lifetime may result in permanent impairment of the lungs.

Elevated ozone levels are also associated with adverse welfare effects. Ozone exposure has been blamed for damages to certain commercial timber species as well as losses to such commercially valuable crops as soybeans and cotton. In rural areas, ozone is thought not only to depress crop yields but to cause visible damage to other plant life, such as premature aging and leaf loss.



More than half the U.S. population lives or works in areas that exceed the NAAQS for ozone. The new VOC standards for consumer products will reduce nationwide emissions of VOC by 82,000 megagrams per year (90,000 tons per year) by 1998 relative to 1990 levels. This equates to a 20-percent reduction in emissions compared to those which would have resulted in the absence of these standards.



2.2 Narrative of the consumer products regulation

The consumer products rule reduces VOC emissions from 24 categories of consumer products by limiting their VOC content. The rule also regulates VOC emissions from charcoal lighter materials by requiring that such materials may not emit more than 9 grams (0.02 pound) of VOC per start, as determined using procedures specified in the regulation. Manufacturers, importers and distributors of subject consumer products manufactured for sale or distribution in the United States must comply with the rule.

Compliance with the standards must be demonstrated by the manufacturer or importer. If the distributor is identified on the label, that distributor is responsible for complying with all provisions of the rule except the limits on VOC content and emissions.

The VOC content or emission limits for all product categories are presented on the fact sheets included as Appendix A. In most cases, these limits must be achieved by December 10, 1998, that is, 90 days following publication of the rule in the *Federal Register*. However, consumer products that are also subject to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) are allowed an additional year (a total of one year and 90 days from publication in the *Federal Register*) to come into compliance. This allowance is made to accommodate the additional product testing required for these products under FIFRA.

To identify consumer products that are manufactured after the compliance dates and are therefore subject to the rule, all consumer product containers must display the day, month and year on which the product was manufactured, or a code indicating such date.

Regulated entities of subject charcoal lighter material must label their products with information specifying the quantity of charcoal lighter material per pound of charcoal that was used in the testing protocol for that product.

In all cases, existing product inventory manufactured *before* the applicable compliance date is not affected by the rule and can be sold.



2.2.1 Exemptions and exceptions

Exemptions from the above-mentioned VOC content limits (or emission standards for charcoal lighter materials) include the following:

- 1) Consumer products manufactured or imported before December 10, 1998.
- 2) Any consumer product manufactured in the United States for shipment and use outside the United States.
- 3) Fragrances incorporated into a consumer product up to a combined level of 2 weight-percent.
- 4) Insecticides and air fresheners containing at least 98 percent paradichlorobenzene or at least 98 percent naphthalene.
- 5) Adhesives sold in containers of 0.03 liter (1 ounce) or less.
- 6) Bait station insecticides. For the purpose of this rule, bait station insecticides are containers enclosing an insecticidal bait that does not weigh more than 14 grams (0.03 pound), where bait is designed to be ingested by insects and is composed of solid-material feeding stimulants with less than 5 percent active ingredients.
- 7) Air fresheners whose VOC constituents are 100 percent fragrance materials.
- 8) VOC in underarm antiperspirants or underarm deodorants that have a vapor pressure of less than 80 millimeters of mercury at 20 degrees Celsius.
- 9) Non-aerosol mothproofing products that are principally for the protection of fabric from damage by moths and other insects that damage fabric in adult, juvenile or larval forms.
- 10) Flooring seam sealers used to join or fill the seam between two adjoining pieces of flexible sheet flooring.

The following products are not included in the product category definitions. (For more details about what is included in these categories, see Appendix A.)

- ◆ Air fresheners used on the human body.
- ◆ Institutional or industrial disinfectant air fresheners sold only through institutional and industrial channels of distribution.
- ◆ Automotive windshield washer fluids placed by the automobile manufacturer in a new vehicle.
- ◆ Products designed to be placed directly into fuel lines or fuel storage tanks rather than directly into or on carburetors.



- ◆ Products specifically designed to clean toilet bowls or toilet tanks.
- ◆ Carburetor and choke cleaner and engine degreaser solvents the use of which are regulated under 40 CFR part 63, subpart C (halogenated solvent NESHAP).
- ◆ Electrical starters and probes used to ignite charcoal.
- ◆ Metallic cylinders using paper tinder to ignite charcoal.
- ◆ Natural gas and propane gas grills.
- ◆ Dusting aids consisting entirely of compressed gases for use in electronic or other specialty areas.
- ◆ Silicone-based fabric protectants whose function is to provide water repellency.
- ◆ Fabric protectants designed for use solely on fabrics labeled “Dry Clean Only.”
- ◆ Floor products designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.
- ◆ Floor finish strippers.
- ◆ Floor products designed for unfinished wood floors.
- ◆ Coatings subject to the architectural coatings regulations (*Federal Register*, June 25, 1996, Volume 61, Number 123, 32729; *Federal Register*, September 3, 1996, Volume 61, Number 171, 46410).
- ◆ Furniture maintenance products that leave a permanent finish such as stains, sanding sealers and lacquers.
- ◆ Glass cleaners solely designed to clean optical materials used in eyeglasses, photographic equipment, scientific equipment or photocopying machines.
- ◆ Adhesive products used on humans or animals.
- ◆ Adhesive tapes, contact papers, wallpapers, shelf liners.
- ◆ Adhesive products with an adhesive incorporated onto or in an inert substrate.
- ◆ Insecticides used exclusively on humans or animals or their bedding.
- ◆ Agricultural insecticides.
- ◆ Restricted-use insecticides (FIFRA, 7 U.S.C. 136-136y).
- ◆ Wasp and hornet insecticides.
- ◆ Insecticides designed for use against house dust mites.



There are no reporting or record-keeping requirements for exempt products. Also, there are no small-batch-size or volume-of-production exclusions. Although packagers and fillers may not be a regulated entity, they may be required to maintain records for regulated entities if they add something to the product. They may also need to modify their process to ensure that each product package displays a date code stamp.

The rule also includes an innovative product provision that allows higher VOC content in the product than is specified in the rule. To qualify, a manufacturer must demonstrate that, due to some characteristic of the product formulation, design, delivery system or other factor, the use of the product will result in equal or fewer VOC emissions than from a consumer product that complies with the VOC content limit prescribed in the rule. The innovative product provisions are covered in more detail in Section 3.10.

The rule also allows regulated entities to apply for a temporary variance if, for reasons beyond their reasonable control, they cannot comply with the VOC content limit requirements by the specified compliance dates. Criteria that must be met before the Administrator will grant a variance are specified in the rule.



2.2.2 Record-keeping and reporting requirements

The regulated entity is responsible for seeing that all required records are kept. For the purposes of record keeping, the regulated entity is the distributor, if the distributor is named on the label. If no distributor is named on the label, the manufacturer or importer is the regulated entity responsible for record keeping. The manufacturer or importer may also become responsible for record keeping by submitting to the Administrator a written certification that the manufacturer or importer will maintain the records for a distributor who is a regulated entity.

All of the records required to be kept are necessary for demonstrating compliance with the VOC standards. For charcoal lighter fluid, records must be kept of the emissions testing results; for all other products, records must be kept of the product formulation in use and the weight percent and chemical composition of each constituent of each batch of product manufactured. A more detailed discussion of record-keeping and reporting requirements is included in Sections 3.8 and 3.9.

The rule requires that each regulated entity of any subject consumer product submit a one-time initial notification report containing the following information:

- 1) Company name;
- 2) A list of product categories and subcategories, as found in Table 1, for which the company is the regulated entity;
- 3) Description of date-coding systems;
- 4) Name, title, phone number, address and signature of certifying company official; and
- 5) The name and location of the designated record-keeping agent, if the records are to be maintained by the manufacturer.
- 6) No standard form has been developed by EPA for initial notification reports. The Chemical Specialties Manufacturers Association, however, has developed a standard form for submission of initial notification reports. The form may be downloaded from the EPA website at “www.epa.gov/ttn/uatw/183e/cp/cppq.html.”

An updated description of any date code that may have been revised subsequent to the initial notification report must be submitted no later than 30 days after its first use. More information on the reporting requirements is found in Section 3.9.

2.2.3 Compliance timetable

Table 2 provides compliance dates for notifications and other requirements. In general, all subject consumer products manufactured after December 10, 1998, must comply with the VOC content limits. FIFRA products have an additional year to comply. More details on compliance dates, including options for flexibility, are presented in Part 3.



Table 2. Compliance timetable

Date or time frame	Notifications and requirements
December 10, 1998	Submit an initial notification report for all consumer products regulated under this rule
December 10, 1998	All consumer products regulated under this rule, other than products subject to the Federal Insecticide, Fungicide And Rodenticide Act (FIFRA, 7 U.S.C.136-136y), must meet the promulgated VOC content limits or VOC emission limits, unless innovative product notification or variance application has been filed, and must meet product labeling (i.e., date coding) requirements
December 10, 1999	Products subject to FIFRA must meet the promulgated VOC content limits and product labeling requirements.
Within 30 days of becoming a new regulated entity	Submit an initial notification report as a new regulated entity
Within 30 days of changing a date coding system reported in the initial notification report	Submit a report of the new date coding system
For at least three years after testing charcoal lighter material or producing other regulated consumer products	Maintain test results and raw data for charcoal lighter materials, or product formulations and accurate production records for other products
Within a reasonable time when requested by the Administrator	Submit a detailed information report

Q: Can I continue to sell products that were manufactured prior to the compliance date?

A: Yes. Products manufactured prior to the compliance date can continue to be sold until all stocks are depleted.

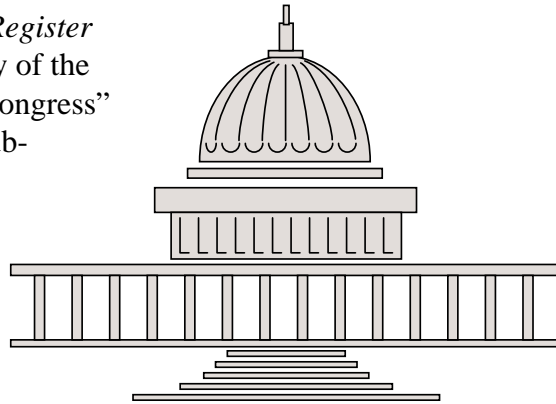


2.3 How does this regulation relate to other federal, state and local requirements?

2.3.1 Relationship to overall consumer and commercial product federal regulations

Section 183(e) of the Act addresses VOC emissions from the use of consumer and commercial products. It requires the EPA to study VOC emissions from the use of consumer and commercial products to assess their potential to contribute to violations of the NAAQS for ozone, to report to Congress the results of the study, and to list for regulation products accounting for at least 80 percent of VOC emissions resulting from the use of such products in ozone nonattainment areas.

Accordingly, in the March 23, 1995, *Federal Register* (60 FR 15264), the EPA announced the availability of the “Consumer and Commercial Products Report to Congress” (EPA-453/R-94-066-A). At the same time, EPA published a list of the products to be regulated and the schedule for regulation. The report concluded that emissions from the use of these products do contribute to ozone levels that violate the NAAQS. The list and schedule for regulation constitute the U.S. EPA’s plan to reduce those emissions.



Both the list and EPA’s schedule for regulation were necessarily based on a limited amount of available information. To ensure consistency and fairness, the National Air Pollution Control Techniques Advisory Committee (NAPCTAC) was convened to assist the EPA in ranking the consumer product categories. The NAPCTAC is a technical advisory body composed of representatives from industry, state and local air pollution agencies and the general public. As required by Section 183(e), the EPA grouped the listed categories of consumer and commercial products into four groups, and stipulated that one member of the list would be regulated every two years.

Besides the 25 consumer products regulated by this rule, shipbuilding and repair coatings, aerospace coatings, architectural coatings, auto body refinishing coatings and wood furniture coatings are also regulated in the first group. This rule for the 25 consumer product categories completes the first-phase requirements of the Act.



2.3.2 Relationship to current state requirements

Seven states (California, Oregon, Rhode Island, Massachusetts, New Jersey, New York and Texas) are currently enforcing VOC standards for various categories of consumer products. All of these state rules address at least some of the products covered by the federal rule. Representatives of the consumer products industry (e.g., the Chemical Specialties Manufacturers Association, The Cosmetic, Toiletry, and Fragrance Association, the National Aerosol Association, The Soap and Detergent Association, The Adhesive and Sealant Council, the Automotive Chemical Manufacturers Council and the International Sanitary Supply Association) 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 the EPA to issue rules for consumer products to encourage consistency across the country. As a result of this rule, several states, such as Maine, have dropped plans to promulgate their own rule or have rescinded rules that were previously promulgated.

Many states with ozone pollution problems are relying on the VOC emission reductions from this rule to assist them in their efforts toward achievement of ozone NAAQS. The Act required that nonattainment areas for ozone achieve a minimum 15-percent reduction in emissions of VOC by November 1996 or face certain economic sanctions. At least 13 states have included anticipated reductions from the federal consumer products rule as part of their state implementation plans to satisfy this requirement.

This rule establishes VOC content limits for 24 consumer products and sets emissions limits for charcoal lighter materials. The federal rule does not prohibit states from promulgating additional VOC standards for consumer products if they are at least as stringent as federal rules. In some cases, depending upon their strategy for achieving attainment with the NAAQS for ozone, certain states may elect to promulgate emission standards for additional product categories, or promulgate more stringent standards for products covered by the federal rule.



3.0 Step-by-step approach to compliance with this rule

3.1 How can I tell if I am subject to this rule?

See Table 1 on page 1-8, or the product fact sheets in Appendix A, to see if your product is regulated under this rule. Appendix B includes definitions and descriptions that may help you determine whether a particular product is subject to the standards. Section 2.2.1 lists those products and product categories that are specifically excluded or exempted from this rule.

Once you know yours is a regulated product, use Table 3 to determine whether you are the regulated entity and which provisions of the rule apply to you.





Table 3. Who is responsible for compliance?

If the product label contains the name of the following regulated entity ...	Then the entity responsible for complying with the content or emission limit is ...	The entity responsible for labeling, date coding, reporting and record-keeping is ...
Manufacturer only	Manufacturer	Manufacturer
Distributor only	Manufacturer	Distributor
Manufacturer & distributor	Manufacturer	Distributor
Importer only	Importer	Importer
Importer & distributor	Importer	Distributor

Manufacturers include **processors** who blend and mix consumer products, **contract fillers** who develop formulas and package these formulas under a distributor’s label, **contract fillers** who manufacture products using formulas provided by a distributor, and **distributors** who specify formulas to be used by a contract filler or processor.



3.2 What requirements am I subject to?

Table 4 summarizes the requirements of the rule. The requirements that you are subject to will depend on which product categories you are the regulated entity for. There are different requirements for charcoal lighter materials; aerosol underarm antiperspirants and underarm deodorants; products subject to FIFRA (7 U.S.C. 136-136y); and the remaining regulated product categories.

However, there are three universal requirements for all regulated products:

- 1) The regulated entity must submit an initial notification report by December 10, 1998.
 - 2) Each regulated product container shall display either the day-month-year of manufacture or a code indicating such.
 - 3) The regulated entity must demonstrate that the products meet the content or emission limits and retain records as documentation.
- ◆ Charcoal lighter materials must emit, on average, less than or equal to 9 grams (0.02 pounds) of VOC per start as determined using the charcoal lighter material ignition test method specified in the regulation. Charcoal lighter materials must be labeled with information specifying the quantity of charcoal lighter material per pound of charcoal that was used in the testing protocol for that product.
 - ◆ Aerosol underarm antiperspirants and aerosol underarm deodorants shall not contain greater than 60 percent and 20 percent by weight, respectively, of HVOC (high-volatility organic compound), i.e., VOC with a vapor pressure of 80 mm Hg or greater at 20 degrees Celsius. The weight percent of HVOC will be determined from the product formulation and the batch production records.
 - ◆ All other products regulated under this regulation shall not contain more VOC content than specified in Appendix A. The weight percent of VOC will be determined from the product formulation and the batch production records.



Table 4. What requirements am I subject to?

Product category	Requirement *	How measured
Charcoal lighter material	Cannot emit, on average, greater than 9 grams (0.02 pounds) of VOC per start. Must be labeled with directions specifying the quantity of charcoal lighter material per pound of charcoal that was used in the testing protocol	Determined by the charcoal lighter material test method
Aerosol underarm antiperspirants or underarm deodorants	The percent by weight of propellant must not be greater than 60% for antiperspirants and 20% for deodorants.	Determined from the formulation and production records
All other consumer products regulated under this rule	The VOC content of compounds with vapor pressures greater than or equal to 0.1 millimeters of mercury shall not exceed the specified limit in the end-use diluted product (see fact sheet for your product and product subcategory if applicable). If the vapor pressures of the VOC components are unknown, the VOC content of compounds consisting of 12 or fewer carbon atoms, or with melting points of 20 degrees Celsius or less, or which sublime must be less than or equal to the limit on the fact sheet for your product.	Determined from your product formulation and production records

* An initial notification report is required for all regulated products. All regulated products must also be labeled with the day, month and year of manufacture or a code indicating such date.



3.3 When do I need to comply?

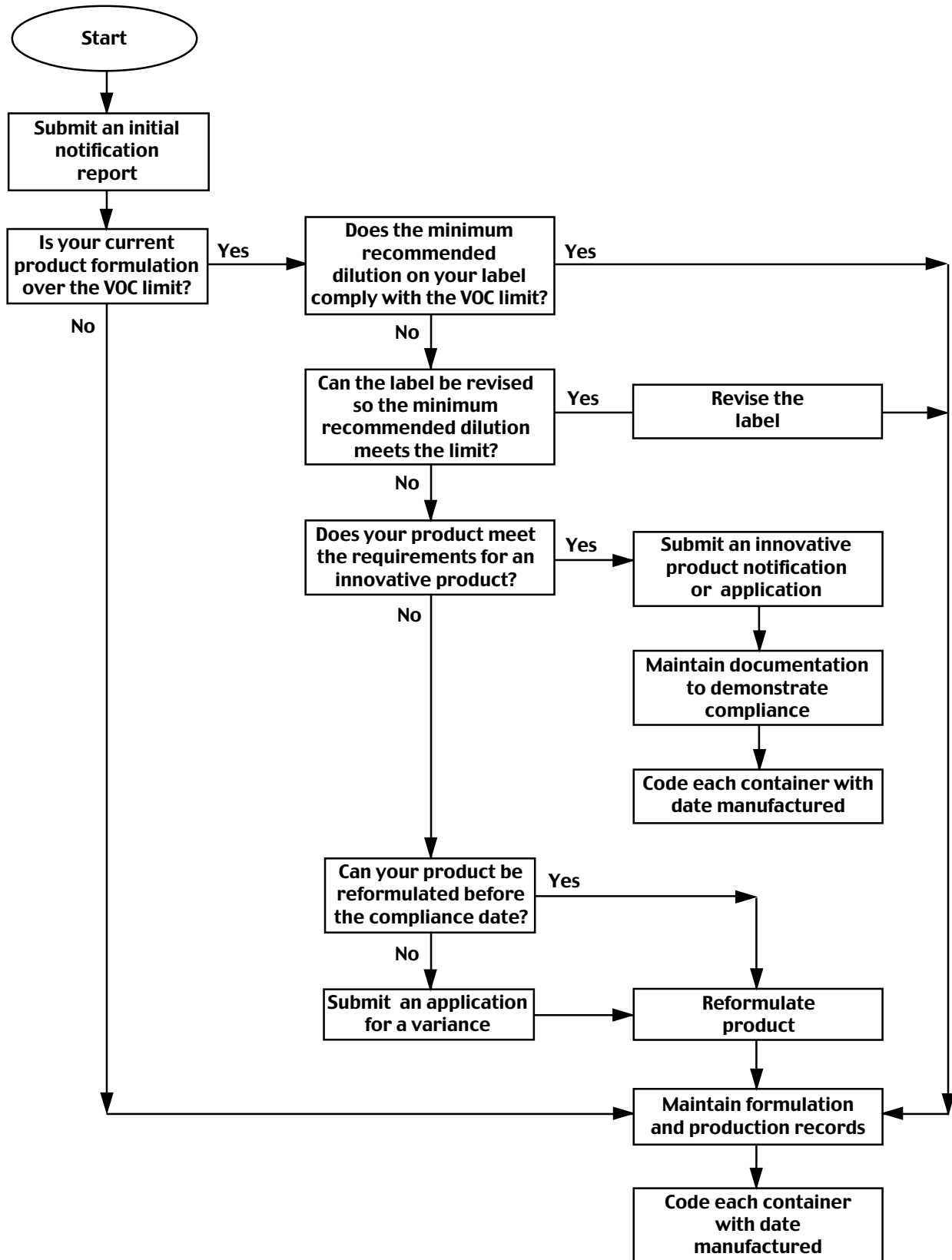
Compliance dates are provided in Table 5. All regulated products, except for products subject to FIFRA (the Federal Insecticide, Fungicide and Rodenticide Act), must comply with this rule by December 10, 1998. Regulated products subject to FIFRA must comply by December 10, 1999. The only exceptions to these compliance dates are regulated products for which a variance has been applied or granted.

Table 5. When do I need to comply?

Product	Compliance date
Products for which a variance application has been approved	Date in variance order granted by the US EPA
Products subject to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA, 7 U.S.C. 136-136y)	December 10, 1999
All other consumer products regulated under this rule	December 10, 1998



Figure 1. What do I need to do to comply?





3.4 What do I need to do to comply?

Figure 1 provides a flow chart to help you comply with this rule. The first action you must take to comply with the rule is to submit an initial notification report by December 10, 1998. See Section 3.9 for details on what must be included in the initial notification report.

Next, you need to determine if your current product formulation is over the established limit for its product category. See Section 3.6 for directions on how to do this.

Note: Products manufactured *prior* to the compliance date—whether or not they exceed the established VOC limits—can continue to be sold until all stocks are depleted.

If your product formulation is currently in compliance, all you need to do to comply with the rule is to: (1) date or date-code each product container with the day, month and year of manufacture and (2) maintain the appropriate records for three years. See Section 3.8 for details.

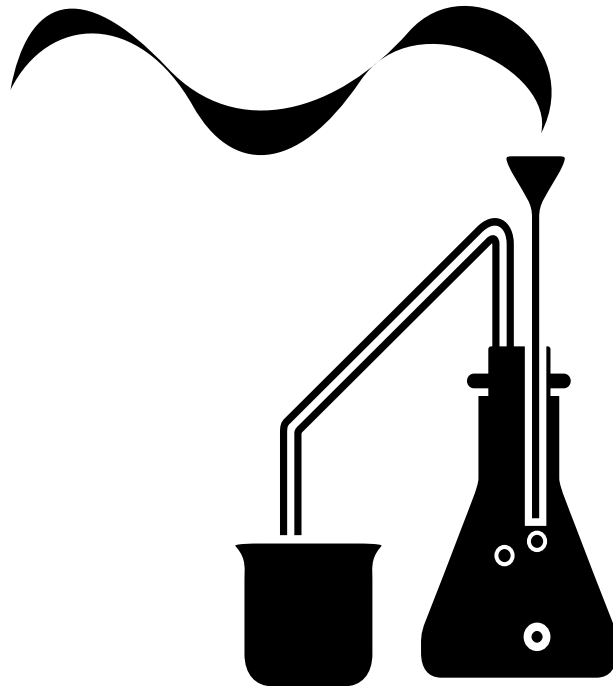
If your product is not currently in compliance, you have the following options: (1) Submit an innovative product notification or application. (2) Submit a variance application. 3) Reformulate. If your product meets the requirements for an innovative product, you can submit an innovative product application. See Section 3.10 for additional information on what requirements an innovative product must meet and what information must be included in the application.

If your product does not meet the innovative product requirements, you must reformulate your product to meet the promulgated standard. If your product cannot be reformulated before the compliance date, you can apply for a variance which will give you additional time to comply. See Section 3.7 for more information on variances and to determine what information must be included in a variance application.



3.5 How do I know if my products are in compliance ?

Table 6 summarizes what, when and how to monitor or test a product to determine if it complies with the regulation.



3.5.1 Selecting a method

The standards rely predominantly on formulation information to demonstrate compliance. The VOC content of each product must be calculated based on the amounts of constituents used to manufacture the product. If the product is labeled as dilutable before use, the minimum recommended dilution on the label must be considered in determining whether the product meets the VOC limit.

A separate test protocol is used for determining compliance for charcoal lighter materials. To successfully ignite charcoal without leaving a residue, charcoal lighter materials consist entirely of VOC. Therefore, the standard for charcoal lighter materials consists of a limit on the amount of VOC that can be emitted during use. The amount of VOC emitted is determined using the charcoal ignition test method provided in the rule (reproduced in this manual as Appendix D).



Table 6. What, when and how do I monitor

Product	What you	When you	How you
Charcoal lighter material	The amount of VOC emitted per start.	Initially and whenever the formulation changes	Use the charcoal lighter material ignition test method in Section 59.208 of the rule
Underarm antiperspirants or underarm deodorants	HVOC percent by weight (propellant).	Whenever you produce a batch of product	Product formulation and production records
All other consumer products regulated under this	Weight percent VOC content of the product or its minimum recommended dilution. Include compounds with vapor pressures greater than or equal to 0.1 millimeters of mercury if the vapor pressures of the VOC components are known. Otherwise, monitor the VOC content of compounds consisting of 12 or fewer carbon atoms, or with melting points of 20 degrees Celsius or less, or which sublime.	Each batch of	Product formulation and production



3.6 How do I determine compliance?

- ◆ Compliance is determined by the computation of the chemical composition of each batch of product produced.
- ◆ If the weight-percent VOC content of the constituents of the batch meets the emission limit for VOC or HVOC (as appropriate), then all products produced from the batch are in compliance with the standard.
- ◆ In determining the VOC content of a batch of product, the VOC content shall exclude any:
 - 1) Ingredient compound that has a vapor pressure less than or equal to 0.1 millimeter of Hg (mm Hg) at 20 degrees Celsius;
 - 2) Ingredient compound with an unknown vapor pressure that contains 13 or more carbon atoms;
 - 3) Ingredient compound with an unknown vapor pressure that is solid at room temperature (20 degrees Celsius) and does not readily sublime (become a vapor at room temperature); and
 - 4) Fragrance ingredient up to a combined level of two weight-percent.
- ◆ If the product is labeled as dilutable before use, the percent VOC content minimum recommended dilution should be calculated to determine compliance with the VOC limit.

3.6.1 Minimum Recommended Dilution

For products labeled as requiring dilution prior to use, the VOC limits apply to the product only after the minimum recommended dilution has taken place. The minimum recommended dilution does not include the incidental use of a concentrated product for limited special applications.

Example 1: A general purpose cleaner has label directions that it should be diluted 1:10 before use in cleaning walls, diluted 1:5 for cleaning floors, and used undiluted for cleaning certain difficult soils. In this case, the minimum recommended dilution would be 1:5, with the full-strength use an incidental use. If the concentrate is 50% VOC, then the minimum recommended use is 10%.

Example 2: A windshield washer fluid has directions for multiple dilutions according to freeze protection needed, 1:10 for temperatures above 20 degrees F, 1:5 for 0 degrees F, or 1:3 for -20 degrees F. The label also advises that the product should be used undiluted only if extreme temperatures will be encountered. The minimum recommended dilution is therefore 1:3, with undiluted an incidental use. Even if the concentrate is 100% VOC, the product will still meet the VOC limit of 35%.



Example 1. Determining the VOC content of a hypothetical single-phase aerosol air freshener

Ingredient	Vapor pressure at 20 degrees Celsius	Mass used per batch (tons)	Regulated VOC content (tons)
Propellant 1	>0.1	2.0	2.0
Propellant 2	>0.1	33.0	33.0
Solvent 1	>0.1	32.5	32.5
Solvent 2 (water)	exempt (does not contain carbon)	30.0	0.0
Corrosion inhibitor	unknown, solid, does not sublime	0.5	0.0
Fragrance	exempt up to 2 weight percent	2.0	0.0
Total		100.0	67.5

- √ VOC content = 100 (regulated VOC content / mass used per batch)
- √ VOC content = 100 (67.5 / 100) = 67.5% by weight
- √ VOC content limit = 70% (from Appendix A)
- √ Because the computed weight percent VOC content (67.5%) is less than the emission limit (70%), the product complies with the rule.

- ◆ In determining the HVOC content of a batch constituent aerosol antiperspirant or deodorant, the HVOC content shall not include any:
 - 1) Ingredient compound that has a vapor pressure less than 80 millimeter of Hg (mm Hg) at 20 degrees Celsius;
 - 2) Ingredient compound with an unknown vapor pressure that contains 10 or more carbon atoms;
 - 3) Ingredient compound with an unknown vapor pressure that is solid at room temperature (20 degrees Celsius) and does not readily sublime (become a vapor at room temperature); and
 - 4) Fragrance ingredient up to a combined level of two weight-percent.



Example 2. Determining the VOC content of a hypothetical total release insect fogger

Ingredient	Vapor pressure at 20 degrees Celsius	Mass used per batch (tons)	Regulated VOC content (tons)
Propellant	>0.1	35.0	35.0
Solvent 1	>0.1	10.0	10.0
Solvent 2 (water)	exempt (does not contain carbon)	45.5	0.0
Active ingredients	unknown, >12 carbon atoms	9.0	0.0
Corrosion inhibitors	<0.1	0.5	0.0
Total		100.0	45.0

- √ VOC content = 100 (regulated VOC content / mass used per batch)
- √ VOC content = 100 (45 / 100) = 45% by weight
- √ VOC content limit = 45% (from Appendix A)
- √ Because the computed weight percent VOC content (45%) is equal to or less than the content limit (45%), the product complies with the rule.

- ◆ To determine the vapor pressure of a product constituent:
 - 1) Use the vapor pressure information provided by the raw material supplier if the supplier uses a method to determine vapor pressure that is generally accepted by the scientific community;
 - 2) For hydrocarbon solvents that are complex mixtures of many different compounds and that are supplied on a specification basis, the vapor pressure of the hydrocarbon blend may be used.
- ◆ Each regulated entity must ensure that each batch is in compliance with the rule and retain records to substantiate compliance.
- ◆ Each product container must be stamped with a date code. No specific coding system is required, but the system used must be reported to the EPA with the Initial Notification Report. Any changes to the date-coding system must also be reported to the EPA within 30 days.



Example 3. Determining the HVOC content of a hypothetical aerosol underarm deodorant

Ingredient	Vapor pressure (mm Hg at 20 degrees Celsius)	Mass per batch (tons)	Regulated HVOC content (tons per batch)
Product ingredient 1	>760.0	3.8	3.8
Product ingredient 2	between 40 and 80	3.3	0.0
Product ingredient 3	<0.1	5.9	0.0
Product ingredient 4	unknown, solid that does not sublime	7.2	0.0
Fragrance ingredient 1	exempt up to 2 percent	0.3	0.0
Total		20.5	3.8

- √ HVOC (high-volatility organic compound) content = $100 \text{ (HVOC content / mass used per batch)}$
- √ HVOC content = $100 (3.8 / 20.5) = 18.5\%$ by weight
- √ HVOC content limit = 20% (from Appendix A)
- √ Because the computed weight percent VOC content (18.5%) is less than the content limit (20%), the product complies with the rule.



3.7 Variances

The consumer products rule offers additional compliance flexibility through its variance provisions. These provisions address situations where a regulated entity cannot bring a product or products into compliance on time without incurring economic hardship. The economic hardship must be due to unforeseen and extraordinary circumstances and a time extension for compliance must be in the public interest. In such cases, the Administrator may grant additional time for complying. Table 7 summarizes the requirements for obtaining a variance.

Variances are temporary time extensions and may be granted either for initial compliance or for a defined period at any point in the future when the following criteria are met:

- 1) Circumstances beyond reasonable control cause complying with the standards to result in economic hardship for the regulated entity;
- 2) The public benefits of granting a variance and avoiding the economic hardship on the regulated entity outweigh the effects of the foregone emission reductions; and
- 3) The regulated entity has developed a feasible and reasonable plan, including a compliance date, for achieving full compliance as quickly as possible.

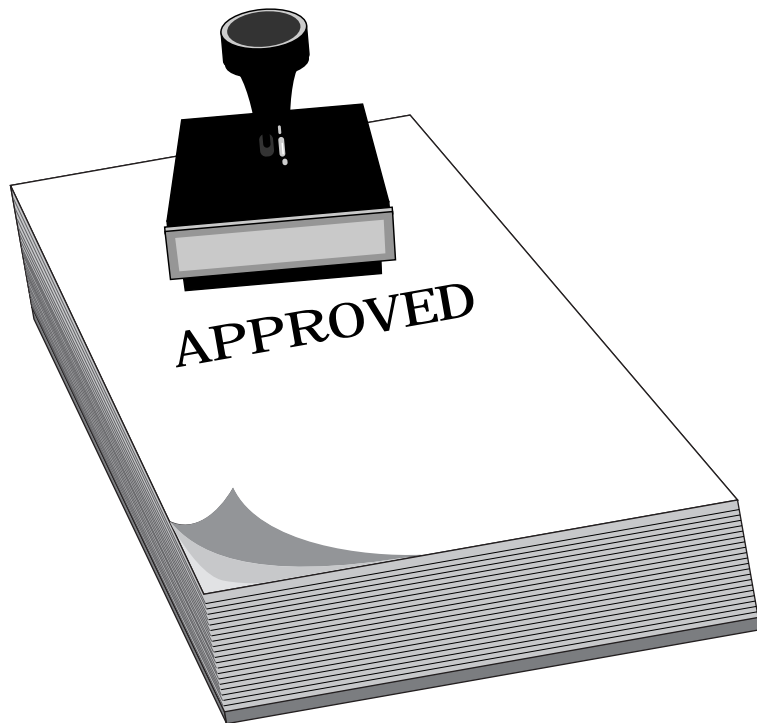




Table 7. Variances

What is a variance?	How do I qualify for one?	What do I include in my application?	To whom do I apply?
<p>Additional time to comply with the rule or permission to exceed content limits for a limited period of time</p>	<ol style="list-style-type: none"> 1) Demonstrate that compliance by or continued compliance after December 10, 1998, will cause you undue economic hardship due to circumstances beyond your control. 2) Demonstrate that obtaining a variance is of greater public benefit than reducing the VOC emissions by the published compliance date 3) Develop a compliance plan and schedule for achieving compliance 	<ol style="list-style-type: none"> 1) The specific grounds upon which you are seeking the variance 2) The proposed date(s) by which your product(s) will be in compliance 3) A compliance plan reasonably detailing the method(s) you will use to achieve compliance 	<p>The EPA regional office that serves the state in which your corporate headquarters is located</p>



3.7.1 Applying for a variance

Variances are granted by the Administrator. A regulated entity needing a variance for one or more products must submit an application that includes the elements listed in Table 7. The application must document the causes for the difficulty in complying and must demonstrate that the product(s) in question can be brought into compliance within a reasonable time. A proposed date for full compliance must be included.

After receiving a variance application, the Administrator will publish a notice regarding the application in the *Federal Register*. If someone requests it, the Administrator will hold a public hearing to determine whether, under what conditions, and to what extent a variance from the requirements of this subpart is necessary and will be granted. The Administrator will hold the public hearing within 75 days of receiving the variance application. Notice of the time and place of the hearing will be sent to the applicant by certified mail not less than 30 days before the hearing.

The application will be made available to the public at least 30 days prior to the hearing. The Administrator will grant the variance if the three criteria listed on page 3-34 are met. A variance order will include a mandatory compliance date as well as increments of progress to ensure timely compliance. At any time following the granting of a variance, anyone may apply to the Administrator to review the variance. If the Administrator concludes that the public interest is not being served, or if any information submitted in the application is called into question, the variance may be modified or revoked following a public hearing.



3.8 What records do I need to keep, and for how long?

Table 8 summarizes the record-keeping requirements.

3.8.1 Record-keeping and reporting requirements

The information required to be collected by this rule is necessary to identify the regulated entities who are subject to the rule and to ensure their compliance with the rule. The record-keeping and reporting requirements are mandatory and are established under authority of Section 114 of the Clean Air Act. They do not apply, however, to products manufactured prior to the compliance date of the rule.

The standards include the minimum reporting and record-keeping requirements that the EPA has determined are necessary to ensure compliance. Record-keeping requirements must be met by the regulated entity for each product formulation. For charcoal lighter materials, records must be kept for three years of the data collected and results for all emissions tests performed according to Section 59.208. For all other subject products, records of each product's formulation must be kept for three years, while daily records must be kept for three years showing the weight percent of each VOC ingredient included in each product batch produced.

The only report required is a one-time initial notification report due on December 10, 1998; this report is required of all regulated entities of subject consumer products. It must include identifying and location information for the respondent, a description of the product date coding system and a list of subject products.



Table 8. Record-keeping requirements

Product category	Records needed	How long?
Charcoal lighter materials	<ul style="list-style-type: none"> ◆ Ignition test results ◆ Raw data from ignition tests: <ul style="list-style-type: none"> √ Temperature data √ Continuous organic emissions monitor data √ QA/QC procedures used for the measuring equipment √ Calibration test data for the measuring equipment √ QA/QC procedures used for the sampling and analysis equipment √ Calibration test data for the sampling and analysis equipment √ Time and quantity of blank and ambient air samples √ Chain of custody for samples √ Labelled directions √ Field notes and data sheets √ Calculation sheets √ Sample of charcoal and charcoal lighter material √ Formulation of charcoal lighter material √ Photographs documenting charcoal surface ash coverage 	For at least three years
All other consumer products regulated under this rule	<ul style="list-style-type: none"> ◆ Product formulations ◆ Accurate records for each batch of production of the weight percent and chemical composition of the individual constituents. 	For at least three years



3.8.2 What records do I keep?

Maintain for three years:

- 1) Records of formulation for each product subject to the rule.
- 2) Record of weight percent and chemical composition of each constituent in each batch of production.
- 3) Ignition test results and supporting documentation for charcoal lighter materials.

Table 3 (page 3-22) specifies who is responsible for keeping records and filing reports under this rule. Records may be maintained at any location of the regulated entity's choosing as long as the regulated entity can produce the required records within a reasonable time after the EPA asks to see them.

Two examples are provided in Figure 2.

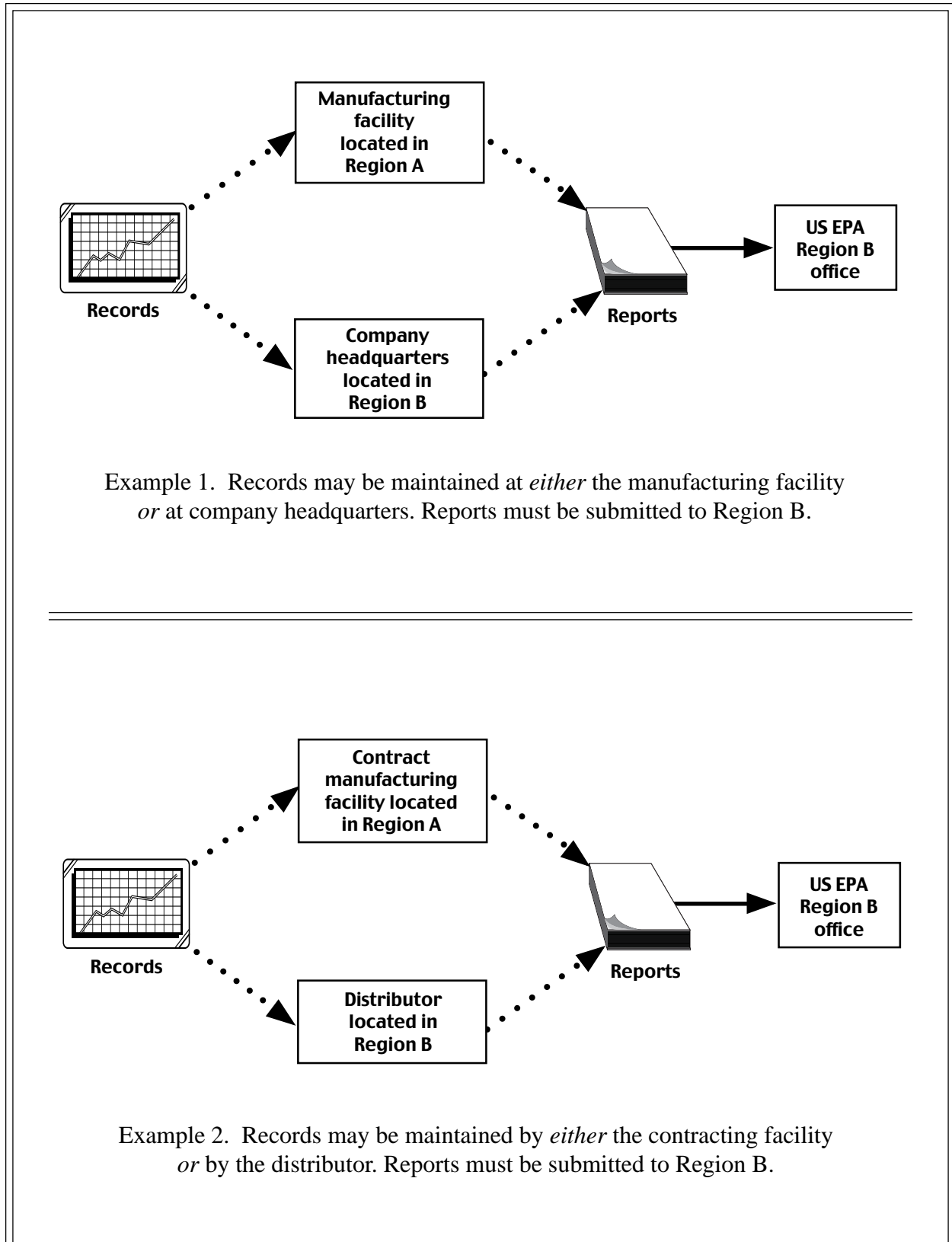
In Example 1, a large company has a corporate headquarters with one or more manufacturing facilities. The company may choose to maintain records at the corporate headquarters or at the facility where the product was manufactured.

In Example 2, a regulated entity contracts with a manufacturing facility to produce a product. The regulated entity may choose to maintain the records at its facility; or the manufacturer may submit to the Administrator a written certification that the manufacturer will maintain the records for the regulated entity.





Figure 2. Flow chart of records and reports





3.9 What, when and where do I report?

Table 9 summarizes the reporting requirements and Figure 2 shows who to send the reports to. All information submitted to the EPA for which a claim of confidentiality is made will be safeguarded according to the EPA policies set forth in title 40, chapter 1, part 2, subpart B: “Confidentiality of Business Information” (see 40 CFR 2; 41 CFR 36092, September 1, 1976; amended by 43 FR 39999, September 8, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

Regulated entities seeking a variance must submit an application which provides information necessary to the EPA in determining whether to grant the variance. The application shall include the specific grounds on which the variance is sought, proposed date by which the requirements of the rule will be met and a plan for achieving compliance. (See the previous section for more details.)

Supporting documentation is required of regulated entities who wish to market a product subject to the “innovative products” provision of the rule. This documentation includes information on VOC emissions from the use of the product as compared to emissions from a product formulated in compliance with the Table of Standards. (See previous section for more details.)

The rule requires that the containers of subject consumer products display the date of manufacture. The date can be in coded form. All regulated entities must submit an explanation of all date codes used. This explanation must be submitted with the initial notification report. Regulated entities must submit explanations of any new date codes within 30 days after their first use.

Any reports requested from the regulated entity by the Administrator must be produced within a “reasonable time.” The regulated entity is not required to maintain the information needed for the reports in its possession. The regulated entity is responsible for ensuring that the information is maintained and made available if requested by the Administrator. In selecting reporting requirements for this rule, the EPA balanced the need to ensure compliance with the directive to ensure that burden is minimized.



Table 9. Reporting requirements

Report required	What you submit	When	To whom
Initial notification report	<ul style="list-style-type: none"> Your company name The name, title, phone number, address and signature of certifying company official A list of product categories and subcategories for which you are the regulated entity A description of your date coding systems, clearly explaining how the date of manufacture is marked on each sales unit of subject consumer products The name and location of the designated record-keeping agent, if the product formulation and production records are to be maintained by the manufacturer 	By the compliance date, or within 30 days of becoming a regulated entity, whichever is later	EPA regional office
Compliance certification report	<ul style="list-style-type: none"> Product formulation For each batch of production, accurate records of the weight percent and chemical composition of the individual product constituents 	Whenever requested by the Administrator	EPA regional office
Charcoal lighter material ignition test report	<ul style="list-style-type: none"> Test report and all supporting data and information 	Whenever requested by the Administrator	EPA regional office
Changes to date coding system	<ul style="list-style-type: none"> A description of your date coding systems, clearly explaining how the date of manufacture is marked on each sales unit of subject consumer product 	Within 30 days if coding system reported in initial report is changed	EPA regional office
Detailed information report	<ul style="list-style-type: none"> Location of facility/ies manufacturing, importing or distributing subject consumer products A list of product categories and subcategories manufactured, imported or distributed at each facility Location where VOC content records are kept for each subject consumer product 	Whenever requested by the Administrator	EPA regional office



3.9.1 What reports do I submit?

Mandatory reporting:

- ◆ One-time initial notification report
- ◆ Initial notification of date-coding system
- ◆ Changes to date-coding system (due within 30 days of change)

Reporting at the request of the Administrator:

- ◆ Product formulations
- ◆ Batch production information
- ◆ Location of facilities
- ◆ List of products
- ◆ Charcoal lighter fluid test report
- ◆ Location of VOC content records

3.9.2 Where do I submit reports?

Submit reports to the EPA regional office for the state or territory in which the corporate headquarters of the regulated entity is located. Addresses are provided in Table 14.

3.9.3 Confidentiality

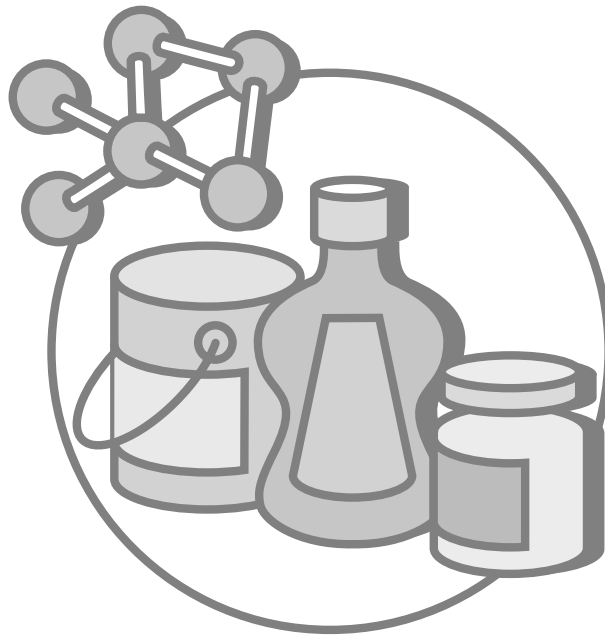
All confidential business information entitled to protection under Section 114 of the Act that must be submitted or maintained by a regulated entity pursuant to this rule shall be treated in accordance with 40 CFR part 2, subpart B.



3.10 Innovative product option

The innovative product provisions allow some flexibility in VOC content levels of regulated products. If a product meets the criteria of these provisions (described below), then the product is declared to be compliant with the VOC regulations. The regulated entity must still submit an initial notification report and maintain sufficient documentation to certify compliance with the terms of the approved application.

An innovative product is a product that contains more VOC than allowed by the standards, but that can be shown to cause VOC emissions equal to or less than those from a complying product in the same product category. The innovative product provisions are included in the rule to allow formulation flexibility without compromising VOC emission reductions and to encourage formulators to pursue new technologies that might reduce VOC emissions.



Regulated entities are allowed to market innovative products immediately upon notifying the Administrator and providing appropriate documentation. In addition, manufacturers can request written concurrence from the Administrator that their product meets the innovative product provisions.



3.10.1 Will my product qualify?

Innovative products notifications, at the regulated entity's option, may be submitted with a request for written concurrence from the Administrator. The regulation sets specific timetables for the EPA Administrator's review of the application. The innovative product can be manufactured and marketed once the notification or application is filed.

The regulation requires that the manufacturer of an innovative product clearly and convincingly demonstrate to the Administrator that although the innovative product does not comply on basis of percent VOC by weight, its overall or net emissions are equal to or less than that of a product that complies on basis of VOC by weight. The regulation includes two ways that the regulated entity may make this demonstration.

Method 1: The first option for demonstrating an innovative product is to compare the actual VOC emissions from the innovative product with the emissions from a complying product in the same category, intended for the same use (*representative product*). The applicant would choose an appropriate representative product for the comparison. The innovative product's emissions must be equal to or less than those of the representative product.

An example of such a demonstration might be as follows: Emissions from the innovative product on a per-application basis could be calculated or determined by actual emissions testing and then compared to per-application emissions from the representative complying product. The applicant would demonstrate that an "application" of the innovative product is equivalent to an "application" of the representative complying product.

User habits and perception of efficacy would be considered in the demonstration. The applicant could submit data from product testing and consumer use testing to demonstrate that, for equivalent efficacy, the innovative product releases equal or less VOC than the representative complying product. The assumption here is that the consumer would use less volume of the innovative product for each application or would use fewer applications for the same effect. Table 10 shows some sample calculations for this type of innovative product demonstration.

Method 2: This second option requires the same types of demonstration and documentation as Method 1. The only difference is that this method allows comparison with a calculation of hypothetical emissions expected from a noncompliant product, had it been reformulated to comply. This method is expected to be useful in cases where data on actual emissions from a complying product are not available to the applicant. The consumer products rule includes an equation that must be used for Method 2. Table 10 shows the equation and sample calculations. The rule also includes provisions whereby applicants may demonstrate their innovative products without using the equation if they demonstrate that the equation yields inaccurate results.



Table 10. Sample calculations of representative product emissions for innovative products

Method 1: Compare the innovative product's emissions to those of a complying representative product

For this example, assume:

- a. The VOC standard is 50%.
- b. The innovative product's VOC content is 60%.
- c. The applicant has chosen to demonstrate emissions on a per application basis.
- d. The applicant has determined that the average application volume is 0.1 oz./application for the complying representative product (CRP) and 0.075 oz./application for the innovative product (IP).

- 1. CRP emissions/application = % VOC content x application volume
 CRP emissions/application = 50% VOC x 0.1 oz./application
 CRP emissions/application = 0.05 oz. VOC/application
- 2. IP emissions/application = 60% VOC x 0.075 oz./application
 IP emissions/application = 0.045 oz. VOC/application
- 3. Alternatively, the applicant could compare test data showing *actual* emissions from the CRP and the IP.

Method 2: Compare the innovative product's emissions to those of a reformulated, noncomplying representative product

For this example, assume:

- a. The VOC standard is 50%.
- b. The innovative product's VOC content is 60%.
- c. The noncomplying representative product's (NRP) VOC content is 75%.
- d. The applicant has chosen to demonstrate emissions on a per application basis.
- e. The applicant has determined that the average application volume for the NRP is 0.1 oz./application and for the IP is 0.075 oz./application.

- 1. NRP emissions/application = % VOC content x application volume
 NRP emissions/application = 75% VOC x 0.1 oz./application
 NRP emissions/application = 0.075 oz. VOC/application
- 2. If the NRP were reformulated to comply with the 50% standard, the reformulated emissions (E_R) would be:

$E_R = \text{NRP emissions} \times (\text{VOC standard} / \text{VOC content of NRP})^*$

$E_R = (0.075 \text{ oz. VOC/application}) \times 50\% \text{ VOC} / 75\% \text{ VOC}$

$E_R = 0.049 \text{ oz. VOC/application}$

* This equation is included in the regulation and must be used with Method 2.

- 3. IP emissions/application = % VOC content x application volume
 IP emissions/application = 60% x 0.075 oz./application
 IP emissions/application = 0.045
- 4. Alternatively, the applicant could compare the reformulated NRP emissions (calculated as above) with test data showing *actual* emissions from the IP.



3.10.2 Other ways to demonstrate an innovative product

Regulated entities who develop innovative products can also use alternative methods to demonstrate that the VOC emissions from their product are equal to or lower than a product that complies with the VOC limit. The examples described above are merely illustrations of one possible approach. The nature of the innovative technology will determine the most appropriate means of demonstrating acceptable emissions. The only requirement in the rule for an innovative product application is that the documentation must clearly demonstrate, with valid data, that the innovative product will actually result in the same (or lower) emissions as a product that meets the VOC standard.

3.10.3 Applying for an innovative product designation

If a regulated entity develops an innovative product, the product may be offered for sale once the regulated entity has submitted the required application materials to the Administrator. The Administrator's express approval is not required before the product can be sold, as long as all of the required information is submitted in the application. Failure to submit complete information, however, can result in the innovative product being found in violation of the standards.

If the regulated entity submits a written request for the Administrator's written concurrence that the innovative product fulfills the requirements for an innovative product, the Administrator must respond to the applicant within 30 days regarding the completeness of the application. Within an additional 90 days the Administrator must determine whether or not the product meets the innovative product criteria and is therefore exempt from the VOC content limits. If the application is not acceptable to the Administrator, additional time and documentation might be allowed for further demonstration.

Many states have developed or are developing VOC rules for consumer products and some may include innovative product provisions (e.g., California). In cases where a product has already been approved by a state agency as an innovative product, the Administrator's approval of an application will be expedited. Table 11 outlines the general procedures for obtaining an innovative product designation. Table 12 shows what is required in an application to the Administrator for designation of an innovative product.

Once a product is designated an innovative product, the regulated entity must notify the Administrator if any change occurs in the product's formulation or intended usage, or if the regulated entity has any information or reason to believe that the emissions from the innovative product have changed. If, in the future, more stringent VOC limits apply to the innovative product, the innovative product exemption will no longer apply unless the demonstrated emissions for the product are lower than the new standards. Table 13 summarizes how innovative products are affected by these changes.



Table 11. How the innovative product provision works

Step	Action	Date
One	The regulated entity submits a written notification or application to the Administrator ^a	By the time the innovative product is available for sale or distribution to customers
Two	The Administrator determines the application is complete ^b	Within 30 days from receipt of the application
Three	The Administrator determines if the product meets the innovative product requirements	No deadline provided
Four	The Administrator establishes conditions that are enforceable	No deadline provided
Five	The Administrator notifies the applicant in writing, specifying the terms and conditions of the innovative product designation ^b	Within 90 days ^c after the application has been deemed complete. Additional time may be taken if the applicant and the Administrator mutually agree.

- a) If the applicant has a state or local exemption, he/she must include the factual basis for the exemption. If there is no existing approved innovative product exemption, the applicant must submit full documentation that the product meets the innovative product requirements.
- b) Only if the applicant submits a written request for written concurrence from the Administrator.
- c) If the applicant has a state or local exemption, the Administrator must respond within 45 days.



Table 12. Required contents of an innovative product notification or application

Question	Answer		
What is it?	An innovative products notification provides notice to the Administrator that a product qualifies as an innovative product. An innovative products application is a notification that also requests written concurrence from the Administrator that the product meets the innovative products provisions.”		
How do I qualify?	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Method 1:</i> Use of your product must result in VOC emissions that are equal to or less than those of a representative consumer product that complies with the rule.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Method 2:</i> Use of your product must result in VOC emissions that are equal or less than the calculated VOC emissions from a noncomplying representative product if the product had been reformulated to comply with the rule.</p> </td> </tr> </table>	<p><i>Method 1:</i> Use of your product must result in VOC emissions that are equal to or less than those of a representative consumer product that complies with the rule.</p>	<p><i>Method 2:</i> Use of your product must result in VOC emissions that are equal or less than the calculated VOC emissions from a noncomplying representative product if the product had been reformulated to comply with the rule.</p>
<p><i>Method 1:</i> Use of your product must result in VOC emissions that are equal to or less than those of a representative consumer product that complies with the rule.</p>	<p><i>Method 2:</i> Use of your product must result in VOC emissions that are equal or less than the calculated VOC emissions from a noncomplying representative product if the product had been reformulated to comply with the rule.</p>		
What do I include in my notification?	<ol style="list-style-type: none"> 1) Supporting documentation that demonstrates the emissions from your product. Include the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage; and 2) Any information necessary to enable the Administrator to establish enforceable conditions for your product. Include the VOC content of your product expressed as a weight percentage and test methods for determining the VOC content. 		
To whom do I apply?	To the EPA regional office which serves the state or territory in which the corporate headquarters of the regulated entity is located. (See Table 9.)		
How do I make my notification an application for written concurrence?	A regulated entity can also include with the notification a written request for concurrence by the Administrator that the product meets the innovative product provisions.		



Table 13. How changes affect the innovative product designation

If these changes occur ...	Then the regulated entity must ...	In this time frame:
Formulation changes	... submit a written notice to the EPA Administrator	within 30 days after the change
Changes in product usage directions	... submit a written notice to the EPA Administrator	within 30 days after the change
Changes in the emissions estimates	... submit a written notice to the EPA Administrator	within 30 days after learning the information
Promulgation of lower VOC content limit standards	... comply with the new limits unless the innovative product meets the lower limits	when the new limits take effect



3.11 Where do I go for help?

3.11.1 US EPA regional offices

The U.S. EPA maintains ten regional offices whose staff are available to help you understand and comply with this and other federal air regulations. Contact the division directly by writing or calling the address given in Table 14. (This list is repeated in Appendix C.) Or, call the U.S. EPA's Clean Air Technology Center hotline at (919) 541-0800.

3.11.2 US EPA's Technology Transfer Network (TTN)

The EPA operates the Technology Transfer Network, or "TTN," which contains copies of preambles and regulations, background information documents, policy memoranda and other guidance materials. You may access portions of the EPA's TTN at "<http://www.epa.gov/ttn>."



3.11.3 ChemAlliance

ChemAlliance ("<http://www.chemalliance.org>") is an online, "virtual" compliance resource center for the chemistry industry. Established in 1998 by a cooperative agreement between the U.S. EPA and the National Center for Clean Industrial and Treatment Technologies, its primary objective is to help small chemistry companies comply with federal, state and local environmental regulations. It is described more fully in Appendix C.

3.11.4 Trade associations

Trade associations may be able to provide you with technical, legal or practical guidance. Appendix C lists contact information for the industry groups that sponsored this broadcast.



Table 14. EPA regional offices

Region	Phone #	States covered	Address
Phone #s: a = general information b = information on consumer products rule			
1	a (888)372-7341 a (617) 918-1111 b (617) 918-1669	CT, ME, MA, NH, RI & VT	Office of Ecosystem Protection 1 Congress Street Boston, MA 02203-2211
2	a (212) 637-4249 b (212) 637-3381	NJ, NY, Puerto Rico & Virgin Islands	Environmental Planning & Protection 290 Broadway New York, NY 10007-1866
3	a-b (215) 814-5000	DE, MD, PA, VA, WV & DC	Air, Radiation and Toxics Division 1650 Arch Street Philadelphia, PA 19103-2029
4	a (404) 562-9077 b (404) 562-9218	AL, FL, GA, KY, MS, NC, SC & TN	Air, Pesticides and Toxics Division Management Division 61 Forsyth Street Atlanta, GA 30365
5	a (312) 353-2000 b (312) 353-5713	IL, IN, MI, WI, MN & OH	Air and Radiation Division 77 West Jackson Boulevard Chicago, IL 60604-3507
6	a (800) 887-6063 a (214) 665-7225 b (214) 665-7200	AR, LA, NM, OK & TX	Multimedia Planning & Permitting 1445 Ross Avenue Dallas, TX 75202-2733
7	a (913) 551-7020 b (913) 551-7566	IA, KS, MO & NE	Air, RCRA and Toxics Division 726 Minnesota Avenue Kansas City, KS 66101
8	a (303) 312-6928 b (303) 312-6479	CO, MT, ND, SD, UT & WY	Office of Pollution Prevention, State and Tribal Assistance 999 18th Street, Suite 500 Denver, CO 80202-2466
9	a-b (415) 744-1143	AZ, CA, HI, NV, American Sa- moa & Guam	Air Division 75 Hawthorne Street San Francisco, CA 94105
10	a (800) 424-4EPA b 206) 553-6641	AK, ID, WA & OR	Office of Air Quality 1200 Sixth Avenue Seattle, WA 98101



3.11.5 Small business assistance programs

Small businesses in particular are encouraged to contact their state's Small Business Assistance Program or Small Business Ombudsman. For a listing, go to www.epa.gov/ttn/sbap and look under Contacts and Resources. Or, call the U.S. EPA's Clean Air Technology Center hotline at (919) 541-0800.

3.11.6 Other EPA guidance materials

In developing this regulation, the U.S. EPA has prepared other materials that provide further information on the technical aspects of the regulation. Copies of these reports are available online via the TTN; the National Center for Environmental Publications and Information (NCEPI) at "<http://www.epa.gov/ncepihom/orderpub.htm>"; by calling the NCEPI at (800) 490-9198; through EPA's Library Services Office (MD-35), US EPA, Research Triangle Park, NC 27711, (919) 541-2777; or, for a fee, from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161, (703) 487-4600.

Study of Volatile Organic Compound Emissions from Consumer and Commercial Products—Report to Congress. EPA-453/R-94-066-a. March 1995.

Comprehensive Emissions Inventory. EPA-453/R-94-066-b. March 1995.

Fate of Consumer Product VOC in Landfills. EPA-453/R-94-066-c. March 1995.

Fate of Consumer Product VOC in Wastewater. EPA-453/R-94-066-d. March 1995.

Economic Incentives to Reduce VOC Emissions from Consumer and Commercial Products. EPA-453/R-94-066-e. March 1995.

Aerosol Products and Packaging Systems. EPA-453/R-94-066-e. March 1995.

Final Report: Economic Impact and Regulatory Flexibility Analysis of the Regulation of VOCs from Consumer Products. Prepared by Research Triangle Institute (RTI). EPA-453/R-96-014. October 1996.

Technical Support for Proposed Rule National VOC Emission Standards for Consumer Products. Prepared by US EPA Coatings and Consumer Products Group. February 1996.

National Volatile Organic Compound Emission Standards for Consumer Products—Background for Promulgated Standards. Prepared by US EPA Coatings and Consumer Products Group. EPA-453/R98-0086.



APPENDIX A: PRODUCT CATEGORY FACT SHEETS

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AIR FRESHENERS

Consumer products designed for masking odors, or freshening, cleaning, scenting or deodorizing the air

Regulated products

Single-phase aerosol air fresheners

Aerosol air fresheners with liquid contents in a single homogeneous phase that do not require that the product container be shaken before use

Double-phase aerosol air fresheners

Aerosol air fresheners with liquid contents in two or more distinct phases that require the product container to be shaken before use to mix the phases, producing an emulsion

Liquid and pump spray air fresheners

Air fresheners where the product ingredients are in liquid form or delivered using a pump spray packaging system

Solid and gel air fresheners

Air fresheners where the product ingredients are in the form of a solid or gel

Content limit

70% VOC by weight

30% VOC by weight

18% VOC by weight

3% VOC by weight

Exempt products:

- ◆ Air fresheners used on the human body
- ◆ Air fresheners whose VOC constituents consist of 100-percent fragrance
- ◆ Air fresheners that consist of 98% p-Dichlorobenzene or 98% naphthalene
- ◆ Institutional or industrial disinfectant air fresheners sold only through institutional and industrial channels of distribution

Compliance date: December 10, 1998



AUTOMOTIVE WINDSHIELD WASHER FLUID

Any liquid designed for use in a motor vehicle windshield washer system either as an antifreeze or for the purpose of cleaning, washing or wetting the windshield

Regulated products

Automotive windshield washer fluid

Content limit

35% VOC by weight

Exempt products:

- ◆ Fluids placed by the automobile manufacturer in a new vehicle

Compliance date: December 10, 1998

BATHROOM AND TILE CLEANERS

Products designed to clean tile or surfaces in bathrooms

Regulated products

Aerosol bathroom and tile cleaners

Content limit

7% VOC by weight

Cleaning products designed to clean tile or surfaces in bathrooms

Bathroom and tile cleaners—all other forms

5% VOC by weight

Non-aerosol cleaning products designed to clean tile or surfaces in bathrooms

Exempt products:

- ◆ Products specifically designed to clean toilet bowls or toilet tanks

Compliance date: December 10, 1998, OR, if FIFRA-registered, December 10, 1999



CARBURETOR AND CHOKE CLEANERS

Products designed to remove dirt and other contaminants from a carburetor or choke

Regulated products:

Carburetor and choke cleaners

Content limit

75% VOC by weight

Exempt products:

- ◆ Products designed to be placed directly into the fuel lines or fuel storage tank rather than directly into or on the carburetor
- ◆ Solvent use regulated under 40 CFR part 63, subpart C (halogenated solvent NESHAP)

Compliance date: December 10, 1998

CHARCOAL LIGHTER MATERIALS

Combustible materials designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition

Regulated products

Charcoal lighter materials

Emission limit

≤ 9 grams (0.02 lbs) VOC per start

Exempt products:

- ◆ Electrical starters and probes
- ◆ Metallic cylinders using paper tinder
- ◆ Natural gas
- ◆ Propane

Compliance date: December 10, 1998



COOKING SPRAYS

Food products applied to cooking or baking surfaces or directly on food to reduce sticking during cooking or baking

Regulated products:

Aerosol cooking sprays

Content limit

18% VOC by weight

Exempt products:

- ◆ Non-aerosol cooking sprays
- ◆ Aerosol food products that are not used to reduce sticking during cooking or baking

Compliance date: December 10, 1998

DUSTING AIDS

Products designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone-based coating

Regulated products:

Aerosol dusting aids

Content limit

35% VOC by weight

Aerosol cleaning products designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone-based coating

Dusting aids—all other forms

7% VOC by weight

Non-aerosol cleaning products designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone-based coating

Exempt products:

- ◆ Products consisting entirely of compressed gases for use in electronic or other specialty areas

Compliance date: December 10, 1998



ENGINE DEGREASERS

Cleaning products designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts

Regulated products:

Engine degreasers

Content limit

75% VOC by weight

Exempt products:

- ◆ Solvent used in parts-washing equipment
- ◆ Solvent use regulated under 40 CFR part 63, subpart C (halogenated solvent NESHAP)

Compliance date: December 10, 1998

FABRIC PROTECTANTS

Products applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of water into the fabric's fibers

Regulated products:

Fabric protectants

Content limit

75% VOC by weight

Exempt products:

- ◆ Silicone-based products whose function is to provide water repellency
- ◆ Products designed for use solely on fabrics labeled "dry clean only"

Compliance date: December 10, 1998



FLOOR POLISHERS OR WAXES

Waxes, polishes or other products designed to polish, protect or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished

Regulated products

Content limit

Polishes or waxes for flexible flooring material

7% VOC by weight

Floor waxes, polishes or other products designed for use on asphalt, cork, linoleum, co-wax, rubber, seamless vinyl or vinyl composite flooring

Polishes or waxes for nonresilient flooring

10% VOC by weight

Floor waxes, polishes or other products designed for use on terrazzo, marble, slate, granite, brick, stone, ceramic tile, concrete or other flooring materials which contain minerals and are not flexible

Wood floor waxes

90% VOC by weight

Floor waxes and wax-based products designed for use on wood floors

Some floor polishes or waxes are regulated as general purpose cleaners:

- ◆ Floor products that function solely as a cleaning product

Exempt products:

- ◆ Products designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad
- ◆ Floor finish strippers
- ◆ Products designed for unfinished wood floors
- ◆ Coatings subject to architectural coatings regulations

Compliance date: December 10, 1998



FURNITURE MAINTENANCE PRODUCTS

Waxes, polishes, conditioners or other products designed to polish, protect or enhance finished wood surfaces other than floors

Regulated products

Content limit

Aerosol furniture maintenance products

25% VOC by weight

Aerosol waxes, polishes, conditioners or other products designed to polish, protect or enhance finished wood surfaces other than floors

Some furniture maintenance products are regulated as general purpose cleaners:

- ◆ Products that function solely as a cleaning product

Some furniture maintenance products are regulated as dusting aids:

- ◆ Products that assist in removing dust and other soils without leaving a wax or silicone-based coating

Exempt products:

- ◆ Products that leave a permanent finish such as stains, sanding sealers and lacquers
- ◆ Non-aerosol furniture maintenance products designed to polish, protect or enhance finished wood surfaces

Compliance date: December 10, 1998



GENERAL PURPOSE CLEANERS

Products designed for general all-purpose cleaning

Regulated products

Content limit

General purpose cleaners

10% VOC by weight

Products designed for general all-purpose cleaning such as products for general floor cleaning, kitchen or countertop cleaning, and cleaning a variety of hard surfaces

Some cleaning products are regulated under other product categories in lieu of the “general purpose cleaners” category:

- ◆ Bathroom and tile cleaners
- ◆ Dusting aids
- ◆ Glass cleaners
- ◆ Oven cleaners

Exempt products:

- ◆ Toilet bowl and toilet tank cleaners
- ◆ Products consisting entirely of compressed gases for use in electronic or other specialty areas
- ◆ Products designed solely to clean optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines

Compliance date: December 10, 1998, OR, if FIFRA-registered, December 10, 1999



GLASS CLEANERS

Cleaning products designed primarily for cleaning surfaces made of glass

Regulated products:

Aerosol glass cleaners

Aerosol cleaning products designed primarily for cleaning surfaces made of glass

Glass cleaners—all other forms

Non-aerosol cleaning products designed primarily for cleaning surfaces made of glass

Content limit

12% VOC by weight

8% VOC by weight

Exempt products:

- ◆ Products designed solely to clean optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines

Compliance date: December 10, 1998

HAIR MOUSSES

Hairstyling foams designed to facilitate styling of a coiffure and provide limited holding power

Regulated products:

Hair mousses

Content limit

16% VOC by weight

Exempt products:

- ◆ None

Compliance date: December 10, 1998



HAIR SPRAYS

Consumer products designed primarily to dispense droplets of a resin on and into a hair coiffure to impart sufficient rigidity to the coiffure to establish or retain the style for a period of time

Regulated products:

Hair sprays

Content limit

80% VOC by weight

Exempt products:

- ◆ None

Compliance date: December 10, 1998

HAIR STYLING GELS

High-viscosity, often gelatinous products that contain a resin and are designed for application to hair to aid in styling and sculpting of the hair coiffure

Regulated products:

Hair styling gels

Content limit

6% VOC by weight

Exempt products:

- ◆ None

Compliance date: December 10, 1998



HOUSEHOLD ADHESIVES

Products used to bond one surface to another by attachment and primarily designed for use inside or outside living quarters or residences, including the immediate surroundings, that are occupied or intended for occupation by individuals

Regulated products

Aerosol household adhesives

Content limit

75% VOC by weight

Contact household adhesives

80% VOC by weight

An adhesive that 1) when applied to two substrates, forms an instantaneous, nonrepositionable bond that, when dried to touch, exhibits a minimum 30-minute bonding range; and that 2) bonds only to itself without the need for reactivation by solvents or heat

Construction and panel household adhesives

40% VOC by weight

One-component adhesives with gap-filling capabilities that distribute stress uniformly throughout the bonded area, reducing or eliminating the need for mechanical fasteners

General purpose household adhesives

10% VOC by weight

Non-aerosol adhesives designed to be used on a variety of substrates

Structural waterproof household adhesives

15% VOC by weight

Adhesives whose bondlines are resistant to conditions of continuous immersion in fresh or salt water and that conform to Federal Specification MMM-A-181 (type 1, grade 1) and MIL-A-4605 (type A, grade A and grade C)

Exempt products:

- ◆ Adhesive products used on humans or animals
- ◆ Adhesive tapes, contact papers, wallpapers and shelf liners
- ◆ Products with an adhesive incorporated onto or into an inert substrate
- ◆ Seam sealers for flexible sheet flooring
- ◆ Adhesives sold in containers of 0.03 liters (1 ounce) or less

Compliance date: December 10, 1998



INSECTICIDES

Pesticide products designed for use against insects or other arthropods

Regulated products

Crawling bug insecticides

Insecticides designed for use against crawling arthropods such as ants, cockroaches, silverfish, spiders, etc.

Flea and tick insecticides

Insecticides designed for use against fleas, ticks, their larvae or their eggs

Flying bug insecticides

Insecticides designed for use against flying insects such as flies, mosquitoes, etc.

Foggers

Insecticides designed to release all or most of their contents as a fog or mist into indoor areas during a single application, targeting a variety of pests such as fleas and ticks, crawling insects, lawn and garden pests and flying insects.

Lawn and garden insecticides

Insecticides designed primarily to protect plants from insects or other arthropods in lawn and garden areas inside or outside of living quarters or residences, including the immediate surroundings, that are occupied or intended for occupation by individuals

Content limit

40% VOC by weight

25% VOC by weight

35% VOC by weight

45% VOC by weight

20% VOC by weight

Exempt products:

- ◆ Insecticides used exclusively on humans or animals or their bedding
- ◆ Agricultural insecticides
- ◆ Restricted-use insecticides
- ◆ Bait station insecticides (FIFRA, 7 U.S.C. 136-136y)
- ◆ Wasp and hornet insecticides
- ◆ Non-aerosol mothproofing products, including paradichlorobenzene and naphthalene
- ◆ Insecticides designed for use against house dust mites

Compliance date: December 10, 1999



LAUNDRY PREWASH PRODUCTS

Products designed for application to fabrics before laundering to supplement and contribute to the effectiveness of laundry detergents or to provide specialized performance

Regulated products:

Content limit

Aerosol or solid laundry prewash products

22% VOC by weight

Aerosol or solid products designed for application to fabrics before laundering to supplement and contribute to the effectiveness of laundry detergents or to provide specialized performance

Laundry prewash products—all other forms

5% VOC by weight

Non-aerosol and nonsolid products designed for application to fabrics before laundering to supplement and contribute to the effectiveness of laundry detergents or to provide specialized performance

Exempt products:

- ◆ None

Compliance date: December 10, 1998

LAUNDRY STARCH PRODUCTS

Products, such as fabric finishes, sizings and starches, designed for application to fabrics, either during or after laundering, to impart and prolong a crisp look or to facilitate ironing of the fabric.

Regulated products:

Content limit

Laundry starch products

5% VOC by weight

Exempt products:

- ◆ None

Compliance date: December 10, 1998



NAIL POLISH REMOVERS

Products designed to remove nail polish or coatings from fingernails or toenails

Regulated products:

Nail polish removers

Content limit

85% VOC by weight

Exempt products:

- ◆ None

Compliance date: December 10, 1998

OVEN CLEANERS

Any cleaning product designed to clean and remove dried food deposits from oven interiors

Regulated products:

Aerosol or pump spray oven cleaners

Content limit

8% VOC by weight

Aerosol or pump spray cleaning products designed to clean and remove dried food deposits from oven interiors

Liquid oven cleaners

5% VOC by weight

Liquid cleaning products designed to clean and remove dried food deposits from oven interiors

Exempt products:

- ◆ Solid, gel and other oven cleaners that are not liquid, aerosol or pump sprays

Compliance date: December 10, 1998



SHAVING CREAMS

Products that dispense a lather intended to be used with a blade, or cartridge razor, or other wet-shaving system in the removal of facial or other body hair

Regulated products:

Aerosol foam shaving creams

Aerosol products that dispense a foam lather intended to be used with a blade, or cartridge razor, or other wet-shaving system in the removal of facial or other body hair

Content limit

5% VOC by weight

Exempt products:

- ◆ Aerosol shaving creams that dispense a gel lather
- ◆ Non-aerosol shaving creams

Compliance date: December 10, 1998

UNDERARM ANTIPERSPIRANTS

Products intended to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population

Regulated products:

Aerosol underarm antiperspirants

Aerosol products intended to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population

Content limit

60% HVOC by weight with vapor pressure greater than 80 millimeters of mercury when measured at 20 degrees Celsius

Exempt products:

- ◆ Non-aerosol underarm antiperspirants
- ◆ Antiperspirants intended for use on areas other than the human armpit

Compliance date: December 10, 1998



UNDERARM DEODORANTS

Products intended to be used to minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration

Regulated products:

Aerosol underarm deodorants

Aerosol products intended to be used to minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration

Exempt products:

- ◆ Non-aerosol underarm deodorants
- ◆ Deodorants intended for use on areas other than the human axilla

Content limit

20% HVOC by weight with vapor pressure greater than 80 millimeters of mercury when measured at 20 degrees Celsius

Compliance date: December 10, 1998



APPENDIX B: GLOSSARY OF ENVIRONMENTAL TERMS

Administrator means the Administrator of the United States Environmental Protection Agency (EPA) or an authorized representative (e.g., a state that has been delegated the authority to implement the provisions of this subpart).

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

Aerosol product means a pressurized spray system that dispenses product ingredients by means of a propellant (i.e., a liquefied or compressed gas that is used in whole or in part, such as a co-solvent, 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.

Agricultural use means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage, or processing of any animal or plant crop. "Agricultural use" does not include the sale or use of pesticides in properly labeled packages or containers that are intended for: (a) "Home use," (b) use in "structural pest control," or (c) "industrial use" or "institutional use."

All other forms means all consumer product forms for which no form-specific volatile organic compound standard is specified. Unless specified otherwise by the applicable volatile organic compound standard, "all other forms" include, but are not limited to, solids, liquids, wicks, powders, crystals and cloth or paper wipes (towelettes).

Air freshener means any consumer product including, but not limited to, sprays, wicks, powders and crystals designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. This does not include products that are used on the human body, products that function primarily as cleaning products, disinfectant products claiming to deodorize by killing germs on surfaces, or institutional/industrial disinfectants when offered for sale solely through institutional and industrial channels of distribution. It does include spray disinfectants and other products that are expressly represented for use as air fresheners, except institutional and industrial disinfectants when offered for sale through institutional and industrial channels of distribution. To determine whether a product is an air freshener, all verbal and visual representations regarding product use on the label or packaging and in the product's literature and advertising may be considered. The presence of and representations about a product's fragrance and ability to deodorize (resulting from surface application) shall not constitute a claim of air freshening.

Automotive windshield washer fluid means any liquid designed for use in a motor vehicle windshield washer system either as an antifreeze or for the purpose of cleaning, washing, or



wetting the windshield. “Automotive windshield washer fluid” does not include fluids placed by the manufacturer in a new vehicle.

Bathroom and tile cleaner means a product designed to clean tile or surfaces in bathrooms.

“Bathroom and tile cleaner” does not include products specifically designed to clean toilet bowls or toilet tanks.

Carburetor and choke cleaner means a product designed to remove dirt and other contaminants from a carburetor. “Carburetor-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 T (halogenated solvent NESHAP).

Charcoal lighter material means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. “Charcoal lighter material” does not include any of the following: (a) electrical starters and probes; (b) metallic cylinders using paper tinder; (c) natural gas; and (d) propane.

Construction and panel adhesive means any one-component household adhesive having gap-filling capabilities that distributes stress uniformly throughout the bonded area resulting in a reduction or elimination of mechanical fasteners.

Consumer means any person who purchases or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not “consumers” of that product.

Consumer product means any household or institutional product (including paints, coatings and solvents), or substance, or article (including any container or packaging) held by any person, the use, consumption, storage, disposal, destruction or decomposition of which may result in the release of volatile organic compounds. For the purposes of this subpart, consumer product means any product listed in tables 1 or 2 of this subpart.

Contact adhesive means any household adhesive that:

- 1) when applied to two substrates forms an instantaneous, nonrepositionable bond;
- 2) when dried to touch, exhibits a minimum 30-minute bonding range; and
- 3) bonds only to itself without the need for reactivation by solvents or heat.

Container or packaging means the part or parts of the consumer product that serve only to contain, enclose, incorporate, deliver, dispense, wrap, or store the chemically formulated substance or mixture of substances that is solely responsible for accomplishing the purposes for which the product was designed or intended. “Container or packaging” includes any article onto or into which the principal display panel is incorporated, etched, printed or attached.



Crawling bug insecticide means any insecticide product that is designed for use against household crawling arthropods including, but not limited to, ants, cockroaches, mites, silverfish, or spiders. "Crawling bug insecticide" does not include products designed to be used exclusively on humans or animals.

Distributor means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce. Manufacturers, retailers and consumers are not distributors.

Double-phase aerosol air freshener means an aerosol air freshener with liquid contents in two or more distinct phases that requires the product container to be shaken before use to mix the phases, producing an emulsion.

Dusting aid means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone-based coating. "Dusting aid" does not include products that consist entirely of compressed gases for use in electronic or other specialty areas.

Engine degreaser means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts. "Engine degreaser" does not include any solvent used in parts-washing equipment or any solvent use regulated under 40 CFR part 63, subpart T (Halogenated Solvent NESHAP).

Fabric protectant means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of water into the fabric's fibers. "Fabric protectant" does not include silicone-based products whose function is to provide water repellency, or products designed for use solely on fabrics that are labeled "dry clean only."

Flea and tick insecticide means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. "Flea and tick insecticide" does not include products that are designed to be used exclusively on humans or animals or their bedding.

Flexible flooring material means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.

Floor polish or wax means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. "Floor polish or wax" does not include "spray buff products," products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors and coatings subject to 40 CFR part 59, subpart D (National Volatile Organic Compound Emission Standards for Architectural Coatings).



Clean Air Compliance for Consumer Products

Flooring seam sealer means any low-viscosity specialty adhesive used in small quantities for the sole purpose of bonding adjoining rolls of installed flexible sheet flooring or to fill any minute gaps between the adjoining rolls.

Flying bug insecticide means any insecticide product that is designed for use against flying insects including, but not limited to, flies, mosquitoes, moths and gnats. “Flying bug insecticide” does not include “wasp and hornet insecticide” or products that are designed to be used exclusively on humans or animals or their bedding.

Fragrance means a substance or mixture of aroma chemicals, natural essential oils and other functional components that is added to a consumer product to impart an odor or scent, or to counteract a malodor.

Furniture maintenance product means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting, or enhancing finished wood surfaces other than floors. “Furniture maintenance product” does not include dusting aids, products designed solely for the purpose of cleaning and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

Gel means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

General purpose adhesive means any non-aerosol household adhesive designed for use on a variety of substrates. General purpose adhesives do not include contact adhesives or construction and panel adhesives.

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 countertop cleaning and cleaners designed to be used on a variety of hard surfaces.

Glass cleaner means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

Hair mousse means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

Hair spray means a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure to impart sufficient rigidity to the coiffure to establish or retain the style for a period of time.



Hair styling gel means a high-viscosity, often gelatinous product that contains a resin and is designed to be applied to hair to aid in styling and sculpting of the hair coiffure.

High-volatility organic compound or HVOC means any organic compound that exerts a vapor pressure greater than 80 millimeters of mercury when measured at 20° C.

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.

Household product means any consumer product that is primarily designed to be used inside or outside of living quarters or residences, including the immediate surroundings, that are occupied or intended for occupation by individuals.

Household use means use of a product in a home or its immediate environment.

Importer means any person who brings a consumer product that was manufactured, filled or packaged at a location outside the United States into the United States for sale or distribution in the United States.

Industrial use means use for, or in, a manufacturing, mining, or chemical process or use in the operation of factories, processing plants and similar sites.

Insecticide means a pesticide product that is designed for use against insects or other arthropods, excluding products that are: (a) for agricultural use or (b) restricted use pesticides.

Insecticide fogger means any insecticide product designed to release all or most of its content as a fog or mist into indoor areas during a single application. Foggers may target a variety of pests, including, but not limited to, fleas and ticks; crawling insects; lawn and garden pests; and flying insects. Foggers are not subject to the specific VOC limitations for other categories of insecticides listed in Table 1 of 40 CFR part 59, subpart C.

Institutional product means a consumer product that is designed for use in the maintenance or operation of an establishment that manufactures, transports, or sells goods or commodities, or provides services for profit; or is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. “Establishments” include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters or transportation companies. “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.



Institutional use means use within the confines of or on property necessary for the operation of buildings, including but not limited to government agencies, factories, sanitariums, prisons, restaurants, stores, automobile service and parts centers, health clubs, theaters, transportation companies, hospitals, schools, libraries, auditoriums, hotels and office complexes.

Label means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product package for purposes of branding, identifying or giving information with respect to the product or to the contents of the package.

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.

Laundry starch product means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp look and may also facilitate ironing of the fabric. “Laundry starch product” includes, but is not limited to, fabric finish, sizing and starch.

Lawn and garden insecticide means an insecticide product designed primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

Liquid means a substance or mixture of substances that flows readily, but, unlike a gas, does not expand indefinitely (i.e., a substance with constant volume but not constant shape). “Liquid” does not include powders or other materials that are composed entirely of solid particles.

Manufacturer means any person who manufactures or processes a consumer product. Manufacturers include:

- 1) Processors who blend and mix consumer products;
- 2) Contract fillers who develop formulas and package them under a distributor’s label;
- 3) Contract fillers who manufacture products using formulas provided by a distributor;
- 4) Distributors who specify formulas to be used by a contract filler or processor.

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

Nonagricultural pesticide means and includes any substance or mixture of substances that is a pesticide as defined in Section 2 (u) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA, 7 U.S.C. 136-136y) and implementing regulations.



Nonresilient flooring means floor of a mineral content that is not flexible. “Nonresilient flooring” includes, but is not limited to, terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

Oven cleaner means any cleaning product designed to clean and to remove dried food deposits from oven interiors.

Person means an individual corporation, partnership, association, state, and agency, department or instrumentality of the United States, and any officer, agent or employee thereof.

Principal display panel(s) means that part, or those parts, of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the “principal display panel” shall pertain to all such “principal display panels.”

Product category means the applicable category which best describes the product as listed in tables 1 or 2 of 40 CFR part 59, subpart C, and which appears on the product's principal display panel.

Product form means the form that most accurately describes the product's dispensing form including aerosols, gels, liquids, pump sprays and solids.

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.

Representative consumer product means a consumer product that is subject to the same VOC limit in Section 59.203 as the innovative product.

Restricted-use pesticide means a pesticide that has been classified for restricted use under the provisions of Section 3(d) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA, 7 U.S.C. 136-136y).

Shaving cream means an aerosol product that dispenses a foam lather intended to be used with a blade, or cartridge razor, or other wet-shaving system in the removal of facial or other body hair.

Single-phase aerosol air freshener means an aerosol air freshener with liquid contents in a single homogeneous phase that does not require that the product container be shaken before use.

Solid means a substance or mixture of substances that does not flow or expand readily (i.e., a



substance with constant volume such as the particles constituting a powder). “Solid” does not include liquids or gels.

Spray buff product means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

Structural waterproof adhesive means an adhesive whose bond lines are resistant to conditions of continuous immersion in fresh or salt water and that conforms with Federal Specification MMM-A-181 (Type 1, Grade A) and MIL-A-4605 (Type A, Grade A and Grade C).

Underarm antiperspirant means any aerosol product that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.

Underarm deodorant means any aerosol product that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration.

United States means the United States of America, including the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Usage directions means the text or graphics on the consumer product’s label or accompanying literature that describes to the end user how and in what quantity the product is to be used.

Volatile organic compound or VOC means any compound that meets the definition of a VOC, as defined under 40 CFR part 51, subpart F, and in subsequent amendments. The full text of the definition (as updated July 1, 1998) reads as follows:

(s) *Volatile organic compounds (VOC)* means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

(1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane



(HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate and perfluorocarbon compounds which fall into these classes:

- (i) Cyclic, branched, or linear, completely fluorinated alkanes;
- (ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(2) For purposes of determining compliance with emissions limits, VOC will be measured by the test methods in the approved State implementation plan (SIP) or 40 CFR part 60, appendix A, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibility-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the enforcement authority.

(3) As a precondition to excluding these compounds as VOC or at any time thereafter, the enforcement authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the enforcement authority, the amount of negligibly-reactive compounds in the source's emissions.

(4) For purposes of Federal enforcement for a specific source, the EPA shall use the test methods specified in the applicable EPA-approved SIP, in a permit issued pursuant to a program approved or promulgated under title V of the Act, or under 40 CFR part 51, subpart I or appendix S, or under 40 CFR parts 52 or 60. The EPA shall not be bound by any State determination as to appropriate methods for testing or monitoring negligibly-reactive compounds if such determination is not reflected in any of the above provisions.

Wasp and hornet insecticide means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray a high-volume directed stream or burst from a safe distance at the intended pest or its hiding place.

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.

Wood floor wax means wax-based products for use solely on wood floors.



APPENDIX C: CONTACTS AND RESOURCES

ChemAlliance

ChemAlliance, a Chemical Industry Compliance Assistance Center, is being established through a cooperative agreement between the U.S. Environmental Protection Agency and the National Center for Clean Industrial and Treatment Technologies, with additional support from the Pacific Northwest National Laboratory and the University of Wisconsin Extension—Solid and Hazardous Waste Education Center.

The agreement provides start-up funding to build a sector-specific resource for the chemical industry and providers of information to chemical companies. The main goal of ChemAlliance is to provide guidance and resources that will help small chemical companies comply with federal environmental regulations. Beyond the federal level, users will be routed to regional and local regulatory information and contacts where available. ChemAlliance will also promote pollution prevention and provide information on innovative source-reduction technologies and management practices.

ChemAlliance will consist of three primary components:

1. *An on-line, “virtual” compliance resource center*, including a chemical industry compliance LISTSERV and a system of World Wide Web pages, that will provide compliance information and links to other useful sites.
2. *A toll-free fax-back service* that will provide documents to users without Internet access.
3. *Compliance assistance tools*, ranging from one-page fact sheets to an interactive compliance “help desk” that will direct users to relevant information without the need for complex keyword searches. These tools will be developed by the Center, if necessary, or provided by third parties (e.g., trade associations) in return for appropriate consideration.

Frequently asked questions about ChemAlliance

What is ChemAlliance?

ChemAlliance is a compliance assistance center for the chemical industry designed to:

- Provide information that addresses, in readily understood language, the environmental compliance needs of the chemical industry.
- Improve information transfer ...
 - ⇒ between individual companies;
 - ⇒ between companies and the US EPA;
 - ⇒ among assistance providers.
- Provide practical information on how chemical manufacturers can use pollution prevention to improve compliance while reducing costs and improving quality.
- Help manufacturers decrease the costs and increase the effectiveness of compliance.

This information will be provided primarily via a site on the World Wide Web.



Why ChemAlliance?

There are various sources of environmental compliance information at the federal, state and local level. ChemAlliance is not intended to replace these sources but rather augment them by helping users navigate the broad spectrum of existing information and directing them to the most appropriate solution in a timely fashion.

Who is ChemAlliance?

ChemAlliance is being constructed through the collaboration of:

- The National Center for Clean Industrial and Treatment Technologies / Michigan Technological University
- Pacific Northwest National Laboratory
- The University of Wisconsin Solid and Hazardous Waste Education Center
- The U.S. Environmental Protection Agency
- Individual contributors from industry and federal, state and local government agencies

When will it be available?

The ChemAlliance website and toll-free hotline will be launched in the fall of 1998.

How can I help?

ChemAlliance welcomes your participation. Specific needs include:

- Identifying needs of companies and information providers.
- Identifying compliance resources and tools that the Center can promote or provide access to (for a fee, if necessary).
- Suggestions on services that ChemAlliance should provide and how it should provide them.
- Partnerships with publishers, consultants, technical assistance programs and others currently providing information to the chemical industry.

What is the website address?

WWW.CHEMALLIANCE.ORG

For more information, contact:

Jim Baker, General Director
National Center for Clean Industrial
and Treatment Technologies
Michigan Technological University
1400 Townsend Drive
Houghton, MI 49931-3292
Phone: (906) 487-3143
Fax: (906) 487-3292
Email: jrbaker@mtu.edu

R. Scott Butner, Technical Director
Battelle/Pacific Northwest
National Laboratory
Battelle Seattle Research Center
4000 NE 41st Street
Seattle, WA 98105
Phone: (206) 528-3290
Fax: (206) 528-3552
Email: rs_butner@pnl.gov



EPA regional offices

Region	Phone #	States covered	Address
a = general information b = information on consumer products rule			
1	a (888)372-7341 a (617) 918-1111 b (617) 918-1669	CT, ME, MA, NH, RI & VT	Office of Ecosystem Protection 1 Congress Street Boston, MA 02203-2211
2	a (212) 637-4249 b (212) 637-3381	NJ, NY, Puerto Rico & Virgin Islands	Environmental Planning & Protection 290 Broadway New York, NY 10007-1866
3	a-b (215) 814-5000	DE, MD, PA, VA, WV & DC	Air, Radiation and Toxics Division 1650 Arch Street Philadelphia, PA 19103-2029
4	a (404) 562-9077 b (404) 562-9218	AL, FL, GA, KY, MS, NC, SC & TN	Air, Pesticides and Toxics Division Management Division 61 Forsyth Street Atlanta, GA 30365
5	a (312) 353-2000 b (312) 353-5713	IL, IN, MI, WI, MN & OH	Air and Radiation Division 77 West Jackson Boulevard Chicago, IL 60604-3507
6	a (800) 887-6063 a (214) 665-7225 b (214) 665-7200	AR, LA, NM, OK & TX	Multimedia Planning & Permitting 1445 Ross Avenue Dallas, TX 75202-2733
7	a (913) 551-7020 b (913) 551-7566	IA, KS, MO & NE	Air, RCRA and Toxics Division 726 Minnesota Avenue Kansas City, KS 66101
8	a (303) 312-6928 b (303) 312-6479	CO, MT, ND, SD, UT & WY	Office of Pollution Prevention, State and Tribal Assistance 999 18th Street, Suite 500 Denver, CO 80202-2466
9	a-b (415) 744-1143	AZ, CA, HI, NV, American Sa- moa & Guam	Air Division 75 Hawthorne Street San Francisco, CA 94105
10	a (800) 424-4EPA b 206) 553-6641	AK, ID, WA & OR	Office of Air Quality 1200 Sixth Avenue Seattle, WA 98101



Sponsoring trade associations

Association Address	Phone #	Fax #
ASC		
The Adhesive and Sealant Council 1527 K Street, NW Washington, DC 20006	(202) 452-1500	(202) 452-1501
ACMC		
Automotive Chemical Manufacturers Council Motor and Equipment Manufacturers Association 1325 Pennsylvania Avenue, NW Washington, DC 20004	(202) 393-6362	(202) 737-3742
CSMA		
Chemical Specialties Manufacturers Association 1913 Eye Street, NW Washington, DC 20006 CSMA has developed a standard form for submitting initial notification reports. To receive a copy, contact EPA's website at " www.epa.gov/tta/uatw/183e/cp/cppg.html ."	(202) 872-8110	(202) 872-8114
CTFA		
The Cosmetic, Toiletry, and Fragrance Association 1101 17th Street, NW Suite 300 Washington, DC 20036	(202) 331-1770	(202) 331-1969
ISSA		
International Sanitary Supply Association 7373 N. Lincoln Avenue Lincolnwood, IL 60646	(847) 982-0800	(847) 982-1922
NAA		
National Aerosol Association 787 Windgate Drive Annapolis, MD 21401	(410) 349-8614	(410) 349-8616
SDA		
The Soap and Detergent Association 475 Park Avenue, South New York, NY 10016	(212) 725-1262	(212) 213-0685



APPENDIX D: COMPLETE TEXT OF THE CONSUMER PRODUCTS RULE

Note: The full text of the consumer products rule as it appeared in the *Federal Register* of Sept. 11, 1998 (Vol. 63, No. 176; pages 48819–48847), is included in hard copies of this manual. If you are accessing this manual via the Internet, please return to the teleconference home page (www.cis.utk.edu/teleconf.html) and click on “Complete text of the consumer products rule.”