

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION
NEW JERSEY ADMINISTRATIVE CODE
TITLE 7
CHAPTER 27
SUBCHAPTER 26

**Prevention of Air Pollution from Adhesives, Sealants,
Adhesive Primers and Sealant Primers**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
REGULATORY HISTORY	2
7:27-26.1 Definitions	3
7:27-26.2 Applicability	9
7:27-26.3 Requirements	9
7:27-26.4 Exemptions	13
7:27-26.5 Administrative Requirements	15
7:27-26.6 Compliance Procedures and Test Methods.....	17
7:27-26.7 Container Labeling	21
7:27-26.8 Registration.....	22

Please note: The Department has made every effort to ensure that this text is identical to the official, legally effective version of this rule, set forth in the New Jersey Register. However, should there be any discrepancies between this text and the official version of the rule, the official version will prevail.

This is a courtesy copy of this rule. All of the Department's rules are compiled in Title 7 of the New Jersey Administrative Code.

REGULATORY HISTORY

Regulatory Action	Date Adopted or filed with OAL	Effective Date and NJR Citation	Operative Date
New Rules	October 30, 2008 adopted November 5, 2008 filed	December 1, 2008 40 N.J.R. 6769(a)	December 29, 2008
Administrative Change		September 6, 2011 43 N.J.R. 2328(a)	August 12, 2011

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.

“Bituminous” means a material, consisting mainly of hydrocarbons and soluble in carbon disulfide, that is obtained from natural deposits or as residue from the distillation of crude petroleum oils or of low grades of coal.

“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.

“Distributor” means a person to whom a product is sold or supplied for the purpose of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

“Dry wall installation” means the installation of gypsum dry wall to studs 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.

“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 or sealant” means any adhesive or sealant 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 bituminous roof cement, 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 studs 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, as determined by ASTM Method E-260-96(2006), as supplemented and amended.

“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.

“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.

“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.

“Retailer” means any person who owns, leases, operates, controls, or supervises a retail outlet.

“Retail outlet” means any establishment at which products are sold, supplied, or offered for sale directly to consumers.

“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 for sale, 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), (g), (i) and (l), 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), (g), (i) and (l), on and after January 1, 2009, no person shall sell, supply for sale 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), (h) and (l), 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 millimeters of mercury (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.

Table 1. VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied to Particular Substrates

Adhesive, sealant, adhesive primer or sealant primer category	Maximum VOC content limit (grams VOC per liter*) Operative Date 1/1/2009
Adhesives	
ABS welding	400
Ceramic tile installation	130
Computer diskette jacket manufacturing	850
Contact bond	250
Cove base installation	150
CPVC welding	490
Indoor floor covering installation	150
Metal to urethane/rubber molding or casting	850
Multipurpose construction	200
Nonmembrane roof installation/repair	300
Other plastic cement welding	510
Outdoor floor covering installation	250

PVC welding	510
Single-ply roof membrane installation/repair	250
Structural glazing	100
Thin metal laminating	780
Tire retread	100
Perimeter bonded sheet vinyl flooring installation	660
Waterproof resorcinol glue	170
Sheet-applied rubber installation	850
Sealants	
Architectural	250
Marine deck	760
Nonmembrane roof installation/repair	300
Roadway	250
Single-ply roof membrane	450
Other	420
Adhesive Primers	
Automotive glass	700
Plastic cement welding	650
Single-ply roof membrane	250
Traffic marking tape	150
Other	250
Sealant Primers	
Non-porous architectural	250
Porous architectural	775
Marine deck	760
Other	750
Adhesives Applied to the Listed Substrate	
Flexible vinyl	250
Fiberglass	200
Metal	30
Porous material	120
Rubber	250
Other substrates	250

* 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.

- (j) For an architectural sealant or sealant primer that also falls within the definition of a marine deck sealant, nonmembrane roof installation/repair sealant, roadway sealant, single-ply roof membrane sealant or marine deck sealant primer, the highest VOC limit

shall apply, unless the manufacturer markets the product as for more than one use, in which case the lowest VOC limit shall apply.

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. Cyanoacrylate 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).
- (h) A person may use in New Jersey "single-ply roof membrane installation or repair adhesives, and adhesive primers," manufactured on and after January 1, 2009, and before January 1, 2012, that exceed the VOC content limits specified in Table 1 at N.J.A.C. 7:27-26.3, only if the product that exceeds the limits is not used during the following periods:
 - 1. In 2009, during the months of June through August; and
 - 2. In 2010 and 2011, during the months of May through September.

- (i) A person may manufacture for use, supply for use or sell for use, in New Jersey, on and after January 1, 2009, and before January 1, 2012, "single-ply roof membrane installation or repair adhesives, and adhesive primers" that exceed the VOC content limits specified in Table 1 at N.J.A.C. 7:27-26.3, only if the product that exceeds the limits is not sold during the following periods:
 - 1. In 2009, during the months of June through August;
 - 2. In 2010 and 2011, during the months of May through September; and
 - 3. On and after January 1, 2012.
- (j) Any manufacturer that sells "single-ply roof membrane installation or repair adhesives, and adhesive primers" for use in New Jersey, that exceed the VOC content limits specified in Table 1 at N.J.A.C. 7:27-26.3 as provided in (i) above shall notify in writing each distributor, retailer and seller of the product that the product is not to be sold in New Jersey during the periods specified in (i) above. This notification shall be made each year in accordance with the following schedule:
 - 1. In 2009, prior to May 15; and
 - 2. In 2010 and 2011, prior to April 15.
- (k) If any manufacturer that sells "single-ply roof membrane installation or repair adhesives, and adhesive primers" for use in New Jersey that exceed the VOC content limits specified in Table 1 at N.J.A.C. 7:27-26.3 as provided in (i) above sells a product directly to the user of the product, the manufacturer shall notify in writing each direct user of the product that the product is not to be used in New Jersey during the periods specified in (h) above. This notification shall be made each year in accordance with the following schedule:
 - 1. In 2009, prior to May 15; and
 - 2. In 2010 and 2011, prior to April 15.
- (l) A person may manufacture for sale, sell, supply for sale, offer for sale, use or apply for compensation, within New Jersey, any adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limits specified in Table 1 at N.J.A.C. 7:27-26.3, on or after January 1, 2009 and on or before June 29, 2010, if the user, in order to comply with this subchapter, will install add-on air pollution control equipment that is not installed as of December 29, 2008.

7:27-26.5 Administrative requirements

- (a) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-26.2(a) 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 at N.J.A.C. 7:27-26.3 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;
 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 <http://www.aqmd.gov/tao/methods/labmethtoc.html> by clicking on the appropriate heading or method listed; or
 3. For reactive adhesives, National Emission Standards for Hazardous Air Pollutants, Surface Coating of Plastic Parts and Products, Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives, at 40 CFR Part 63 Subpart PPPP, Appendix A, incorporated herein by reference.
- (b) The organic content of exempt compounds shall be determined using ASTM D4457-02(2008), 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 <http://www.aqmd.gov/tao/methods/labmethtoc.html> 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(2006), General Gas Chromatography Procedures, as supplemented or amended, and incorporated herein by reference; or
 2. For water content, ASTM D3792-05 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:

$$Pp_c = \frac{\sum_{i=1}^n (W_i)(VP_i)/Mw_i}{W_w/Mw_w + \sum_{i=1}^n W_e/Mw_e + \sum_{i=1}^n W_i/Mw_i}$$

Where:

Pp_c = VOC composite partial pressure at 20 degrees C, in millimeters of mercury (mm Hg)

W_i = Weight of the "i"th VOC compound, in grams, as determined by ASTM E260-96(2006), as supplemented or amended

W_w = Weight of water, in grams as determined by ASTM D3792-05, as supplemented or amended

W_e = Weight of the "i"th exempt compound, in grams, as determined by ASTM E260-96(2006), as supplemented or amended

Mw_i = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature

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

Mw_e = Molecular weight of the "i"th exempt compound, in grams per g-mole, as given in chemical reference literature

Vp_i = Vapor pressure of the "i"th VOC compound at 20 degrees C, in mm Hg, as determined 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, PA19428-2959, 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 Isotenoscope, 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, 88th Edition, 2007, as supplemented or amended;
 4. Lange's Handbook of Chemistry; John Dean, editor, McGraw-Hill Book Company, 15th 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; 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;
 - 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
 - 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 http://www.arb.ca.gov/testmeth/VOL1/MJ_1100.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](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, sealants and primers, with the exception of low solids adhesives, sealants and primers, 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:

$$\text{Grams of VOC per liter of adhesive} = \frac{W_s - W_w - W_e}{V_m - V_w - V_e}$$

Where:

W_s = weight of volatile compounds, in grams

W_w = weight of water, in grams

W_e = weight of exempt compounds, in grams

V_m = volume of material, in liters

V_w = volume of water, in liters

V_e = volume of exempt compounds, in liters

(j) For adhesives, sealants and primers, 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:

$$\text{Grams of VOC per liter of adhesive} = \frac{W_{rs} - W_{rw} - W_{re}}{V_{rm} - V_{rw} - V_{re}}$$

Where:

W_{rs} = weight of volatile compounds not consumed during curing, in grams

W_{rw} = weight of water not consumed during curing, in grams

W_{re} = weight of exempt compounds not consumed during curing, in grams

V_{rm} = volume of material not consumed during curing, in liters

V_{rw} = volume of water not consumed during curing, in liters

V_{re} = volume of exempt compounds not consumed during curing, in liters

(k) For low-solids adhesives, sealants or primers, grams of VOC per liter of material shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of adhesive} = \frac{W_s - W_w - W_e}{V_m}$$

Where:

W_s = weight of volatile compounds, in grams

W_w = weight of water, in grams

W_e = weight of exempt compounds, in grams

V_m = volume of material, in liters

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

$$\% \text{ VOC by weight} = [(W_v / W)] \times 100$$

Where:

W_v = 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 December 29, 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:

Department of Environmental Protection
Bureau of Air Quality Planning
401 East State Street
Mail Code 401-07H
PO Box 420
Trenton, New Jersey 08625-0420

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;

This is a courtesy copy of this rule. All of the Department's rules are compiled in Title 7 of the New Jersey Administrative Code.

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
5. Once the Department has approved submission of a non-electronic submission, the manufacturer shall send the submission to the address provided at (c)1 above.