# ENVIRONMENTAL PROTECTION ENVIRONMENTAL REGULATION

Air Quality Management

Prevention of Air Pollution from Consumer Products, TBAC Emissions Reporting, Prevention of Air Pollution from Adhesives and Sealants

Proposed Amendments: N.J.A.C. 7:27-8.1, 16.1, 17.1, 18.1, 19.1, 21.1, 22.1, 23.2, 24.1 through

24.10, 24.12 through 24.8, and 25.1; N.J.A.C. 7:27A-3.2 and 3.10; and

N.J.A.C. 7:27B-3.1

Proposed Repeal: N.J.A.C. 7:27-24.11 Proposed New Rules: N.J.A.C. 7:27-26 and 34

Authorized By: Lisa P. Jackson, Commissioner, Department of Environmental

Protection.

Authority: N.J.S.A. 13:1B-3(e), 13:1D-9 and 26:2C-1 et seq., in particular 26:2C-

8.

Calendar reference: See Summary below for explanation of exception to calendar

requirement.

DEP Docket Number: 20-07-10/642. Proposal Number: PRN 2007-337.

A <u>public hearing</u> concerning this rule proposal and a proposed State Implementation Plan (SIP) revision will be held on:

December 10, 2007 at 10 a.m. at:

New Jersey Department of Environmental Protection

Hearing Room, 1<sup>st</sup> Floor 401 East State Street

Trenton, New Jersey 08625

Directions to the hearing room may be found at the Department's website address <a href="http://www.state.nj.us/dep/where.htm.">http://www.state.nj.us/dep/where.htm.</a>

Submit written comments by January 4, 2008, to:

Alice A. Previte, Esq.

Attention: DEP Docket No. 20-07-10/642

Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street

PO Box 402

Trenton, NJ 08625-0402

Written comments may also be submitted at the public hearing. It is requested (but not required) that anyone submitting oral testimony at the public hearing provide a copy of any prepared text to the stenographer at the hearing.

The Department of Environmental Protection (Department) requests but does not require that commenters submit comments on diskette or CD as well as on paper. The Department prefers Microsoft Word 6.0 or above. Macintosh formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

This rule proposal can be viewed or downloaded from the Department's web site at <a href="http://www.state.nj.us/dep">http://www.state.nj.us/dep</a>.

The agency proposal follows:

## **Summary**

Since the Department has provided a 60-day comment period on this proposal, the proposal is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department is proposing new rules and amendments that will reduce the emissions in New Jersey of volatile organic compounds (otherwise referred to as VOCs), which are precursors to the formation of ozone from a variety of commercial and consumer products. These proposed new rules and amendments will also limit the use of certain chlorinated toxic air contaminants in a number of consumer products. The proposed amendments will also amend the Department's definition of "volatile organic compound" or "VOC" throughout Chapters 27, 27A and 27B to match the current partial exemption by the United States Environmental Protection Agency (USEPA) of tertiary butyl acetate (also known as t-butyl acetate, or informally as TBAC or TBAc). The proposed amended definition of "VOC" also incorporates by reference the USEPA's definition of "VOC," as supplemented or amended, in order that the Department's definition will continue to match the USEPA's definition, even if the USEPA's definition changes. The proposed new rules will add a TBAC emissions-reporting requirement for manufacturers of TBAC or products containing TBAC, consistent with this partial exemption by the USEPA.

#### Background

Ozone occurs naturally in the upper regions of the atmosphere (stratosphere) and is critical to shielding the Earth from the Sun's harmful ultraviolet radiation. However, in the lower atmosphere (troposphere) ozone is a harmful air pollutant formed by complex chemical reactions involving volatile organic compounds and oxides of nitrogen ( $NO_x$ ) in the presence of sunlight.

The USEPA established a health-based National Ambient Air Quality Standard (NAAQS) for eight-hour ozone at 0.08 parts per million (ppm). The entire State of New Jersey was designated by the USEPA as nonattainment for the eight-hour ozone National Ambient Air Quality Standard. The northern New Jersey nonattainment area includes the New York, New York metropolitan area and portions of Connecticut; the southern New Jersey nonattainment area includes the Philadelphia, Pennsylvania metropolitan area, all of Delaware and a portion of Maryland.

Volatile organic compounds are chemicals or mixtures of chemicals that evaporate easily at room temperature. Sources of those volatile organic compounds that form ozone are vehicle and industrial exhaust; evaporation of gasoline; a variety of consumer and commercial products including paints, solvents, adhesives, carpeting, deodorants, cosmetics, cooking, hair products, cleaning fluids, commercial adhesives and sealants and products used in automotive maintenance and repair activities; as well as biogenic emissions. In addition to contributing to the formation of ozone, some volatile organic compounds are harmful if directly inhaled.

The Department worked with the other member jurisdictions of the Ozone Transport Commission (OTC) to develop rules to address these sources of volatile organic compounds emissions. The Ozone Transport Commission is made up of representatives of 12 northeastern and mid-Atlantic states, including New Jersey, and the District of Columbia. The Ozone Transport Commission's mission is, in part, to develop and recommend control measures that can be applied within the Ozone Transport Region (OTR) to make progress toward attaining the National Ambient Air Quality Standard for ozone. The Department's existing rules at N.J.A.C. 7:27-24, Prevention of Air Pollution from Consumer Products, are based on prior model rules developed by the Ozone Transport Commission. These proposed new rules and amendments further the underlying goal of reducing the emission of volatile organic compounds and chlorinated toxic air contaminants from these consumer and commercial products.

## Consumer Products (chemically formulated consumer products and portable fuel containers)

Consumer products are those items sold to retail customers for personal, household, or automotive use. The category also includes the products marketed by wholesale distributors for use in commercial or institutional settings, such as beauty shops, schools and hospitals. Volatile organic compounds are emitted from these products as the result of the evaporation of propellant and organic solvents during use. Chemically formulated consumer product categories include hundreds of individual products, including personal care products, household products, automotive aftermarket products, products used in the maintenance and repair of motor vehicles, adhesives and sealants, insecticides regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. §136 et seq.), and other miscellaneous products.

The Department regulates consumer products at N.J.A.C. 7:27-24. The USEPA's rule for consumer products is at 40 CFR 59.401 to 59.413. In addition to chemically formulated consumer products, the group of products the Department refers to in its rules as "consumer products" also includes portable fuel

containers (PFCs), otherwise known as "gas cans," from which volatile organic compounds may be emitted when gasoline or other fuels are poured out of the container or are stored in the container.

The Department's rules control emissions from chemically formulated consumer products by establishing limits on the volatile organic compound content of the products. The Department's existing rules for portable fuel containers control emissions by requiring these containers to meet performance standards to reduce volatile organic compound emissions.

#### Chemically formulated consumer products

The USEPA's consumer and commercial products regulations, promulgated in 1998 (40 CFR Part 59), set volatile organic compound formulation limits for certain consumer products. Since the Federal regulations did not regulate more than half of the inventory of volatile organic compounds-emitting products, in 2001 the Ozone Transport Commission developed a model rule for consumer products. This model rule, upon which the Department based the chemically formulated consumer products provisions in its existing consumer products rules (adopted in 2004), regulated additional consumer product categories and specified more stringent volatile organic compound content limits than the Federal rule. Because the California Air Resources Board (CARB) had already addressed volatile organic compound emissions from consumer products that the USEPA had not, the Ozone Transport Commission's 2001 model rule for consumer products closely mirrored a series of CARB's consumer products rules. The Ozone Transport Commission's 2001 model rule included categories such as hairspray, air fresheners, glass and general-purpose cleaners, adhesives, anti-perspirants and deodorants, insecticides and automotive aftermarket products.

CARB amended its consumer products rules in July 2005, establishing volatile organic compounds limits for 11 new categories of consumer products and establishing a more restrictive volatile organic compound limit for one previously regulated category. CARB also established restrictions on the use of paradichlorobenzene and three other chlorinated toxic air contaminants, methylene chloride (an exempt volatile organic compound), perchloroethylene (an exempt volatile organic compound), and trichloroethylene, in a number of existing and new product categories. Paradichlorobenzene is widely used as an air freshener in toilet and urinal deodorant blocks, as a solid air freshener, and also as the main ingredient in moth balls. The effective date for the new volatile organic compound limits and other requirements in CARB's amended regulations is December 31, 2006, with one and three-year sell-through provisions for properly dated products. This means that a properly dated product that complies with the rules in effect at the time of manufacture, even if those rules were less stringent than the rules in effect at the time of sale, can be sold for one year (or three years, depending on the product) from the effective date of the rules. Thereafter, only fully compliant products can be sold.

As a result of, and based upon CARB's 2005 amendments, the Ozone Transport Commission amended its 2001 model rule. The Ozone Transport Commission's 2007 model rule includes an effective date of January 1, 2009, with optional sell-through provisions. The Ozone Transport Commission's 2007 model rule does not include CARB's second tier standards for antistatic aerosols and shaving gels, in effect as of December 31, 2008, and December 31, 2009, respectively.

The Department's proposed new and amended rules for chemically formulated consumer products rules are based upon the Ozone Transport Commission's 2007 model rule. The proposed rules provide for unlimited sell-through for some products (consistent with the Department's existing rules), and a three-year sell-through for those containing paradichlorobenzene, methylene chloride, perchloroethylene and trichloroethylene. Accordingly, products manufactured prior to January 1, 2009, that do not meet the new volatile organic compound limits can continue to be sold in New Jersey if they comply with the rules in effect at the time they were manufactured, and if they display the date or a code representing the date they were manufactured.

CARB prepared substantial technical documentation as part of its rulemaking, in which it set forth the technical basis for its volatile organic compound content limits. The Department reviewed the CARB volatile organic compound limits and data for applicability in the Ozone Transport Region, including New Jersey, and agreed with the conclusions. Accordingly, the within proposed chemically formulated consumer products rules and amendments include all of CARB's new standards, with the exception of the tier 2 standards for aerosol anti-static products and shaving gel. To maximize consistency and uniformity of the products, most volatile organic compound limits, definitions, exemptions and flexibility options in the proposed new rules and amendments are the same as those used in California. The Department identifies the variations in the summary of each proposed section. For more details on the Ozone Transport

Commission's 2007 model rule, see the Ozone Transport Commission Technical Support Document and the model rule posted on the Ozone Transport Commission website at http://www.otcair.org.

Tables 1 through 4 below identify the chemically formulated consumer products that are affected by the proposed rules. Table 1 identifies new categories with VOC limits; Table 2 identifies the single category regulated under the existing rules for which the Department is proposing a more restrictive VOC limit; Table 3 identifies those categories in the existing rules that are proposed to have additional air toxics requirements; and Table 4 identifies new categories of chemically formulated consumer products, which are proposed to have air toxics requirements.

#### Table 1

## New Categories with Volatile Organic Compounds (VOC) Limits

Adhesive Remover (4 subcategories) Footwear or Leather Care Product

Anti-Static Product Hair Styling Product\*
Electrical Cleaner Graffiti Remover

Electronic Cleaner Shaving Gel

Fabric Refresher Toilet/Urinal Care Product

Wood Cleaner

#### Table 2

## **Previously Regulated Category with More Restrictive**

## **Volatile Organic Compounds (VOC) Limit**

Contact Adhesive\*\*

#### Table 3

#### Previously Regulated Categories with Additional Air Toxics Requirements

Air Freshener, Solid General Purpose Degreaser

## Table 4

#### **New Categories with Air Toxics Requirements**

Contact Adhesive Adhesive Remover
Electronic Cleaner
Footwear or Leather Care Product

Graffiti Remover

General Purpose Degreaser Automotive Consumer Product

Toilet/Urinal Care Product

#### Portable fuel containers

The Department's consumer products rules at N.J.A.C. 7:27-24 also address portable fuel containers. Portable fuel containers are designed for transporting and storing fuel from retail distribution to the point of use and the eventual dispensing of the fuel into equipment. Commonly referred to as "gas cans," these products come in a variety of shapes and sizes, with nominal capacities from under one gallon to over six gallons. Fuel stored in portable fuel containers is a significant source of air pollution in New Jersey and throughout the United States. Volatile organic compound emissions from portable fuel containers are classified by five different activities: permeation emissions, which are fuel molecules that escape through the wall of the portable fuel containers; diurnal emissions, which are stored fuel molecules that escape to the air through any opening of the portable fuel containers; transport-spillage emissions,

<sup>\*</sup> This product category will incorporate Hair Styling Gel and include additional forms of hair styling products (that is, liquid, semi-solid, and pump spray) but does not include Hair Mousse, Hair Shine or Hair Spray. The Department does not propose to amend the existing VOC limits for Hair Mousse, Hair Shine or Hair Spray.

<sup>\*\*</sup> This product category has been separated into 2 subcategories: General Purpose and Special Purpose

which are fuel vapors produced from any accidental discharge of a fuel while the fuel is being transported to another destination; spillage emissions, which are fuel vapors produced when fuel is being distributed from a container to another source; and refueling-vapor displacement emissions, which are fuel vapors that escape when a fuel tank or fuel container is being refueled from a portable fuel container. Of these, the diurnal emissions are the largest source of volatile organic compounds.

CARB established design and manufacturing specifications for portable fuel containers in its 2000 portable fuel containers regulations (13 CCR 2467). The Ozone Transport Commission developed a model rule for portable fuel containers in 2001, based on the CARB 2000 regulations. The Department's existing portable fuel container rules are based on the Ozone Transport Commission's 2001 model rule. Since then, CARB amended its regulations in two phases. The first phase of these amendments, effective February 12, 2006, addressed the use of utility jugs and kerosene containers that are sometimes used by consumers for gasoline. The second phase of the amendments, effective October 11, 2006, established a certification program for portable fuel containers, and changed the performance standards for certification. CARB made these changes in response to the problematic nature of the cans that were made to meet these standards. Specifically, CARB eliminated the requirement for an automatic shutoff, fuel flow rate and fill level standards, as well as the one-opening standard. In addition, CARB changed the permeability standard from 0.4 grams reactive organic gas (ROG) /gallon-day to 0.3 grams/gallon-day.

The Ozone Transport Commission amended its 2001 model rule based on CARB's 2006 amendments. The Department bases its proposed amendments to its portable fuel container rules on the Ozone Transport Commission's 2007 model rule. For more details on the Ozone Transport Commission's 2007 model rule for portable fuel containers, see the Ozone Transport Commission Technical Support Document and the model rule posted on the Ozone Transport Commission website at http://www.otcair.org.

The Department's proposed rules require that portable fuel containers and/or spouts must be certified or exempted by either CARB or the USEPA as meeting their performance standards, as evidenced by the issuance of a CARB Executive Order or USEPA documentation to that effect. Manufacturers of portable fuel containers and spouts must comply with the proposed rules by 30 days after the operative date of the rules. Consistent with similar provisions in CARB's portable fuel container rules, the Department's proposed rules provide additional time (up to one year after the operative date of the rules) for a portable fuel container or spout that is labeled or designated for use solely with kerosene to come into compliance with the certification requirements, if it displays the date of manufacture or a manufacture date-code. In this way the proposed rules would accommodate the manufacturers of these kerosene containers who were not previously regulated by the Department's portable fuel container requirements.

The proposed new rules and amendments for consumer products (both chemically formulated consumer products and portable fuel containers) will primarily impact manufacturers. In order to comply with the rules, manufacturers may have to reformulate or redesign some of their products in order to meet the new requirements, or refrain from selling the products in New Jersey for use in New Jersey. Distributors, suppliers and retailers will need to ensure proper distribution and sale of the products.

#### Adhesive and Sealants (commercial products)

In general, an adhesive is any material used to bond two surfaces together. A sealant is a material with adhesive properties that is used primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces. Adhesives, sealants, adhesive primers, and sealant primers are used in product manufacturing, packaging, construction, and installation of metal, wood, rubber, plastic, ceramics, or fiberglass materials.

Emissions of volatile organic compounds from adhesives result from evaporation of solvents during transfer, drying, surface preparation and cleanup. These solvents are the media used to solubilize the adhesive, sealant, or primer material so that it can be applied. The solvent is also used to completely wet the surface to provide a stronger bond. In plastic pipe bonding, the solvent dissolves the polyvinyl chloride pipe and reacts with the pipe to form a bond. Solvents used to clean the surface before bonding and to clean the application equipment after bonding also contribute to volatile organic compounds emissions. Volatile organic compounds emissions in this category are primarily from industrial and commercial operations, such as wood product manufacturers, upholstery shops, adhesives retailers and architectural trades, such as building construction, floor covering installation and roof repair.

The consumer products rules promulgated by the USEPA, CARB, and the Department, and the Ozone Transport Commission's 2001 consumer products model rule, all regulate "household" adhesives, as

distinguished from the commercial application described above. CARB developed a model rule for adhesives and sealants sold in larger containers and used primarily in commercial and industrial applications, titled "Determination of Reasonably Available Control Technology (RACT) and Best Available Retrofit Control Technology (BARCT) for Adhesives and Sealants," dated December 1998, for use by the California Air Pollution Control Districts. This CARB model rule regulates the application of adhesives, sealants, adhesive primers and sealant primers by providing options for appliers to either use a product with a volatile organic compound content equal to or less than a specified limit or to use add-on controls. The CARB model rule also sets volatile organic compounds limits for certain categories of adhesives and sealants, has requirements for cleanup solvents and surface preparation solvents and requires that materials containing volatile organic compounds must be stored and disposed of in closed containers. A number of California Air Pollution Control Districts have used the CARB model as the basis for their regulations to limit the volatile organic compounds content of adhesives and sealants. The Ozone Transport Commission developed a model rule in 2007 based on CARB's 1998 model rule.

The Department's proposed new rules for adhesives are based on the Ozone Transport Commission's 2007 model rule, and will regulate adhesives sold in larger containers and used primarily in commercial and industrial applications. For more details on the Ozone Transport Commission's 2007 model rule see the Ozone Transport Commission Technical Support Document and the model rule posted on the Ozone Transport Commission website at http://www.otcair.org.

Table 5 below identifies the categories of adhesives and sealants affected by the proposed rules and amendments.

# Table 5 Categories of Adhesives and Sealants Affected by the Proposal

#### Adhesives

ABS welding

Ceramic tile installation

Computer diskette jacket manufacturing

Contact bond

Cove base installation

**CPVC** welding

Indoor floor covering installation

Metal to urethane/rubber molding or casting

Multipurpose construction

Nonmembrane roof installation/repair

Other plastic cement welding

Outdoor floor covering installation

PVC welding

Single-ply roof membrane installation/repair

Structural glazing

Thin metal laminating

Tire retread

Perimeter bonded sheet vinyl flooring installation

Waterproof resorcinol glue

Sheet-applied rubber installation

#### Sealants

Architectural

Marine deck

Nonmembrane roof installation/repair

Roadway

Single-ply roof membrane

Other

## **Adhesive Primers**

Automotive glass

Plastic cement welding

Single-ply roof membrane

Traffic marking tape Other

#### **Sealant Primers**

Non-porous architectural Porous architectural Marine deck Other

#### Adhesives Applied to the Listed Substrate

Flexible vinyl Fiberglass Metal Porous material Rubber Other substrates

#### **Reducing chlorinated toxic air contaminants**

As discussed above, the proposed new rules and amendments prohibit the use of paradichlorobenzene and three other chlorinated toxic air contaminants or "air toxics" (methylene chloride, also known as chloromethane, dichloromethane or MeCl; perchloroethylene, also known as tetrachloroethylene or perc; and trichloroethylene, also known as trichlorethene or TCE) in certain products manufactured or sold after January 1, 2009. Paradichlorobenzene, methylene chloride, perchloroethylene and trichloroethylene are also regulated by the USEPA and the Department as hazardous air pollutants (HAPs). Methylene chloride, perchloroethylene and trichloroethylene are also regulated by the Department as toxic substances (TXS) at N.J.A.C. 7:27-17.

The Department's existing consumer products rules, based on the Ozone Transport Commission's 2001 consumer products model rule, already ban the use of methylene chloride, perchloroethylene and trichloroethylene in some consumer products. The proposed new rules and amendments expand that prohibition to even more consumer products, based on the Ozone Transport Commission's 2007 model rule for consumer products, and to automotive consumer products, based on CARB's airborne toxic control measure for emissions of chlorinated toxic air contaminants from automotive maintenance and repair activities (CARB's automotive consumer products rules at 17 CCR 93111). CARB's recent amendments and the Ozone Transport Commission's 2007 model rule for consumer products also address the use of paradichlorobenzene in air fresheners (solid) and toilet/urinal products.

Perchloroethylene is a solvent commonly used in automotive consumer products, such as brake cleaners. Methylene chloride and trichloroethylene are also occasionally used as solvents in automotive consumer products. The Department proposes to prohibit the use of these chlorinated toxic air contaminants in contact adhesive, electronic cleaner, footwear or leather care products, general purpose degreasers, adhesive remover, electrical cleaner, graffiti remover and automotive consumer products.

According to CARB (2000, Staff Report: Initial Statement of Reasons, www.arb.ca.gov/regact/amr/notice.pdf):

Exposure to perchloroethylene (tetrachloroethylene) or trichloroethylene may result in both cancer and non-cancer (acute and chronic) health effects to off-site receptors and on-site workers. The primary route of human exposure for these compounds is inhalation. Non-cancer effects from exposure to perchloroethylene include headache, dizziness, rapid heartbeat, and liver and kidney damage. Non-cancer effects from exposure to methylene chloride include cardiac arrhythmia and loss of consciousness. Non-cancer effects from exposure to trichloroethylene include headache, nausea, tremors, and respiratory irritation.

The USEPA's Technology Transfer Network (TTN) Air Toxics Website fact sheets for methylene chloride, perchloroethylene (tetrachloroethylene) and trichloroethylene include health impacts for these chlorinated toxic air contaminants and are available at <a href="http://www.epa.gov/ttnatw01/hlthef/hapindex.html">http://www.epa.gov/ttnatw01/hlthef/hapindex.html</a>.

The Department is proposing amendments to N.J.A.C. 7:27-24 to reduce the amount of methylene chloride, perchloroethylene, and trichloroethylene entering the environment by reducing the use of these chlorinated toxic air contaminants in the automotive consumer products industry in New Jersey, and in a number of other consumer products. The proposed amendments will require the manufacturers of these consumer products to switch to alternative technologies that use cleaning agents other than methylene chloride, perchloroethylene and trichloroethylene. The proposed amendments permit the sale of products containing chlorinated toxic air contaminants through December 31, 2011, if the products display a date or date code indicating manufacture before January 1, 2009.

When CARB initially promulgated its rule limiting the use of methylene chloride, perchloroethylene, and trichloroethylene, one common substitute was n-hexane. According to the USEPA (www.epa.gov/ttn/atw/hlthef/hexane.html):

Acute (short-term) inhalation exposure of humans to high levels of hexane causes mild central nervous system (CNS) effects, including dizziness, giddiness, slight nausea, and headache. Chronic (long-term) exposure to hexane in air is associated with polyneuropathy in humans, with numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue observed.

Because of concerns with the health effects of n-hexane, CARB issued a health hazard advisory. (See <a href="http://www.dhs.ca.gov/ohb/HESIS/nhexane.pdf">http://www.dhs.ca.gov/ohb/HESIS/nhexane.pdf</a>) Fortunately, other less toxic formulations are available (<a href="http://www.irta.us/DTSC%20Auto%20Repair%20Report.pdf">http://www.irta.us/DTSC%20Auto%20Repair%20Report.pdf</a>). The users of automotive cleaning and degreasing products should review the material safety data sheets (MSDS) for the products they use, in order to become aware of the health risks. They should also be sure to follow the instructions on the product label.

The Department anticipates that the proposed rules will significantly reduce emissions of these chlorinated toxic air contaminants from consumer products, resulting in significantly reduced health risks to the public.

#### The definition of volatile organic compounds

This proposal addresses a discrepancy between the Department's definition of "volatile organic compound" or "VOC" and the definition of that term by the USEPA concerning the exemption of TBAC, and eliminates any future discrepancies. Consistent with the recent amendments to USEPA's definition of VOC which exempted TBAC from emission requirements but not from reporting requirements, this proposal includes new rules at N.J.A.C. 7:27-34 that adds a reporting requirement for those who manufacturer TBAC or TBAC-containing products that will be bought and used in New Jersey.

The Department proposes to amend the definition of "volatile organic compound" or "VOC" in every subchapter in Chapters 27, 27A and 27B of Title 7 in which it appears, by incorporating by reference the USEPA's definition of this term at 40 CFR 51.100(s). The USEPA defines VOC as "any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions." At 40 CFR 51.100(s)(1), USEPA sets forth a list of organic compounds that have been determined to have negligible photochemical reactivity, and specifically exempts them from the definition of VOC. The Department's existing VOC definitions refer to 40 CFR 51.100(s)(1) for this complete list of compounds exempted by the USEPA from the definition of volatile organic compounds. The Department's intention in incorporating this list in the Federal regulations by reference was to exempt all compounds that the USEPA exempted. At the time the Department promulgated these definitions of VOC to refer to the list at 40 CFR 51.100(s)(1), the USEPA definition of VOC contained other provisions at 40 CFR 51.100(s)(2), (3) and (4) that related to compliance with emissions limits, excluding negligibly reactive compounds, and test methods to be used. They did not relate directly to what compounds would be defined by the USEPA as volatile organic compounds.

The Department's reference to 40 CFR 51.100(s)(1) became problematic when the USEPA amended its definition in November of 2004 to create a new category of exempt compounds at 40 CFR 51.100(s)(5) (see 69 Fed. Reg. 69298). This new category, although exempt from emission limit requirements, is still subject to reporting requirements. The one compound in the new category is TBAC. Because the Department's definition references only 40 CFR 51.100(s)(1) for the definitive list of exempt compounds, it could be interpreted as not exempting 40 CFR 51.100(s)(5) compounds (TBAC).

The USEPA stated in its adoption of the TBAC exemption that it recognized that even "negligibly reactive" compounds may contribute significantly to ozone formation if present in sufficient quantities and so these emissions need to be represented accurately in photochemical modeling analyses. The USEPA also recognized "a potential for widespread use of TBAC, the fact that its relative reactivity falls close to the borderline of what has been considered negligibly reactive, and the continuing efforts to assess long-term health risks." Accordingly, the USEPA required that emissions information for TBAC continue to be recorded and reported. (See "Revision to Definition of Volatile Organic Compounds – Exclusion of t-Butyl Acetate," 69 Fed. Reg. 69298, 69302, November 29, 2004.) Specifically, the Federal rule states that TBAC is a volatile organic compound "for the purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements..." (See 40 CFR 51.100(s).)

In order to carry out the State's reporting responsibilities, the Department proposes reporting requirements for TBAC in new N.J.A.C. 7:27-34. The Department identified two entities that would need to report under these proposed rules: manufacturers located outside of New Jersey who manufacture products containing TBAC for sale in the State, and manufacturers in New Jersey who manufacture either TBAC or products containing TBAC. Those manufacturers who sell TBAC (as distinguished from products containing TBAC) in the State are not required to report the estimated amount of actual emissions resulting from the use of their products in the State, since the emissions from these products will be reported by those who use the TBAC in the manufacture of another product. All manufacturers (both in-State and out-of-State) who sell products containing TBAC in the State are to report the estimated amount of actual emissions resulting from the use of their products in the State. The in-State manufacturers of TBAC or products containing TBAC are to report the estimated amount of actual emissions resulting from manufacturing TBAC and products containing TBAC in the State.

In developing these proposed rules, the Department based the reporting requirements on N.J.A.C. 7:27-21, 23 and 24 (emission statements, architectural coatings and consumer products rules, respectively). The USEPA's amended definition of VOC requires TBAC reporting but does not give specific instruction as to what information states should collect. The Department is, therefore, basing its requirements on the Department's other air pollution control rules with similar reporting requirements, that is, the emission statements, architectural coatings and consumer products rules. The proposed rules require the reporting of the manufacturer's address, contact information, TBAC emissions, method of estimating emissions, product brand, and product category or intended use. These requirements will satisfy the Federal requirements and involve minimal effort in reporting for the manufacturers.

The Department is also proposing related amendments at N.J.A.C. 7:27A-3.10, Air Administrative Procedures and Penalties, to establish penalties for the new and amended rules.

A specific summary of the proposed new rules and amendments follows.

#### **Chapter 27. Air Pollution Control**

# Subchapter 8. Permits and Certificates for Minor Facilities (And Major Facilities without an Operating Permit)

## **N.J.A.C. 7: 27-8.1 Definitions**

The Department proposes to amend the definition of "volatile organic compound" or "VOC" in N.J.A.C. 7:27-8.1, to incorporate by reference the USEPA's definition of this term at 40 CFR 51.100(s). The existing definition refers to 40 CFR 51.100(s)(1) for the complete list of compounds exempted by the USEPA from the definition of VOC. Recent amendments to the Federal definition made the reference in the Department's existing definition incomplete, in that the Department's existing definition does not reflect the exemption (from emission limit requirements, only) of tertiary butyl acetate (also known as t-butyl acetate, or informally as TBAC or TBAc). The Department is also proposing new rules governing the reporting of TBAC at N.J.A.C. 7:27-34, discussed below.

The Department is proposing the same amendment to the definitions of "volatile organic compound" or "VOC" at N.J.A.C. 7:27-8.1, 16.1, 17.1, 18.1, 19.1, 21.1, 22.1, 23.2, 24.1, and 25.1; 7:27A-3.2; and 7:27B-3.1.

## Subchapter 24. Control of Air Pollution from Consumer Products

#### **N.J.A.C. 7:27-24.1 Definitions**

The Department proposes to add definitions for 38 terms and amend the definitions for 45 existing terms for consistency with CARB's rules and the OTC model rules for consumer products and portable fuel containers and CARB's automotive consumer products rules. CARB's rules are codified at 17 CCR 93111(c), 94501, and 94508 and 13 CCR 2467.1.

The following proposed new definitions match CARB's definitions in its recent amendments to its rules for consumer products and portable fuel containers (which formed the basis for both the OTC model rule and these proposed rules):

"adhesive remover - floor and wall covering adhesive remover," "adhesive remover -gasket or thread-locking," "adhesive remover - general purpose," "adhesive remover - specialty," "aerosol coating product," "anti-static product," "contact adhesive - general purpose," "contact adhesive - special purpose," "deodorant body spray," "electrical cleaner," "energized electrical cleaner," "fabric refresher," "finish" or "finishing," "floor coating," "footwear or leather care product," "graffiti remover," "hair styling product," "kerosene," "liquid product," "personal fragrance product," "pressurized gas duster," "pump sprayer," "reactive adhesive," "shaving gel," "soft household surface sanitizer," "solvent cleaning machine," "styling," "toilet/urinal care product," "vinyl/fabric/leather/polycarbonate coating," and "wood cleaner."

The Department proposes adding definitions for a number of terms used in the proposed new rules regarding the prohibition and limitations on the sale and use of automotive products that contain chlorinated toxic air contaminants, based on the definitions of these terms by CARB in its "Airborne Toxic Control Measure for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities" (automotive consumer products rules) at 13 CCR 2467.1. These terms include "automotive consumer product," "automotive maintenance facility" or "automotive repair facility," "automotive maintenance or repair activities," "CAS Registry Number," "chlorinated toxic air contaminant," "liquid product," "pump sprayer," and "solvent cleaning machine." The proposed definitions of these terms are identical or essentially identical to CARB's definitions. Differences between the two are limited to stylistic changes necessary to conform to New Jersey rulemaking style requirements.

The Department also proposes to amend a number of definitions to match CARB's definitions in its recent amendments to its rules for consumer products and portable fuel containers or otherwise conform the Department's proposed programs to those rules.

The term "adhesive" is used differently in the definition of "adhesive remover" than it is elsewhere in the subchapter. The Department proposes to clarify this in an amendment to the definition of "adhesive remover," based on CARB's rules and the OTC's model rules.

The Department proposes to amend the definition of "aerosol adhesive" consistent with the OTC model rule to match the CARB definition of this term by adding clarifying text that was not included in the prior OTC consumer products model rule when the Department last amended N.J.A.C. 7:27-24. This text clarifies the inclusion in "aerosol adhesive" of three types of spray adhesives by explicitly including them.

The Department proposes to add a definition of "aerosol coating product" because this term is used in the proposed definition of "anti-static product." The proposed definition matches the definition of this term by CARB in its consumer products regulation that addresses aerosol coating product emissions at 17 CCR 94521(a)(1). CARB's aerosol coating product emissions regulation is not otherwise the basis for this proposal.

The Department proposes to amend the definition of "aerosol product," consistent with the OTC model rule, to match the CARB amendments to the definition that make stylistic changes and clarify that the propellant dispensing the product is contained in the product itself or its container.

The Department proposes to amend the definition of "air freshener," consistent with the OTC model rule, to match the CARB amendments to the definition that exclude toilet/urinal care products, and products with labels that indicate the primary function of the products is as cleaning products.

The Department proposes to amend the definitions of "alternative control plan" or "ACP," "innovative product exemption" or "IPE," and "variance" to correct references to N.J.A.C. 7:27-24.4, which the Department proposes to renumber, as discussed below. The proposed amendment also corrects the reference to relevant CARB rules in the definitions of "alternative control plan" or "ACP," and "innovative product exemption" or "IPE."

The Department is proposing to amend the definition of "automotive brake cleaner" to reflect that it is use interchangeably with the term "brake cleaner," and amend the definition so that it more closely matches the more inclusive definition of "brake cleaner" in the CARB automotive consumer products rules.

The Department proposes to amend the definition of "bathroom and tile cleaner," consistent with the OTC model rule, to match the CARB amendments to the definition that expand the products expressly excluded from the definition.

The Department proposes to amend the definition of "bug and tar remover," consistent with the OTC model rule, to match the CARB amendments to the definition that switch from the "designed" to the "labeled" purpose of the product.

The Department proposes to amend the definition of "contact adhesive," consistent with the OTC model rule, to match the CARB amendments to the definition that explicitly exclude certain tire repair products.

The Department proposes to amend the definition of "deodorant," consistent with the OTC model rule, to match the CARB definition of this term in its antiperspirants and deodorants rules that changes the criteria for inclusion in the definition from a product intended to minimize odor from bacterial growth and perspiration decomposition to one labeled as one that can be used to provide a scent and/or minimize odor. The Department proposes further to add language, consistent with the OTC model rule, clarifying that "deodorant body spray" that is labeled to be used on human axilla (armpit hair) is also a "deodorant" for the purposes of N.J.A.C. 7:27-24. Also consistent with the OTC model rule, the Department proposes to define a new term, "deodorant body spray," to match the definition of that term by CARB in its amended consumer products rules to limit this term, effective with the new standards, to deodorant body sprays designed for application all over the human body.

The Department proposes to amend the definition of "dusting aid," consistent with the OTC model rule, to match the CARB amendments to the definition that explicitly exclude a "pressurized gas duster" from the term.

The Department proposes to amend the definition of "electronic cleaner," consistent with the OTC model rule, to match the CARB amendments to the definition. Essentially, these amendments exclude a number of products and are part of the splitting of this category into a number of other categories for which different emissions limits may be appropriate.

The Department proposes to amend the definition of "facial cleaner" or "soap," consistent with the OTC model rule, to match the CARB amendments to the definition of these terms to replace "gels" with "semisolids." Semisolid, which is already defined in N.J.A.C. 7:27-24, includes gels, and the broader, more inclusive term is appropriate in this context.

The Department proposes to amend the definition of "fragrance," consistent with the OTC model rule, to match CARB's more precise definition of this term by referencing the limit on the combined vapor pressure of the components of the substance in question.

The Department proposes to amend the definition of "furniture maintenance product," consistent with the OTC model rule, to match the CARB amendments to the definition that expressly exclude "wood cleaners" from this term.

The Department proposes to amend the definition of "general purpose degreaser," consistent with the OTC model rule, to match the CARB amendments to the definition that add "electrical cleaners" and "energized electrical cleaners" from this term, as they are now separate product categories. The amendments also look to the labeling of a product rather than its design, to ascertain its purpose in determining whether it is included in this product category.

The Department proposes to amend the definition of "hair shine," consistent with the OTC model rule, to match the CARB amendments to the definition that add "hair styling product" and remove "spray gel" from the products expressing excluded from this product category.

The Department proposes to amend the definition of "hair spray," consistent with the OTC model rule, to match the CARB amendments to the definition that distinguish between those products that "hold, retain and/or finish" a hair style and those that aid in styling but do not finish a hairstyle, and are not included in the product category "hair spray."

The Department proposes to amend the definition of "hair styling gel," consistent with the OTC model rule, to match the CARB amendments to the definition that make this term applicable only to products before the effective date of the new emissions limits.

The Department proposes to amend the definition of "lawn and garden insecticide," consistent with the OTC model rule, to match the CARB amendments to the definition that switch to the labeling of a product, rather than its design, to ascertain its purpose in determining whether it is included in this product category. The proposed amendments, consistent with the OTC model rule and the CARB rules, also would

permit claims that the product kills insects, without triggering the most restrictive limits provisions of N.J.A.C. 7:27-24.4(g).

The Department proposes to amend the definition of "low vapor pressure VOC" or "LVP-VOC," consistent with the OTC model rule, to match the CARB amendments to the definition that modifies one of the conditions a chemical compound must meet to be a LVP-VOC such that the boiling point, as well as the vapor pressure, must be unknown, and the composition of the mixture as solely of compounds with more than 12 carbon atoms must be verified by formulation data.

The Department proposes to amend the definition of "paint remover" or "stripper," consistent with the OTC model rule, to match the CARB amendments to the definition that are grammatical and stylistic in nature

The Department proposes to amend the definition of "product form," consistent with the OTC model rule, to match the CARB definition of that term to reflect the abbreviations to be used in the manufacturer's records of the product's dispensing form.

The Department proposes to amend the definition of "semisolid," consistent with the OTC model rule, to match the CARB amendments to the definition that are grammatical and stylistic in nature.

The Department proposes to amend the definition of "shaving cream," consistent with the OTC model rule, to match the CARB definition of the term. The proposed amendment removes "shaving gel" (for which the Department proposes a new definition, consistent with the OTC model rule and the CARB rules) from the "shaving cream" product category. The Department is proposing more stringent limits for shaving gel products than are currently provided for shaving cream products.

The Department proposes to amend the definition of "spot remover," consistent with the OTC model rule, to match the CARB amendments to the definition that remove carpet and upholstery cleaner products from the list of products excluded from this product category and switch to the labeling of a product, rather than its design, to ascertain its purpose in determining whether it is included in this product category.

The Department proposes adding definitions for a number of terms used in the proposed new rules regarding the prohibition and limitations on the sale and use of automotive products that contain chlorinated toxic air contaminants, based on the definitions of these terms by CARB in its "Airborne Toxic Control Measure for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities" (automotive consumer products rules) at 13 CCR 2467.1. These terms include "automotive consumer product," "automotive maintenance facility" or "automotive repair facility," "automotive maintenance or repair activities," "CAS Registry Number," "chlorinated toxic air contaminant," "liquid product," "pump sprayer," and "solvent cleaning machine." The proposed definitions of these terms are identical or essential identical to CARB's definitions. Differences between the two are limited to stylistic changes necessary to conform to New Jersey rulemaking style requirements.

The Department proposes to add a definition of "CCR," an acronym used in citations to CARB's rules in the California Code of Regulations.

The Department proposes to amend the definition of "consumer product" to include aerosol adhesives, to be consistent with the OTC model rule and CARB's consumer products rules.

The Department proposes grammatical amendments to the definitions of "device" and "manufacturer."

The Department proposes to define the acronym FIFRA, to obviate the need to spell out the full name of the act whenever it is used in the subchapter (at N.J.A.C. 7:27-24.4(c) and N.J.A.C. 7:27-24.5(f)3), and in the definitions of "disinfectant," "pesticide" and "restricted materials."

The Department proposes to amend the definitions of "liquid" and "solid" to include future supplements or revisions of the American Society for Testing and Materials (ASTM) tests referenced in the definitions.

Based on CARB's expansion of this product category in its portable fuel container regulations, the Department proposes to amend the definition of "portable fuel container" to include containers for kerosene. In establishing a portable fuel container program similar to CARB's, in effect on and after January 1, 2009, the USEPA also includes kerosene containers in its definition of portable fuel containers. The Department also proposes to define this term to exclude a permanently embossed or labeled container for the exclusive use with non-fuel or non-kerosene products, consistent with the exclusion of such a container by CARB in its definition of "portable fuel container," based on the applicable Federal regulations in effect at the time of CARB's 2005 amendments to its rules.

The Department proposes to amend the spelling of "propellent" to "propellant" in "type A propellent," "type B propellent," and "type C propellent" and wherever else in the existing rules it appears, for a consistent spelling of this word throughout the subchapter. While both "propellent" and "propellant" are acceptable spellings, the USEPA and CARB use the "-ant" spelling, which is the preferred spelling in a number of dictionaries, as well.

The Department proposes to amend the definitions of "spill-proof spout" and "spill-proof system" to remove the references to standards, since the proposed amendments to this subchapter replace the standards in the existing rules with a CARB certification requirement and, in 2009, a CARB or USEPA certification requirement.

The Department proposes to add a definition of "vinyl/fabric/leather/polycarbonate coating" that is identical to the CARB definition of that term in its Aerosol Coating Products regulations at 17 CCR 94521(a)(72). The term is used in the proposed definition of "footwear or leather care product."

## N.J.A.C. 7:27-24.2 Applicability

Proposed amended N.J.A.C. 7:27-24.2(a) extends the applicability of subchapter 24 to any person who advertises portable fuel containers for sale in New Jersey. The proposed amendment is based on the OTC amendments to its model rule for portable fuel containers and CARB's 2006 amendments to its portable fuel container regulations.

The proposed amendment to N.J.A.C. 7:27-24.2(d)3 and proposed new N.J.A.C. 7:27-24.2(d)4 would, on and after January 1, 2009, eliminate the exemption of solid air fresheners that contain at least 98 percent paradichlorobenzene by weight from the applicability of the subchapter, as is provided in the existing rules.

Consistent with the CARB and OTC model rules, the Department also proposes to exempt from the subchapter small quantities of contact adhesive-special purpose, under proposed N.J.A.C. 7:27-24 2(d)6iv

At N.J.A.C. 7:27-24.2(e)5, the Department proposes to add an exemption for closed-system portable fuel containers used for fueling remote control model airplanes. This exemption was added by CARB in its amendments and is reflected in the OTC model rule. Other proposed amendments to N.J.A.C. 7:27-24.2(e) provide greater clarity by expanding the examples of officially sanctioned off-highway motor sports (subparagraph (e)3i) and update a reference to Federal rules concerning safety cans (paragraph (e)i.).

The Department proposes new N.J.A.C. 7:27-24.2(f) to exempt automotive consumer products that are used in solvent cleaning operations from the requirements for automotive consumer products at N.J.A.C. 7:27-24.4(n), as is provided by CARB in its automotive consumer products rules. The Department prohibits the use of these products through its rules at N.J.A.C. 7:27-16.6(j)3 which prohibits the use, in a cold cleaning machine or a heated cleaning machine, of any solvent that has a vapor pressure of one millimeter of mercury or greater, measured at 20 degrees centigrade (68 degrees Fahrenheit), which effectively prohibits chlorinated air toxic contaminants in these operations, as their vapor pressure exceeds the standard in the Department's rules. Existing N.J.A.C. 7:27-24.2(h), to be recodified as subsection (i), refers to "design standards" for portable fuel containers. Because the Department proposes to substitute CARB- or USEPA-certification requirements for these standards, it proposes to change the reference in this subsection to CARB- and USEPA-certification requirements. In addition, the Department proposes to amend the subsection to allow a retailer who sells products that violate any of the standards in N.J.A.C. 7:27-24.4 to demonstrate compliance with the subchapter by providing specific documentation. The existing subsection allowed a retailer to present documentation if he or she sold products that violated the VOC content or design standards.

#### N.J.A.C. 7:27-24.4 Chemically formulated consumer products: standards

All proposed amendments to N.J.A.C. 7:27-24.4 are based on the 2004 amendments to CARB's consumer products rules, unless otherwise noted, and reflect standards that have been in effect in California since December 31, 2006.

Existing Table 1 sets forth the VOC content limits for chemically-formulated consumer products. The Department proposes amending this table to add a third sub-column under the "Maximum Allowable VOC Content" column to set forth new VOC standards to go into effect on January 1, 2009 for the following product categories: adhesive removers (including floor or wall covering, gasket or thread locking, general purpose and specialty); anti-static products, non-aerosol; electrical cleaners; electronic cleaners; fabric refreshers; footwear or leather care products; graffiti removers; hair styling products;

shaving gels; toilet/urinal care products; and wood cleaners. The Department also proposes dividing the category "adhesives," form "contact" into the forms "contact – general purpose" and "contact - special purpose," in order to establish more stringent standards for "contact – general purpose," effective January 1, 2009. Thus, the standard for the adhesive form "contact – special purpose" would be unchanged from the existing standard for contact adhesive (80 percent by weight), but the standard for the adhesive form "contact – general purpose" would be established as a maximum of 55 percent by weight.

The Department proposes to amend the form of "air freshener" referred to as "solids/gels" by renaming it "solids/semisolids." The proposed term more accurately describes the form of those products.

For consistency within the table, the Department proposes to change the names of existing categories from singular to plural to match those categories already in the plural form, as well as the proposed new categories, which are proposed in the plural.

Existing N.J.A.C. 7:27-24.4(d) provides for an unlimited "sell-through" period for chemically formulated consumer products. Properly date-coded products manufactured before the operative date of the standards for that product can be sold indefinitely. The Department proposes an amendment that excepts solid air fresheners and toilet/urinal care products that contain paradichlorobenzene and chemically formulated consumer products that contain chlorinated toxic air contaminants from this unlimited sell-through. The Department proposes, at new N.J.A.C. 7:27-24(o) and (t), to allow a sell-through for these products, if properly date-coded, through December 31, 2011.

Existing N.J.A.C. 7:27-24.4(g) provides that the most stringent VOC content limit applies to a product that is labeled (on the principal display panel) to indicate that it belongs to more than one chemically formulated consumer product category in Table 1, if the product is other than a general purpose cleaner, antiperspirant or deodorant. The proposed amendments to this subsection also exempt insecticide foggers from these provisions, and make the limits applicable only to those products manufactured before January 1, 2009, or, in the case of a FIFRA-registered insecticide, before January 1, 2010. Existing N.J.A.C. 7:27-24.4(c) provides that the operative date for FIFRA products is one year later than the operative date for the other regulated consumer products.

The Department proposes new N.J.A.C. 7:27-24.4(h) for consumer products manufactured on or after January 1, 2009 (or, for FIFRA-registered insecticide, on or after January 1, 2010), that are identical to those at N.J.A.C. 7:27-24.4(g), except for language referring to a sticker or label on the product. The proposed language subjects the product to the most stringent of two or more applicable standards.

The Department proposes amending existing N.J.A.C. 7:27-24.4(i) (recodified as N.J.A.C. 7:27-24.4(j)), which provides an exemption for a chemically formulated consumer product if the product is subject to an innovative product exemption (IPE), alternative compliance plan (ACP) or variance issued by CARB or another state with rules based on the OTC consumer products model rule. The proposed amendments correct and update references and citations to the CARB rules and the internet address of the OTC website.

The Department proposes new N.J.A.C. 7:27-24.4(n), consistent with the OTC model rules and the CARB rules, to ban the sale of a number of chemically formulated consumer products if they contain chlorinated toxic air contaminants, except as provided in the proposed sell-through provisions at proposed new N.J.A.C. 7:27-24.4(o) and (p).

The Department proposes new N.J.A.C. 7:27-24.4(o) to allow the sale of a product containing chlorinated toxic air contaminants through December 31, 2011, provided the product displays a date or date code reflecting manufacture before January 1, 2009.

The Department proposes new N.J.A.C. 7:27-24.4(p) to require notification by sellers of the end of the sell-through period to a distributor or retailer who purchases a sell-through product within the six months preceding the end of the sell-through. Proposed new N.J.A.C. 7:27-24.4(q) exempts products that contain such small amounts of chlorinated toxic air contaminants that they are considered "impurities" (a combined amount less than or equal to 0.01 percent by weight) from the notice requirements of subsection (p) and the sale restrictions of subsections (n) and (o). Similarly, the Department proposes new N.J.A.C. 7:27-24.4(r), which is identical to CARB's provisions in its automotive consumer products rules, to establish 1.0 percent or greater as the threshold over which the Department classifies a product as containing a chlorinated toxic air contaminant.

At proposed N.J.A.C. 7:27-24.4(s), the Department proposes prohibiting the sale, after January 1, 2009, of any solid air fresheners and toilet/urinal care products that contain paradichlorobenzene. However, the Department proposes a three-year sell-through, consistent with the sell-through allowed for products containing chlorinated toxic air contaminants. Proposed N.J.A.C. 7:27-24.4(t) is similar to

proposed N.J.A.C. 7:27-24.4(p), and requires one who sells a non-compliant "sell-through" product to a retailer or distributor within the six months immediately preceding the end of the sell-through date to notify the retailer or distributor of the sell-through end date. This would put the retailer or distributor on notice that the product will be non-compliant and cannot be sold after that date.

#### N.J.A.C. 7:27-24.5 Chemically formulated consumer products: registration and labeling

Based on the OTC model rule and the 2004 CARB amendments, the Department proposes to amend N.J.A.C. 7:27-24.5(d) to obviate the need for a manufacturer to provide the Department with an explanation of the date portion of the product code required under N.J.A.C. 7:27-24.5(d). The proposed amendment allows a manufacturer to use a YY DDD format for the coding, which would not require a separate explanation from the manufacturer. For example, 07 364 would be the 364th day in 2007 (December 30, 2007). Such a code would alleviate much of the administrative burden otherwise placed on the manufacturer (in providing explanations) and on the Department (in processing the explanations and using them to monitor products and enforce these rules).

Existing N.J.A.C. 7:27-24.5(d) requires a manufacturer to provide the date code in a location that is "readily observable or obtainable without disassembling any part of the packaging." As amended, the subsection would allow the manufacturer to place the date code in a location within the packaging, provided it could be observed without irreversibly disassembling the package. The Department proposes a similar amendment at N.J.A.C. 7:27-24.5(g)3. The Department also proposes a minor amendment to existing subsection (e) to refer to the date portion of the product code, as opposed to strictly referring to a date-code.

At existing N.J.A.C. 7:27-24.5(g), the Department proposes to expand the coverage of information display requirements beyond aerosol adhesives to include adhesive remover, contact adhesive, electronic cleaner, electrical cleaner and energized electrical cleaner products. These additional products would be required to reflect the name (in full or abbreviated form) of the product category to which they belong and, with the exception of an energized electrical cleaner, the VOC content standard for the product.

The proposed amendment to N.J.A.C. 7:27-24.5(i) provides an exception to the general prohibition of the removal of the required information prior to final sale of the product to the consumer, in the case where the manufacturer has expressly authorized such removal. This would allow the manufacturer to retain control over the decision as to when the information is and is not required.

#### N.J.A.C. 7:27-24.6 Chemically formulated consumer products: recordkeeping and reporting

Consistent with CARB's 2004 amendments to its consumer products rule at 17 CCR 94513(a) and the OTC model rule, the Department proposes to amend N.J.A.C. 7:27-24.6(b) to allow the Department to obtain information from persons other than the manufacturer, including other entities up and down the chain of production and distribution, such as the formulator, supplier, parent company, private labeler, distributor or repackager. The information that the Department might request is at existing N.J.A.C. 7:27-24.6(b)1 through 3.

The Department proposes to correct cross references at N.J.A.C. 7:27-24.6(j).

## N.J.A.C. 7:27-24.7 Chemically formulated consumer products: testing

To be consistent with CARB's automotive consumer products rule, the Department proposes to amend N.J.A.C. 7:27-24.7(a) to add a testing requirement to determine the amount of chlorinated toxic air contaminants in chemically formulated consumer products, which include automotive consumer products. This would parallel the existing requirement regarding the VOC content of the other products regulated by this subchapter. Also based on CARB's rule, the Department proposes amendments to N.J.A.C. 7:27-24.7(b) to allow the use of CARB Method 310 or the use of an alternative method that has been previously approved in writing by the USEPA and the Department. Method 310 applies specifically to measuring VOCs; however, the same means of measuring VOCs can be used to measure chlorinated air toxic contaminants. Accordingly, the Department proposes at N.J.A.C. 7:27-24.7(b) to specify that the term "VOC" in Method 310 should be interpreted as encompassing both "VOC" and "chlorinated toxic air contaminant." Proposed amendments to N.J.A.C. 7:27-24.7(d) and (f) update citations to ASTM test methods.

## N.J.A.C. 7:27-24.8 Portable fuel containers and spill-proof spouts: certification requirements

Based on both the OTC model rule and CARB's 2006 amendments to its portable fuel container rules, the proposed amendments to N.J.A.C. 7:27-24.8 replace the existing performance standards requirements with a CARB-certification requirement. As explained in the Summary above, CARB has initiated a certification program for these products, vastly simplifying the process for states to ensure compliance with CARB standards. Accordingly, the proposed amendments to N.J.A.C. 7:27-24.8 eliminate the requirement that a product meet the standards in existing N.J.A.C. 7:27-24.8(a) and (b), and substitute the requirement that the product be certified by CARB as being in compliance with its standards and be covered by the appropriate CARB Executive Order.

Alternatively, a portable fuel container that meets the USEPA's new requirements for certification of these products, which will affect portable fuel containers nationwide that are manufactured on and after January 1, 2009, will be in compliance with the Department's proposed new rules. The USEPA has characterized its program as being very similar to the CARB portable fuel container program, and has expressed its belief that manufacturers will be able to meet both USEPA and CARB requirements with the same container designs. (See 72 Fed. Reg. 8499.) The Department proposes to make CARB-certification requirements take effect 30 days after the operative date of the proposed amendments, but proposes, at N.J.A.C. 7:27-24.8(c), to permit the sale, for one year after the operative date of the rulemaking, of date-coded products labeled or designated for use solely with kerosene. Environmental and safety concerns prompted both CARB and the USEPA to include these products in their portable fuel container rules. CARB will require kerosene containers to conform to CARB's certification requirements as of January 1, 2007, and USEPA will require kerosene containers to conform to its requirements as of January 1, 2009. Recognizing that these products, unlike their gasoline counterparts, have not previously been regulated in New Jersey, the Department is providing this limited sell-through to allow for a smooth industry transition.

CARB's certification requirements, adopted in 2006, went into effect on July 1, 2007. CARB provided interim performance standards that apply until the certification requirements are in effect. These interim standards are not more stringent than their predecessors; rather, they represent the elimination of certain standards that had proven problematic. The timing of the Department's rulemaking is such that it would not make sense to provide interim standards, especially since CARB's certification program is already in effect.

Additional proposed amendments include the prohibition at N.J.A.C. 7:27-24.8(a) of the advertising of non-certified products for sale; the addition of "spout" to make CARB-certification requirements applicable to all the portable fuel container products; and, at N.J.A.C. 7:27-24.8(d), a grammatical correction, the deletion of an obsolete cross-reference and a corrected OTC website address.

The Department also proposes to amend N.J.A.C. 7:27-24.8(b) to reference CARB's website and the CARB document where the criteria for obtaining certification are set forth. Consistent with CARB's portable fuel container rules, the Department also proposes new N.J.A.C. 7:27-24.8(g), to state that certification does not exempt products from other Federal and State requirements, such as separate safety codes and regulations.

## N.J.A.C. 7:27-24.9 Portable fuel containers and spill proof spouts: labeling

The Department proposes substituting the word "requirements" for "standards" at N.J.A.C. 7:27-24.9(a)1i, consistent with the Department's proposal to use CARB- or USEPA-certification requirements rather than the standards in the existing rules.

Proposed amended N.J.A.C. 7:27-24.9(a)1iii and 3iii require the representative code on the portable fuel container and spout to identify the CARB executive order issued for the portable fuel container, portable fuel container and spout, or spout in question. The Department also proposes simplifying the language of subsection (a) by combining existing N.J.A.C. 7:27-24.9(a)2 and 4.

### N.J.A.C. 7:27-24.10 Portable fuel containers and spill proof spouts: recordkeeping and reporting

Consistent with its proposed reliance on CARB-certification, the Department proposes to delete N.J.A.C. 7:27-24.10(a) because the proposed elimination of the testing requirements at N.J.A.C. 7:27-24.11 makes it unnecessary to require the retention and reporting of the test records. The Department proposes deleting N.J.A.C. 7:27-24.10(b) because it repeats IPE and variance documentation requirements at N.J.A.C. 7:27-24.8(e)5 and (f).

The Department also proposes adding text at N.J.A.C. 7:27-24.10(c) to clarify that the manufacturer to whom the section refers is a manufacturer of a spout, portable fuel container or portable

fuel container and spout, since the deletion of existing N.J.A.C. 7:27-24.10(a) would remove this language modifying "manufacturer."

## N.J.A.C. 7:27-24.11 Portable fuel containers and spill-proof spouts: testing

The Department proposes repealing and reserving N.J.A.C. 7:27-24.11, as the proposed incorporation of CARB-certification requirements will make this testing unnecessary.

#### N.J.A.C. 7:27-24.12 Penalties and other requirements imposed for failure to comply

The Department proposes to amend N.J.A.C. 7:27-24.12(b) to allow the Department to impose penalties and other requirements for violations of the applicable chlorinated toxic air contaminants content requirements, as well as violations of the VOC content requirements. The existing rule applies only to violations of the VOC content requirements.

The proposed amendments to N.J.A.C. 7:27-24.12(c) reflect the switch to CARB or USEPA certification from performance standards, as previously discussed. Enforcement will involve only verification of that certification. There will be no need for a manufacturer to demonstrate compliance by testing, as provided at existing N.J.A.C. 7:27-24.12(c)1(i) through (iii). Accordingly, the Department proposes to amend those provisions, so that the manufacturer will have 30 days to recall a non-compliant product.

# Subchapter 26. Control of Air Pollution from Adhesives, Sealants, Adhesive Primers and Sealant Primers

#### **N.J.A.C.** 7:27-26.1 Definitions

The Department is proposing definitions for 67 terms that are used in these new rules, consistent with the model rule developed by the OTC. These definitions, except as discussed below, are based on the definition of these terms by CARB in its Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology for Adhesives and Sealants, December 1998 (Determination), which formed the basis for both the OTC model rule and these proposed rules, as well as adhesives/sealants rules adopted by a number of the California Air Quality Management Districts (the California Districts).

For some terms that are not defined by CARB in its Determination, the OTC model rule based its definitions of these terms on definitions or other rule text adopted by one or more of the California Districts. These include "aerospace component," "cleanup solvent," "medical equipment manufacturing," "plastic cement welding adhesive," "plasticizer," "reactive diluent," "sheet-applied rubber installation," "solvent," and "undersea-based weapons systems component."

The Department proposes to define "person" consistent with the definition of that term elsewhere in N.J.A.C. 7:27. Similarly, proposed "Department," "CARB," "EPA" and "SCAQMD" are state and Federal agencies referred to in the proposed new rules. The definitions are consistent with their use elsewhere in N.J.A.C. 7:27. The Department also proposes to define "volatile organic compound" or "VOC" to refer to the definition of this term by the USEPA, consistent with the proposed amended definition of this term throughout N.J.A.C. 7:27, 7:27A and 7:27B.

Unlike CARB, the Department proposes to define separately "polyvinyl chloride plastic" or "PVC plastic," which CARB defines as part of its definition of "polyvinyl chloride welding adhesive" or "PVC welding adhesive."

The Department proposes a definition of the term "exempt compound" in order that the term can be used throughout the proposed rules as a shorthand reference to those compounds that the USEPA has exempted from emission limit requirements in its definition of "VOC" at 40 CFR 51.100(s). These compounds (and water) are not included in calculations of vapor pressure of adhesives and the weight and volume of VOCs for the purposes of determining compliance with the proposed rules.

## N.J.A.C. 7:27-26.2 Applicability

Under proposed new N.J.A.C. 7:27-26.2(a), the proposed new subchapter is applicable to those who sell, supply, offer for sale or manufacture for sale, in New Jersey, any adhesives, sealants, adhesive primer or sealant primer, for use in New Jersey. The exceptions to the applicability of the subchapter are those exemptions and exceptions at proposed N.J.A.C. 7:27-26.4. In accordance with N.J.A.C. 7:27-26.3, the proposed subchapter would not take effect until January 1, 2009.

Consistent with the OTC model rule, the proposed new Sbchapter 26 is also applicable to any person who uses or applies any adhesive, sealant, adhesive primer or sealant primer for compensation within New Jersey. By restricting the applicability to those who use these products "for compensation," the Department is proposing not to apply these requirements to, for example, homeowners using these products for home repair or renovations. This provision also references the exemptions and exceptions proposed at N.J.A.C. 7:27-26.4.

#### N.J.A.C. 7:27-26.3 Requirements

Proposed Table 1 in proposed new N.J.A.C. 7:27-26.3 sets forth the VOC limits that apply to those products manufactured, sold or used on and after January 1, 2009. These limits are identical to those in the OTC and CARB model rules.

Proposed N.J.A.C. 7:27-26.3(a) applies the limits in proposed new Table 1 to those who manufacture the products for sale in New Jersey; proposed N.J.A.C. 7:27-26.3(b) applies these limits to those who sell the products; and N.J.A.C. 7:27-26.3(c) applies the limits in Table 1 to those who use or apply the products.

Proposed N.J.A.C. 7:27-26.3(d) specifies which limit applies in Table 1 when it would appear that one or more limits might apply. That is, for those applying an adhesive or sealant that has both a specific VOC limit in Table 1, as well as a generic adhesive-to-substrate limit, the applicable limit would be the one for the specific adhesive or application. For those applications where there are two dissimilar substrates so that two adhesive-to-substrate limits would be applicable, the limit with the highest VOC content would be the limit for this application. For example, the VOC limit for an adhesive applied to fiberglass is 200 grams/liter, while the VOC limit for an adhesive applied to metal is only 30 grams/liter. The decision to set the VOC limit for fiberglass at 200 grams/liter was based on a careful review of the available technology, suggesting problems in trying to use an adhesive with fiberglass that has a lower VOC content. Using the higher limit ensures the appropriateness of the adhesive for use with both substrates.

Proposed N.J.A.C. 7:27-26.3(e) establishes VOC and/or composite vapor pressure limits for cleanup and surface preparation solvents. These limits are based on those in the CARB and OTC model rules. Proposed N.J.A.C. 7:27-26.3(e)1 addresses surface preparation materials other than for single-ply roofing; N.J.A.C. 7:27-26.3(e)2 addresses surface preparation solvents used in applying single-ply roofing; N.J.A.C. 7:27-26.3(e)3 addresses solvents used to remove adhesives, sealants or adhesive or sealant primers from surfaces other than spray application equipment; and N.J.A.C. 7:27-26.3(e)4 addresses solvents used to remove adhesives, sealants or adhesive or sealant primers from spray application equipment.

Consistent with the OTC and CARB model rules, the Department proposes, at N.J.A.C. 7:27-26.3(f), an alternative to the VOC limits established in Table 1. Persons using or applying adhesives, sealants, or adhesive or sealant primers have the option of using add-on pollution control equipment rather than complying with the Table 1 limits. Proposed N.J.A.C. 7:27-26.3(f)1 through 5 set forth the requirements for using the add-on pollution control equipment option. These include an overall capture and control efficiency of at least 85 percent, by weight; the continuous monitoring of combustion temperature, inlet and exhaust gas temperatures and control device efficiency, depending upon the type of add-on controls used; and the maintenance of operation records to demonstrate compliance.

Proposed N.J.A.C. 7:27-26.3(g) requires the proper storing and disposal of all absorbent materials produced when the regulated products are used. Proposed N.J.A.C. 7:27-26.3(h) prohibits the requirement or solicitation by contract of the use of non-compliant products.

Proposed N.J.A.C. 7:27-26.3(i) allows the unlimited sell-through of non-compliant products manufactured before January 1, 2009. The Department proposes to allow this sell-through to be consistent with its sell-through provisions for consumer products containing VOCs at N.J.A.C. 7:27-24.

#### **N.J.A.C. 7:27-26.4 Exemptions**

The Department proposes to exempt certain compounds and uses of compounds from the requirements of proposed Sbchapter 26, to be consistent with both the OTC and CARB model rules and in consideration of the difficulty in finding acceptable low VOC alternatives for certain types of older equipment or the relatively limited impact on the amount of VOC emissions in New Jersey from the compounds and uses.

Proposed N.J.A.C. 7:27-26.4(a) exempts certain compounds from the subchapter. Generally speaking, these exemptions cover small volume, low VOC compounds and those used in non-commercial, research-related applications.

Proposed N.J.A.C. 7:27-26.4(b) exempts from the subchapter certain operations that involve the use of regulated compounds. These exemptions are based on the lack of available and acceptable low VOC substitutes for the compounds currently used in these operations. In the case of plaque-laminating operations using older lamination equipment (installed prior to July 1, 1992), written notification of the Department that a complying adhesive is not available is required at proposed N.J.A.C. 7:27-26.4(b)4 before the Department will grant an exemption.

Proposed N.J.A.C. 7:27-26.4(c) exempts an operation with a low yearly VOC emission level. Proposed N.J.A.C. 7:27-26.4(d) exempts a use with a low facility-wide volume of non-complying compounds. Exemptions at both N.J.A.C. 7:27-26.4(c) and (d) require recordkeeping to demonstrate compliance with the emission thresholds.

Proposed N.J.A.C. 7:27-26.4(e) and (f) exempt a manufacturer or distributor of non-compliant compounds that are intended for shipment and use outside of New Jersey who has taken reasonable precautions to prevent the distribution of the products to or within New Jersey. The products must not be sold, supplied or offered for sale to a retail outlet in New Jersey. A manufacturer or distributor exempted by these provisions is required to keep records to verify that all the conditions were met.

Proposed N.J.A.C. 7:27-26.4(g) exempts the sale or manufacture for sale of non-compliant products to persons using add-on air controls to comply with the requirements of this subchapter.

#### N.J.A.C. 7:27-26.5 Administrative requirements

Proposed N.J.A.C. 7:27-26.5(a) sets forth the recordkeeping requirements for those users of adhesives, sealants, adhesive primers and sealant primers to whom the subchapter applies, pursuant to proposed N.J.A.C. 7:27-26.2(b), who are operating pursuant to a permit issued by the Department under N.J.A.C. 7:27-8. Although the OTC model rule applies recordkeeping requirements across the board to all persons subject to the rules (including those who use, sell, or manufacture these products for sale), the Department proposes to limit these requirements to those with operating permits issued by the State. This is consistent with both the approach taken by a number of the California Districts, as well as the "optional" nature of the prohibition of sales provisions in the CARB model rule at III G. (See footnote 8 to III G of CARB's model rule, which makes adoption of these provisions by the Districts discretionary.)

Proposed N.J.A.C. 7:27-26.5(b) and (c) set forth the recordkeeping requirements for those who comply through the use of add-on air pollution control equipment, and those who conduct testing in connection with the laboratory testing exemption at N.J.A.C. 7:27-26.4(a)1, respectively. Consistent with the OTC model rule, the Department proposes, at N.J.A.C. 7:27-26.5(d), to require all records to be maintained for five years and be available to the Department upon request. This is also consistent with other recordkeeping requirements in N.J.A.C. 7:27.

#### N.J.A.C. 7:27-26.6 Compliance procedures and test methods

The Department proposes to require test methods to be used to demonstrate compliance with N.J.A.C. 7:27-26, consistent with the OTC and CARB model rules.

Proposed N.J.A.C. 7:27-26.6(a) prescribes the use of either EPA Reference Method 24 or South Coast Air Quality Management District (SCAQMD) Method 304-91 to determine the VOC and solids content of all non-aerosol adhesives, adhesive primers and cleanup solvents. EPA Reference Method 24 is used to determine volatile matter content, water content, density, volume solids, and weight solids of paint, varnish, lacquer, or other related surface coatings. SCAQMD Method 304-91 is used to determine the VOC content of various materials for compliance with the VOC requirement specified in various SCAQMD rules.

Proposed N.J.A.C. 7:27-26.6(b) prescribes the use of ASTM D4457-85, which uses gas spectrum analysis to measure the organic content of paints and coatings to identify or quantify the organic content of exempt compounds.

Proposed N.J.A.C. 7:27-26.6(c) prescribes the use of SCAQMD Method 316A 92, which is used to determine VOC content in materials used for pipes and fittings, to determine the VOC of plastic welding cement adhesive or primer. SCAQMD Method 316A 92 provides for the analysis of an aliquot of the material for VOC by the procedure specified in SCAQMD Method 304. Another portion of the material is applied to a substrate specified by the manufacturer and cured. After curing, the assembly is heated for one hour at 110°C. The VOC retained and the VOC emitted is then determined.

Proposed N.J.A.C. 7:27-26.6(d) prescribes the use of SCAQMD Method 316A, described above, to determine whether a diluent is a reactive diluent.

Proposed N.J.A.C. 7:27-26.6(e) prescribes the use of ASTM E 260-96 to determine the composite vapor pressure of organic compounds in cleaning materials and ASTM D 3792-79 for water content. ASTM E 260-96 is a general guide to the application of gas chromatography (GC) with packed columns for the separation and analysis of vaporizable or gaseous organic and inorganic mixtures and as a reference for the writing and reporting of GC methods. It excludes any form of gas chromatography associated with open tubular (capillary) columns. ASTM D 3792-79 is a test method for the determination of the total water content of waterborne paints, using gas spectrum analysis.

Proposed N.J.A.C. 7:27-26.6(f) lists a number of resources that may be used in determining the vapor pressure of each single component compound for the purpose of complying with this subchapter. The list includes a number of chemical handbooks as well as other sources approved by the SCAQMD or other California air districts for this purpose. The list also includes ASTM D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, which can be used for this purpose.

For an owner or operator using air pollution control equipment to comply with the subchapter, proposed N.J.A.C. 7:27-26.6(g)1 requires measurement of capture efficiency in accordance with USEPA's "Guidelines for Determining Capture Efficiency" issued January 9, 1995. This document provides technical guidance to USEPA, state and local personnel and regarding capture efficiency testing, as well as owners and operators of stationary sources required to determine capture efficiency. Proposed N.J.A.C. 7:27-26.6(g)2 prescribes the use of EPA Methods 25, 25A, 25B or CARB Method 100 to determine the control efficiency. The EPA Methods, set forth at Appendix A of 40 CFR 60, measure total gaseous organic concentration using a flame ionization analyzer or a non-dispersive infrared analyzer and total gaseous non-methane organic emissions as carbon. The control efficiency can also be determined by using CARB Method 100, whereby a sample of an exhaust gas stream is extracted, conditioned and analyzed continuously by instruments. The measurements made by the continuous analyzers are used to determine average emission concentrations. By measuring the stack gas flowrate and moisture, and using this information with the average emission concentration, mass emission rates can be determined.

Proposed N.J.A.C. 7:27-26.6(h) prescribes the use of SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" to determine solvent losses from spray gun cleaning systems. This method is intended to determine solvent losses during active and passive modes. The active mode comprises all steps carried out during a cleaning operation. The active loss is expressed in grams of solvent loss per cleaning cycle. The passive mode represents the non-active mode period when cleaning equipment sits idle between cleaning cycles and for extended periods such as weekends. Passive losses are a result of natural evaporation of the solvent from the equipment. The passive loss is expressed in grams of solvent loss in the passive mode per hour. Proposed N.J.A.C. 7:27-26.6(h) also establishes the requirements for the test solvent to be used as well as the minimum test temperature.

Proposed N.J.A.C. 7:27-26.6(i) provides the equation to be used in calculating grams of VOC per liter of adhesive, for adhesives that do not contain reactive diluents. For adhesives that contain reactive diluents, proposed N.J.A.C. 7:27-26.6(j) provides the equation to be used in calculating grams of VOC per liter of adhesive, determined after curing.

Proposed N.J.A.C. 7:27-26.6(k) provides the equation to be used in calculating grams of VOC per liter of material, and proposed N.J.A.C. 7:27-26.6(l) provides the equation to be used in calculating percent VOC by weight.

#### N.J.A.C. 7:27-26.7 Container labeling

The Department proposes at N.J.A.C. 7:27-26.7(a) to require certain information to be displayed on the regulated product or its label. This includes the VOC content as supplied, recommendations regarding thinning, reducing, or mixing, and the maximum or actual VOC content of the product as used following the manufacturer's recommendations regarding thinning, reducing, or mixing in grams per liter of product.

At proposed N.J.A.C. 7:27-26.7(b), the Department requires the dating or code-dating of the regulated products. Use of a code in the YY DDD format would exempt the manufacturer from the requirements of proposed N.J.A.C. 7:27-26.7(c) that it register an explanation for the date-coding with the Department. The format of the proposed YY DDD date code is the same as, and for the same reasons as for proposed N.J.A.C. 7:27-24.5(d), discussed above. Proposed N.J.A.C. 7:27-26.7(d) also exempts from the date-code explanation requirement products with no or low VOC content and free samples of products.

### N.J.A.C. 7:27-26.8 Registration

The Department proposes to require the manufacturer of applicable products to register its date-code (other than as provided in proposed N.J.A.C. 7:27-26.7) and the product.

Proposed N.J.A.C. 7:27-26.8(a) through (c) require the manufacturer to provide an electronic, non-confidential registration that contains the contact information for the manufacturer of the product, an explanation of the date-code (if the product is date-coded), and a description of the product. The manufacturer can apply for a hardship waiver from the electronic registration requirement, if necessary, and send it to the address in the proposed rule. The proposed rule sets forth the schedule for submission, depending on the nature of the product.

#### Subchapter 34. TBAC Emissions Reporting

#### **N.J.A.C.** 7:27-34.1 Definitions

The Department proposes to define terms used in the proposed new rules. For the terms "AP-42," "CEM," "Department," "EPA," "manufacturer," "person," "reasonably available," "responsible official," and "State," the Department proposes to define these terms as they are defined elsewhere in N.J.A.C. 7:27, such as in the Department's consumer products rules at N.J.A.C. 7:27-24, and in its emissions statements rules at N.J.A.C. 7:27-21.

The proposed definition of "AP-42" includes information on how to obtain or view a copy of this document. Those filing emissions statements with the Department pursuant to N.J.A.C. 7:27-21 are no doubt already familiar with this compilation of emission factors provided by the USEPA. An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (for example, kilograms of particulate emitted per megagram of coal burned). Such factors facilitate estimation of emissions from various sources of air pollution. In most cases, these factors are simply averages of all available data of acceptable quality, and are generally assumed to be representative of long-term averages for all facilities in the source category (that is, a population average). The USEPA compilation of these factors is organized by industry function, so the factors are intended to be relevant to the sources.

The Department has proposed a hierarchy of methods that can be used in estimating actual emissions in Table 1 of N.J.A.C. 7:27-34.4(a), in which the use of an AP-42 Emission Factor is ranked in sixth place, which means that, where reasonably available, the methods ranked one through five should be used. The Department proposes to define "emission year" and "reporting year" to refer to the calendar year during which reported emissions were emitted and the calendar year during which emissions are reported, respectively. The reporting year is the year immediately following the emission year.

The Department proposes to define "ozone season" as May 1 through September 30, which is consistent with how the Department refers to the ozone season elsewhere in N.J.A.C. 7:27. The Department proposes to define "TBAC" as the acronym for t-butyl acetate.

## N.J.A.C. 7:27-34.2 Applicability

Proposed N.J.A.C. 7:27-34.2 identifies who must report TBAC emissions. This includes out-of-State manufacturers who sell TBAC-containing products for sale within the State, and in-State manufacturers of TBAC or TBAC-containing products. Out-of-State manufacturers of products containing TBAC for sale in the State are to report the estimated amount of actual emissions resulting from the use of their products in the State. In-State manufacturers of TBAC or products containing TBAC are to report the estimated amount of actual emissions resulting from the manufacturing of their products in the State. Additionally, these in-State manufacturers that sell TBAC or products containing TBAC in the State are to report the estimated amount of actual emissions resulting from the use of their products in the State.

#### N.J.A.C. 7:27-34.3 Reporting requirements

Proposed N.J.A.C. 7:27-34.3 is based on the registries required under N.J.A.C. 7:27-21, 23 and 24 (the rules for the emission statements, architectural coatings and consumer products programs, respectively). The proposed reporting requirements include manufacturer information, such as street and mailing address, contact information, TBAC emissions in pounds per ozone season day and pounds per year, method of emissions estimation, product brand, and product category. "TBAC emissions" is the only

category of information requiring a calculation. The rest of the information is general information about the manufacturer and its products.

The proposed rule requires that the information be submitted to the Department electronically, except for cases in which electronic submittal would create a hardship, and be accompanied by a certification signed by the person with direct knowledge and the responsible official. The Department proposes requiring annual submission of the TBAC emissions report to the Department by April 30 of the reporting year.

#### N.J.A.C. 7:27-34.4 Methods to estimate actual emissions

Proposed N.J.A.C. 7:27-34.4 requires the use of TBAC emission quantification methods in the hierarchy set forth in Table 1 at N.J.A.C. 7:27-34.4. The manufacturer is required to choose from the table the highest-ranking method that is reasonably available and that provides the most accurate estimation of the actual emissions from the emission source. The table is based on Table 3 at N.J.A.C. 7:27-21.6 (the rules for the emission statements program); therefore, the proposed table focuses on manufacturers who have facilities in the State producing the products. However, the table provides enough variability that out-of-State manufacturers who sell their products in the State should still be able to use it. For most manufacturers, the most appropriate method would be mass/material balance. But, if a manufacturer cannot use any of the listed methods, the proposed rules also provide procedures on how to document the method used. Proposed N.J.A.C. 7:27-34.4(b) allows for the use of a lower-ranking method and proposed N.J.A.C. 7:27-34.4(c) requires documentation of the selection of the lower-ranking method.

The Department recognizes that the use of good engineering judgment is inherent in the selection, use, and development of any specific calculation methodology. For example, the decision as to whether an AP-42 emission factor is appropriate for a given piece of equipment always involves good or best engineering judgment. The manufacturer will indicate that good engineering judgment was used when no other calculation methodology code adequately describes the primary method selected to estimate and report emissions for a given air contaminant. For example, if stack test data were relied upon to develop the emission estimates for a given source but the stack test data from several stack tests were averaged to report one annual estimate of emissions, the manufacturer would report "source test" as the method used, rather than good engineering judgment. If a facility has stack testing results showing emissions from a source, the facility should apportion those emissions into the reported emission values using actual process rates. For example, if stack testing was performed under a certain load, then those results should be used for the period of the year that the source operated under that load. If available, another emission factor or stack test result should be used for the period of time the source operated under other than stack-testperformed loads. Conversely, a facility may use the stack test results without modification if good engineering judgment suggests that those results are representative of the emissions during actual operations. The emission factor would then be the pounds per hour emission rate derived from the stack test. The Department expects any facility that performed a stack test approved by either the USEPA or the Department to factor those emission results into its reported emission values. Also note that AP-42 Emission Factors are recommended to be used over a non-approved stack test – that is, they rank higher in the hierarchy in Table 1. If a facility uses a stack test that is not USEPA or Department-approved, the Department would be unable to determine whether the results that the facility obtains and reports are scientifically valid. Accordingly, AP-42 Emission Factors are preferred to a non-approved stack test.

#### N.J.A.C. 7:27-34.5 Recordkeeping requirements

The Department proposes at N.J.A.C. 7:27-34.5(a) to require a manufacturer to retain electronic and paper copies of the TBAC emission report and all background documentation for five years, which is consistent with the length of time the Department requires similar records to be retained, such as in the Emission Statements Program (N.J.A.C. 7:27-21). Proposed N.J.A.C. 7:27-34.5(b) and (c) require the records to be made available for inspection by the Department and submitted to the Department upon written request.

Chapter 27A. Air Administrative Procedures and Penalties

Subchapter 3. Civil Administrative Penalties and Requests for Adjudicatory Hearings

N.J.A.C. 7:27A-3.10 Civil administrative penalties for violation of rules adopted pursuant to the Act

The Department proposes to amend N.J.A.C. 7:27A-3.10(m)24 to add penalties for violations of proposed N.J.A.C. 7:27-24, and to add new penalties for violations of proposed N.J.A.C. 7:27-26 and N.J.A.C. 7:27-34. The proposed new penalty provisions for N.J.A.C. 7:27-24 pertain to chlorinated toxic air contaminants and, therefore, the penalty amounts are similar to N.J.A.C. 7:27-24.4(*l*) (renumbered as proposed N.J.A.C. 7:27-24.4(m)) for chlorinated toxic air contaminants. The proposed new penalty provisions for violations of N.J.A.C. 7:27-26 are consistent with penalties for violations of similar provisions at N.J.A.C. 7:27-24. The penalties for violations of the TBAC emissions reporting requirements are consistent with existing penalties for similar violations of N.J.A.C. 7:27-21. In addition, the Department proposes to designate new penalties as either minor or non-minor in accordance with the Grace Period Law, N.J.S.A. 13:1D-125 through 133, and consistent with similar penalty provisions in N.J.A.C. 7:27A-3.10(m).

## **Social Impact**

The Department anticipates that these proposed new rules and amendments will have a positive social impact on the general public. This rulemaking is primarily designed to reduce VOC emissions to help the State make progress toward attainment of the health based NAAQS for eight—hour ozone. It will also reduce chlorinated toxic air contaminants in various consumer products. The general public will benefit from the proposed rules because exposure to ground-level ozone and air toxics is a health concern in New Jersey.

Ozone exposure can cause several health effects, including irritation of the lungs. This can make the lungs more vulnerable to diseases, such as pneumonia and bronchitis, increase incidents of asthma and susceptibility to respiratory infections, reduce lung function, reduce an individual's ability to exercise and aggravate chronic lung diseases. Increased ozone concentrations severely affect the quality of life for susceptible populations (small children, the elderly, and asthmatics) and present health risks for everyone. Exposure to ozone for several hours at relatively low concentrations significantly reduces lung function and induces respiratory inflammation in normal, healthy people during exercise. This decrease in lung function is generally accompanied by symptoms such as chest pain, coughing, sneezing, and pulmonary congestion. Recent research in Southern California strongly suggests that, in addition to exacerbating existing asthma, ozone also causes asthma in children. (See Mid-Atlantic Regional Air Management Association (MARAMA) A Guide to Mid-Atlantic Regional Air Quality, Appendix A, Health Effects of Air Pollutants, October 2005, available at http://www.marama.org/reports/Guide-MidAtlantic\_RegAQ\_Final.pdf. See also Ground-level Health Environment, available Ozone and http://www.epa.gov/air/ozonepollution/health.html.)

Long-term exposure to ozone may lead to scarring of lung tissue and lowered lung efficiency. Repeated exposure may cause permanent lung damage. When ozone reaches unhealthy levels, children, people who are active outdoors, and people with respiratory disease are most at risk.

The Department estimates that attaining the Federal health standard for ozone in New Jersey would eliminate about 40,000 asthma attacks each year and substantially reduce hospital admissions and emergency room visits among children and adults with asthma and other respiratory diseases. (See New Jersey Department of Environmental Protection, In Pursuit of Clean Air – Ozone, available at <a href="http://www.state.nj.us/dep/ipoca/ozone.htm">http://www.state.nj.us/dep/ipoca/ozone.htm</a>.) As such, implementing the proposed amendments and new rules would not only yield greater air quality benefit, but also would save lives and money and provide better living conditions for the people of New Jersey, especially the susceptible populations.

In addition to the positive social impact from reducing ozone concentrations, reducing long-term exposure to low concentrations of VOCs will also have beneficial health effects. Therefore, decreasing and thus decreasing VOC emissions provides a positive social impact. The health effects of VOCs may include elevation of serum enzyme levels, mild cellular changes and changes in lipid metabolism. At somewhat higher concentrations, breathing these contaminants may cause irritation of the respiratory tract. (See Colorado Department of Public Health and Environment, November 2000 Volatile Organic Compounds Health Effects Fact Sheet, available at http://www.cdphe.state.co.us/hm/schlage/vocfactsheet.pdf.)

Acute effects include eye irritation and watering, nose irritation, throat irritation, headaches, nausea/vomiting, dizziness and asthma exacerbation. Chronic effects include cancer, liver damage, kidney damage and central nervous system damage. (See Minnesota Department of Health, September 2005 Volatile Organic Compounds – VOCs Fact Sheet. Available at <a href="http://www.health.state.mn.us/divs/eh/indoorair/voc/">http://www.health.state.mn.us/divs/eh/indoorair/voc/</a>.)

In addition, several VOCs, including the chlorinated toxic air contaminants addressed by the proposed rules, are also classified as hazardous air pollutants (HAPs) under the Clean Air Act (42 U.S.C. §7412(b)). HAPs are substances that cause serious health effects. The health effects include cancer, birth defects, nervous system problems and death due to massive accidental releases. (USEPA's Plain English Guide to the Clean Air Act, April 1993.) Common HAPs used in adhesives and sealants, for example, include methyl ethyl ketone, methyl isobutyl ketone, methanol, toluene, xylenes, hexane, and vinyl acetate.

The proposed new rules and amendments will also directly reduce methylene chloride, perchloroethylene and trichloroethylene from automotive and other consumer products and paradichlorobenzene from certain other consumer products. As CARB stated in the executive summary to its automotive consumer products rule proposal, available at <a href="http://www.arb.ca.gov/regact/amr/isor-vol1.pdf">http://www.arb.ca.gov/regact/amr/isor-vol1.pdf</a>,

Exposure to Perc, MeCl, or TCE may result in both cancer and non-cancer (acute and chronic) health effects to off-site receptors and on-site workers. The primary route of human exposure for these compounds is inhalation. Non-cancer effects from exposure to Perc include headache, dizziness, rapid heartbeat, and liver and kidney damage. Non-cancer effects from exposure to MeCl include cardiac arrhythmia and loss of consciousness. Non-cancer effects from exposure to TCE include headache, nausea, tremors, and respiratory irritation. These health effects may also result from exposures that occur within the workplace for all three compounds.

CARB noted that alternative products and processes are effective in cleaning and degreasing, based on claims that manufacturers make on the product labels of non-chlorinated products and on their websites. And, as CARB further noted in the executive summary, additional benefits from these rules include reduced waste water and hazardous waste contamination, and reduced workplace exposure.

In the Executive Summary of CARB's Initial Statement of Reasons for its rule proposal addressing paradichlorobenzene in consumer products, CARB stated,

[Paradichlorobenzene] is a chlorinated benzene compound designated by the International Agency for Research on Cancer to be possibly carcinogenic to humans (Group 2B). It is also a California [toxic air contaminant] and a federal Hazardous Air Pollutant (HAP). As such, PDCB has potential carcinogenic and non-cancer health effects.

CARB noted further that a concern for the health impacts of paradichlorobenzene had led many other entities to ban its use in consumer products.

Many entities have a policy against the purchase or use of [paradichlorobenzene] products in their facilities, including the City of Seattle, Washington; Erie County, New York; the New York Department of Corrections; and the Fire Department of New York City. The state of Vermont has banned its state agencies from purchasing [paradichlorobenzene] products. In addition, the New York State Legislature is currently considering a statewide ban on the sale or use of [paradichlorobenzene] products in any location open to access by the public.

In evaluating the proposal's impact on the cancer health risk, CARB also noted,

Staff estimates that in the seven categories where staff proposes prohibitions of methylene chloride, perchloroethylene, and trichloroethylene, for a given category, up to 64 chances of potential excess cancer cases per million persons would be avoided statewide. As for para-dichlorobenzene, we estimate that 9 potential excess cancers per million persons would be avoided statewide. These estimates are based on outdoor, near-source, exposure over a 70 year lifetime. Further, for reductions of para-dichlorobenzene, we estimate that there would be 145 potential excess cancer cases per million avoided as a result of indoor exposure.

This would be in addition to the cancer risk reductions from eliminating methylene chloride, perchloroethylene, and trichloroethylene from automotive consumer products in the separate CARB rulemaking.

Further information on the health effects of these compounds is available from the USEPA Technology Transfer Network Air Toxics Website (Health Effects Notebook for Hazardous Air Pollutants) at http://www.epa.gov/ttn/atw/hlthef/hapindex.html.

#### **Economic Impact**

## **Chemically formulated consumer products**

CARB estimates that the cost effectiveness of VOC limits with an effective date of December 31, 2006 (those limits included in the OTC 2007 model rule for 2009 implementation) to be about \$4,000 per ton of VOC reduced. (See CARB, "Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products Volume I: Executive Summary," June 24, 2004.) CARB further estimates the average increase in cost per unit to the manufacturer to be about \$0.16. For some product categories, it was assumed that manufacturers would either drop the products or implement minor reformulation changes. For other categories, manufacturers would undertake complete production line overhaul and equipment replacement rather than simple retooling. These costs are likely to be less in the Ozone Transport Region and New Jersey because some of the research and reformulation costs to develop compliant products for California need not be incurred again for many nationally distributed products sold in the Ozone Transport Region. Additionally, some existing products manufactured before the new content requirements are in effect can be sold as long as they are properly dated, thus further reducing the cost impact to the manufacturer.

Companies that supply raw materials for existing non-compliant products may experience a decline in demand for their products. On the other hand, companies that supply solvents, other chemicals and equipment for use in reformulating the products could potentially benefit from the proposed new rules and amendments as they experience an increase in demand for their products.

Distributors and retailers may be impacted if the potential increase in the cost of products dampens demand for the products. It is assumed that manufacturers, distributors and retailers pass on any additional compliance costs to the consumers. This may be conservative, because the manufacture may absorb some or all of the cost of compliance. Based on the projected low potential impact on consumers, the Department does not anticipate any significant adverse economic impacts for distributors and retailers.

#### **Portable fuel containers**

The proposed amendments are expected to have a minimal economic impact. In the Summary of Comments and Agency Response of CARB's July 2006 Final Statement of Reasons concerning the second phase of its rulemaking, CARB noted that the Portable Fuel Container Manufacturers Association (PFCMA) supported its rulemaking. PFCMA indicated that it believed the amendments would allow the development of products that would avoid problems associated with current products, that are more intuitive and easy to use for consumer, and that would ultimately lead to emission reductions. Kerosene containers that were not previously regulated in New Jersey will be covered by the proposed sell-through provisions for up to a year after the operative date of the rules, if properly dated and labeled solely for use with kerosene. Manufacturers of portable fuel containers have already incurred research and engineering costs in order to meet the 2005/2006 standards in California. No further research and engineering should be necessary, inasmuch as the proposed standards are the same as those in effect in California. There are no additional costs associated with the Department's rules in this regard. The proposed amendments regarding kerosene containers will have very little economic impact on retailers because there is a relatively small market for kerosene containers in the State, and very few retailers offer kerosene containers for sale.

The Department does not anticipate significant adverse economic impact on portable fuel container and spout manufacturers, distributors, retailers, businesses that use portable fuel containers, or consumers. The Department assumes manufacturers will pass on to consumers the cost of compliance, if any. The potential cost increase to the consumer is not expected to impose a noticeable adverse impact. Portable fuel containers are not expensive, and they have a long useful life. The USEPA noted in its February 2007 Regulatory Announcement, Control of Hazardous Air Pollutants from Mobile Sources: Final Rule to Reduce Mobile Source Air Toxics (including the portable fuel container final rule) that the reduced evaporation from containers will result in gasoline savings over the life of the container that will more than offset the increased cost for the container. (The Regulatory Announcement is available from the USEPA's website at <a href="http://www.epa.gov/otaq/regs/toxics/420f07017.pdf">http://www.epa.gov/otaq/regs/toxics/420f07017.pdf</a>.)

CARB estimates that the cost of its 2005/2006 amendments would range from \$0.40 to \$0.70 per pound of VOC reduced, or \$800.00 to \$1,400 per ton of VOC reduced. (See CARB's "Staff Report: Initial Statement of Reasons for Proposed Amendments to the Portable Fuel Container Regulations," July 29, 2005, pg. 27.) Using CARB's projected costs for the Ozone Transport Region provides a conservative estimate, as some of the one-time research and reformulation costs incurred for products sold in California will not have to be incurred again.

#### Adhesives and sealants

The cost of complying with the proposed new requirements includes the cost of using alternative formulations of low-VOC or water-based adhesives, sealants, adhesive primers, and sealant primers and cleanup products. Based on information provided by the Ventura County Air Pollution Control District, CARB determined that the cost-effectiveness of VOC limit component of its adhesives rule ranges from a savings of \$1,060 per ton to a cost of \$2,320 per ton of VOC reduced. (See CARB's "Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology for Adhesives and Sealants," December 1998, pg. 17.) These costs are likely to be less in the Ozone Transport Region. CARB also reports an estimated cost of \$9,000 to \$110,000 per ton of VOC reduced, based upon the use of add-on control equipment to comply with the requirements.

#### Reducing chlorinated toxic air contaminants

The proposed amendments to N.J.A.C. 7:27-24 will reduce the amount of methylene chloride, perchloroethylene and trichloroethylene entering the environment by eliminating the use of these chlorinated toxic air contaminants in the automotive consumer products industry in New Jersey and in other consumer products commonly sold in the State. The proposed amendments will also reduce the amount of paradichlorobenzene, by eliminating its use in certain other consumer products categories. The proposed amendments will require automotive and other consumer products to switch to alternative technologies and formulations that do not require the use of these chlorinated toxic air contaminants.

In the Executive Summary of its rule proposal to eliminate the use of methylene chloride, perchloroethylene and trichloroethylene in automotive repair products, available at <a href="http://www.arb.ca.gov/regact/amr/isor-vol1.pdf">http://www.arb.ca.gov/regact/amr/isor-vol1.pdf</a>, CARB discussed the cost-effectiveness of the regulations, and stated

Based on our analyses, we estimate that the cost-effectiveness of the proposed ATCM [airborne toxic control measure] ranges from essentially no cost to a high of about \$0.23 per pound of methylene chloride, perchloroethylene and trichloroethylene reduced. The estimated average cost-effectiveness weighted by emissions reductions across all categories is about \$0.03 per pound of methylene chloride, perchloroethylene and trichloroethylene reduced.

\* \* \*

The estimated average cost-effectiveness per cancer case avoided is \$26,000 with a range of approximately \$1,400 to \$111,000.

The Department's proposed new rules for automotive consumer products are similar to CARB's automotive repair products rules; therefore, the economic impacts for New Jersey also should be similar to those projected for California. CARB projected no significant economic impacts from its rulemaking. It found that companies that did not have a VOC product and chose to formulate one would be able to absorb the cost of reformulation with no adverse impacts on their profitability.

CARB's analysis showed that raw material costs for the chlorinated toxic air contaminant-containing products were greater than the raw material costs for replacement products. This suggested that it should be less costly to manufacture compliant products. CARB found no noticeable differences between the market prices for products that use chlorinated air toxic contaminants and those that use VOC products, and concluded that there should be no economic impact on the consumer.

A more detailed discussion of CARB's analysis of these economic impacts, including the potential additional cost to the consumer and availability of alternate automotive consumer products that do not contain chlorinated toxic air contaminants, can be obtained from CARB at <a href="http://www.arb.ca.gov/regact/amr/amr.htm">http://www.arb.ca.gov/regact/amr/amr.htm</a> and <a href="http://www.arb.ca.gov/toxics/amr/amr.htm">http://www.arb.ca.gov/regact/amr/amr.htm</a> and <a href="http://www.arb.ca.gov/toxics/amr/amr.htm">http://www.arb.ca.gov/toxics/amr/amr.htm</a>.

## **Updating the definition of VOC/reporting TBAC emissions**

The Department anticipates that the proposed new rules and amendments exempting TBAC from emission limits, but requiring the reporting of TBAC emissions, will have no economic impact because the

Department expects regulated entities to be able to use their existing personnel to provide the requested information. The Department anticipates the cost of records retention, if any, to be minimal.

### **Penalty provisions**

The proposed new and amended provisions of the penalty schedule at N.J.A.C. 7:27A will have no economic impact on persons who comply with the air pollution control rules. For violators, the economic impact of the proposed rules will vary according to the severity of the violation. The proposed penalties for violations of the proposed new requirements at N.J.A.C. 7:27-24, 26 and 34 are comparable to violations of similar provisions elsewhere in N.J.A.C. 7:27A.

#### **Cost to the Department**

Additional Department resources may be needed to implement the proposed new rules and amendments. Resources will be needed to organize the date-code information submitted to the Department by the manufacturers and to continue to evaluate CARB's research and technology reviews. Staff will also be needed to process the TBAC emissions reports. While some resources will also be needed to enforce the rules, local County Environmental Health Act (CEHA) communities will be asked to perform most of the enforcement monitoring as part of their annual work plan. This will represent a small shift in the workload for these communities and Department oversight of the CEHA work plan.

#### **Environmental Impact**

The proposed new rules and amendments will have a positive environmental impact. The primary environmental benefit will be a reduction in VOC emissions, which are precursor emissions to the formation of ground-level ozone. This will contribute towards the attainment of the health-based NAAQS for eight-hour ozone. Ozone interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. Ozone damages the leaves of trees and other plants, ruining the appearance of cities, national parks, and recreation areas. Ozone reduces crop and forest yields and increases plant vulnerability to disease, pests, and harsh weather. This impacts annual crop production throughout the United States, resulting in significant losses, and injures native vegetation and ecosystems. Ground-level ozone also damages certain man-made materials, such as textile, fibers, dyes, and paints, requiring more frequent upkeep and repair.

The proposed new rules and amendments are also expected to reduce emissions of hazardous air pollutants and toxic substances that cause serious environmental effects. For example, some toxic air pollutants can deposit onto soils or surface waters, where plants take them up. They can be ingested by animals and eventually magnified up through the food chain. Like humans, animals may experience health problems if exposed to sufficient quantities of air toxics over time. These health effects can include damage to the immune system, as well as neurological, reproductive (for example, reduced fertility), developmental, respiratory and other health problems. (See United States Environmental Protection Agency, Toxic Air Pollutants – About Air Toxics, Health and Ecological Effects. August 2006, available at http://www.epa.gov/air/toxicair/newtoxics.html#effects.)

In addition, the proposed new rules and amendments are also expected to reduce emissions of HAPs and toxic substances such as ethylene-based glycol ethers, methyl ethyl ketone, methanol, toluene, methyl bromide, xylenes, 1,3-dichloropropene, and chlorobenzene, and the constituents of gasoline, such as benzene, toluene, xylenes, ethylbenzene, hexane, and methyl tertiary butyl ether. The proposed new rules and amendments are also expected to reduce  $PM_{2.5}$ , some of which is created from VOC emissions.

## **Chemically formulated consumer products**

The Department estimates the VOC emissions from chemically formulated consumer products to be approximately 77 tons per day. The reduction benefit from the proposed rules affecting chemically formulated consumer products would be approximately 1.2 tons per day in 2009, or approximately two percent from this category. These calculations are contained and explained in the final technical support document prepared for the Mid-Atlantic Regional Air Management Association (MARAMA) (Development of Emission Projections For 2009, 2012, and 2018 For NonEGU Point, Area, and Nonroad Sources in the MANE-VU Region, Final Report February, 2007). This report is available from MARAMA's website at

http://www.marama.org/reports/MANEVU\_Emission\_Projections\_TSD\_022807.pdf.

The emission reduction benefit estimation methodology in the MARAMA technical support document is based on information developed by CARB in its 2005 amendments. Reductions were calculated for states in the OTR by extrapolating from California's population. The New Jersey-specific calculations are also documented in Chapter 6 and Appendix E of the New Jersey 8-hour Ozone Attainment State Implementation Plan (SIP), available from the Department's website at <a href="http://www.state.nj.us/dep/bagp/sip/siprevs.htm">http://www.state.nj.us/dep/bagp/sip/siprevs.htm</a>.

### Portable fuel containers

The Department estimates VOC emissions from portable fuel containers in New Jersey to be approximately 31.7 tons per day on a typical summer day in 2002. The Department estimates that implementation of the portable fuel container rules, as amended, will result in a reduction in VOC emissions in New Jersey of approximately 6.1 tons per ozone season day in 2009. The Department's calculations are based on the projections in the MARAMA technical support document for VOC control measures in the Ozone Transport Region. These calculations are based on CARB's estimated VOC emission reduction benefits from its 2006 amendments to its portable fuel container rules and extrapolated, based on population, for the Ozone Transport Region states. Recognizing that the full benefit will not be realized until there is complete turnover of the portable fuel container population in New Jersey, the Department projected a proportionate benefit for 2009.

The proposed amendments and new rules will also improve water quality in the State's lakes, rivers and aquifers. Many marine pleasure craft, especially personal water craft, are refueled using portable fuel containers. Thus the possibility of fuel spillage during "on the water" refueling is always present. The spill-proof systems will allow users of pleasure craft to refuel their engines without fuel spillage, thereby reducing the amount of fuel discharged into bodies of water. In addition, use of the spill-proof systems to refuel lawn, garden, and small construction equipment will reduce fuel spills that could percolate into aquifers.

#### Adhesives and sealants

From 1998 to 2001, various Air Pollution Control Districts in California promulgated regulations similar to this proposal, limiting the VOC content of adhesives and sealants, based on CARB's model rule. New Jersey has no existing rules covering the VOC emissions of products from this source category. The Department estimates the VOC content limits for the solvent-based adhesives and sealants will result in a 64 percent reduction in total VOC emissions from this source category. The Department's emission estimates and percent reductions were derived by extrapolating from California's population and adhesive and sealant usage data. Using this method, the Department estimates the reduction in VOC emissions to be more than 6.9 tons per day in 2009 from implementing the amendments and new rules.

Emissions from this category are classified as both point sources and area sources. About 96 percent of adhesive and sealant VOC emissions in the OTC states fall into the area source category. The remaining four percent of the VOC emissions are included in the point source inventory.

For point sources, the Department first identified those sources included in the State-wide emissions inventory that were applying adhesives and sealants (using the source classification code of 4-02-007-xx, adhesives application). Next, the Department determined whether these sources had existing capture and control systems. Most of the controlled sources reported capture and destruction efficiencies in the 90 to 98 percent range. Sources with existing control systems that exceed an 85 percent overall capture and destruction efficiency would meet the OTC 2007 model rule provision for add-on air pollution control equipment; therefore, no VOC reductions were calculated for these sources. For point sources without add-on control equipment, the Department assumed a conservative 64 percent reduction based on reformulation rather than add-on air pollution control equipment.

## Reducing chlorinated toxic air contaminants

The Department anticipates that the proposed new rules and amendments will significantly reduce emissions of the chlorinated toxic air contaminants methylene chloride, perchloroethylene and trichloroethylene from automotive products in 2009, resulting in significantly reduced health risks to the public. Ultimately, when only compliant products are sold in New Jersey, the proposed amendments to N.J.A.C. 7:27-24 will reduce these chlorinated toxic air contaminants emissions in New Jersey by approximately 460 tons per year. Most of this reduction is attributable to a projected reduction of about 370 tons per year of perchloroethylene.

To estimate the reduction in emissions of chlorinated air toxic contaminants that would result from implementation of the proposed new rules and amendments, the Department looked to the calculations and projections developed by CARB for its automotive consumer products rulemaking. CARB adopted regulations eliminating the use of perchloroethylene, methylene chloride and trichloroethylene in automotive repair products effective April 1, 2001. The Department's proposed new rules for automotive consumer products are based on those adopted by CARB, and so the Department projects impacts from this proposal similar to those projected by CARB. CARB provided emission estimates for automotive consumer products in the executive summary of its Initial Statement of Reasons (<a href="http://www.arb.ca.gov/regact/amr/isor-vol1.pdf">http://www.arb.ca.gov/regact/amr/isor-vol1.pdf</a>). CARB based the estimates of the emissions of methylene chloride, perchloroethylene and trichloroethylene from the automotive consumer products on information collected from surveys and site visits to facilities using these products. Based on the survey data, over eight million brake service and repair operations (brake jobs) are performed in California each year. Brake jobs account for the greatest use of these automotive products. CARB summarized the estimated statewide emissions of methylene chloride, perchloroethylene and trichloroethylene from the regulated automotive consumer product categories as follows:

## California Statewide Emission Estimates from Automotive Consumer Products (methylene chloride, perchloroethylene and trichloroethylene)

Compound	Air toxic emissions [tons/day]
Perc	4.2
TCE	0.3
Total	5.2

Assuming the use in New Jersey of these products is proportional to that in California, based on population, the Department made the following calculations.

From:

California population 34,441,000

New Jersey population 8,392,000

methylene chloride

0.7 tons/day x 8392/34441 = 0.17 tons/day x 365 days/yr = 62 tons/year

perchloroethylene

4.2 tons/day x 8392/34441 = 1.02 tons/day x 365 days/yr = 373 tons/year

trichloroethylene

0.3 tons/day x 8392/34441 = 0.07 tons/day x 365 days/yr = 27 tons/year

Total = 1.26 tons/day = 462 tons/year total HAP

Population figures were obtained from the United States Census Bureau at <a href="http://www.census.gov/population/projections/state/stpjpop.txt">http://www.census.gov/population/projections/state/stpjpop.txt</a>.

This reduction will have a positive environmental impact in terms of ground and groundwater contamination in New Jersey, as well. In addition to air-based environmental impacts, perchloroethylene has caused numerous problems with ground and ground water contamination. Perchloroethylene has been present in over 250 remedial investigations involving ground and groundwater contamination in New Jersey, several involving extensive and expensive remediation cleanup projects. Additional perchloroethylene contaminated sites are found every year. Examples can be seen in the Department's Publicly Funded Cleanups Site Status Reports for 2001, 2002, and 2003, which include descriptions of numerous contaminated sites that involve perchloroethylene contamination.

The Department's Publicly Funded Cleanups Site Status Reports, 2001, 2002 and 2003 are available at the Department's website, at

http://www.state.nj.us/dep/srp/publications/site\_status/2001/pdf/2001site\_status.pdf; http://www.state.nj.us/dep/srp/publications/site\_status/2002/pdf/2002site\_status.pdf; and http://www.state.nj.us/dep/srp/publications/site\_status/2003/pdf/2003\_site\_status.pdf, respectively.

Further information on these impacts, including the reduction on potential heath impacts and availability of alternate automotive consumer products that do not contain chlorinated toxic air contaminants, can be obtained from CARB at <a href="http://www.arb.ca.gov/regact/amr/amr.htm">http://www.arb.ca.gov/regact/amr/amr.htm</a> and <a href="http://www.arb.ca.gov/toxics/amr/amr.htm">http://www.arb.ca.gov/toxics/amr/amr.htm</a>.

#### Updating the definition of VOC/reporting TBAC emissions

The Department anticipates some positive environmental impact from these proposed new rules and amendments. The reporting of TBAC emissions allows states and the USEPA to gauge if there is an increase in the use of TBAC after it was exempted from the definition of VOC. If there is an increase, the USEPA and states can determine its extent. This is important, because the exemption for TBAC from the definition of VOC was based on the photochemical reactivity of TBAC, which is very low. But if the increase in TBAC use is large, then the increase may play a much larger role in the photochemistry of ozone formation.

## **Federal Standards Statement**

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65) require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

The Department is proposing amendments and new rules for which there are no Federal standards, as follows. There are no Federal standards establishing either VOC limits for or prohibiting or limiting the use of methylene chloride, perchloroethylene and trichloroethylene in the consumer and automotive products addressed by the Department's proposed new rules and amendments. There are no Federal standards establishing VOC limits or add-on control requirements for adhesives and sealants as provided in the Department's proposed new rules. The USEPA has adopted new rules regarding portable fuel containers, but the Department's new portable fuel container regulations will be consistent with those rules, in that portable fuel containers certified by the USEPA or by CARB (whose rules are comparable to the USEPA's) will be compliant with New Jersey's requirements. Accordingly, no further Federal standards analysis is required.

The USEPA's definition of VOCs indicates that TBAC emissions are to be reported, but does not include the reporting requirements. The Department's proposed TBAC reporting requirements are consistent with the USEPA's rules. However, the proposed new rules and amendments are needed to fulfill a requirement, imposed by USEPA pursuant to the Federal Clean Air Act, 42 U.S.C. §§7401 et seq., that New Jersey adopt sufficient control measures to address additional VOC (ozone precursor) emission reductions identified by USEPA as being needed for New Jersey to attain the eight-hour ozone standard by the mandated attainment dates of 2010. Therefore, proposal of these new rules and amendments is necessary for the State to comply with Federal requirements. Accordingly, no further Federal standards analysis is required.

New Jersey worked with the OTC and other jurisdictions in the Ozone Transport Region to develop a set of control measures to assist in designing an air quality management strategy to attain the eight-hour ozone attainment date by 2010. The VOC emission reductions achieved from the consumer products, portable fuel container, and the adhesive and sealant rules are a component of New Jersey's State Implementation Plan (or SIP). The other States in the Ozone Transport Region are also working to adopt similar regulations.

#### Jobs Impact

The Department anticipates that the proposed new rules and amendments will have no impact on employment in New Jersey.

## **Agriculture Industry Impact**

Pursuant to P.L. 1998, c. 48, the Department has evaluated this rulemaking to determine the nature and extent of impact of the proposed new rules and amendments on the agriculture industry. The Department expects the proposed new rules and amendments to have a positive impact on the State's

agriculture industry. The primary environmental benefit will be a reduction in volatile organic compounds, which are precursor emissions that lead to the formation of ground-level ozone. As discussed in the Social Impact statement above, ground-level ozone is breathed by or comes in contact with crops and other vegetation as well as people and animals. Ground-level ozone interferes with various plants' ability to produce and store nutrients (A USEPA Fact sheet on the New 8-Hour Ozone and Fine (2.5 microns) Particulate Matter Health Standards, July 1997) causing plants to become more susceptible to disease, insects, other pollutants and harsh weather. Not only are native plants and ecosystems injured, but also agricultural crop production suffers significant losses throughout the U.S. If ground-level ozone is reduced, then agricultural crops will suffer less, and the agricultural industry will benefit.

The Department anticipates that the proposed rules concerning the reporting of TBAC emissions will have no impact on the agriculture industry because the agricultural industry does not manufacturer TBAC or any product containing TBAC.

To the extent that agricultural establishments purchase and use portable fuel containers or VOC-containing products, the impact on them will not differ from the impact on other consumers, as discussed in the Economic Impact above.

#### **Regulatory Flexibility Analysis**

As required by the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has evaluated the reporting, recordkeeping, and other compliance requirements that the proposed new rules and amendments would impose upon small businesses. The Regulatory Flexibility Act defines the term "small business" as "any business which is a resident in this State, independently owned and operated and not dominant in its field, and which employs fewer than 100 full-time employees." Based upon this definition, small businesses may be subjected to additional requirements by the proposed new rules and amendments.

The proposed new rules and amendments may affect small businesses, depending on the products they manufacture. In proposing these new rules and amendments, the Department has balanced the need to protect the environment and the public health and to comply with the USEPA against any economic impacts of the rules upon businesses. No further exemption from coverage can be provided to small businesses if the full effect of these amendments is to be achieved. Owners and employees of small businesses will enjoy the environmental, health, and other social benefits of the new rules and amendments. Furthermore, securing the VOC emission reductions that would be realized through the new amendments is required by the USEPA, pursuant to the Federal Clean Air Act. Failure to achieve these reductions could subject New Jersey to economic sanctions, which would adversely affect all businesses in the State, including small businesses. The Department has determined that to exempt small businesses from any requirements or to reduce any requirements would compromise the goals of the rules and the emission reductions needed to reach attainment of the ozone standards.

The flexibility options in the proposed new rules and amendments are applicable to large, as well as small, businesses. The future operative dates of January 1, 2009, and 2010, for compliance with the proposed VOC limits give both large and small businesses time to reformulate products to comply with the proposed new rules and amendments. The effective dates in CARB's consumer products rules vary from January 1, 2006, for some chemically formulated consumer products to July 1, 2007, for portable fuel containers. Therefore, most national manufacturers will have to reformulate to be compliant in California prior to New Jersey's operative dates. Unlike California, which requires non-complying products to be sold within three years or removed from the market, the proposed New Jersey rules and amendments provide an unlimited sell-through option, except in the case of automotive and other consumer products that contain methylene chloride, perchloroethylene, trichloroethylene or paradichlorobenzene, for which a limited sell-through is provided.

The Department does not anticipate that small businesses will need to employ professional services in order to comply with the administrative requirements of the proposed new rules and amendments. The labeling, administrative and recordkeeping requirements are not significantly different than the existing rules. There may be some businesses that need to employ a consultant to assist in the reformulation of products, or obtain additional employees to assist in the reformulation of products, although the reformulation of many national product lines would have already been completed to comply with the CARB rules.

There should be no noticeable impact on any small businesses that manufacture portable fuel containers and spouts. There are no proposed new administrative requirements. The substitution of

certification requirements for standards should not generate any burden on any small businesses. Additionally, compliance with the new Federal rules for portable fuel containers will reduce any impact from the New Jersey-specific rules.

The proposed new regulations for adhesives and sealants will impose new recordkeeping requirements for some of the regulated parties, some of which may be small businesses. The Department designed these requirements to impose minimal, if any, burden on these small businesses. Only those businesses that are already keeping records as part of an air permit issued by the Department under N.J.A.C. 7:27-8 are required to keep records concerning the regulated substances used, and only those businesses that elect to comply with the new rules by using add-on controls will have to keep records of the materials used and the operation and maintenance of the add-on controls. Reporting of the recorded information is only at the request of the Department.

With respect to the proposed TBAC emissions-reporting requirement, although a small business would be subject to the reporting, recordkeeping, and compliance requirements, no small business would be required to retain a consultant or other professional in order to comply with the proposed amendments and new rules. The Department expects that such small businesses already have personnel who keep records on the amount of products made and sold. Using that information, personnel could provide the proposed reporting requirement within a few days. The Department finds this to be minimal effort at minimal cost from the regulated entity's standpoint.

## **Smart Growth Impact**

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal State regulations to include in the rulemaking document a Smart Growth Impact statement that describes the impact of the proposed new rules and amendments on the achievement of smart growth and implementation of the State Development and Redevelopment Plan (State Plan). The proposed new rules and amendments are to be implemented evenly Statewide and, therefore, do not relate to the State's official land use and development policies in a way that would either encourage or discourage any development or redevelopment in this State contrary to the guiding principles of the State Plan. As a result, the Department does not expect this rulemaking to have an impact on the State's achievement of smart growth or implementation of the State Plan.

Because the proposed new rules and amendments are intended to reduce the emission of volatile organic compounds into the State, thereby helping to protect air quality, the proposed amendments and new rules support the State Plan's goal of protecting the environment and preventing air pollution by implementing a strategy of reducing air pollution at the source.

**Full text** of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

## CHAPTER 27 AIR POLLUTION CONTROL

# PERMITS AND CERTIFICATES FOR MINOR FACILITIES (AND MAJOR FACILITIES WITHOUT AN OPERATING PERMIT)

#### 7:27-8.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

. . .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

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)

2,2-dichloro-1,1,1-trifluororethane (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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>)

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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>)

methyl acetate

perfluorocarbon compounds which fall into these classes:

cyclic, branched, or linear, completely fluorinated alkanes

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations

cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations

sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFP 51.100(s) as supplemented or amended, which is incorporated by reference herein

 $\underline{CFR~51.100(s), as~supplemented~or~amended,~which~is~incorporated~by~reference~herein}.$ 

## SUBCHAPTER 16 CONTROL AND PROHIBITION OF AIR POLLUTION BY VOLATILE ORGANIC COMPOUNDS

#### **7:27-16.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

. .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

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)

2,2-dichloro-1,1,1-trifluororethane (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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>) 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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>) methyl acetate perfluorocarbon compounds which fall into these classes: cyclic, branched, or linear, completely fluorinated alkanes cyclic, branched, or linear, completely fluorinated ethers with no unsaturations cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

# SUBCHAPTER 17. CONTROL AND PROHIBITION OF AIR POLLUTION BY TOXIC SUBSTANCES

#### **7:27-17.1 Definitions**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

. . .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and

the classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

methane

ethane

methylene chloride (dichloromethane)

1,1,1-trichloroethane (methyl chloroform)

trichlorofluoromethane (CFC-11)

dichlorodifluoromethane (CFC-12)

chlorodifluoromethane (HCFC-22)

trifluoromethane (HFC-23)

1,1,2-trichloro-1,2,2,-trifluoroethane (CFC-113)

1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)

chloropentafluoroethane (CFC-115)

2,2-dichloro-1,1,1-trifluoroethane (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 (C4F9OCH3)

2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3)

1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5)

 $\hbox{$2$-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5)$ methyl acetate}$ 

Perfluorocarbons compounds which fall into these classes:

cyclic, branched, or linear, completely fluorinated alkanes

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations

cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations

sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine If there is any conflict between the list at 40 CFR 51.100(s)(l) and the list set forth above, the list at 40 CFR

51.100(s)(l) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR

51.100(s), as supplemented or amended, which is incorporated by reference herein.

# SUBCHAPTER 18. CONTROL AND PROHIBITION OF AIR POLLUTION FROM NEW OR ALTERED SOURCES AFFECTING AMBIENT AIR OUALITY (EMISSION OFFSET RULES)

#### **7:27-18.1 Definitions**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

. .

"Volatile organic compound" or "VOC" [shall have the meaning defined for this term at N.J.A.C. 7:27-16.1] means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

# SUBCHAPTER 19. CONTROL AND PROHIBITION OF AIR POLLUTION FROM OXIDES OF NITROGEN

#### **7:27-19.1 Definitions**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

. . .

"Volatile organic compound," or "VOC," means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods which have been approved in writing by the Department. This term does not include the compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definitions of VOC at 40 CFR 51.100(s) are set forth below:

methane ethane methylene chloride (dichloromethane) 1,1,1-trichloroethane (methyl chloroform) 1, 1, 2-trichloro-1,2,2-trifluroroethane (CFC-113) trichlorofluoromethane (CFC-11) dichlorodifluoromethane (CFC-12) chlorodifluoromethane (HCFC-22) trifluoromethane (HFC-23) 1,1,2-trichloro-1,2,2,-trifluoroethane (CFC-113) 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114) chloropentafluoroethane (CFC-115) 2,2-dichloro-1,1,1-trifluoroethane (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 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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>) 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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>) methyl acetate perfluorocarbon compounds which fall into these classes: Cyclic, branched, or linear, completely fluorinated alkanes Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and

If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

• • •

## SUBCHAPTER 21. EMISSION STATEMENTS

#### **7:27-21.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

. . .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods which have been approved in writing by the Department. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below: 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)

```
1,1,1,2-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
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 (C4F9OCH3)
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3)
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5)
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5)
methyl acetate
perfluorocarbon compounds which fall into these classes:
cyclic, branched, or linear, completely fluorinated alkanes
cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to
carbon and fluorine
If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR
51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR
51.100(s), as supplemented or amended, which is incorporated by reference herein.
```

## **SUBCHAPTER 22. OPERATING PERMITS**

2,2-dichloro-1,1,1-trifluororethane (HCFC-123)

#### **7:27-22.1 Definitions**

The following words and terms, when used in this subchapter, have the meanings given below unless the context clearly indicates otherwise.

. .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods which have been approved in writing by the Department. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein,

together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

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) 2,2-dichloro-1,1,1-trifluoroethane (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 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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>) 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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>) methyl acetate perfluorocarbon compounds which fall into these classes: cyclic, branched, or linear, completely fluorinated alkanes cyclic, branched, or linear, completely fluorinated ethers with no unsaturations cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and

If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

# SUBCHAPTER 23. PREVENTION OF AIR POLLUTION FROM ARCHITECTURAL COATINGS

#### **7:27-23.2 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

. .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

```
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)
2,2-dichloro-1,1,1-trifluororethane (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 ( $C_4F_9$  OCH<sub>3</sub>)

2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub> CFCF<sub>2</sub> OCH<sub>3</sub>)

1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ( $C_4 F_9 OC_2 H_5$ )

2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF $_3$ ) $_2$  CFCF $_2$  OC $_2$  H $_5$ ) methyl acetate

perfluorocarbon compounds which fall into these classes:

cyclic, branched, or linear, completely fluorinated alkanes

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations

cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations

sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

. . .

#### SUBCHAPTER 24. PREVENTION OF AIR POLLUTION FROM CONSUMER PRODUCTS

#### **7:27-24.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

. . .

- "Adhesive remover" means a product designed [exclusively for the removal of] to remove adhesives, caulk and other bonding materials from either a specific substrate or a variety of substrates, and includes the subcategories of floor and wall covering adhesive remover, gasket or thread-locking adhesive remover, general purpose adhesive remover, and specialty adhesive remover, each of which is defined elsewhere in this section. This term does not include products that remove adhesives intended exclusively for use on humans or animals. For purposes of this definition of "adhesive remover" and subcategories of "adhesive removers" and notwithstanding the definition of "adhesive" elsewhere in this section, "adhesive" means a substance used to bond one or more materials, and includes, but is not limited to, caulks, sealants, glues or similar substances used for the purpose of forming a bond.
- "Adhesive remover floor and wall covering adhesive remover" means an adhesive remover designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate.
- "Adhesive remover -gasket or thread-locking" means an adhesive remover designed or labeled to remove gaskets or thread-locking adhesives. This term includes products labeled for dual use as a paint stripper and adhesive remover gasket remover and/or adhesive remover thread-locking.
- "Adhesive remover general purpose" means an adhesive remover designed or labeled to remove cyanoacrylate adhesives as well as non-reactive adhesives or residue from a variety of substrates. This term includes, but is not limited to, products that remove thermoplastic adhesives, pressure sensitive adhesives, dextrine or starch-based adhesives, casein glues, rubber or latex-based adhesives, as well as products that remove stickers, decals, stencils, or similar materials. This term does not include adhesive remover floor or wall covering.
- "Adhesive remover specialty" means an adhesive remover designed to remove reactive adhesives from a variety of substrates. This term does not include adhesive remover gasket or thread-locking.

"Aerosol adhesive" means an adhesive that is an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. This term includes special purpose spray adhesives, mist spray adhesives and web spray adhesives.

"Aerosol coating product" means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications.

"Aerosol product" means a product that incorporates a pressurized spray system that dispenses product ingredients by means of a propellant <u>contained in a product or a product's container</u>, or <u>by means of a mechanically induced force</u>. This term does not include pump sprays.

. . .

"Air freshener" means a 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 term does not include products that are used on the human body, products that, as indicated on a product label, function primarily as cleaning products, toilet/urinal care 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. This term 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 or in the product's literature and advertising may be considered. The presence of or representation about a product's fragrance and ability to deodorize resulting from surface application shall not constitute a claim of air freshening.

. . .

- "Alternative control plan" or "ACP" means an emissions averaging program for chemically formulated consumer products, which provides a manufacturer with an alternative method to comply with the VOC content limits in Table 1 at N.J.A.C. 7:27-24.4(a), and which was issued in accordance with N.J.A.C. 7:27-24.4(i)] (i) and [(j)] (k) by:
  - 1. CARB pursuant to its consumer products regulations (including all amendments and supplements) at [Title] 17[, Subchapter 8.5, Article 1, Section 94503.5 or Article 2, Section 94511 of the California Code of Regulations] **CCR 94540-94555**; or
  - 2. (No change.)

. .

"Anti-static product" means a product that is labeled to eliminate, prevent, or inhibit the accumulation of static electricity. This term does not include electronic cleaner, floor polish or wax, floor coating, aerosol coating product, or architectural coating.

. .

- "Automotive brake cleaner" or "brake cleaner" means a product designed, labeled, promoted or advertised (expressed or implied) to clean motor vehicle brake mechanisms and parts by removing oil, grease, brake fluid, brake pad material or dirt from them.
- "Automotive consumer product" means any of the following chemically formulated consumer products, aerosol or liquid, used in automotive maintenance or repair activities: brake cleaners, carburetor or fuel-injection air intake cleaners, engine degreasers, and general purpose degreasers intended for use in automotive maintenance or repair activities.

. . .

- "Automotive maintenance facility" or "automotive repair facility" means any establishment at which a person repairs, rebuilds, reconditions, services, or in any way maintains motor vehicles. These terms do not include private residences or entities that are involved only in motor vehicle body work or painting.
- "Automotive maintenance or repair activities" means any service, repair, restoration, or modification activity to a motor vehicle in which cleaning or degreasing products could be used

# <u>including</u>, but not limited to, brake work, engine work, machining operations, and general degreasing of engines, motor vehicles, parts, or tools.

. . .

"Bathroom and tile cleaner" means a product designed to clean tile or surfaces in bathrooms. This term does not include products [specifically] designed <u>primarily</u> to clean toilet bowls, [or] toilet tanks, <u>or</u> <u>urinals</u>.

"Bug and tar remover" means a product [designed] <u>labeled</u> to remove either or both of the following from painted motor vehicle surfaces without causing damage to the finish: 1. -2. (**No change.**)

. . .

"CAS Registry Number" means a unique accession number assigned by the Chemical Abstracts Service, a division of the American Chemical Society.

#### "CCR" means the California Code of Regulations.

. . .

# <u>"Chlorinated toxic air contaminant" means methylene chloride, perchloroethylene, or trichloroethylene.</u>

. . .

"Consumer product" means a household or institutional product, including any packaging, that includes, but is not limited to:

- 1. Chemically formulated products including, but not limited to, products that are detergents; cleaning compounds; floor polishes and waxes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; and automotive specialty products[;] . This term also refers to aerosol adhesives, including aerosol adhesives used for consumer, industrial or commercial uses and automotive consumer products; and
- 2. (No change.)

"Contact adhesive" means an adhesive that:

- 1. 3. (No change.)
- 4. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces; [and]
- 5. Is not a rubber cement that is primarily intended for use on paper substrates; and
- 6. Does not include vulcanizing fluids that are designed and labeled for tire repair only.

# "Contact adhesive - general purpose" means any contact adhesive that is not a contact adhesive - special purpose.

## "Contact adhesive - special purpose" means a contact adhesive that:

- 1. Is used to bond melamine-covered board, unprimed metal, unsupported vinyl, Teflon, ultrahigh molecular weight polyethylene, rubber, high pressure laminate or wood veneer 1/16 inch or less in thickness to any porous or nonporous surface; or
- 2. Is used in automotive applications that are either automotive under-the-hood applications requiring heat, oil or gasoline resistance, or body-side molding, automotive weatherstrip or decorative trim.

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- "Deodorant" means:
  - 1. For products manufactured before January 1, 2009, a product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams and squeeze bottles, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria which cause the decomposition of perspiration; and
  - 2. For products manufactured on or after January 1, 2009, any product including, but not limited to, aerosol, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that indicates or

depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and/or minimize odor.

This term also includes a deodorant body spray that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla.

## "Deodorant body spray" means:

- 1. For products manufactured before January 1, 2009, a personal fragrance product with 20 percent or less fragrance; or
- 2. For products manufactured on or after January 1, 2009, a personal fragrance product with 20 percent or less fragrance that is designed for application all over the human body to provide a scent.

. . .

"Device" means an instrument or contrivance, other than a firearm, designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than [humans and other than bacteria] **a human or a bacterium**, **a** virus or other microorganism on or in living humans or other living animals). This term does not include equipment used for the application of pesticides if the equipment is sold separately from the pesticide.

"Disinfectant" means a product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under [the Federal Insecticide, Fungicide, and Rodenticide Act (] FIFRA [, 7 U.S.C. §§136 et seq.)]. This term does not include:

#### 1. - 4. (No change.)

. . .

"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. This term does not include [products which consist entirely of compressed gases for use in electronic or other specialty areas] **a pressurized gas duster**.

"Electrical cleaner" means a product labeled to remove heavy soils such as grease, grime, or oil from electrical equipment, including, but not limited to, armatures, electric motors, electric panels, generators or relays. This term does not include an anti-static product, dusting aid, electronic cleaner, energized electrical cleaner, engine degreaser, general purpose cleaner, general purpose degreaser, pressurized gas duster, or a product designed to clean the casings or housings of electrical equipment.

"Electronic cleaner" means a product [designed specifically] <u>labeled</u> for the removal of dirt, [grease or grime] <u>moisture</u>, <u>dust</u>, <u>flux or oxides</u> from [electrical] <u>the internal components of electronic or precision</u> equipment such as [electric motors,] circuit boards, [electricity panels], and [generators] <u>the internal components of electronic devices</u>, including, but not limited to, radios, compact disc (CD) players, digital video disc (DVD) players and computers. This term does not include anti-static product, dusting aid, electrical cleaner, energized electrical cleaner, engine degreaser, general purpose cleaner, general purpose degreaser, pressurized gas duster, or a product designed to clean the casings or housings of electronic equipment.

#### "Energized electrical cleaner" means a product that meets both of the following criteria:

- 1. The product is labeled to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or when there is a residual electrical potential from a component, such as a capacitor; and
- 2. The product label clearly displays the statements: "Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts."

This term does not include electronic cleaner.

. .

"Fabric refresher" means a product labeled to neutralize or eliminate odors on non-laundered fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive

interiors, footwear, athletic equipment, clothing and/or on household furniture or objects upholstered or covered with fabrics such as, but not limited to, wool, cotton, or nylon. This term does not include an anti-static product, a carpet and upholstery cleaner, soft household surface sanitizers, footwear or leather care product, spot remover, or disinfectant, or a product labeled for application to both fabric and human skin.

"Facial cleaner or soap" means a cleaner or soap designed primarily to clean the face. This term includes, but is not limited to, facial cleansing creams, [gels] <u>semisolids</u>, liquids, lotions, and substrate-impregnated forms. This term does not include prescription drug products, antimicrobial hand or body cleaner or soap, astringent/toner, general-use hand or body cleaner or soap, medicated astringent/medicated toner, or rubbing alcohol.

. . .

"FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 et seq.

"Finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time.

. . .

"Floor coating" means an opaque coating that is labeled and designed for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic.

. . .

"Footwear or leather care product" means a product designed or labeled to be applied to footwear, including both leather and non-leather foot apparel, or to other leather articles/components, to maintain, enhance, clean, protect, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. This term does not include fabric protectant, general purpose adhesive, contact adhesive, vinyl/fabric/leather/polycarbonate coating, rubber and vinyl protectant, fabric refresher, products solely for deodorizing, or sealant products with adhesive properties used to create external protective layers greater than two millimeters thick.

"Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, or other functional components with a combined vapor pressure not in excess of two millimeters (mm Hg) at 20 degrees Celsius (°C), the sole purpose of which is 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. This term does not include dusting aids, **wood cleaners and** products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

. .

"General purpose degreaser" means a product [designed] <u>labeled</u> to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. This term does not include:

- 1. Engine degreasers, general purpose cleaners, adhesive removers, electronic cleaners, <u>electrical</u> <u>cleaners</u>, <u>energized electrical cleaners</u> or metal polish/cleansers;
- 2. 3. (No change.)

• •

"Graffiti remover" means a product labeled to remove spray paint, ink, marker, crayon, lipstick, nail polish, or shoe polish, from a variety of non-cloth or non-fabric substrates. This term does not include paint remover or stripper, nail polish remover, or spot remover. Products labeled for dual use as both a paint stripper and graffiti remover are graffiti removers.

. . .

"Hair shine" means a product designed for the primary purpose of creating a shine when applied to the hair. This term includes, but is not limited to, dual-use products designed primarily to impart a sheen to the hair.

This term does not include hair spray, hair mousse, <u>hair styling product</u>, hair styling gel, [or spray gel,] or products whose primary purpose is to condition or hold the hair.

"Hair spray" means:

- 1. For products manufactured before January 1, 2009, a product designed primarily for the purpose of dispensing droplets of a resin on and into hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time; and
- 2. For products manufactured on or after January 1, 2009, a consumer product that is applied to styled hair, and is designed or labeled to provide sufficient rigidity to hold, retain and/or finish the style of the hair for a period of time. This term includes aerosol hair sprays, pump hair sprays, spray waxes, products that are both a styling and finishing product, and color, glitter, or sparkle hairsprays that make finishing claims. This term does not include spray products that are intended to aid in styling but do not provide finishing of a hairstyle.

"Hair styling gel" means <u>a consumer product manufactured before January 1, 2009, that is</u> a high viscosity, often gelatinous, product that contains a resin and is designed for the application to hair to aid in styling and sculpting of the hair coiffure.

"Hair styling product" means a consumer product manufactured on or after January 1, 2009, that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling and/or sculpting of the hair. This term includes, but is not limited to, hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle, and leave-in volumizers, detanglers and/or conditioners that make styling claims. This term does not include hair mousse, hair shine, hair spray, or shampoo and/or conditioner that is rinsed from the hair prior to styling.

. . .

"Innovative product exemption" or "IPE" means a determination that a particular consumer product will result in less VOC emissions as compared to a representative compliant consumer product or as compared to the reformulation of the particular product in order to comply with a VOC content limit due to some characteristic of the product formulation, design, delivery system, or other factor. Such determination must be in accordance with N.J.A.C. 7:27-24.4(i) and (j) for a chemically formulated consumer product, and in accordance with N.J.A.C. 7:27-24.8(e) and (f) for a portable fuel container, spout, or portable fuel container and spout, and be issued by:

- 1. CARB<sub>2</sub> pursuant to [the] <u>its antiperspirants and deodorants regulations and consumer products</u> regulations (including all amendments and supplements) at [Title] 17[, Subchapter 8.5, Article 1, Section] <u>CCR</u> 94503.5 or [Article 2, Section] 94511 [of the California Code of Regulations] <u>or pursuant to its portable fuels containers regulations (including all amendments and supplements) at 13 CCR 2467.4; or</u>
- 2. (No change.)

• • •

"Kerosene" means any light petroleum distillate that is commonly or commercially known, sold or represented as kerosene, that is used in space heating, cook stoves, and water heaters, and is suitable for use as a light source when burned in wick-fed lamps.

. .

"Lawn and garden insecticide" means an insecticide [designed] <u>labeled</u> primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods. <u>Notwithstanding the requirements of N.J.A.C. 7:27-24.4(g), aerosol lawn and garden insecticides may claim to kill insects or other arthropods.</u>

"Liquid" means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D-4359-90(2000)e1, as supplemented or amended. This term does not include powders or other materials that are composed entirely of solid particles.

"Liquid product" means any product that is packaged and sold as a bulk liquid, including liquid delivered by pump sprayers.

"Low vapor pressure VOC" or "LVP-VOC" means a VOC that is a chemical compound (that is, a molecule of definite chemical formula and isomeric structure) or mixture (that is, a substrate comprised of two or more chemical compounds) that contains at least one carbon atom and meets one of the following conditions:

- 1. (No change.)
- 2. Its vapor pressure [is] and boiling point are unknown and it is:
  - i. A chemical compound with more than 12 carbon atoms; or
  - ii. A chemical mixture comprised solely of compounds with more than 12 carbon atoms <u>as</u> verified by formulation data;
- 3.-4. (No change.)

. . .

"Manufacturer" means a person who manufactures, imports, assembles, processes, produces, packages, repackages, or relabels a product. [Manufacturer] **This term** also includes any person for whom the product is manufactured, or by whom the product is distributed, if that person is identified as such on the product label [. Manufacturer also includes] **and** any person [that] **who** hires another person to manufacture a product for compensation.

. .

"Paint remover or stripper" means a product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. This term does not include multi-purpose solvents, paint brush cleaners, products designed and labeled exclusively [to remove] <u>as</u> graffiti <u>removers</u>, and hand cleaner products that claim to remove paints and other related coatings from skin.

. . .

"Personal fragrance product" means a product that is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave, and toilet water. This term does not include:

- 1. Deodorant;
- 2. Medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body;
- 3. Mouthwashes, breath fresheners and deodorizers;
- <u>4. Lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations;</u>
- 5. Products designed exclusively for use on human genitalia;
- 6. Soaps, shampoos, and products primarily used to clean the human body; and
- 7. Fragrance products designed to be used exclusively on non-human animals.

"Pesticide" means a substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed or intended for use as a defoliant, desiccant, or plant regulator. This term does not include any substance, mixture of substances, or device which the EPA does not consider to be a pesticide in accordance with [the Federal Insecticide, Fungicide, and Rodenticide Act ( ]FIFRA [) (7 U.S.C. §§136 et seq.)].

• • •

"Portable fuel container" means a [product that is a] reusable container or vessel, with a nominal capacity of [ten] 10 gallons or less, designed or used primarily for receiving, transporting, storing or dispensing fuel (including kerosene), or a fuel blend. This term does not include a container or vessel permanently embossed or permanently labeled, as described in 49 CFR 172.407(a), as it existed on September 15, 2005, with language indicating said container or vessel is solely intended for use with non-fuel or non-kerosene products.

. . .

"Pressurized gas duster" means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards, and other types of surfaces that cannot be cleaned with solvents. This term does not include a dusting aid.

. . .

"Product form" <u>for the purpose of complying with N.J.A.C. 7:27-24.6 only</u>, means the applicable form which most accurately describes the product's dispensing form [, including aerosols, gels, liquids, pump sprays, and solids] <u>to be indicated in the manufacturer's records in abbreviated form, as follows:</u>

A = aerosol product

S = solid

P = pump spray

L = liquid

SS = semisolid

O = other.

• •

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

. .

"Reactive adhesive" means an adhesive that requires a hardener or catalyst in order for the bond to occur. This term includes but is not limited to epoxies, urethanes and silicones.

. . .

"Restricted materials" means pesticides classified as restricted use pesticides under N.J.A.C. 7:30-2.10 or classified for restricted use by EPA pursuant to section [3(d)] <u>136a(d)</u> of [the Federal Insecticide, Fungicide, and Rodenticide Act (] FIFRA [, 7 U.S.C. §§136 et seq.)].

. . .

"Semisolid" means a product that, <u>when</u> at room temperature, will not pour, but will spread or deform easily, including, <u>but not limited to</u>, gels, pastes, and greases.

"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. **This term does not include shaving gel.** 

"Shaving gel" means an aerosol product that dispenses a post-foaming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other body hair. This term does not include shaving cream.

. . .

"Soft household surface sanitizer" means a product labeled to neutralize or eliminate odors on surfaces to which fabric refreshers are applied and listed in the definition of "fabric refresher" above, whose label is registered as a sanitizer under FIFRA.

"Solid" means a substance or mixture of substances which is not capable of visually detectable flow as determined under ASTM D-4359-90(2000)e1, as supplemented or amended. The substance or mixture of substances may be in a form either whole or subdivided (such as particles comprising a powder).

"Solvent cleaning machine" means any device or piece of equipment with a capacity greater than 7.6 liters (two gallons) that uses methylene chloride, perchloroethylene, or trichloroethylene to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of motor vehicle substrates or surfaces or miscellaneous metallic parts.

. . .

"Spill-proof spout" means any spout that complies with the [applicable standards specified] <u>certification</u> <u>requirements</u> at N.J.A.C. 7:27-24.8 <u>and with N.J.A.C. 7:27-24.9</u>.

"Spill-proof system" means any configuration of portable fuel container and firmly attached spout that complies with the [applicable standards or] <u>certification requirements</u> at N.J.A.C. 7:27-24.8 <u>and with N.J.A.C. 7:27-24.9</u>.

"Spot remover" means a product [designed] <u>labeled</u> to clean localized areas, or remove localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require subsequent

laundering to achieve stain removal. This term does not include dry cleaning fluid, laundry prewash, [carpet and upholstery cleaner,] or multi-purpose solvent.

"Spout" means, with respect to a portable fuel container, any device that can be firmly attached to the container and that serves as the conduit through which the contents of the portable fuel container may be poured out of the container, not including a device that can be used to lengthen the spout to accommodate necessary applications.

. . .

"Styling" means the forming, sculpting, or manipulating of the hair to temporarily alter the hair's shape.

. . .

"Toilet/urinal care product" means a product designed or labeled to clean and/or to deodorize toilet bowls, toilet tanks, or urinals, including, but not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations, and toilet or urinals in vehicles such as buses, recreational motor homes, boats, ships, and aircraft. This term does not include bathroom and tile cleaner or general purpose cleaner.

"Type A [propellent] **propellant**" means a compressed gas such as  $CO_2$ ,  $N_2$ ,  $N_2O$ , or compressed air, used as a [propellent] **propellant** and either incorporated with the product or contained in a separate chamber within the product's packaging.

"Type B [propellent] **propellant**" means any halocarbon used as a [propellent] **propellant**, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

"Type C [propellent] **propellant**" means any [propellent] **propellant** not a Type A or Type B [propellent] **propellant**, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

"Variance" means a temporary exemption based on extraordinary economic hardship granted in accordance with N.J.A.C. 7:27-24.4[(i)](j) and [(j)](k) to a manufacturer of a chemically formulated consumer product, which temporary exemption relieves the manufacturer from meeting an applicable VOC content standard in Table 1 at N.J.A.C. 7:27-24.4(a), or granted in accordance with N.J.A.C. 7:27-24.8(e) and (f) to a manufacturer of a portable fuel container, spout, or portable fuel container and spout, which temporary exemption relieves the manufacturer from meeting the standards at N.J.A.C. 7:27-24.8.

# "Vinyl/fabric/leather/polycarbonate coating" means a coating designed and labeled exclusively to coat vinyl, fabric, leather, or polycarbonate substrates.

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

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)

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trifluoromethane (HFC-23)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
1,1,1,2-tetrafluoroethane (HFC-134a)
1.1-dichloro-1-fluoroethane (HCFC-141b)
1-chloro-1,1-difluroethane (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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>)
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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>)
methyl acetate
perfluorocarbon compounds which fall into these classes:
    cyclic, branched, or linear, completely fluorinated alkanes
    cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
    cyclic, branched, or linear, completely fluorinated tertiary amines with no
                                                                                   unsaturations
    sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon
         and fluorine
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If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound, as that term is defined by the EPA at 40 CFR 51.100(s), which is incorporated by reference herein, together with all amendments and supplements.

• • •

"Wood cleaner" means a product labeled to clean wooden materials, including, but not limited to, decking, fences, flooring, logs, cabinetry, and furniture. This term does not include dusting aid, general purpose cleaner, furniture maintenance product, floor wax stripper, floor polish or wax, or products designed and labeled exclusively to preserve or color wood.

. . .

#### 7:27-24.2 Applicability

- (a) This subchapter applies to any person who sells, offers for sale, holds for sale, distributes, supplies, or manufactures for sale in New Jersey any consumer product in (b) or (c) below and that is for use in New Jersey by a consumer or by a person who uses the product in providing a service. This subchapter also applies to any person who advertises any portable fuel container or spout for sale in New Jersey.
- (b) (c) (No change.)
- (d) This subchapter does not apply to the following chemically formulated consumer products:
  - 1.-2. (No change.)
  - 3. Any [air freshener or any] insecticide [which] **that** contains at least 98 percent by weight paradichlorobenzene;

# 4. Before January 1, 2009, any solid air freshener that contains at least 98 percent by weight paradichlorobenzene.

- [4.] <u>5.</u> (No change in text.)
- [5.] **6.** Any of the following adhesives:
  - i. (No change.)
  - ii. A contact adhesive that is a non-aerosol product and that is sold in units of product, less packaging, which consist of more than one gallon; [and]
  - iii. Either of the following adhesives, provided that it is a non-aerosol product and that it is sold in units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces:
    - (1) (No change.)
    - (2) A general purpose adhesive; and

# <u>iv.</u> A contact adhesive – special purpose that is sold in units of product, less packaging, that contain more than eight fluid ounces;

**Recodifying existing 6. and 7. as 7. and 8.** (No change in text.)

- (e) This subchapter does not apply to the following types of portable fuel containers:
  - 1. A safety can meeting the requirements of Federal regulations at 29 [C.F.R. 1926] CFR 1910.106;
  - 2. (No change.)
  - 3. A rapid refueling device with nominal capacity greater than or equal to four gallons, if the device:
    - i. Is designed for use in officially sanctioned off-highway <u>motor sports, such as car racing and</u> motorcycle competitions;
    - ii. (No change.)
    - iii. Is designed to operate in conjunction with a receiver permanently installed on the target fuel tank; [or]
  - 4. A portable fuel tank manufactured specifically to deliver fuel through a hose attached between the portable fuel tank and the outboard engine for the purpose of operating the outboard engine; or
  - 5. A closed-system portable fuel container that is used exclusively for fueling remote control model airplanes.

# (f) N.J.A.C. 7:27-24.4(n) does not apply to a solvent cleaning machine or to liquid products that are designed, labeled, promoted and advertised (expressed or implied) solely for use in a solvent cleaning machine.

- [(f)] (g) (No change in text.)
- [(g)] (h) No manufacturer shall be held liable for the sale of a consumer product that does not comply with the requirements of this subchapter to a consumer in New Jersey if:
  - 1. (No change.)
  - 2. The manufacturer meets each of the obligations listed in [(f)2] (g)2 through 5 above.
- [(h)] (i) A retailer who sells, offers for sale, or holds for sale in New Jersey a chemically formulated consumer product that violates the [VOC content] standards at N.J.A.C. 7:27-24.4[(a)] or a portable fuel container and/or spout that violates the [design standards] certification requirements at N.J.A.C. 7:27-24.8(a) [and (b)] may demonstrate compliance with [N.J.A.C. 7:27-24.4(a) or 24.8(a) and (b), as] the applicable provisions of this subchapter, if the retailer provides any one or more of the following types of documentation with respect to its purchase of the consumer product, portable fuel container and/or spout in question:
  - 1. 3. (No change.)

#### 7:27-24.4 Chemically formulated consumer products: standards

(a) Except as provided at N.J.A.C. 7:27-24.2 and in (c) and (i) below, no person shall sell, offer for sale, hold for sale, distribute, supply, or manufacture for sale in New Jersey a chemically formulated consumer product that belongs to a chemically formulated consumer product category listed in Table 1 below, that was manufactured on or after the operative date in Table 1 below, and that contains a VOC content in excess of the applicable limit specified in Table 1 below.

TABLE 1
VOC CONTENT LIMITS FOR CHEMICALLY FORMULATED CONSUMER PRODUCTS
Maximum Allowable VOC Content

(percent by weight, unless otherwise indicated)<sup>2</sup>

		(percent by weight, unless other wise mulcateu)		
Chemically Formulated		State Standard On anating	State Standard Operative Date	State Standard Operative Date
Consumer	Form	State Standard Operative Date 4/30/96-12/31/04 <sup>3</sup>		1/1/09
Product Category		Date 4/30/90-12/31/04	<u>1/1/05</u>	
Adhesive Pamayara	Floor or wall covering	_		<u>5</u> <u>50</u>
Removers	Gasket or thread locking	<u> </u>		<u>30</u> <u>20</u>
	General purpose			<del>20</del> <del>70</del>
	Specialty Aerosal:	75		<u>70</u>
		13	<i>(5</i>	
	Mist spray		65 5.5	
	Web spray		55	
	Special purpose spray adhesives:	7		
	Mounting, automotive			
Adhesives	engine compartment,		70	
	and flexible vinyl			
	Polystyrene foam and		65	
	automotive headliner		0.5	
	Polylolefin and	l		
Trainestves	laminate		60	
	repair/edgebanding			
	Contact:	80	80	<u>N/A</u>
	Contact general			<u>55</u>
	<u>purpose</u>			<u>==</u>
Air fresheners	Contact special			<u>80</u>
	<u>purpose</u>			
	Construction, panel, and	40	15	
	floor covering			
	General purpose	10	10	
	Structural waterproof	(Reserved)	15	
	Single-phase aerosols	70	30	
	Double-phase aerosols	30	25	
	Liquids/pump sprays	18	18	
	Solids/[gels] semisolids	3	3	
Antiperspirants	Aerosols	60 HVOC	40 HVOC	
	110100010		10 MVOC	
			0 HVOC	)
	Non-aerosols	0 HVOC	MVOC	

Anti-static products, non- aerosol				<u>11</u>
Dusting aids	Aerosols All other forms	35 7	25 7	
Electrical cleaners Electronic cleaners	<u> </u>			<u>45</u> <u>75</u>
Engine degreasers	Aerosols Non-aerosols	75 75	35 5	
Fabric protectants		75	60	
Fabric	Products for flexible flooring materials	<sup>e</sup> 7	7	
polishes/waxes	Products for nonresilient flooring	10	10	
	Wood floor wax Aerosol	90	90	15
Fabric refreshers	Non-aerosol:			15 6
Floor wax strippers	For light or medium build-up	n	3	
<b>.</b>	For heavy build-up		12	
Footwear or leather care products	Aerosol Solid Other forms			75 55 15
Glass cleaners	Aerosols	12	12	
	All other forms Non-aerosols	8	4	
Graffiti removers	Aerosol		7	<u>50</u>
Hair mousses	Non-aerosol	16	6	<u>30</u>
Hair shines			55	
Hair sprays		80	55	
Hair styling gels <u>Hair styling</u>	Aerosol and pump	6	6	_
products	sprays			<u>6</u>
Heavy-duty hand	All other forms			<u>2</u>
cleaner or soaps			8	
Shaving creams  Shaving gels		5	5	<u>7</u>
Tire sealants and inflators			20	
Toilet/urinal care products	Aerosol Non-aerosol			<u>10</u> <u>3</u>
Undercoatings Wood cleaners	Aerosols Aerosol		40	<u>17</u> <u>4</u>
Footnotes to Table:	Non-aerosol			<u>4</u>

- (b) (No change.)
- (c) Notwithstanding the provisions of (a) above and the specifications of Table 1 above, for a consumer product with a label that is registered under [the Federal Insecticide, Fungicide, and Rodenticide Act (] FIFRA [, 7 U.S.C. § 136-136y)], the operative date of the applicable State standard is one year after the operative date specified in Table 1.
- (d) [A] Except as provided at (n) through (p), (t) and (u) below, a chemically formulated consumer product manufactured prior to the operative date specified for that product in Table 1 above, may be sold, supplied, or offered for sale after the specified operative date, if that product complies with the standards in effect at the time that product was manufactured, and if that product displays the date or date-code in accordance with the requirements at N.J.A.C. 7:27-24.5(d), (e) and (f).
- (e) (f) (No change.)
- (g) If anywhere on the principal display panel of a consumer product <u>manufactured before January 1</u>, <u>2009</u>, <u>or any FIFRA-registered insecticide manufactured before January 1</u>, 2010, any representation is made that the product may be used as, or is suitable for use as, a consumer product that belongs to more than one chemically formulated consumer product category in Table 1 at (a) above, then the [lower] <u>lowest</u> VOC content limit shall apply. However, this subsection does not apply to general purpose cleaners, antiperspirants, [and deodorant products] <u>deodorants</u>, and <u>insecticide foggers</u>.
- (h) If anywhere on the principal display panel of a consumer product manufactured on or after January 1, 2009, or any FIFRA-registered insecticide manufactured on or after January 1, 2010, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as, a consumer product that belongs to more than one chemically formulated consumer product category in Table 1 at (a) above, then the lowest VOC content limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirants, deodorants and insecticide foggers.
- [(h)] (i) (No change in text.)
- [(i)] (j) A chemically formulated consumer product is exempt from (a) above and (n) below if:
  - 1. The manufacturer of the product has been granted an IPE, ACP or variance for the product by either:
    - <u>i.</u> CARB, pursuant to its <u>antiperspirants and deodorants</u>, consumer products, <u>alternative control plan or automotive consumer products</u> regulations (including all amendments and supplements) at [Title] 17[, Subchapter 8.5, Article 1, Section] <u>CCR</u> 94503.5, <u>94505</u>, [or Article 2, Section] 94511, <u>94514</u>, <u>94540 through 94555</u> [of the California Code of Regulations] <u>or 93111</u>, <u>respectively[,]</u>; or
    - <u>ii.</u> <u>By</u> the air pollution control agency of another state that has adopted a consumer product rule based on or substantially equivalent to the Ozone Transport Commission (OTC) "Model Rule for Consumer Products" dated November 29, 2001, including subsequent revisions (accessible at the OTC's website [http://www.sso.org/otc/Publications/pub2.htm] <u>at http://www.otcair.org</u>) [, has granted to the product's manufacturer an IPE, ACP, or variance for the product]; and
  - 2. The IPE, ACP, or variance is valid for use in New Jersey pursuant to [(j)] (k) below.
- [(j)]  $(\underline{\mathbf{k}})$  An IPE, ACP, or variance in [(i)]  $(\underline{\mathbf{i}})$  above shall not be valid for use in New Jersey to comply with this subchapter unless:
  - 1. 4. (No change.)
  - 5. Prior to relying on an IPE, ACP, or variance for compliance, the manufacturer has submitted to the Department, in accordance with [(k)] (I) below, the following:
    - i. ii. (No change.)
    - iii. A copy of the document(s) setting forth the IPE, ACP, or variance; the issuing agency's approval; the issuing agency's conditions of its approval; the demonstration of [(j)4] (k)4 above if an IPE; and any documents from the issuing agency that subsequently modify or terminate its conditions of approval; documentation demonstrating compliance with the IPE, ACP or variance; and

<sup>&</sup>lt;sup>1-2</sup> (No change.)

<sup>&</sup>lt;sup>3</sup>[On and after] <u>As of</u> January 1, 2005, the State limits operative as of April 30, 1996 [will] <u>are</u> no longer [be] applicable.

<sup>&</sup>lt;sup>4</sup>See N.J.A.C. 7:27-24.4[(h)] (i) for additional State requirements pertaining to charcoal lighter material.

- iv. A statement that the IPE, ACP, or variance, as well as the product for which the IPE, ACP, or variance is being used, conforms with [(j)1] (k)1 through 4 above, as applicable; and
- 6. (No change.)
- [(k)]  $\underline{(l)}$  Any submittal made pursuant to [(j)5]( $\underline{k}$ )5 above shall be sent to the address given at N.J.A.C. 7:27-24.3(d) and the envelope or package shall be labeled as follows:
  - 1. 3. (No change.)
- [(l)] (m) (No change in text.)
- (n) Except as provided at N.J.A.C. 7:27-24.2(f), and at (o) and (p) below, and subject to (r) below, on and after January 1, 2009, no person shall sell, offer for sale, hold for sale, distribute, supply, or manufacture for sale in New Jersey any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner, graffiti remover or automotive consumer product that contains a chlorinated toxic air contaminant even if it meets the VOC content standards at (a) above.
- (o) Any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner, graffiti remover or automotive consumer product that was manufactured before January 1, 2009 and contains a chlorinated toxic air contaminant may be sold, offered for sale, held for sale, distributed, or supplied through December 31, 2011, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with N.J.A.C. 7:27-24.5 and the product otherwise meets the VOC content standards at (a) above.
- (p) On or after June 30, 2011, any person who sells or supplies a consumer product identified above in (o) above to a distributor or retailer must notify the distributor or retailer in writing that the product cannot be sold after December 31, 2011.
- (q) The requirements of (n) through (p) above do not apply to any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner, graffiti remover that contains a chlorinated toxic air contaminant that is present as an impurity in a combined amount equal to or less than 0.01 percent by weight.
- (r) For purposes of (n) above, an automotive consumer product contains a chlorinated toxic air contaminant if the product contains 1.0 percent or more by weight (exclusive of the container or packaging) of methylene chloride, perchloroethylene, or trichloroethylene, as determined by the test method specified in N.J.A.C. 7:27-24.7(b).
- (s) On and after January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in New Jersey any solid air fresheners or toilet/urinal care products that contain paradichlorobenzene, except that solid air fresheners and toilet/urinal care products that contain paradichlorobenzene and were manufactured before January 1, 2009 may be sold, supplied, or offered for sale through December 31, 2011, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with N.J.A.C. 7:27-24.5.
- (t) On or after June 30, 2011, any person who sells or supplies a solid air freshener or toilet/urinal care product that contains paradichlorobenzene to a distributor or retailer must notify the distributor or retailer in writing that the product cannot be sold after December 31, 2011.

#### 7:27-24.5 Chemically formulated consumer products: registration and labeling

(a) - (c) (No change.)

(d) Except as provided at (f) below, a manufacturer of a chemically formulated consumer product subject to this subchapter pursuant to N.J.A.C. 7:27-24.2(b)1 shall clearly display, on each product package, the day, month, and year in which the product was manufactured, or a code indicating such date (that is, a date-code). The date or date-code shall be located on the packaging, or inside the cover or cap, so that it is readily observable or obtainable without <u>irreversibly</u> disassembling any part of the packaging, such as by simply removing the cover or cap. <u>Use of the following code to indicate the date of manufacture in compliance with the requirements of this subsection will exempt the manufacturer from the requirements of (e) below, if the code is represented separately from other codes on the product container so that it is easily recognizable:</u>

YY DDD

Where:

"YY" = two digits representing the year in which the product was manufactured, and

# "DDD" = three digits representing the day of the year on which the product was manufactured, with "001" representing the first day of the year, "002" representing the second day of the year, and so forth (also known as the "Julian date").

- (e) If for any consumer product, the manufacturer uses a date-code <u>other than the YY DDD format described at (d) above</u> to comply with (d) above, the manufacturer shall submit an explanation of the [date-code] <u>date portion of the product code</u> to the Department. The explanation shall be submitted with the electronic registration or re-registration, in accordance with the requirements of (a), (b) and (c) above.
- (f) Subsection (d) above does not apply to a product if:
  - 1. 2. (No change.)
  - 3. The product's label is registered under [the Federal Insecticide, Fungicide, and Rodenticide Act (] FIFRA [, 7 U.S.C. § 136-136y)].
- (g) For <u>any</u> aerosol adhesive, <u>adhesive remover</u>, <u>contact adhesive</u>, <u>electronic cleaner</u>, <u>electrical cleaner</u>, <u>and energized electrical cleaner</u> products manufactured on or after [January 1, 2005] <u>the effective date for the product category specified in Table 1 at N.J.A.C. 7:27-24.4(a)</u>, the manufacturer shall ensure that:
  - 1. The following information shall be clearly displayed on each product package:
    - i. The name (as given in Table 1 at N.J.A.C. 7:27-24.4(a)) of the specific [aerosol adhesive] **product** category to which the product belongs (for example, automobile headliner adhesive) or, an abbreviation of the name of the category;
    - ii. [The] Except for an energized electrical cleaner, the applicable VOC content standard to which the product is subject, under Table 1 at N.J.A.C. 7:27-24.4(a), expressed as a percentage by weight; and
    - iii. (No change.)
  - 2. (No change.)
  - 3. The information required under (g)1 above shall be displayed on the product packaging such that it is readily observable without removing or **irreversibly** disassembling any portion of the product packaging. [For the purposes of this subsection, information] **Information** may be displayed on the bottom of a **container or** package as long as it is clearly legible without removing any product packaging.
- (h) (No change.)
- (i) No person shall erase, alter, deface, or otherwise remove or make illegible any information required to be displayed on any product packaging under (d), (g) or (h) above, prior to the final sale of the product to a consumer without the express authorization of the manufacturer.

#### 7:27-24.6 Chemically formulated consumer products: recordkeeping and reporting

- (a) (No change.)
- (b) The Department may require the manufacturer of a chemically formulated consumer product subject to this subchapter pursuant to N.J.A.C. 7:27-24.2(a) to submit information which may include the [following:] information in (b)1 through 3 below. If the manufacturer does not have or does not provide the information requested by the Department, the Department may require the reporting of this information by another person who has the information, including, but not limited to, a formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager.
  - 1. 2. (No change.)
  - 3. For any of the manufacturer's products subject to the standards in Table 1 at N.J.A.C. 7:27-24.4(a), the following information (if the product is sold in more than one form, this information shall be provided separately for each product form):
    - i. v. (No change.)
    - vi. Sales of the product within the State, given to the nearest pound in pounds of product (not including the weight of packaging) per year, and the method used to calculate the sales; [and]
    - vii. For each product, the net percent by weight of the total product less packaging, comprised of the following, rounded to the nearest one-tenth of a percent (0.1 percent):
      - (1) (No change.)
      - (2) Total of carbon-containing compounds **specifically** excluded from the definition of "VOC," as defined at N.J.A.C. 7:27-24.1;
      - (3) (7) (No change.)
    - viii. ix. (No change.)

- x. For each product, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:
  - (1) Each compound  $\underline{\text{specifically}}$  excluded from the definition of "VOC," as set forth at N.J.A.C. 7:27-24.1; and
  - (2) (No change.)
- xi. If the product includes a [propellent] **propellant**, the following:
  - (1) The weight of the [propellent] **propellant**, given as a percentage of the weight of the product sold, not including packaging, rounded to the nearest one-tenth of a percent (0.1 percent); and
  - (2) Identification of the type of [propellent] **propellant** (Type A, Type B, Type C, or a blend of the different types).
- (c) (i) (No change.)
- (j) IPE, ACP, and variance documentation shall be submitted to the Department in accordance with N.J.A.C. 7:27- 24.4[(j)5] (k)5 and [(k)] ( $\underline{I}$ ).

## 7:27-24.7 Chemically formulated consumer products: testing

- (a) Upon the written request of the Department, any manufacturer of a chemically formulated consumer product subject to the requirements of this subchapter shall test any of its products that are sold, offered for sale, held for sale, distributed, supplied, or manufactured for sale in New Jersey to determine the VOC content of the product (or in the case of charcoal lighter material, its emissions per start) or the amount of a chlorinated toxic air contaminant the product contains. Such testing shall be performed utilizing the test methods in (b) through (g) below, as applicable.
- (b) Testing to determine compliance with the VOC content limits at N.J.A.C. 7:27-24.4(a) <u>or the prohibition of chlorinated toxic air contaminants at N.J.A.C. 7:27-24.4(n)</u> shall be performed using:
  - 1. CARB Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products, adopted September 25, 1997, [amended September 3, 1999, including subsequent revisions,] as supplemented or amended, which is incorporated by reference herein[;] . For purposes of determining compliance with N.J.A.C. 7:27-24.4 (I) through (o), Sections 3.5 and 3.7 of CARB Method 310 shall be used and the term "VOC" in those sections shall be interpreted as meaning "chlorinated toxic air contaminant"; or
  - 2. An alternative method [which] <u>that</u> is shown to accurately determine the concentration of VOCs <u>or chlorinated toxic air contaminants</u> in a product. Such methods must first be approved in writing by the Department and EPA.
- (c) (No change.)
- (d) Testing to determine whether a product is a liquid or a solid shall be performed using ASTM D4359-90(2000)e1 [(reapproved June, 2000)], "Standard Test Method for Determining Whether a Material is a Liquid or a Solid," [including subsequent revisions] as supplemented or amended, which is incorporated by reference herein.
- (e) (No change.)
- (f) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM [D86-90 (Sept. 28, 1990)] <u>D86-04</u>, [including subsequent revisions] <u>as supplemented or amended</u>, which is incorporated by reference herein.
- (g) -(i) (No change.)

## 7:27-24.8 Portable fuel containers and spill-proof spouts: [standards] certification requirements

- (a) Except as provided at N.J.A.C. 7:27-24.2(e), no person shall sell, offer for sale, hold for sale, <u>advertise</u>, distribute, supply, or manufacture for sale in New Jersey on or after [January 1, 2005] (30 days after the <u>operative date of these amendments</u>), any portable fuel container, <u>spout</u>, or any portable fuel container and spout [which, at the time of sale or manufacture, does not meet all of the following performance standards for spill-proof systems:
  - 1. Has an automatic shut-off that stops the fuel flow before the target fuel tank overflows;
  - 2. Automatically closes and seals when removed from the target fuel tank and remains completely closed when not dispensing fuel;
  - 3. Has only one opening for both filling and pouring; and
  - 4. Provides a fuel flow rate and fill level of:
    - i. Not less than one-half gallon per minute for portable fuel containers with a nominal capacity of:

- (1) Less than or equal to 1.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening; or
- (2) Greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening if the spill-proof system clearly displays the phrase "Low Flow Rate" in type of 34 point or greater on each spill-proof system or label affixed thereto, and on the accompanying package, if any;
- ii. Not less than one gallon per minute for portable fuel containers with a nominal capacity greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to 1.25 inches below the top of the target fuel tank opening; or
- iii. Not less than two gallons per minute for portable fuel containers with a nominal capacity greater than 2.5 gallons;
- 5. Does not exceed a permeation rate of 0.4 grams per gallon per day; and
- 6. Is warranted by the manufacturer for a period of not less than one year against defects in materials and workmanship] that has not been exempted from CARB and the EPA's certification requirements at 13 CCR 2467.3, 2467.4 and 2467.6 and 40 CFR 59.660 through 59.663, respectively, or has not been certified for use and sale by the manufacturer as follows:
  - i. For CARB certification, the product must be covered by a CARB Executive Order issued pursuant to 13 CCR 2467 through 2467.9; or
  - ii. For EPA certification, the product must be covered by an EPA certificate of conformity issued pursuant to its portable fuel container certification program at 40 CFR 59.600 through 699.
- [ (b) Except as provided at N.J.A.C. 7:27-24.2(e), no person shall sell, offer for sale, hold for sale, distribute, supply, or manufacture for sale in New Jersey on or after January 1, 2005 any spout which, at the time of sale or manufacture, does not meet all of the following performance standards for spill-proof spouts:
  - 1. Has an automatic shut-off that stops the fuel flow before the target fuel tank overflows;
  - 2. Automatically closes and seals when removed from the target fuel tank and remains completely closed when not dispensing fuel;
  - 3. Provides a fuel flow rate and fill level of:
    - i. Not less than one-half gallon per minute for portable fuel containers with a nominal capacity of:
      - (1) Less than or equal to 1.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening; or
      - (2) Greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening if the spill-proof spout clearly displays the phrase "Low Flow Rate" in type of 34 point or greater on the accompanying package, or for spill-proof spouts sold without packaging, on either the spill-proof spout or a label affixed thereto:
    - ii. Not less than one gallon per minute for portable fuel containers with a nominal capacity greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to 1.25 inches below the top of the target fuel tank opening; or
    - iii. Not less than two gallons per minute for portable fuel containers with a nominal capacity greater than 2.5 gallons; and
  - 4. Is warranted by the manufacturer for a period of not less than one year against defects in materials and workmanship.]
- (b) Certification criteria, including all test procedures for determining certification and compliance with the standards applicable to portable fuel containers, spouts, or portable fuel containers and spouts, produced on or after (30 days after the operative date of these rules) that are manufactured for sale, advertised for sale, sold, or offered for sale in New Jersey, or that are introduced, delivered or imported into New Jersey for introduction into commerce and that are subject to any of the standards prescribed in this subchapter, and documents incorporated by reference therein, are as follows:
  - 1. For CARB certification, in "CP-501, Certification Procedure for Portable Fuel Containers and Spill-Proof Spouts," as supplemented or amended. CP-501 is available at <a href="http://www.arb.ca.gov">http://www.arb.ca.gov</a>, or from contacting CARB, at:

1001 "I" Street

P.O. Box 2815

#### Sacramento, CA 95812

(916) 322-3260

or at webmaster@arb.ca.gov; and

- 2. For EPA certification, in 40 CFR Part 59, Subpart F, generally, and for testing specifically, 40 CFR 59.653, each as supplemented or amended.
- (c) Notwithstanding the provisions of (a) [and (b)] above, a portable fuel container or spout or both portable fuel container and spout manufactured before [January 1, 2005] (30 days after the operative date of this rulemaking) may be sold, offered for sale, held for sale, distributed, or supplied for sale until [January 1, 2006] (one year from the operative date of this rulemaking) if it is labeled or designated for use solely with kerosene and the date of manufacture or a date-code representing the date of manufacture is clearly displayed on the portable fuel container or spout and on the packaging (if any) in which it is sold. The date of manufacture or date-code shall be located so that it is readily observable without disassembling any part of the packaging (if any). If the manufacturer uses a date-code to comply with this subsection, the manufacturer shall electronically register the product, including an explanation of the date-code, in accordance with the requirements at N.J.A.C. 7:27-24.10[(c)] (a).
- (d) The provisions of (a)[, (b)] and (c) above [shall] **do** not apply to a spout, portable fuel container, or portable fuel container and spout if:
  - 1. The spout, portable fuel container, or portable fuel container and spout has been <u>exempted or</u> granted an IPE or variance by CARB, <u>the EPA</u>, or by the air pollution control agency of another state that has adopted a portable fuel container rule based on or substantially equivalent to the Ozone Transport Commission (OTC) "Model Rule for Portable Fuel Container Spillage Control" dated March 6, 2001, including subsequent revisions accessible at the OTC's website [http://www.sso.org/otc/Publications/pub2.htm] at http://www.otcair.org; and
  - 2. (No change.)
- (e) (f) (No change.)
- (g) Compliance with the certification requirements in this subchapter does not exempt spill-proof systems or spill-proof spouts from compliance with other applicable Federal and State statutes and regulations such as State fire codes, safety codes, and other safety regulations.

#### 7:27-24.9 Portable fuel containers and spill-proof spouts: labeling

- (a) On and after January 1, 2005, a manufacturer of a spout, a portable fuel container, or a portable fuel container and spout that is subject to this subchapter pursuant to N.J.A.C. 7:27-24.2(b) shall clearly label the product as follows:
  - 1. The following shall be displayed on a portable fuel container or on a portable fuel container and spout:
  - i. The phrase "Spill-Proof System" to mean that the product meets the applicable [standards] **requirements** at N.J.A.C. 7:27-24.8;
    - ii. (No change.)
    - iii. A representative code <u>identifying the Executive Order Number issued by CARB or the number issued by the EPA for the portable fuel container or portable fuel container and spout;</u>
  - 2. The [following] **phrase "Not Intended for Refueling On-Road Motor Vehicles" in type 34 point or greater** shall be displayed on a portable fuel container or on a portable fuel container and spout, **spill-proof spout**, or label, and on any accompanying package [:
    - i. The product's flow rate (that is, the minimum rate at which the container-and-spout dispenses fuel); and
    - ii. If] <u>if</u>, due to its design or other feature, the portable fuel container and spout cannot be used to refuel an on-road motor vehicle[, the phrase "Not Intended For Refueling On-Road Motor Vehicles" in type 34 point or greater ]; <u>and</u>
  - 3. The following shall be displayed on a spout's accompanying package, or for spill-proof spouts sold without packaging, on either the spill-proof spout or a label:
    - i. ii. (No change.)
    - iii. A representative code <u>identifying the Executive Order Number issued by CARB or the number issued by the EPA for the spout</u>; and
    - iv. The make, model number, and size of only those portable fuel container(s) the spout is designed to accommodate and can demonstrate compliance with N.J.A.C. 7:27-24.8 [; and].

- [4. The following shall be displayed on a spill-proof spout, or label, and on any accompanying package:
  - i. The spout's minimum flow rate (that is, the minimum rate at which the spout dispenses fuel); and
  - ii. If due to its design or other feature the spout cannot be used to refuel an on-road motor vehicle, the phrase "Not Intended For Refueling On-Road Motor Vehicles" in type 34 point or greater.]
- (b) Manufacturers of portable fuel containers or portable fuel containers and spouts not subject to or not in compliance with the applicable standards in N.J.A.C. 7:27-24.8[,] may not display the phrase "Spill-Proof Spout" or "Spill-Proof System" on the portable fuel container or spout on any sticker affixed thereto, on any label, or on any accompanying package.

### 7:27-24.10 Portable fuel containers and spill-proof spouts; recordkeeping and reporting

- [(a) On or after January 1, 2005, the manufacturer of a spout, a portable fuel container, or a portable fuel container and spout who is required to perform compliance testing pursuant to N.J.A.C. 7:27-24.11(a) shall:
  - 1. Maintain a record of the results of the compliance testing, whether performed before or after January 1, 2005, for as long as the spout, portable fuel container, or portable fuel container and spout is offered for sale, held for sale, sold, or otherwise supplied for household use or institutional use in New Jersey; and
  - 2. Make the test results available to the Department within 60 days of the manufacturer's receipt of a written request from the Department.
- (b) Manufacturers shall submit IPE and variance documentation to the Department in accordance with 7:27-24.8(e)5 and (f).]
- [(c)] (a) If the manufacturer of a spout, a portable fuel container, or a portable fuel container and spout uses a date-code on a product or its packaging, the manufacturer shall electronically register or reregister the product with the Department by following the procedure at N.J.A.C. 7:27-24.5(a)1 and 2, (b) and (c), and by following [(d)] (b) through [(g)] (e) below.

Recodify existing (d) – (g) as (b) – (f) (No change in text.)

#### 7:27-24.11 [Portable fuel containers and spill-proof spouts: testing] (Reserved)

- [(a) The manufacturer of a spout, or the manufacturer of a portable fuel container and spout, shall perform compliance testing, using the test methods listed in (b) below, prior to allowing the spout or portable fuel container and spout to be distributed, offered for sale, held for sale, sold or otherwise supplied for household use or institutional use in New Jersey. The compliance testing shall demonstrate that the spout, together with each portable fuel container with which it is compatible, or the portable fuel container and spout, meet the applicable requirements at N.J.A.C. 7:27-24.8(a) and (b), and, therefore, qualify as a "spill-proof system" or a "spill-proof spout," as applicable.
- (b) A manufacturer of a spout for a portable fuel container, or the manufacturer of a portable fuel container and spout, shall use the following test methods in performing the testing required at (a) above, unless the manufacturer obtains the Department's approval in writing to use alternative test method(s) pursuant to (c) below:
  - 1. "Test Method 510, Automatic Shut-off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts," adopted by CARB on July 6, 2000, including subsequent revisions, incorporated by reference herein:
  - 2. "Test Method 511, Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts," adopted by CARB on July 6, 2000, including subsequent revisions, incorporated by reference herein;
  - 3. "Test Method 512, Determination of Fuel Flow Rate for Spill-Proof Systems and Spill-Proof Spouts," adopted by CARB on July 6, 2000, including subsequent revisions, incorporated by reference herein; and
  - 4. "Test Method 513, Determination of Permeation Rate For Spill-Proof Systems," adopted by CARB on July 6, 2000, including subsequent revisions, incorporated by reference herein.
- (c) A manufacturer may submit a written request to the Department for approval to use an alternate test method other than one given in (b) above, in order to demonstrate compliance with the applicable standards in N.J.A.C. 7:27-24.8(a) and (b). The Department shall not approve use of any such alternate test method unless the alternate test method has been approved in writing by the Department and the EPA and unless the manufacturer demonstrates, to the satisfaction of the Department and the EPA, that the alternate method

is at least as accurate, precise, and appropriate as the test method given in (b) above, for which it would be substituted. A written request for Department approval to use an alternate test method pursuant to this subsection shall be addressed to:

Attn: Portable Fuel Container Test Method

Bureau of Technical Services

New Jersey Department of Environmental Protection

PO Box 437

380 Scotch Road

West Trenton, New Jersey 08625-0437]

### 7:27-24.12 Penalties and other requirements imposed for failure to comply

- (a) (No change.)
- (b) If a chemically formulated consumer product subject to this subchapter does not comply with the applicable VOC <u>or chlorinated toxic air contaminant</u> content requirements at N.J.A.C. 7:27-24.4, the Department may issue an order including, but not limited to, any or all of the following:
  - 1. Requiring the product's manufacturer to:
    - i. Demonstrate to the satisfaction of the Department that the test results or calculations are in error, and that the product in fact complies with the applicable VOC <u>or chlorinated toxic air contaminant</u> content requirements at N.J.A.C. 7:27-24.4;
    - ii. iii. (No change.)
  - 2. (No change.)
  - 3. Prohibiting the sale of the product in New Jersey until the manufacturer makes a demonstration to the satisfaction of the Department that the product to be sold will meet the applicable VOC <u>and chlorinated toxic air contaminant</u> content requirements at N.J.A.C. 7:27-24.4.
- (c) If a spout, portable fuel container, or portable fuel container and spout subject to this subchapter fails to comply with the applicable requirements at N.J.A.C. 7:27-24.8, the Department may issue an order [including, but not limited to, any or all of the following:
  - 1. Requiring requiring the product's manufacturer to [:
    - i. Demonstrate] <u>demonstrate</u> to the satisfaction of the Department that [the test results or calculations are in error, and that] the product in fact complies with the applicable requirements at N.J.A.C. 7:27-24.8 [;
    - ii. Demonstrate to the satisfaction of the Department that the test results or calculations for that specific unit are not representative of the entire batch, or entire product line of that unit; and/or
    - iii. Within 30 days of the manufacturer's submission of the test report to the Department,] by producing evidence of CARB or EPA certification or the issuance of an IPE, ACP, or variance for the product, or recall its non-complying product from all retail outlets in New Jersey within 30 days of the issuance of the order;
  - 2. -3. (No change.)

# SUBCHAPTER 25 CONTROL AND PROHIBITION OF AIR POLLUTION BY VEHICULAR FUELS

#### **7:27-25.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings unless the context clearly indicates otherwise:

. .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

```
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)
2,2-dichloro-1,1,1-trifluoroethane (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
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 (C4F9OCH3)
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3)
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5)
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5
methyl acetate
perfluorocarbons compounds which fall into these classes:
cyclic, branched, or linear, completely fluorinated alkanes
cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine
If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40
CFR 51.100(s)(1) shall control a volatile organic compound as that term is defined by the EPA at 40
CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.
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. . .

methane

# SUBCHAPTER 26. [(RESERVED)] PREVENTION OF AIR POLLUTION FROM ADHESIVES, SEALANTS, ADHESIVE PRIMERS AND SEALANT PRIMERS

#### **7:27-26.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

- "Acrylonitrile-butadiene-styrene" or "ABS welding adhesive" means any adhesive intended by the manufacturer to weld acrylonitrile-butadiene-styrene pipe, which is made by reacting monomers of acrylonitrile, butadiene and styrene.
- "Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- "Adhesive primer" means any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.
- "Aerospace component" means for the purposes of this subchapter, the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile, or space vehicle, including passenger safety equipment.
- "Aerosol adhesive" means an adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.
- "Architectural sealant or primer" means any sealant or sealant primer intended by the manufacturer to be applied to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.
- "Automotive glass adhesive primer" means an adhesive primer labeled by the manufacturer to be applied to automotive glass prior to the installation of the glass using an adhesive/sealant. This primer improves adhesion to the pinch weld and blocks ultraviolet light.
- "CARB" means the California Air Resources Board.
- "Ceramic tile installation adhesive" means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.
- "Chlorinated polyvinyl chloride plastic" or "CPVC plastic" means a polymer of the vinyl chloride monomer that contains 67 percent chlorine and is normally identified with a CPVC marking.
- "Chlorinated polyvinyl chloride welding adhesive" or "CPVC welding adhesive" means an adhesive labeled for the welding of chlorinated polyvinyl chloride plastic.
- "Cleanup solvent" means a VOC-containing material used to remove a loosely held uncured (that is, not dry to the touch) adhesive or sealant from a substrate, or to clean equipment used in applying a material.
- "Computer diskette jacket manufacturing adhesive" means any adhesive intended by the manufacturer to glue the fold-over flaps to the body of a vinyl computer diskette jacket.
- "Contact bond adhesive" means an adhesive that:
  - 1. Is designed for application to both surfaces to be bonded together;
  - 2. Is allowed to dry before the two surfaces are placed in contact with each other;

- 3. Forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and
- 4. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.
- This term does not include rubber cements that are primarily intended for use on paper substrates and vulcanizing fluids that are designed and labeled for tire repair only.
- "Cove base" means a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.
- "Cove base installation adhesive" means any adhesive intended by the manufacturer to be used for the installation of a cove base or wall base on a wall or vertical surface at floor level.
- "Cyanoacrylate adhesive" means any adhesive with a cyanoacrylate content of at least 95 percent by weight.
- "Department" means the Department of Environmental Protection.
- "Dry wall installation" means the installation of gypsum dry wall to study or solid surfaces using an adhesive formulated for that purpose.
- "EPA" means the United States Environmental Protection Agency.
- "Exempt compound" means any compound exempted by the EPA from the definition of "VOC" at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.
- "Flexible vinyl" means non-rigid polyvinyl chloride plastic with at least five percent by weight plasticizer content.
- "Fiberglass" means a material consisting of extremely fine glass fibers.
- "Indoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl-backed carpet, resilient sheet and roll or artificial grass. This term does not include any adhesive that is used to install ceramic tile and perimeter-bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl.
- "Laminate" means a product made by bonding together two or more layers of material.
- "Low-solids adhesive, sealant or primer" means any product that contains 120 grams or less of solids per liter of material.
- "Marine deck sealant" or "marine deck sealant primer" means any sealant or sealant primer labeled for application to wooden marine decks.
- "Medical equipment manufacturing" means the manufacture of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators, and cardiatory reservoirs.
- "Metal to urethane/rubber molding or casting adhesive" means any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

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- "Multipurpose construction adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile and acoustical tile.
- "Nonmembrane roof installation/repair adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of nonmembrane roofs and that is not intended for the installation of prefabricated single-ply flexible roofing membrane, including, but not limited to, plastic or asphalt roof cement, asphalt roof coating and cold application cement.
- "Outdoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.
- "Panel installation" means the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to study or solid surfaces using an adhesive formulated for that purpose.
- "Perimeter bonded sheet flooring installation" means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip with a width of up to four inches around the perimeter of the sheet flooring.
- "Person" means an individual, public or private corporation, company, partnership, firm, association, society or joint stock company, municipality, state, interstate body, the United States, or any board, commission, employee, agent, officer or political subdivision of a state, an interstate body or the United States.
- "Plastic" or "plastics" means a synthetic material chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers and are capable of being molded, extruded, cast into various shapes and films or drawn into filaments.
- "Plastic cement welding adhesive" means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.
- "Plastic cement welding adhesive primer" means any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.
- "Plastic foam" means foam constructed of plastics.
- "Plasticizer" means a material, such as a high boiling point organic solvent, that is incorporated into a vinyl to increase its flexibility, workability, or distensibility.
- "Polyvinyl chloride plastic" or "PVC plastic" means a polymer of the chlorinated vinyl monomer that contains 57 percent chlorine.
- "Polyvinyl chloride welding adhesive" or "PVC welding adhesive" means any adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.
- "Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, wood, paper and corrugated paperboard.
- "Propellant" means a fluid under pressure that expels the contents of a container when a valve is opened.

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- "Reactive diluent" means a liquid that is a reactive organic compound during application and one in that, through chemical and/or physical reactions such as polymerization, 20 percent or more of the reactive organic compound becomes an integral part of a finished material.
- "Roadway sealant" means any sealant intended by the manufacturer for application to public streets, highways and other surfaces, including, but not limited to, curbs, berms, driveways and parking lots.
- "Rubber" means any natural or manmade rubber substrate, including but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene and ethylene propylene diene terpolymer.
- "SCAQMD" means the South Coast Air Quality Management District, a part of the California Air Resources Board, which is responsible for the regulation of air quality in the State of California.
- "Sealant" means any material with adhesive properties that is formulated primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces. Sealants include sealant primers and caulks.
- "Sealant primer" means any product intended by the manufacturer for application to a substrate, prior to the application of a sealant, to enhance the bonding surface.
- "Sheet-applied rubber installation" means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.
- "Single-ply roof membrane" means a prefabricated single sheet of rubber (normally ethylene-propylene diene terpolymer) that is field-applied to a building roof using one layer of membrane material.
- "Single-ply roof membrane installation and repair adhesive" means any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes and ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole and reapplying flashings to vents, pipes or ducts installed through the membrane.
- "Single-ply roof membrane adhesive primer" means any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.
- "Single-ply roof membrane sealant" means any sealant labeled for application to single-ply roof membrane.
- "Solvent" means organic compounds that are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or other related uses.
- "Structural glazing adhesive" means any adhesive intended by the manufacturer to apply glass, ceramic, metal, stone or composite panels to exterior building frames.
- "Subfloor installation" means the installation of subflooring material over floor joists, including the construction of any load-bearing joists. Subflooring is covered by a finish surface material.
- "Surface preparation solvent" means a solvent used to remove dirt, oil and other contaminants from a substrate prior to the application of a primer, adhesive or sealant.

- "Thin metal laminating adhesive" means any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mils.
- "Tire repair" means a process that includes expanding a hole, tear, fissure or blemish in a tire casing by grinding or gouging, applying adhesive and filling the hole or crevice with rubber.
- "Tire retread adhesive" means any adhesive intended by the manufacturer for application to the back of precured tread rubber and to the casing and cushion rubber. Tire retread adhesive may also be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.
- "Traffic marking tape" means preformed reflective film intended by the manufacturer for application to public streets, highways and other surfaces, including but not limited to curbs, berms, driveways and parking lots.
- "Traffic marking tape adhesive primer" means any primer intended by the manufacturer for application to surfaces prior to installation of traffic marking tape.
- "Undersea-based weapons systems component" means the fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on undersea ships.
- "Volatile organic compound" or "VOC" means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.
- "Waterproof resorcinol glue" means a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

## 7:27-26.2 Applicability

- (a) Except as provided in N.J.A.C. 7:27-26.4, this subchapter applies to any person who:
  - 1. Sells, supplies, offers for sale or manufactures for sale in New Jersey any adhesive, sealant, adhesive primer or sealant primer for use in New Jersey; or
  - 2. For compensation, uses or applies any adhesive, sealant, adhesive primer or sealant primer within New Jersey.

## 7:27-26.3 Requirements

- (a) Except as provided in N.J.A.C. 7:27-26.4(e) and (g), on and after January 1, 2009, no person shall manufacture for sale in New Jersey any adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limits specified in Table 1 below.
- (b) Except as provided in (i) below and N.J.A.C. 7:27-26.4(a), (b), (e) and (g), on and after January 1, 2009, no person shall sell, supply or offer for sale in New Jersey any adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limits specified in Table 1 below.
- (c) Except as provided in (f) and (i) below and N.J.A.C. 7:27-26.4(a) through (d), on and after January 1, 2009, no person shall, for compensation, use or apply within New Jersey any adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limits specified in Table 1 below.
- (d) The VOC content limits in Table 1 for adhesives applied to particular substrates apply as follows:
  - 1. If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable, rather than an adhesive-to-substrate limit; and

- 2. If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content is the limit for such use.
- (e) Any person subject to this subchapter using a surface preparation or cleanup solvent shall:
  - 1. Except as provided in (e)2 below for single-ply roofing, not use materials for surface preparation containing VOCs, unless the VOC content of the surface preparation solvent is less than 70 grams per liter;
  - 2. If using a surface preparation solvent in applying single-ply roofing, not use materials for surface preparation containing VOCs, unless the composite vapor pressure, excluding water and exempt compounds, of the surface preparation solvent is less than or equal to 45 millimeters of mercury (mm Hg) at 20 degrees Celsius;
  - 3. Not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than or equal to 45 mm Hg at 20 degrees Celsius; and
  - 4. Remove an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment:
    - i. In an enclosed cleaning system, or equivalent cleaning system, as determined by the test method identified in N.J.A.C. 7:27-26.6;
    - ii. By using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material; or
    - iii. By soaking parts containing dried adhesive in solvent containing VOCs, if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 mm Hg at 20 degrees Celsius and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.
- (f) A person using an adhesive, sealant, adhesive primer or sealant primer subject to the provisions of this subchapter may comply with (c) and (e) above by using add-on air pollution control equipment if the following requirements are met:
  - 1. The VOC emissions from the use of all adhesives, sealants, adhesive primers or sealant primers subject to the provisions of this subchapter are reduced by an overall capture and control efficiency of at least 85 percent, by weight;
  - 2. The combustion temperature is monitored continuously if a thermal incinerator is operated;
  - 3. Inlet and exhaust gas temperatures are monitored continuously if a catalytic incinerator is operated;
  - 4. Control device efficiency is monitored continuously if a carbon absorber or control device other than a thermal or catalytic incinerator is operated; and
  - 5. Operation records sufficient to demonstrate compliance with the requirements of this subsection are maintained as required by N.J.A.C. 7:27-26.5.
- (g) Any person using adhesives, sealants, adhesive primers, sealant primers, surface preparation or clean-up solvents subject to this subchapter shall store or dispose of all absorbent materials, such as cloth or paper, that are moistened with adhesives, sealants, primers or solvents subject to this subchapter, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.
- (h) No person shall solicit, require the use or specify the application of any adhesive, sealant, adhesive primer, sealant primer, surface preparation or clean-up solvent if such use or application results in a violation of the provisions of this subchapter. This prohibition applies to all written or oral contracts under which any adhesive, sealant, adhesive primer, sealant primer, surface preparation or clean-up solvent subject to this subchapter is to be used at any location in New Jersey. (i) An adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limits specified in Table 1 below, manufactured prior to January 1, 2009, may be sold, supplied, offered for sale, or used after January 1, 2009, if that product displays the date or date-code in accordance with the requirements at N.J.A.C. 7:27-26.7(b) and 26.8.

# <u>Table 1. VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied to Particular Substrates</u>

Adhesive, sealant, adhesive primer or sealant primer category	VOC content limit (grams VOC per liter*)
Adhesives  ABS welding Ceramic tile installation Computer diskette jacket manufacturing Contact bond Cove base installation CPVC welding Indoor floor covering installation Metal to urethane/rubber molding or casting Multipurpose construction Nonmembrane roof installation/repair Other plastic cement welding Outdoor floor covering installation PVC welding Single-ply roof membrane installation/repair Structural glazing Thin metal laminating	(grams VOC per liter*)  400 130 850 250 150 490 150 850 200 300 510 250 510 250 100 780
Tire retread Perimeter bonded sheet vinyl flooring installation Waterproof resorcinol glue Sheet-applied rubber installation	100 660 170 850
Sealants Architectural Marine deck Nonmembrane roof installation/repair Roadway Single-ply roof membrane Other	250 760 300 250 450 420
Adhesive Primers  Automotive glass  Plastic cement welding  Single-ply roof membrane  Traffic marking tape  Other	700 650 250 150 250
Sealant Primers  Non-porous architectural  Porous architectural  Marine deck  Other	250 775 760 750

## **Adhesives Applied to the Listed Substrate**

Flexible vinyl	<u>250</u>
<u>Fiberglass</u>	<u>200</u>
<u>Metal</u>	<u>30</u>
Porous material	<u>120</u>
Rubber	<u>250</u>
Other substrates	<u>250</u>

\* The VOC content is determined as the weight of volatile compounds, less water and exempt compounds as specified in N.J.A.C. 7:27-26.6.

## **7:27-26.4 Exemptions**

- (a) The requirements of this subchapter do not apply to the following compounds:
  - 1. Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in any laboratory testing (including testing by research and development, quality assurance or analytical laboratories), provided records are maintained sufficient to demonstrate compliance with this exemption and in accordance with N.J.A.C. 7:27-26.5.
  - 2. Adhesives, sealants, adhesive primers and sealant primers that are subject to the provisions of N.J.A.C. 7:27-24;
  - 3. Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied;
  - 4. Cvanoacrylate adhesives;
  - 5. Adhesives other than plastic cement welding adhesives and contact adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less, or a net weight of one pound or less; and
  - 6. Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less.
- (b) The requirements of this subchapter do not apply to the following operations:
  - 1. Tire repair operations, provided the label of the adhesive states "For tire repair only";
  - 2. The assembly, repair and manufacture of aerospace or undersea-based weapons systems components;
  - 3. Solvent welding operations used in the manufacture of medical devices; and
  - 4. Plaque-laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992. The exemption in this paragraph shall not apply until the person claiming the exemption notifies the Department in writing that a complying adhesive is not available.
- (c) The provisions of this subchapter, other than N.J.A.C. 7:27-26.3(a) and (b), do not apply if the total of VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the facility is less than 200 pounds per calendar year, or an equivalent volume. Any person claiming exemption pursuant to this subsection shall record and maintain for five years monthly operational records sufficient to demonstrate compliance.
- (d) The provisions of N.J.A.C. 7:27-26.3(c) and (e) do not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents, provided the total volume of noncomplying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per calendar year. Any person claiming exemption pursuant to this subsection shall record and maintain for five years monthly operational records sufficient to demonstrate compliance.
- (e) This subchapter does not apply to a manufacturer or distributor who sells, supplies or offers for sale in New Jersey any adhesive, sealant, adhesive primer or sealant primer that does not comply with the VOC content limits in N.J.A.C. 7:27-26.3, Table 1, provided that such manufacturer or distributor makes and keeps records demonstrating:
  - 1. The adhesive, sealant, adhesive primer or sealant primer is intended for shipment and use outside of New Jersey; and

- 2. The manufacturer or distributor has taken reasonable precautions to assure that the adhesive, sealant, adhesive primer or sealant primer is not distributed to or within New Jersey.
- (f) The provisions of (e) above do not apply to any adhesive, sealant, adhesive primer or sealant primer that is sold, supplied or offered for sale by any person to a retail outlet in New Jersey.
- (g) N.J.A.C. 7:27-26.3(a) and (b) do not apply to the sale or manufacture for sale of any adhesive, sealant, adhesive primer or sealant primer to a person complying with the requirements of this subchapter by using add-on air pollution control equipment, in conformance with a permit issued pursuant to N.J.A.C. 7:27-8, that satisfies the requirements for such add-on equipment at N.J.A.C. 7:27-26.3(f).

## 7:27-26.5 Administrative requirements

- (a) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-26.2(b) to whom the Department has issued an air permit under N.J.A.C. 7:27-8 for any operation that involves the use or application of an adhesive, sealant, adhesive primer or sealant primer shall maintain records demonstrating compliance, including, but not limited to, the following information:
  - 1. A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent in use and in storage;
  - 2. A data sheet or material list which provides the material name, manufacturer identification, and material application;
  - 3. Catalysts, reducers or other components used and the mix ratio;
  - 4. The VOC content of each product as supplied;
  - 5. The final VOC content or vapor pressure, as applied; and
  - 6. The monthly volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup or surface preparation solvent used.
- (b) Any person who complies with N.J.A.C. 7:27-26.3(c) or (e) through the use of add-on air pollution control equipment shall record the key operating parameters for the control equipment, including but not limited to, the following information:
  - 1. The volume used per day of each adhesive, sealant, adhesive primer, sealant primer or solvent that is subject to a VOC content limit in Table 1 and that exceeds such a limit;
  - 2. On a daily basis, the combustion temperature, inlet and exhaust gas temperatures and control device efficiency, as appropriate, pursuant to N.J.A.C. 7:27-26.3(e);
  - 3. Daily hours of operation; and
  - 4. All maintenance performed including the date and type of maintenance.
- (c) For adhesives, sealants, adhesive primers and sealant primers subject to the laboratory testing exemption pursuant to N.J.A.C. 7:27-26.4(a)1, the person conducting the testing shall make and maintain records of all such materials used, including, but not limited to, the product name, the product category of the material or type of application and the VOC content of each material.
- (d) Each record made to determine compliance with this subchapter shall be maintained for five years from the date such record is created and shall be made available to the Department within 90 days of a request.

## 7:27-26.6 Compliance procedures and test methods

- (a) Except as provided in (c), (d) and (e) below, the VOC and solids content of all non-aerosol adhesives, adhesive primers and cleanup solvents shall be determined using either:
  - 1. EPA Reference Method 24, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, as identified in 40 CFR 60, Appendix A, as supplemented or amended, and incorporated herein by reference, or 2. SCAQMD Method 304-91, Determination of Volatile Organic Compounds (VOC) In Various Materials, as supplemented or amended, and incorporated herein by reference, available in "Laboratory Methods of Analysis for Enforcement Samples" which can be viewed or downloaded from the South Coast Air Quality Management District (SCAQMD) website at <a href="http://www.aqmd.gov/tao/methods/labmethtoc.html">http://www.aqmd.gov/tao/methods/labmethtoc.html</a> by clicking on the appropriate heading or method listed.

- (b) The organic content of exempt compounds shall be determined using ASTM D4457-85, (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, as applicable, as supplemented or amended, and incorporated herein by reference, which is available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959 or from its website at www.astm.org.
- (c) The VOC content of any plastic welding cement adhesive or primer shall be determined using SCAQMD Method 316A 92, Determination Of Volatile Organic Compounds (VOC) In Materials Used For Pipes And Fittings, as supplemented or amended, and incorporated herein by reference, available in "Laboratory Methods of Analysis for Enforcement Samples" which can be viewed or downloaded from the South Coast Air Quality Management District (SCAQMD) website at <a href="http://www.aqmd.gov/tao/methods/labmethtoc.html">http://www.aqmd.gov/tao/methods/labmethtoc.html</a> by clicking on the appropriate heading or method listed.
- (d) To determine if a diluent is a reactive diluent, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using SCAQMD Method 316A 92, Determination Of Volatile Organic Compounds (VOC) In Materials Used For Pipes And Fittings, as supplemented or amended, and incorporated herein by reference, available in "Laboratory Methods of Analysis for Enforcement Samples" which can be viewed or downloaded from the South Coast Air Quality Management District (SCAQMD) website at http://www.aqmd.gov/tao/methods/labmethtoc.html by clicking on the appropriate heading or method listed.
- (e) The composite vapor pressure of organic compounds in cleaning materials shall be determined by quantifying the amount of each compound in the blend using, as applicable, either:
  - 1. For organics: ASTM E260–96, General Gas Chromatography Procedures, as supplemented or amended, and incorporated herein by reference; or
  - 2. For water content, ASTM D 3792-79 Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, as supplemented or amended, and incorporated herein by reference, and the following equation:

$$Pp_{c} = \frac{\sum_{i=1}^{n} (W_{i}) (VP_{i})/Mw_{i}}{\sum_{i=1}^{n} (W_{i}) (VP_{i})/Mw_{i}}$$

$$M_{w}/Mw_{w} + \sum_{i=1}^{n} (W_{e}/Mw_{e} + \sum_{i=1}^{n} W_{i}/Mw_{i})$$

Where:

<u>Ppc = VOC composite partial pressure at 20 degrees C, in millimeters of mercury (mm Hg)</u>

Wi = Weight of the "i"th VOC compound, in grams, as determined by ASTM E 260-91

Ww = Weight of water, in grams as determined by ASTM D 3792-86

We = Weight of the "i"th exempt compound, in grams, as determined by ASTM E 260-91

<u>Mwi = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature</u>

Mww = Molecular weight of water, 18 grams per g-mole

<u>Mwe = Molecular weight of the "i"th exempt compound, in grams per g-mole, as given in</u> chemical reference literature

<u>Vpi</u> = <u>Vapor pressure of the "i"th VOC compound at 20 degrees C, in mm Hg, as determined</u> by (f) below.

Both of the above ASTM test methods are available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959, or from its website at www.astm.org.

- (f) The vapor pressure of each single component compound may be determined from ASTM D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, as supplemented or amended, and incorporated herein by reference, which is available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959 or from its website at www.astm.org, or may be obtained from any of the following sources:
  - 1. The Vapor Pressure of Pure Substances; Boublik, Fried, and Hala; Elsevier Scientific Publishing Company, New York, 1984, as supplemented or amended;
  - 2. Perry's Chemical Engineer's Handbook; McGraw-Hill Book Company, Eighth Edition, 2007, as supplemented or amended;
  - 3. CRC Handbook of Chemistry and Physics; Chemical Rubber Publishing Company, 88<sup>th</sup> Edition, 2007, as supplemented or amended;
  - 4. Lange's Handbook of Chemistry; John Dean, editor, McGraw-Hill Book Company, 15<sup>th</sup> Edition, 1998, as supplemented or amended; or
  - 5. Additional sources approved by the SCAQMD or other California air districts.
- (g) If air pollution control equipment is used to meet the requirements of this subchapter, the owner or operator shall make the following determinations:
  - 1. The measurement of capture efficiency shall be conducted and reported in accordance with the EPA Technical Document "Guidelines for Determining Capture Efficiency," issued January 9, 1995, as supplemented or amended and incorporated by reference herein, which is available from the USEPA's Office of Air Quality Planning and Standards, Emission Monitoring and Analysis Division, Research Triangle Park, NC 27711, January 9, 1995; and
  - 2. The control efficiency shall be determined in accordance with one of the following:
    - i. EPA Method 25, 40 CFR 60, Appendix A, Determination of Total Gaseous Non-Methane Organic Emissions as Carbon, as supplemented or amended and incorporated by reference herein;
    - ii. EPA Reference Method 25A, 40 CFR 60, Appendix A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, as supplemented or amended and incorporated by reference herein;
    - <u>iii. EPA Reference Method 25B, 40 CFR 60, Appendix A, Determination of Total Gaseous Organic Concentration Using a Non-Dispersive Infrared Analyzer, as supplemented or amended and incorporated by reference herein; or</u>
    - iv. CARB Test Method 100, Procedures for Continuous Gaseous Emission Stack Sampling, as supplemented or amended and incorporated by reference herein, which can be obtained from CARB, Monitoring and Laboratory, 1927 13th Street, Sacramento, CA 95814, or at <a href="http://www.arb.ca.gov/testmeth/VOL1/M">http://www.arb.ca.gov/testmeth/VOL1/M</a> 100.PDF.
- (h) The active and passive solvent losses from spray gun cleaning systems shall be determined using SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," dated October 3, 1989, as supplemented or amended, and incorporated herein by reference, available from South Coast Air Quality Management District (SCAQMD), 21865 Copley Dr, Diamond Bar, CA 91765, and at

http://yosemite.epa.gov/R9/R9Testmethod.nsf/0/4C22DA95566CEFE78825708F006010EC/\$file/SC%20Sol%20LossSprayGun.pdf. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm of Hg at 20 degrees Celsius, and the minimum test temperature shall be 15 degrees Celsius.

(i) For adhesives that do not contain reactive diluents, grams of VOC per liter of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

Grams of VOC per liter of adhesive = Ws - Ww - We

 $\overline{Vm - Vw - Ve}$ 

Where

 $\overline{Ws}$  = weight of volatile compounds, in grams

weight of water, in grams

weight of exempt compounds, in grams

Vm =volume of material, in liters

volume of water, in liters

volume of exempt compounds, in liters

(j) For adhesives that contain reactive diluents, the VOC content of the adhesive is determined after curing. The grams of VOC per liter of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

Grams of VOC per liter of adhesive Wrs - Wrw - Wre

Vrm - Vrw - Vre

#### Where

Wrs = weight of volatile compounds not consumed during curing, in grams

Wrw = weight of water not consumed during curing, in grams

Wre = weight of exempt compounds not consumed during curing, in grams

= volume of material not consumed during curing, in liters

*Vrw* = volume of water not consumed during curing, in liters

*Vre* = volume of exempt compounds not consumed during curing, in liters

(k) Grams of VOC per liter of material shall be calculated according to the following equation:

 $\frac{Ws - Ww - We}{Vm}$ Grams of VOC per liter of materials

weight of volatile compounds, in grams

Ww =weight of water, in grams

weight of exempt compounds, in grams

Vm = volume of material, in liters

(1) Percent VOC by weight shall be calculated according to the following equation:

% VOC by weight =  $[(Wv/W)] \times 100$ 

#### Where

Wv = weight of VOCs in grams

W = weight of material in grams

#### 7:27-26.7 Container labeling

- (a) On and after January 1, 2009, each manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to this subchapter shall display the following information on the product container or label:
  - 1. A statement of the manufacturer's recommendation regarding thinning, reducing, or mixing of the product, except that:
    - i. This requirement does not apply to the thinning of a product with water; and
    - ii. If thinning of the product prior to use is not necessary, the recommendation must specify that the product is to be applied without thinning;
  - 2. The maximum or the actual VOC content of the product in accordance with N.J.A.C. 7:27-26.6, as supplied, displayed in grams of VOC per liter of product; and

- 3. The maximum or the actual VOC content of the product in accordance with N.J.A.C. 7:27-26.6, which includes the manufacturer's maximum recommendation for thinning, as applied, displayed in grams of VOC per liter of product.
- (b) Except as provided at (c) below, a manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to this subchapter shall clearly display, on each product package, the day, month, and year in which the product was manufactured, or a code indicating such date (that is, a date-code). The date or date-code shall be located on the packaging, or inside the cover or cap, so that it is readily observable or obtainable without irreversibly disassembling any part of the packaging, such as by simply removing the cover or cap. Use of the following code to indicate the date of manufacture in compliance with the requirements of this subsection will exempt the manufacturer from the requirements of (c) below, if the code is represented separately from other codes on the product container so that it is easily recognizable:

#### YY DDD

Where:

- "YY" = two digits representing the year in which the product was manufactured, and
- "DDD" = three digits representing the day of the year on which the product was manufactured, with "001" representing the first day of the year, "002" representing the second day of the year, and so forth (also known as the "Julian date").
- (c) If for any adhesive, sealant, adhesive primer or sealant primer the manufacturer uses a date-code other than the YY DDD format to comply with (b) above, the manufacturer shall submit an explanation of the date portion of the product code to the Department. The explanation shall be submitted with the electronic registration of the date code, in accordance with the requirements of N.J.A.C. 7:27-26.8.
- (d) Subsection (c) above does not apply to a product if:
  - 1. The product contains no VOC; or contains 0.10 percent VOC, or less, by weight; or
  - 2. The product is offered to consumers free of charge for the purpose of sampling the product.

#### 7:27-26.8 Registration

- (a) The manufacturer of an adhesive, sealant, adhesive primer or sealant primer who uses a date-code other than the YY DDD format as described at N.J.A.C. 7:27-26.7(b) to comply with N.J.A.C. 7:27-26.7(b) shall register that product and an explanation of the date-code with the Department as follows:
  - 1. The registration shall include the following information:
    - i. The name of the manufacturer;
    - ii. The full mailing address of the manufacturer;
    - iii. The name and telephone number of a contact person;
    - iv. The product category and subcategory (as listed in Table 1 at 7:27-26.3) to which the manufacturer's product belongs (for example: sealants:marine deck); and
    - v. An explanation of the date-code system;
  - 2. The registration shall be submitted to the Department on the form provided by the Department at http://www.state.nj.us/dep/baqp, and shall be submitted electronically, by email, on diskette, or on CD-ROM, unless:
    - i. Electronic submission would impose hardship on the manufacturer; and
    - ii. The Department is satisfied that a hardship exists and approves a written request from the manufacturer to submit the information on paper pursuant to (c) below;
  - 3. The registration shall be submitted in accordance with the following schedule:
    - i. For an adhesive, sealant, adhesive primer or sealant primer sold in New Jersey prior to January 1, 2009, the registration shall be submitted on or after June 6, 2008 and prior to January 1, 2009; and
    - ii. For an adhesive, sealant, adhesive primer or sealant primer sold in New Jersey on or after January 1, 2009, that was not sold in New Jersey prior to January 1, 2009, the registration shall be submitted prior to selling the product in New Jersey; and
  - 4. If, subsequent to the submission of a registration, any information provided in the registration changes, the manufacturer shall submit a revised registration including the new information within 90 days of the change.

- (b) No information submitted as part of the registration may be claimed to be confidential, including under the procedures set forth at N.J.A.C. 7:27-1.6 through 1.29.
- (c) If a manufacturer seeks approval to submit its registration on paper, rather than electronically, the following apply:
  - 1. The manufacturer shall submit the written request to the following address:

**Bureau of Air Quality Planning** 

**New Jersey Department of Environmental Protection** 

**PO Box 418** 

401 East State Street

Trenton, New Jersey 08625-0418

- and the envelope in which the written request is submitted shall be labeled as follows:
- "Attention: Request for On-Paper Submittal of Adhesives/Sealants Registration";
- 2. The written request shall include an explanation of the hardship that electronic submission would impose on the manufacturer;
- 3. Any submittal to the Department other than a registration shall be certified in accordance with N.J.A.C. 7:27-1.39, Certification of information;
- 4. The Department shall not approve a manufacturer's written request to submit its registration on paper unless the Department is satisfied that electronic submission would impose hardship on the manufacturer; and
- <u>5. Once the Department has approved submission of a non-electronic submission, the manufacturer shall send the submission to the address provided at 1 above.</u>

#### **SUBCHAPTER 33 (RESERVED)**

#### SUBCHAPTER 34. TBAC EMISSIONS REPORTING

#### **7:27-34.1 Definitions**

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

- "AP-42" means the January 1995, 5th edition of the manual entitled "Compilation of Air Pollutant Emission Factors," which is published by the EPA, including supplements A through G and any subsequent revisions, as amended and supplemented, incorporated herein by reference. The manual may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161, (703) 487-4650; or from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, (202) 783-3228. In addition, the manual can be accessed electronically through the EPA Technology Transfer Network CHIEF site at http://www.epa.gov/ttn/chief/ap42/index.html.
- "Continuous emissions monitor" or "CEM" means a device that continuously measures the emissions from one or more source operations.
- "Department" means the New Jersey Department of Environmental Protection.
- "Emission year" means the calendar year during which emissions reported were emitted.
- "EPA" means the United States Environmental Protection Agency.
- "Manufacturer" means a person who manufactures, imports, assembles, processes, produces, packages, repackages, or re-labels a product. Manufacturer also includes any person for whom the product is manufactured, or by whom the product is distributed, if that person is identified as such on the product label. Manufacturer also includes any person who hires another person to manufacture a product for compensation.
- "Ozone season" means the portion of each year beginning May 1 and ending September 30.

- "Person" means an individual, public or private corporation, company, partnership, firm, association, society or joint stock company, municipality, state, interstate body, the United States, or any board, commission, employee, agent, officer or political subdivision of a state, an interstate body or the United States.
- "Reasonably available" means, with respect to a method of quantification, a method that utilizes data or information that is already in the possession of a person at the time of reporting, or that can be obtained by such person through public sources. For example, a quantification method utilizing emission factors set forth in an AP-42 document is a reasonably available method.
- "Reporting year" means the calendar year during which emissions are reported. This is the year immediately following the emission year.
- "Responsible official" has the same meaning as defined at N.J.A.C. 7:27-1.4.
- "State" means the State of New Jersey.
- "TBAC" means tertiary butyl acetate or t-butyl acetate (CAS #540-88-5).

#### 7:27-34.2 Applicability

- (a) This subchapter applies to any person who:
  - 1. Manufactures TBAC or a product containing TBAC, within the State; or
  - 2. Manufactures a product containing TBAC for sale in the State.

#### 7:27-34.3 Reporting requirements

- (a) Each in-State manufacturer of TBAC, each manufacturer of a product containing TBAC for sale in the State, and each manufacturer who uses TBAC in a manufacturing process in the State, shall submit the following information regarding TBAC to the Department:
  - 1. The name of the manufacturer;
  - 2. The full mailing address of the manufacturer;
  - 3. For an in-State manufacturing facility, the full street address of the facility where the product was manufactured;
  - 4. The name, telephone number, and email address of a contact person;
  - 5. The name, telephone number, and email address of the responsible official;
  - 6. For each in-State manufacturer of TBAC or a product containing TBAC, the amount of
  - TBAC emissions in pounds per ozone-season day and pounds per year from the facility;
  - 7. For each manufacturer of a product containing TBAC, the TBAC emissions in pounds per ozone-season day and pounds per year from the use of the product in New Jersey;
  - 8. The method used to estimate actual emissions, in accordance with N.J.A.C. 7:27-34.4;
  - 9. The brand name of the product containing TBAC;
  - 10. If the product containing TBAC is subject to the provisions of N.J.A.C. 7:27-23, 24 or 26, the category to which the product belongs; and
  - 11. If the product containing TBAC is not subject to the provisions of N.J.A.C. 7:27-23, 24 or 26, a description of the use for which the product is intended.
- (b) The information shall be submitted to the Department in a format in accordance with guidance on the Department's website at <a href="http://www.nj.gov/dep/baqp">http://www.nj.gov/dep/baqp</a> and shall:
  - 1. Be submitted to the Department on a CD-ROM, diskette, or any other compatible electronic media unless:
    - i. Electronic submission would impose hardship on the manufacturer; and
    - ii. The Department approves a request from the manufacturer to submit the information on paper pursuant to (e) below;
  - 2. Include properly signed certification in accordance with N.J.A.C. 7:27-1.39;
  - 3. Include the emissions report and the certification and be submitted to the Department at the following address:
  - **Attn: TBAC Emissions Report**

**Bureau of Air Quality Planning** 

**Department of Environmental Protection** 

P.O. Box 418

**401 East State Street** 

Trenton, New Jersey 08625-0418; and

- 4. Be submitted annually to the Department by April 30 of the reporting year.
- (c) Any information submitted pursuant to this section shall not be claimed to be confidential, including under the procedures set forth at N.J.A.C. 7:27-1.6 through 1.29.
- (d) A manufacturer who claims that electronic submission of its emissions report will impose a hardship shall submit annually a request to the Department to submit its emissions report on paper, rather than electronically, as follows:
  - 1. The request shall include an explanation of the hardship that electronic submission would impose on the manufacturer;
  - 2. The request shall include a statement of commitment from the manufacturer to obtaining the required resources to report future emissions reports electronically;
  - 3. The Department shall not approve a manufacturer's request to submit its emissions report on paper unless the Department is satisfied that electronic submission would impose hardship on the manufacturer; and
  - 4. The manufacturer shall submit the request to the Department at the following address:

**Attn: TBAC Emissions Report** 

**Bureau of Air Quality Planning** 

**Department of Environmental Protection** 

P.O. Box 418

**401 East State Street** 

Trenton, New Jersev 08625-0418

#### 7:27-34.4 Methods to estimate actual emissions

(a) The method that shall be used to estimate actual emissions for a TBAC emissions report is the best available estimation method selected from Table 1 below. The best available estimation method is a method listed in Table 1 that is reasonably available and provides the most accurate estimation of the actual emissions from the emission source. A manufacturer submitting a TBAC emission report shall presume that the highest-ranked, reasonably available method in Table 1 is the best available estimation method and shall use that method, unless a different method is selected pursuant to (b) below.

#### TABLE 1: RANKING OF METHODS FOR ESTIMATING ACTUAL EMISSIONS

Ranking	<u>Methods</u>
<u>1</u>	Continuous Emissions Monitoring
$\frac{2}{3}$	Predictive Emissions Monitoring
<u>3</u>	Department-Approved and Supervised Source Emission Testing Performed during the
	Reporting Year
<u>4</u>	Department-Approved and Supervised Source Emission Testing Performed in a Prior Year
<u>4</u> <u>5</u>	Mass/Material Balance
<u>6</u>	AP-42 Emission Factor or Other EPA-Approved Emission Estimation Methodology or
	Selection of a Source Emission Test for a Similar Size Unit from the AP-42 Basis and
	Background Documents
<u>7</u>	Manufacturer's Estimate
<u>8</u>	Others (including):  • Industry Council or Organization Emission Factor
	<ul> <li>Source Emission Testing Not Approved or Supervised by the</li> </ul>
	<u>Department</u>
	<ul> <li>Good Engineering Judgment/Factor</li> </ul>

(b) A method listed in Table 1 that is ranked lower than the highest-ranked reasonably available method may be used to estimate emissions for a TBAC emissions report if:

- 1. The manufacturer can demonstrate that use of the lower-ranked method results in more accurate estimation of emissions than would have been achieved using any higher-ranked, reasonably available method; or
- 2. Use of the lower-ranked method is consistent with EPA's guidance, including its hierarchy for emission calculation methods and/or its identification of preferred methods for specific types of emission sources, as set forth in the EPA's Emissions Inventory Improvement Program (EIIP) Guidance for Emissions Inventory and Development, as supplemented or amended, which is incorporated by reference herein, and which is available from the EPA website at http://www.epa.gov/ttn/chief/eiip/techreport/.
- (c) For each emissions calculation method used in a TBAC emissions report that is a lower-ranked method being used pursuant to (b) above, a written justification shall be prepared documenting the basis for the use of the lower-ranked method. This justification shall be maintained on-site and be provided to the Department upon request. The justification shall:
  - 1. Identify the estimation method that was the highest-ranked reasonably available method pursuant to the rankings in Table 1;
  - 2. Identify the method selected by the manufacturer pursuant to (b) above; and
  - 3. Explain how selection of this method conforms to the applicable condition(s) in (b) above.

#### 7:27-34.5 Recordkeeping requirements

- (a) For each TBAC emissions report submitted to the Department, the manufacturer shall maintain the following records for a period of five years from the date each submittal is due:
  - 1. An electronic copy and a paper copy of the TBAC emissions report submitted to the Department; and
  - 2. Records indicating how the information submitted in the TBAC emissions report was determined, including any calculations, data, measurements, and estimates used.
- (b) Upon the request of the Department, the manufacturer shall make these records available for inspection by any representative of the Department during normal business hours.
- (c) Upon receipt of a written request from the Department, the manufacturer shall timely submit a copy of the records specified in (a) above to the Department by mail or by other means agreed to by the Department.

#### **CHAPTER 27A**

AIR ADMINISTRATIVE PROCEDURES AND PENALTIES SUBCHAPTER 3 CIVIL ADMINISTRATIVE PENALTIES AND REQUESTS FOR ADJUDICATORY HEARINGS

#### 7:27A-3.2 Definitions

The following words and terms, when used in this subchapter, have the following meanings unless the context clearly indicates otherwise. Unless otherwise specified below, all words and terms are as defined in N.J.S.A. 26:2C-2 and in N.J.A.C. 7:27.

. . .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

methane ethane methylene chloride (dichloromethane) 1,1,1-trichloroethane (methyl chloroform)

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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)
2,2-dichloro-1,1,1-trifluororethane (HCFC-123)
1,1,1,2-tetrafluoroethane (HFC 134a)
1,1-dichloro-1-fluoroethane (HFC-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<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub>)
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>)
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<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>)
methyl acetate
perfluorocarbon compounds which fall into these classes:
cyclic, branched, or linear, completely fluorinated alkanes
cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and
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If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

## 7:27A-3.10 Civil administrative penalties for violation of rules adopted pursuant to the Act (a)-(l) (No change.)

(m) The violations of N.J.A.C. 7:27, whether the violation is minor or non-minor in accordance with (q) through (t) below, and the civil administrative penalty amounts for each violation are as set forth in the

following Civil Administrative Penalty Schedule. The numbers of the following subsections correspond to the numbers of the corresponding subchapter in N.J.A.C. 7:27. The rule summaries for the requirements set forth in the Civil Administrative Penalty Schedule in this subsection are provided for informational purposes only and have no legal effect.

### CIVIL ADMINISTRATIVE PENALTY SCHEDULE

#### 1. - 23. (No change.)

24. Civil administrative penalties for each violation of N.J.A.C. 7:27-24, Control of Air Pollution from Consumer Products, are as set forth in the following table:

Consumer Froducts, are as set forth in the following table.						
Citation and Rule Summary	<u>Class</u>	Type of Violation	First Offense	Second Offense	Third Offense	Each Subsequent Offense
N.J.A.C. 7:27-24.4 [(h)](i) Charcoal lighter product requirements	Manufacturer	NM	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
N.J.A.C. 7:27-24.4[(j)](k) IPE, ACP and variance requirements	Manufacturer	M	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
N.J.A.C. 7:27-24.4[(1)](m) Toxic content in aerosol adhesive	Manufacturer, Distributor, Seller	NM	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
N.J.A.C. 7:27-24.4(n) Chlorinated air toxic in consumer products	Manufacturer, Distributor, Seller	<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-24.4(o) Sell through date for chlorinated air toxic in consumer products	<u>Seller</u>	<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-24.4(p) Sell through date for chlorinated air toxic in consumer products	<u>Supplier</u>	<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	\$ 2,500	<u>\$ 7,500</u>
N.J.A.C. 7:27-24.4(s) Sell through date for paradichlorobenzene in consumer products	<u>Seller</u>	<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-24.4(t) Sell through date for paradichlorobenzene in consumer products	<u>Supplier</u>	<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	\$ 2,500	<u>\$ 7,500</u>
 [N.J.A.C. 7:27-24.10(a)	Manufacturer	M	\$ 4,000	\$ 8,000	\$20,000	\$ 50,000

Citation and Rule Summary Record keeping for fuel containers	<u>Class</u>	Type of Violation	First <u>Offense</u>	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-24.10(b) IPE and variance documentation	Manufacturer	M	\$ 1,000	\$ 2,000	\$ 5,000	\$ 15,000]
N.J.A.C. 7:27-24.10[(c)] (a) Date-code registration	Manufacturer	M	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
N.J.A.C. 7:27-24.10[(e)] (c) Registration schedule	Manufacturer	M	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
N.J.A.C. 7:27-24.10[(f)] (d) Register code change	Manufacturer	M	\$ 500	\$ 1,000	\$ 2,500	\$ 7,500
[N.J.A.C. 7:27-24.11(a) Testing of portable fuel containers	Manufacturer	NM	\$ 2,000	\$ 4,000	\$10,000	\$ 30,000]

. . .

<sup>26. [(</sup>Reserved)] <u>Civil administrative penalties for each violation of N.J.A.C. 7:27-26, Control of Air Pollution from Adhesives Products, are as set forth in the following table:</u>

Citation and Rule Summary	Class	Type of Violation	<u>First</u> Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-26.3(a) VOC standards (Per unit-eight pounds or any part thereof)						
N.J.A.C. 7:27-26.3(a) Less than 25 percent over the standard	<u>Manufacturer</u>	<u>NM</u>	<u>\$ 300</u>	<u>\$ 600</u>	<u>\$ 1,500</u>	<u>\$ 4,500</u>
N.J.A.C. 7:27-26.3(a) From 25 through 50 percent over the allowable standard	<u>Manufacturer</u>	<u>NM</u>	<u>\$ 600</u>	<u>\$ 1,200</u>	\$3,000	<u>\$ 9,000</u>
N.J.A.C. 7:27-26.3(a) Greater than 50 percent	<u>Manufacturer</u>	<u>NM</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>

<sup>25. (</sup>No change.)

Citation and Rule Summary over the allowable standard	<u>Class</u>	Type of Violation	<u>First</u> <u>Offense</u>	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-26.3(b) VOC standards (Per unit-eight pounds or any part thereof)						
N.J.A.C. 7:27-26.3(b) Less than 25 percent over the standard	<u>Distributor</u> , <u>Seller</u>	<u>NM</u>	<u>\$ 300</u>	<u>\$ 600</u>	<u>\$ 1,500</u>	<u>\$ 4,500</u>
N.J.A.C. 7:27-26.3(b) From 25 through 50 percent over the allowable standard	<u>Distributor, Seller</u>	<u>NM</u>	<u>\$ 600</u>	<u>\$ 1,200</u>	<u>\$ 3,000</u>	<u>\$ 9,000</u>
N.J.A.C. 7:27-26.3(b) Greater than 50 percent over the allowable standard	Distributor, Seller	<u>NM</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>
N.J.A.C. 7:27-26.3(c) VOC standards (Per unit-eight pounds or any part thereof)						
N.J.A.C. 7:27-26.3(c) Less than 25 percent over the standard	<u>Applicator</u>	<u>NM</u>	<u>\$ 300</u>	<u>\$ 600</u>	<u>\$ 1,500</u>	<u>\$ 4,500</u>
N.J.A.C. 7:27-26.3(c) From 25 through 50 percent over the allowable standard	<u>Applicator</u>	<u>NM</u>	<u>\$ 600</u>	<u>\$ 1,200</u>	\$ 3,000	<u>\$ 9,000</u>
N.J.A.C. 7:27-26.3(c) Greater than 50 percent over the allowable standard	<u>Applicator</u>	<u>NM</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>
N.J.A.C. 7:27-26.3(e) Preparation or cleanup	<b>Applicator</b>	<u>NM</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>

Citation and Rule Summary solvent	<u>Class</u>	Type of Violation	<u>First</u> Offense	Second Offense	<u>Third</u> Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-26.3(g) Store or dispose of absorbent materials		<u>NM</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-26.3(h) Solicit non-complying product		<u>NM</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>
N.J.A.C. 7:27-26.5(a) Maintain Records		<u>M</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-26.5(b) Record keeping		<u>M</u>	<u>\$ 1,000</u>	<u>\$ 2,000</u>	<u>\$ 5,000</u>	<u>\$ 15,000</u>
N.J.A.C. 7:27-26.5(c) Maintain Records		<u>M</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-26.5(d) Maintain Records		<u>M</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-26.5(e) Maintain Records		<u>M</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>
N.J.A.C. 7:27-26.7(a) Labeling Requirements	<u>Manufacturer</u>	<u>M</u>	<u>\$ 2,000</u>	<u>\$ 4,000</u>	<u>\$ 10,000</u>	<u>\$ 30,000</u>
N.J.A.C. 7:27-26.7(b)  Date or date-code requirement	<u>Manufacturer</u>	<u>M</u>	<u>\$ 2,000</u>	<u>\$ 4,000</u>	<u>\$ 10,000</u>	\$ 30,000
N.J.A.C. 7:27-26.8(a) Product and Date-code registration	<u>Manufacturer</u>	<u>M</u>	<u>\$ 500</u>	<u>\$ 1,000</u>	<u>\$ 2,500</u>	<u>\$ 7,500</u>

<sup>27. - 32. (</sup>No change.)

<sup>34.</sup> The violations of N.J.A.C. 7:27-34 TBAC Emissions Reporting, and the civil administrative penalty amounts for each violation, per source, are as set forth in the following table:

<u>Citation</u>	Rule Summary	<u>Type of</u> <u>Violation</u>	<u>First</u> <u>Offense</u>	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-34.3(b)	Submit Report	<u>NM</u>	<u>\$2,000</u>	<u>\$4,000</u>	<u>\$10,000</u>	<u>\$30,000</u>

<sup>33. (</sup>Reserved)

<u>Citation</u>	Rule Summary	Type of Violation	<u>First</u> <u>Offense</u>	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-34.3(b)2	Failure to Certify	<u>M</u>	<u>\$2,000</u>	<u>\$4,000</u>	<u>\$10,000</u>	\$30,000
N.J.A.C. 7:27-34.4(c)	<b>Emission Calculation</b>	<u>M</u>	<u>\$500</u>	<u>\$1,000</u>	<u>\$2,500</u>	<u>\$7,500</u>
N.J.A.C. 7:27-34.5	Recordkeeping Requirements	<u>M</u>	<u>\$500</u>	<u>\$1,000</u>	<u>\$2,500</u>	<u>\$7,500</u>

(n) - (t) (No change.)

#### CHAPTER 27B SAMPLING AND ANALYTICAL PROCEDURES

# SUBCHAPTER 3. AIR TEST METHOD 3: SAMPLING AND ANALYTICAL PROCEDURES FOR THE DETERMINATION OF VOLATILE ORGANIC COMPOUNDS FROM SOURCE OPERATIONS

#### 7:27B-3.1 Definitions

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

. . .

"Volatile organic compound" or "VOC" means [any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For the purpose of determining compliance with emission limits or content standards, VOC shall be measured by test methods in the approved SIP (such as N.J.A.C. 7:27B-3) or 40 CFR Part 60, Appendix A, as applicable, or which have been approved in writing by the Department and are acceptable to EPA. This term excludes those compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. As of April 9, 1998, the compounds and classes of perfluorocarbons excluded from EPA's definition of VOC at 40 CFR 51.100(s) are set forth below:

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)

2.2-dichloro-1.1.1-trifluororethane (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 (C4F9OCH3) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5) methyl acetate perfluorocarbon compounds which fall into these classes: cyclic, branched, or linear, completely fluorinated alkanes cyclic, branched, or linear, completely fluorinated ethers with no unsaturations cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control] a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

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