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

Adopted 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, and 25.1; N.J.A.C. 7:27A-3.2 and 3.10; and N.J.A.C. 7:27B-3.1**
Adopted Repeal:	**N.J.A.C. 7:27-24.11**
Adopted New Rules:	**N.J.A.C. 7:27-26 and 34**
Proposed:	November 5, 2007 at 39 N.J.R. 4492(a)
Adopted:	October 30, 2008 by Lisa P. Jackson, Commissioner, Department of Environmental Protection.
Filed:	November 5, 2008 as R.2008 d.366, **with substantive and technical changes** not requiring additional public notice and comment (See N.J.A.C. 1:30-6.3).
Authority:	N.J.S.A. 13:1B-3(e), 13:1D-9 and 26:2C-1 et seq., in particular 26:2C-8.
DEP Docket Number:	20-07-10/642
Effective Date:	December 1, 2008
Operative Date:	December 29, 2008
Expiration Dates:	Exempt, N.J.A.C. 7:27 and 27B; April 21, 2010, N.J.A.C. 7:27A

The New Jersey Department of Environmental Protection (Department) is adopting new rules and amendments at N.J.A.C. 7:27-24, Prevention of Air Pollution from Consumer Products, which regulates chemically formulated consumer products and portable fuel containers. The Department is also adopting new N.J.A.C. 7:27-26, which regulates adhesives and sealants and N.J.A.C. 7:27-34, establishing reporting requirements for the emission of tertiary butyl acetate (TBAC); and an amended definition of volatile organic compound (VOC) throughout N.J.A.C. 7:27, 27A and 27B. The Department is adopting related amendments at N.J.A.C. 7:27A-3.10, Air Administrative Procedures and Penalties, Civil Administrative Penalties and Requests for Adjudicatory Hearings. These new rules and amendments will help the State continue to make progress towards attainment of the eight-hour ozone standard, as well as aid in the protection of the public from toxic air pollutants.

Summary of Hearing Officer's Recommendation and Agency Response:

The Department held a public hearing on December 10, 2007, at the Department Headquarters Building, 401 E. State Street, Trenton, New Jersey, to provide interested parties the opportunity to present comments on the Department's proposed amendments and new rules and State Implementation Plan (SIP) revision. Six people testified at the hearing. Chris Salmi, Assistant Director of the Department's Division of Air Quality, served as the Hearing Officer. The Department has summarized and responded to the comments it received on the proposal and the proposed SIP revision below. After reviewing the comments presented at the hearing and the

written comments received by the Department, the Hearing Officer recommended that the proposed amendments and new rules be adopted with the changes described below in the Summary of Public Comments and Agency Responses and in the Summary of Agency-Initiated Changes. The Department has accepted the Hearing Officer's recommendation.

A record of the public hearing is available for inspection in accordance with applicable law by contacting:

Department of Environmental Protection
Office of Legal Affairs
ATTN: Docket No. 20-07-10/642
401 East State Street
PO Box 402
Trenton, New Jersey 08625-0402

This proposal document can also be viewed or downloaded from the Department's website at www.nj.gov/dep.

Summary of Public Comments and Agency Responses:

The Department accepted comments on the proposal through January 4, 2008. The following persons timely submitted written comments and/or made oral comments at the public hearing:

1. Brian J. Anthony, The Brewer Company
2. James Baker, Roof Coatings Manufacturers Association
3. Karen M. Bond, Lord Corporation
4. Jared O. Blum, EPDM Roofing Association
5. Michael J. DuCharme, EPDM Roofing Association
6. D. Douglas Fratz, Consumer Specialty Products Association
7. Eileen J. Moyer, Reckitt Benckiser, Inc.
8. Lewis S. Ripps, Palmer Asphalt Company
9. Steve Risotto, Halogenated Solvents Industry Alliance, Inc.
10. Tony Russo, Chemistry Council of New Jersey
11. Chris Salazar, Roof Coatings Manufacturers Association/Karnak Corporation
12. William Schneider, EPDM Roofing Association
13. Thomas D. Sims, Department of Defense
14. Frances K. Wu, Personal Care Products Council
15. Joseph Yost, Consumer Specialty Products Association

The timely submitted comments and the Department's responses are summarized below. The number(s) in parentheses after each comment correspond to the number identifying the commenter(s) above.

VOC Definition

1. COMMENT: The commenters support the Department's amendment of the definition of VOC throughout Chapters 27, 27A and 27B in order to match the United States Environmental Protection Agency (USEPA) definition. (6, 7, 9, 10, 15)

RESPONSE: The Department acknowledges the commenters' support.

N.J.A.C. 7:27-24 Consumer Products

2. COMMENT: The commenters do not oppose the Department's new VOC limits at N.J.A.C. 7:27-24, which are based on the Ozone Transport Commission (OTC) model rule for consumer products, and support the promulgation of uniform regulations. The commenters support the reasonable effective date for the new VOC limits and the Department's sell-through provisions for products manufactured prior to the effective date. (6, 7, 9, 10, 15)

RESPONSE: The Department acknowledges the commenters' support.

3. COMMENT: Through cooperation with the Department on regulations to reduce the VOC content in various consumer products, companies have been able to meet the challenges posed by stricter regulations without impacting interstate commerce. The commenter is in favor of the proposed amendments to the consumer products VOC regulations at N.J.A.C. 7:27-24. (7)

RESPONSE: The Department acknowledges the commenter's support.

4. COMMENT: Is it necessary to proceed with the proposed rulemaking on consumer products at N.J.A.C. 7:27-24 to meet SIP commitments, in light of the forthcoming Federal consumer products rules? USEPA has issued a memorandum which establishes guidelines for the VOC Emission reduction credits states can claim based on the USEPA consumer product rules to be proposed. The memorandum also allows a 75 percent partial credit for those states with areas needing reductions in earlier years based on the assumption that currently marketed products have already been reformulated to meet California VOC limits. (14)

RESPONSE: The Department's new consumer products rules at N.J.A.C. 7:27-24 are necessary for New Jersey to obtain the reductions needed to attain the 8-hour Ozone National Ambient Air Quality Standard (NAAQS). The Federal consumer products rule has not yet been promulgated; therefore, the New Jersey rules will be operative before the Federal rules, thereby allowing the State to achieve earlier reductions towards the goal of attaining the 8-hour Ozone NAAQS. The Federal consumer products rule has not yet been proposed and is not on the schedule anticipated by the USEPA. Adopting State-specific consumer products amendments will provide the State with greater benefits than the allowable 75 percent partial credit for states where the rules are not yet promulgated. In addition, in the event that the Federal rule is less stringent than the 2007 OTC model rule and the Department's rules, the New Jersey rulemaking on consumer products will provide the State with greater benefits.

5. COMMENT: The proposal notes that the new definitions will match the California Air Resources Board's (CARB) definitions in its recent amendments to its rules for consumer products. The definitions for the consumer products rules should include the reference date of January 1, 2009 (and not January 1, 2006, or other dates referenced in the CARB regulations). (14)

RESPONSE: The Department's rules do refer to January 1, 2009, as set forth at N.J.A.C. 7:27-24.4(n), which identifies the operative date of the rules.

N.J.A.C. 7:27-24 Restrictions on the Use of Toxic/Carcinogenic Chlorinated Solvents

6. COMMENT: The Department's proposal to prohibit chlorinated solvents, perchloroethylene (Perc), trichloroethylene (TCE) and methylene chloride (MeCl) in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is a poorly conceived notion for which the Department offers little factual justification. (9, 10)

RESPONSE: As explained in the proposal Summary (39 N.J.R. at 4495), the rules limit the use of Perc, TCE and MeCl in automotive maintenance and repair consumer products based on their toxicity, health hazards, cancer risk, risk to groundwater and soil, the products' use or potential for use of Perc, TCE and MeCl, and the availability of less toxic alternatives. The Minnesota Pollution Control Agency ranks Perc, TCE and MeCl as the top three hazardous chemicals used in brake and carburetor cleaners, as discussed in their fact sheet "Selecting and Managing Brake and Carburetor Cleaners" dated July 1998.

Perc, TCE and MeCl are classified as hazardous air pollutants (HAPs) under the Federal Clean Air Act (42 U.S.C. § 7412). As discussed in the CARB Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities, dated March 10, 2000 (CARB automotive maintenance and repair staff report), exposure to Perc, TCE, or MeCl 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. Ingestion is also a route of exposure.

Cancer Risk

As discussed in the CARB Initial Statement of Reasons For the Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-Dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products, dated May 7, 2004 (CARB consumer products staff report), CARB's 2005 restrictions on the use of toxics in consumer product are based on data suggesting that there would be potential cancer increases resulting from the use of the products containing Perc, TCE and MeCl. CARB found that use of these chlorinated compounds posed an unnecessary health hazard. Based on CARB's risk assessment analysis showing the potential for increased cases of cancer, and because many alternative products were available, CARB in 2000 prohibited the use of Perc, TCE and MeCl in general purpose degreasers designed for automotive use, engine degreasers, brake cleaners, carburetor and fuel injection cleaners, aerosol adhesives, and aerosol coatings.

Perc, and TCE were classified by the USEPA as Group B2/C carcinogens, probable human carcinogen - based on sufficient evidence of carcinogenicity in animals, and are classified by the International Agency for Research on Cancer (IARC) as Group 2A carcinogens, probably carcinogenic to humans. The USEPA does not currently have a classification for the carcinogenicity of Perc and TCE in their Integrated Risk Information System (IRIS), as they are being reassessed; however, the tables used by the Office of Air Quality Planning and Standards

(OAQPS) for risk assessments of hazardous air pollutants contain the USEPA classifications discussed above, as well as the IARC classifications and can be found at the following website: http://www.epa.gov/ttn/atw/toxsource/summary.html.

MeCl is classified by the USEPA as a B2 carcinogen, probable human carcinogen - based on sufficient evidence of carcinogenicity in animals, and is classified by IARC as Group 2B, possibly carcinogenic to humans.

As discussed in the CARB consumer products staff report, CARB estimates that in the seven categories where CARB proposed prohibitions of Perc, TCE and MeCl , for a given category, up to 64 potential excess cancer cases per million persons would be avoided statewide in California. These estimates are based on outdoor near-source exposure over a 70 year lifetime. This would be in addition to the estimated cancer risk reductions from eliminating Perc, TCE and MeCl from automotive maintenance and repair consumer products, which CARB also estimated up to 64 chances of potential excess cancer cases per million persons would be avoided statewide in California. Since the New Jersey and California automotive maintenance and repair markets are similar, then the estimated cancer risks and reductions should also be similar.

Non-Cancer Risks

As discussed in the CARB automotive maintenance and repair staff report, short-term and long-term exposure to Perc, TCE and MeCl may result in non-cancer health effects. Acute toxic health effects resulting from short-term exposure to high levels of Perc may include headaches, dizziness, rapid heartbeat, and irritation or burns on the skin, eyes, or respiratory tract. Massive acute doses can induce central nervous system depression resulting in respiratory failure. Chronic exposure to lower Perc concentration levels may result in dizziness, impaired judgment and perception, and damage to the liver and kidneys. Workers have shown signs of liver toxicity following chronic exposure to Perc, as well as kidney dysfunction and neurological effects. Effects on the liver, kidney, and central nervous systems from chronic inhalation exposure to Perc have been reported in animal studies.

TCE is a central nervous system depressant and has been used as an anesthetic. It is mildly irritating to the eyes and respiratory tract. Occupational exposure to TCE has resulted in nausea, headache, loss of appetite, weakness, dizziness, ataxia, and tremors. Acute exposure to high concentrations has caused irreversible cardiac arrhythmias, nerve and liver damage and death. Chronic exposure to TCE has also been shown to cause respiratory irritation, renal toxicity, and immune system depression. Alcohol consumption in humans increases the toxicity of TCE and causes "degreaser's flush," which are red blotches on the skin.

MeCl vapor is irritating to the eyes, respiratory tract, and skin. It is also a central nervous system depressant including decreased visual and auditory functions and may cause headache, nausea, and vomiting. Acute toxic health effects resulting from short-term exposure to high levels of MeCl may include pulmonary edema, cardiac arrhythmias, and loss of consciousness. Chronic exposure can lead to bone marrow, hepatic, and renal toxicity. MeCl is metabolized by the liver with resultant carboxyhemoglobin formation.

As CARB further noted in the CARB consumer products staff report, additional benefits from the restriction of the use of Perc, TCE and MeCl include reduced waste water, hazardous waste contamination, contaminated water, soil and fish. Besides being found in the air, Perc is found in groundwater, surface water, soil, fatty foods, fish, and human blood. Other routes of exposure to TCE and MeCl include the ingestion of drinking water and food products.

As discussed in the Environmental Impact statement, 39 N.J.R. at 4507, the Department anticipates that the restriction of the use of Perc, TCE and MeCl will have a positive impact on soil and groundwater contamination in New Jersey. In addition to air-based environmental impacts, Perc, TCE and MeCl have caused numerous problems with soil and groundwater contamination in New Jersey. Perc, TCE and MeCl are dense solvents that have specific gravities greater than water (they sink in water). Municipal drinking water wells are set very deep to avoid contamination. If the chlorinated solvents such as Perc, TCE and MeCl enter the groundwater system, they migrate downward. This makes these compounds potentially dangerous to drinking water supplies, and difficult to remediate, or clean up, from soil and groundwater. Due to their dense nature, they travel in the lower aquifers and through cracks in bedrock.

Further information and Fact Sheets 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 and from the IARC website at http://monographs.iarc.fr/ENG/Classification/index.php. The CARB automotive maintenance and repair staff report can be found at http://www.arb.ca.gov/regact/amr/amr.htm. The CARB consumer products staff report can be found at http://www.arb.ca.gov/regact/conprod/conprod.htm.

Alternative Products

As discussed in the CARB automotive maintenance and repair staff report, there are viable complying alternative products without chlorinated solvents that were in use prior to the CARB automotive maintenance and repair rule. CARB's automotive maintenance and repair rule is based on CARB's evaluation of best available control technology (BACT), in consideration of alternative products and processes. In evaluating BACT, information from surveys, site visits, third-party studies, and brake parts manufacturers was analyzed. CARB determined that:

* Brake cleaners, carburetor cleaners, engine degreasers, and general purpose degreasers are often used interchangeably;
* Perc, TCE and MeCl are suitable and readily available replacements for each other;
* The removal of Perc alone could result in significantly increased emissions of TCE and MeCl;
* Non-chlorinated products were already in use prior to the CARB rule at nearly two-thirds of automotive maintenance and repair facilities in California;
* Alternative products that use non-chlorinated formulations and alternative processes, such as aqueous-based portable brake cleaning units and parts washers, were in use in California prior to the CARB rule (62 to 90 percent of automotive consumer products were non-chlorinated and 60 percent of automotive maintenance and repair facilities used aqueous-based processes);

* The overwhelming majority of facilities in California (approximately 90 percent) use non-chlorinated carburetor cleaner, engine degreaser, and general purpose degreaser;

* Most manufacturers market both chlorinated and non-chlorinated aerosol and bulk liquid products and claim that both are suitable and effective;

* 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;

* A study for the USEPA demonstrated that aqueous-based portable brake cleaning units are effective and less costly than chlorinated products;

* Based on the Facility Survey, brake jobs performed with alternative compounds used less product than brake jobs performed with Perc, TCE or MeCl; and

* Discussions with a variety of facility operators and mechanics indicate that alternative products, including non-chlorinated aerosols and bulk liquids, are suitable and effective cleaning products.

Examples of complying non-chlorinated products and manufacturers are included in Appendix H of the CARB automotive maintenance and repair report. In addition to solvent-based complying products, there are also aqueous based and citrus based complying products. Examples of non-chlorinated, complying products are manufactured by CRC Industries (Brakleen, non-chlorinated solvent based and also citrus general purpose cleaners http://www.crcindustries.com/auto/content/prod_detail.aspx?PN=05084&S=N), Solder Seal Gunk products (http://www.gunk.com/index.asp), Johnsen's (http://www.technicalchemical.com/corporate.htm) and Skymart (water-based multi-purpose cleaners, http://www.skymartsales.com/lpslabs/id.asp). Solder Seal Gunk products displays a map on its website providing guidance on where each formula of brake cleaner can be sold in the United States. The Solder Seal Gunk map indicates that a CARB compliant, non-chlorinated, low VOC formula is also required in Oregon and Washington state.

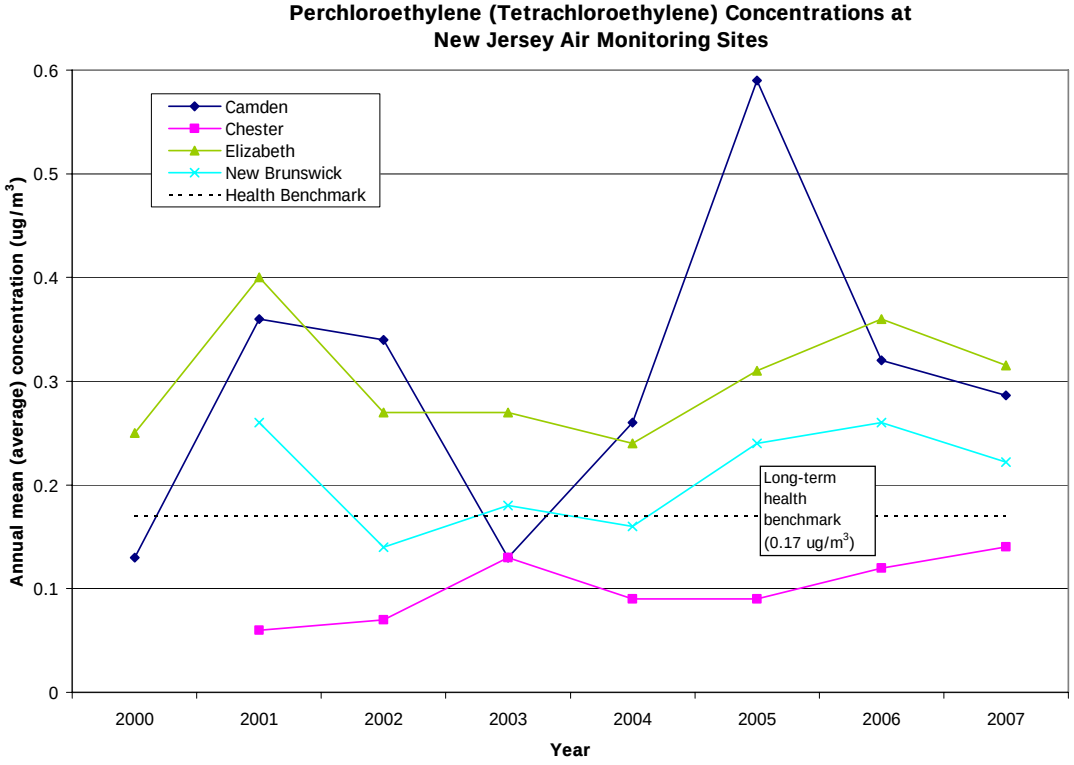
In addition, the Institute for Research and Technical Assistance (IRTA), a nonprofit organization, conducted a project sponsored by California Environmental Protection Agency's (CalEPA's) Department of Toxic Substances Control and the City of Santa Monica to identify, develop, test and demonstrate alternative low-VOC, safer alternatives for brake cleaning, general purpose degreasing and carburetor and fuel injection system cleaning in 10 auto repair facilities. The results of this project can be found in a report entitled "Automotive Aerosol Cleaning Products: Low-VOC, Low Toxicity Alternatives, prepared by: Katy Wolf and Mike Morris, IRTA, dated November 2006," and can be found at http://www.irta.us/DTSC%20Auto%20Repair%20Report.pdf . The report contains examples of low VOC, low toxicity complying products, based on acetone and water based formulations. The results of the project indicate that auto repair facilities can convert to low-VOC, low toxicity alternatives and maintain their operations. The study also concluded that water-based formulas are less expensive than high VOC formulas.

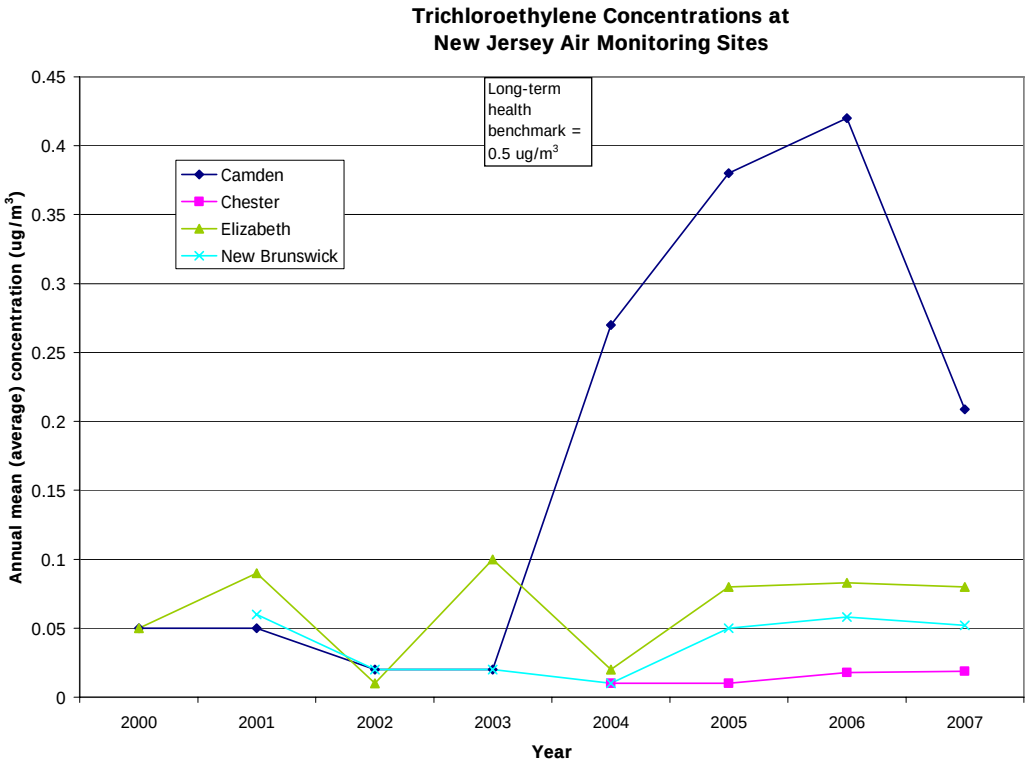
As discussed in Comment 10 below, as a result of reformulation driven by the California requirements, chlorinated solvent use in automotive products has been reduced nationally over the past seven years. The development of non-chlorinated products has increased the variety of products available to auto repair businesses and residents of New Jersey. As discussed in Comment 15 below, most of these products are formulated without Perc, TCE and MeCl.

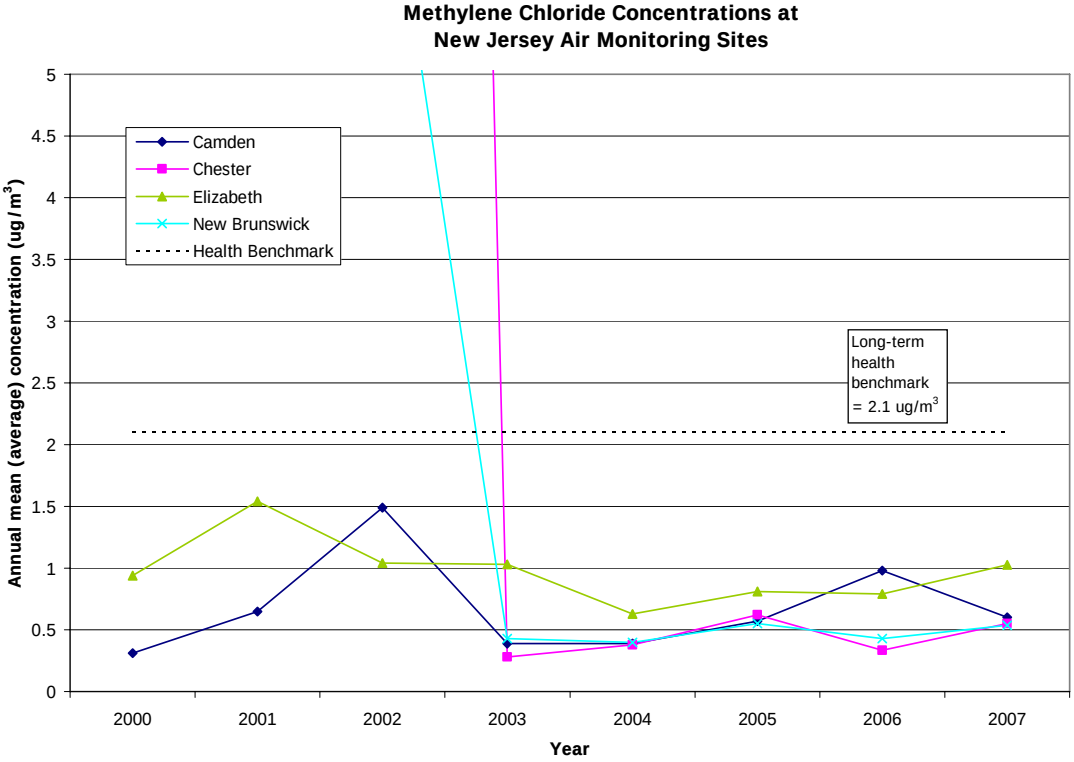
In summary, based on the toxicity, health hazards, cancer risk and risk to groundwater and soil of Perc, TCE and MeCl, and the availability of less toxic alternatives, the Department considers the new rules to be justified and appropriate.

7. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not justified because usage of these banned chlorinated solvents has been dropping and, therefore, these solvents are not high on the list of toxics in the air in New Jersey. Ambient levels (mean and maximum) of MeCl and TCE in New Jersey are below health benchmarks, based on USEPA and Department monitoring data, and levels are declining. While available data indicate that ambient levels of Perc may exceed health benchmarks, ambient levels have been declining steadily between 1996 and 2004. Interpretation of ambient Perc data is complicated by the fact that the State's benchmark is below the detection limit for the compound. (9, 10)

RESPONSE: According to Department air monitoring data from 2000 to 2007, air concentrations of Perc, TCE and MeCl are not declining, but are showing an overall level pattern, with some fluctuations from year to year and site to site. New Jersey air toxics monitoring summaries can be found in the Department's annual Air Quality Reports, available at www.state.nj.us/dep/airmon/reports.htm. Charts showing the Department's annual mean (average) air monitoring data for Perc, TCE and MeCl at New Jersey air monitoring sites from 2000 to 2007 are shown below. As shown in the charts, annual mean concentrations of Perc fluctuate around the benchmark from 2000 to 2007, with the majority of the data exceeding the health benchmark. Annual mean concentrations of TCE were below the health benchmark from 2000 to 2007. Annual mean concentrations of MeCl were below the health benchmark since 2003. Maximum 24-hour values of Perc often exceeded the health benchmark from 2000 to 2007. Maximum 24-hour values of TCE and MeCl have sometimes exceeded health benchmarks from 2000 to 2007. The Department's monitoring sites are not located near known sources of Perc, TCE and MeCl, as these monitoring sites are intended to provide general exposure levels in different types of environments such as rural, suburban, and urban, not maximum exposures. The ambient data does not represent near source exposures, which likely would be higher.







Even with annual average ambient levels of TCE and MeCl below benchmarks, the Department is restricting the use of these products in automotive maintenance and repair consumer products because Perc, TCE and MeCl are suitable and readily available replacements for each other. Thus, if only one of the substances were prohibited, a manufacturer might replace the prohibited compound with one of the remaining two. The removal of Perc alone, therefore, could result in increased emissions of MeCl and/or TCE.

The laboratory method detection limit for Perc is above the health benchmark. The Department's procedure for handling the non-detectable data is to include them in the average as zero. In some cases the analyzing laboratory can report results below the detection limit. Therefore, the Department is reporting the minimum annual averages, because the non-detectable laboratory results may actually be above zero and above the health benchmark, but are being treated as zero.

Therefore, taking into account that near source exposures are likely higher than annual average concentrations at Department monitoring sites, the approach that the Department uses to average non-detectable laboratory results and the interchangeable uses of Perc, TCE and MeCl, a restriction on the use of Perc, TCE and MeCl is the best way to protect the public from exposure to these compounds.

8. COMMENT: Existing dry cleaning rules will reduce ambient levels of Perc substantially over the next two years; therefore, the ban on Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary. (9, 10)

RESPONSE: Federal rules, published in the Federal Register at 71 FR 42724 (July 27, 2006), are in place to reduce Perc emissions from dry cleaners. This does not preclude the need to reduce Perc from other sources in the State. On the contrary, the Federal rules support the goal of reducing potentially carcinogenic toxic air pollutants. The Federal rule was adopted in response to USEPA's evaluation of the toxicity of Perc and the risk to the public. The restriction on the use of Perc, MeCl, and TCE in certain consumer products, including automotive maintenance and repair products, is for the protection of the public. The prohibition will reduce the levels of the compounds in the ambient air, protecting not only the users of the product, but people nearby.

9. COMMENT: The data used by the Department to calculate the benefits from the ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 are based on California data. There is no discussion of New Jersey data or New Jersey health impacts. There was no opportunity for the public to review and comment on underlying data and assumptions. (9, 10)

RESPONSE: The adopted rules for automobile maintenance and repair products, consumer products, portable fuel containers and adhesives and sealants are based on the CARB rules and model rules, which in turn are based on years of extensive research by California's South Coast Air Quality Management District (SCAQMD) and the CARB that would not be practical to duplicate. It is appropriate for states to work together to conserve resources, to avoid duplication of effort and to encourage uniformity. For the same reasons, it is appropriate to rely on data from the USEPA, the CARB or a state that undertakes research on the subject.

The ozone pollution problems in California are more severe than those of New Jersey. This results in California's promulgating rules to reduce ozone air concentrations. New Jersey and other states benefit from the studies and research done by CARB in developing these regulations.

The Department believes that the California data and rules are appropriate for New Jersey. The automotive maintenance and repair consumer products markets are similar, but do not have to be identical for the rules to be appropriate. Similar products are sold and used nationwide. The markets do not have to be identical in order to utilize the years of research and studies conducted by the CARB. The studies and documents on which the Department relied when it drafted the New Jersey rules are referenced in the Department's notice of proposal, with information on where to find the documents. CARB's detailed data and staff reports are accessible on the internet, or by request from the Department, and the public had the opportunity to comment on them for purposes of this rulemaking.

10. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary because the Department overestimates the benefits from such a ban. The Department's benefit estimates from the ban of Perc, TCE and MeCl in automotive maintenance and repair products are based on a CARB survey conducted in 2000, prior to the prohibition in California. The calculations overestimate the benefits because they do not reflect the current market. As a result of reformulation, driven by the California requirements, chlorinated solvent use in automotive products has been reduced nationally over

the past seven years. The development of non-chlorinated products has increased the variety of products available to auto repair businesses and residents of New Jersey. (9, 10)

RESPONSE: The adopted rules for automobile maintenance and repair products, consumer products, portable fuel containers and adhesives and sealants are based on the CARB rules and model rules, which are based on years of extensive research by the SCAQMD and the CARB that would not be practical to duplicate. The benefit calculations are based on the best available data, which are the CARB data. If the emissions of Perc, TCE and MeCl have decreased in New Jersey as a result of the CARB rulemaking, resulting in less calculated benefits than estimated from a 2008 baseline, then this further supports the position of the Department that the CARB rulemaking is a positive benefit to the public, that alternative complying products exist and are being sold in New Jersey and, therefore, it is appropriate to use the CARB rulemaking as a model for New Jersey. If some of the estimated benefits have already been achieved since the CARB rule adoption in 2001 and prior to 2008, this does not mean it is inappropriate for the Department to restrict the use of these compounds in order to attain the full estimated benefits. Without a restriction, manufacturers still have a choice whether to sell different products in different states, or make one product for all states. Some manufacturers will choose different products for different states as demonstrated by the Solder Seal Gunk product map discussed in the Response to Comment 6.

11. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary because the Department overstates the cancer risk for Perc, TCE and MeCl. Although the scientific literature suggests that these compounds are animal carcinogens, the data are not relevant to humans. A study of dry cleaning workers in the Nordic countries which has been submitted to the Department as part of the comments ("Cancer in Persons Working in Dry Cleaning in the Nordic Countries," Lynge et al., Environmental Health Perspective 114:213-2198 (2006)) found no increase in cancer incidence among those workers exposed to higher levels of Perc than the ambient levels in New Jersey. (9, 10)

RESPONSE: Based on the Department's review of the Lynge et al. (2006) study (Nordic study), the Department does not interpret the Nordic study as showing no increase in an incidence of cancer in humans. Rather, the study provides some additional weight of evidence consistent with the hypothesis of a carcinogenic potential to humans. The Nordic study is a significant improvement on the previous epidemiological studies in providing a large set of observations obtained from reasonably compatible databases from Scandinavian countries (laundry workers).

Nevertheless, the Nordic study suffered from some of the same exposure assessment issues as the earlier epidemiological studies in not having useful measurements. Although use of Perc predominated in the dry cleaning establishments, there were, nonetheless, mixed exposures to Perc and hydrocarbon solvents, as well as unidentified exposures to only one or the other solvent. The data did not allow for separation of these exposures. Therefore, without knowing the extent of exposure to the chemicals of interest, one cannot draw conclusions about the health effects of those specific chemicals.

In the Nordic study, the cancer sites/types for which increased risks had been reported in previous studies from the United States, particularly esophageal and cervical, were either not elevated, or were not associated with jobs directly involving Perc. However, there was evidence of a significantly increased risk of bladder cancer, although the authors interpret the finding as equivocal given the lack of a correlation with length of employment. This finding is consistent with some evidence of an increased risk of bladder cancer among dry cleaning workers from earlier studies, although that evidence generally seems to be equivocal for a variety of reasons. Given the inconsistent nature of findings from epidemiological studies, and the difficulty in interpreting the exposures to Perc of the cohorts in those studies, the Nordic study is reasonably consistent in suggesting a general increased risk of cancer from Perc.

Based on a study by CalEPA, Air Toxics Spots Program Risk Assessment Guidelines, entitled "Part II – Technical Support Document for Describing Available Cancer Potency Factors – Perchloroethylene," pg. B-477-482, there appears to be consistent evidence of increased risk of carcinogenicity in general among workers in dry cleaners. However, there is a lack of consistency about the site/type of cancer for which dry cleaning presents an increased risk. In addition, in the epidemiological studies discussed in the CalEPA document, data on exposure of the dry cleaners to Perc are either poor or lacking. This applies to both the assessment of the extent to which the various cohorts were exposed to Perc, as opposed to hydrocarbons (for example, Stoddard solvent), and to the actual doses of Perc associated with the increased risk of cancer. The animal data, for both rats and mice, however, are more definitive, and although there is some lack of concordance between the two key studies as to the type of tumors produced, there is, nonetheless, agreement with respect to the production of hepatic tumors.

Although the lack of agreement as to the site/type of cancers for which Perc poses an increased risk makes the interpretation of the overall weight of evidence from these studies problematic, the Department does not interpret the Nordic study as providing negative evidence of human carcinogenicity. Rather, it provides some additional weight of evidence consistent with the hypotheses of a carcinogenic potential to humans. Overall, in combination with the animal data, the Nordic study, along with the previous epidemiological studies justifies the regulation of Perc emissions based on carcinogenicity.

In addition, the USEPA has recently released the "Toxicological Review of Tetrachloroethylene (Perchloroethylene)" (External Review Draft) (June 2008), in support of summary information on the IRIS. In addition to concluding that Perc is "likely to be carcinogenic to humans" by all routes of exposure within the framework of the 2005 Guidelines for Carcinogen Risk Assessment, it also states on page 5-71:

> Although target organ concordance is not a prerequisite for evaluating the implications of animal study results for humans (U.S. EPA, 2005a), it is notable that the leukemias (in both sexes of rats) support the observation of lymphopoietic cancers in individuals employed as dry cleaners and degreasers, and the liver tumors (in both sexes of mice) support the observation of liver tumors in dry cleaners (see Section 4.10.1.1.2).

12. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary because the Department uses an overly conservative unit risk factor, which overstates the cancer risk for Perc, TCE and MeCl. The USEPA is conducting assessments of the potential health effects of the three banned chlorinated solvents (Perc, TCE and MeCl) that will generate new unit risk factors for estimated potential cancer risk. The USEPA unit risk factor for Perc is much lower than the CalEPA unit risk factor used by the Department. The USEPA discussed the variations in unit risk factors in its proposal to amend the national emissions standards for Perc dry cleaning facilities, and recognized that one significant contributing factor to the differences in the risk estimates is the variability in the characterization of human metabolism of Perc. An article by Clewell et al. (Evaluation of Physiologically Based Pharmacokinetic Models in Risk Assessment: An Example with Perchloroethylene) concludes that the CalEPA model overestimates fractional metabolism in humans. If the Department used a more appropriate estimate of potential cancer risk based on this study and the previous USEPA estimates, the potential health benefits of the notice of proposal would be significantly reduced. (9, 10)

RESPONSE: The Department does not agree that the CalEPA unit risk factors are inappropriate. The Department uses the CalEPA unit risk factors for all of its Perc and TCE risk assessments. As noted by the commenter, the USEPA also used the CalEPA unit risk factor, in addition to its own value, in the residual risk assessment for the dry cleaner Maximum Achievable Control Technology (MACT) standard, thereby acknowledging the relevance of the CalEPA unit risk factor and the uncertainties of the USEPA's own value, which has not yet been added to the USEPA's IRIS database.

The USEPA's Office of Air Quality Planning and Standards (OAQPS) uses the CalEPA's unit risk factor for Perc in its tables for risk assessments of hazardous air pollutants. The OAQPS tables can be found at http://www.epa.gov/ttn/atw/toxsource/summary.html.

13. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary because several of the potential alternatives to Perc, TCE and MeCl in automotive maintenance and repair consumer products also present health hazards. Yet the Department appears to have made no independent attempt to review the potential health and environmental effects of the alternatives. The only comparative risk information offered by the Department are estimates of the potential cancer cases avoided as a result of the prohibition on the chlorinated solvents. Apparently, as long as the solvent isn't chlorinated no analysis is necessary. The Department's notice of proposal at 39 N.J.R. at 4496 provides a link to a California health advisory regarding one substance, n-hexane. There is no discussion by the Department regarding restricting the use of n-hexane, despite evidence of health effects among California auto mechanics. (9, 10)

RESPONSE: As discussed in more detail in the Response to Comment 6, the Department's rules restrict the use of Perc, TCE and MeCl in automotive maintenance and repair consumer products based on their toxicity, health hazards, cancer risk, risk to groundwater and soil, the products' use or potential for use of Perc, TCE and MeCl, and the availability of less toxic alternatives. The Minnesota Pollution Control Agency has ranked Perc, TCE and MeCl as the top three hazardous chemicals used in brake and carburetor cleaners, as discussed in their fact

sheet "Selecting and Managing Brake and Carburetor Cleaners" dated July 1998. As discussed in the CARB automotive maintenance and repair staff report, CARB conducted a study of the potential health impacts of the potential alternatives to Perc, TCE and MeCl in automotive maintenance and repair products. Appendix G of the CARB automotive maintenance and repair staff report contains a list of potential alternatives based on the CARB survey. No adverse health impacts from the compounds on this list (other than Perc, TCE and MeCl) were expected. The apparent use of benzene was a concern; however, upon further investigation, CARB learned that, based on the CARB survey, it was only used by one manufacturer (in one product) at concentrations less than two percent.

As noted by the commenter, and discussed by the Department in the notice of proposal Summary (39 N.J.R. at 4496), the California Department of Public Health issued an advisory for n-hexane in vehicle repair, and recommended switching to hexane free products, especially aqueous based formulations. As discussed in more detail in the Response to Comment 6, there are other viable complying alternative products. An internet search by the Department of the products in the CARB automotive maintenance and repair staff report Appendix H, as well as other products, showed several complying products that do not contain n-hexane. The Department also researched some of the products listed on the n-hexane advisory as containing n-hexane, such as Berryman products. The internet search indicated that several (possibly all) of the products on the n-hexane advisory listed as containing n-hexane, no longer contain n-hexane. No products were found in the Department's search that contained n-hexane. This leads the Department to conclude that after the advisory was issued, manufacturers reformulated their products to remove n-hexane.

It is not practical for the Department to regulate all hazardous air pollutants that could potentially be used in automotive maintenance and repair consumer products. Manufacturers have been advised by CARB and the California Department of Health not to use n-hexane or other toxic compounds in their product formulations. Many manufacturers produce products, without n-hexane, that are sold and used nationally. The existence of complying, non-chlorinated, n-hexane free products shows it is not necessary for the Department to regulate n-hexane in automotive maintenance and repair products at this time.

14. COMMENT: If TCE and Perc are banned in electrical equipment cleaners, in the consumer products rules at N.J.A.C. 7:27-24, this presents flammability concerns, especially on and around energized surfaces. Since these products are generally used on and around energized surfaces, these products must be formulated with non-flammable compounds to avoid flash fires that have the potential to cause serious burns. The use of these compounds, which the rules ban, is necessary for the production of a non-flammable product. (6, 7, 9, 10, 15)

RESPONSE: CARB addressed this same issue in the CARB consumer products staff report (http://www.arb.ca.gov/regact/conprod/conprod.htm). CARB created a separate category for "Energized Electrical Cleaner" and allowed products within the category to continue to contain Perc, TCE, and/or MeCl. The Department's rules also have the "Energized Electrical Cleaner" category, which allows these products to continue to contain Perc, TCE and/or MeCl. Cleaning of energized equipment does pose a risk, but flammability is a lesser concern in other applications.

In the Department's rules, products that fall within the category "Energized Electrical Cleaner" are required to include a statement on the product label explaining that the product is only for use in applications where equipment is energized. The label must also clearly state that the product is not to be used for motorized vehicle maintenance, or for cleaning vehicle parts. These statements are designed to ensure that chlorinated products are only used when appropriate and to prevent their use for motorized vehicle maintenance and for cleaning of motorized vehicle parts, for example, in the work performed by automotive maintenance and repair facilities. Prohibiting the use of Perc, TCE, and MeCl in motorized vehicle applications is consistent with the restriction on the use of Perc, TCE and MeCl in automotive maintenance and repair products, also adopted in this rulemaking. Brake cleaners and electrical cleaners can sometimes be used interchangeably.

In addition, CARB noted in the CARB consumer products staff report that the product labels submitted under the survey definition of "electronic cleaner" (which included both electrical and electronic cleaners) showed that VOC-containing products had the same uses and precautions as those containing a chlorinated solvent. Many of the existing products with a chlorinated ingredient still pose a fire hazard and have warnings and cautionary statements on the product labels indicating that the product is not to be used on energized equipment. Users of electric cleaners should always adhere to manufacturer specified safety precautions and good work practices. Common safety precautions, as well as good operating practices, in combination with allowing Perc, TCE, and MeCl-containing products to continue to be used to clean energized electrical equipment, address the issue of flammability.

15. COMMENT: If TCE and Perc are banned in automotive maintenance and repair consumer products, in the consumer products rules at N.J.A.C. 7:27-24, this presents flammability concerns, especially for small facilities that cannot designate a defined area for brake work. While it is true that most of these products are formulated without Perc, TCE and MeCl, some manufacturers use these compounds to formulate non-flammable products. There are compelling safety reasons to ensure the mechanics and other automotive repair personnel have the option of using these non-flammable products. (6, 7, 9, 10, 15)

RESPONSE: As discussed in the CARB consumer products staff report, in adopting the automotive maintenance and repair rule, the CARB determined that there was not a flammability issue with these uses because of "the use of good operating practices on the part of facility owners, mechanics, and technicians." CARB also concluded, as discussed in more detail in the Response to Comment 6, that non-chlorinated products were already in use prior to the CARB automotive maintenance and repair rule at nearly two-thirds of automotive maintenance and repair facilities, and that the majority of aerosol products available on the market consisted of non-chlorinated VOC-based degreasers. When the California rule for automotive maintenance and repair facilities was developed, CARB could find no evidence of fires, injuries, or other incidents related to the use of non-chlorinated products in automotive maintenance and repair facilities. This conclusion was arrived at by conducting a search of California statewide and national databases, as well as by making inquiries to fire departments and associations across the state of California. Additionally, the California State Fire Marshal's office indicated that the combustion of gasoline, such as from a leaking fuel line, poses a significantly greater

flammability concern than the use of potentially flammable aerosol products. CARB also noted that a few facilities expressed concerns about the health and safety impacts of "poison gas" formation (referring to phosgene and other gases) when chlorinated aerosols are used near heat and flame sources. Therefore, common safety precautions, as well as good operating practices that should already be in place to address existing flammability concerns at automotive maintenance and repair facilities, address the issue of flammability.

16. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is not necessary because the alternatives to chlorinated solvents for use in automotive maintenance and repair products raise the ozone level and could contribute to soil and groundwater contamination. (9, 10)

RESPONSE: Some manufacturers may choose to reformulate products made with Perc or MeCl with alternative VOCs. The automotive maintenance and repair products being regulated under the Perc, TCE and MeCl restriction are also regulated under the Department's consumer product rules, which set VOC limits for the products. While an increase in VOCs may occur due to the restriction on the use of non-VOC chlorinated solvents (Perc and MeCl), there is an estimated overall decrease in VOCs in these products, when measured against a baseline prior to the Department's 2004 consumer products rules, which set the VOC limits. The VOC benefits estimated by the Department for the 2004 rulemaking already accounted for the potential rise in VOCs due to a restriction on the use of Perc, TCE and MeCl, because the estimates were based on CARB calculations. CARB set VOC limits for automotive maintenance and repair consumer products in 1993, 1995, 1996 and 1997, prior to its restriction on the use of toxics in automotive maintenance and repair products. CARB set new VOC limits for automotive maintenance and repair products in 2002 and 2004, after its automotive maintenance and repair rule, to offset the increase in VOCs. The CARB consumer products rules resulted in an estimated overall decrease in VOC in automotive maintenance and repair products over the different phases of regulation. The Department adopted CARB's final phase of consumer products regulations, resulting in an overall decrease in VOCs in automotive maintenance and repair products.

As discussed in the Environmental Impact statement, 39 N.J.R. at 4507, and in the Response to Comment 6, the Department anticipates that the restriction on the use of Perc, TCE and MeCl will have a positive impact on soil and groundwater contamination in New Jersey. In addition to air-based environmental impacts, Perc, TCE and MeCl have caused numerous problems with soil and ground water contamination in New Jersey. Perc, TCE and MeCl are dense solvents that have specific gravities greater than water (they sink in water). A review of Material Safety Data Sheets (MSDS) for complying products, as well as the estimated reformulation tables in the CARB automotive maintenance and repair staff report (http://www.arb.ca.gov/regact/amr/amr.htm), indicate that manufacturers are using compounds such as acetone (2 propanone), toluene, xylenes, heptane and methanol as alternatives to Perc, TCE and MeCl. The specific gravity of the alternative compounds, as well as the reformulated automotive maintenance and repair products found to have these products in them, is less than that of water. Municipal drinking water wells are set very deep to avoid contamination. If the chlorinated solvents such as Perc, TCE and MeCl enter the groundwater system, they migrate downward. This makes these compounds potentially dangerous to drinking water supplies, and difficult to remediate, or clean up, from soil and groundwater. Due to their dense nature, they

travel in the lower aquifers and through cracks in bedrock. Some of the alternative compounds being used such as toluene, xylenes and ethylbenzenes are also found in gasoline, which is commonly found at automotive maintenance and repair facilities. These compounds generally float on water, or remain slightly soluble in the upper aquifer. Therefore, if they enter the soil or groundwater, they are generally confined to the upper aquifer. Of course, contamination of soil and groundwater by any of these hazardous pollutants is difficult to remediate and as always, with good safety practices and adherence to existing rules, none of these compounds should contaminate the soil and groundwater systems. In addition, as discussed in the Response to Comment 6 there are other less toxic alternatives such as water-based and citrus based cleaners.

17. COMMENT: The ban of Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 is problematic because a ban of chlorinated solvents in automotive maintenance and repair products is not in the Ozone Transport Commission (OTC) model rule, and is not being done by other states in the OTC. Therefore, this ban will impact interstate commerce. (6, 7, 9, 10, 15)

RESPONSE: The restriction on the use of Perc, TCE and MeCl in automotive maintenance and repair products is not in the OTC model rule, because the OTC is an organization whose focus is on ozone. The Department's restrictions on Perc, TCE and MeCl are aimed at reducing toxics, rather than ozone. As explained in the notice of proposal Summary (39 N.J.R. at 4497), the Department's rule is based on the CARB automotive consumer products rule.

The OTC model rules contain a restriction on VOCs in consumer products and architectural coatings. The majority of OTC states have implemented rules based on the model rules. The model rules' restriction on VOCs is similar to the Department's restriction on toxics (Perc, TCE and MeCl), because all of the rules regulate the formulation of products sold in the State for use in the State, and differ from their Federal counterparts. New Jersey has had a State-specific architectural coating rule since 1990 and a State-specific consumer products rule since 1996, which regulate VOCs in architectural coatings and consumer products sold in New Jersey for use in New Jersey.

Manufacturers have a choice of either selling different products to different states or making one product for all states. Some manufacturers choose to make different products for different states and some choose to make one product for all states. One manufacturer, Solder Seal Gunk products, displays a map on its website providing guidance on where each formula of brake cleaner can be sold in the United States. The map indicates that a CARB compliant, non-chlorinated, low VOC formula (such as the New Jersey rules require) is also required in Oregon and Washington state. The company also makes available a different product for California's South Coast Air Quality Management District (SCAQMD) than for the rest of California, because of restrictions unique to SCAQMD.

The regulations in California have already influenced the availability of non-chlorinated, lower VOC products sold nationally. As more states adopt rules limiting the use of Perc, TCE and MeCl in automotive maintenance and repair products, more manufacturers will develop and sell throughout the country products without Perc, TCE and MeCl.

In taking this action, the Department is acting under its explicit authority to adopt rules to control and/or prohibit air pollution, including its implicit authority to restrict the sale of certain formulations that may result in such air pollution, in order to effectuate the legislative intent to protect the public health and welfare. These sales limitations are facially nondiscriminatory and do not interfere with interstate commerce.

18. COMMENT: The impact of the ban on Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 on small businesses, such as automotive repair facilities, was not properly addressed. Using California's economic assessment is not representative of New Jersey. Such a cavalier approach to "protecting" small business in the State is inexcusable, particularly in light of the very real concerns about flammability and neurological effects associated with several of the non-chlorinated solvents. (9, 10)

RESPONSE: It is not inappropriate to use California's assessment of business impact to estimate the impact on small business in New Jersey. The automotive repair facilities in New Jersey are similar to the automotive repair facilities in California. As discussed in the rule proposal at 39 N.J.R. at 4506, the economic cost to the user is anticipated to be minimal. The cost estimate is based on the availability of viable complying alternative products without chlorinated solvents. CARB found viable complying alternative products without chlorinated solvents at similar costs as the products that contained chlorinated solvents. As discussed in the Response to Comment 6, CARB also found that:

* Non-chlorinated products were already in use prior to the CARB rule at nearly two-thirds of automotive maintenance and repair facilities in California;
* Alternative products that use non-chlorinated formulations and alternative processes, such as aqueous-based portable brake cleaning units and parts washers, were in use in California prior to the CARB rule (62 to 90 percent of automotive consumer products were non-chlorinated and 60 percent of automotive maintenance and repair facilities used aqueous-based processes);
* The overwhelming majority of facilities in California (approximately 90 percent) use non-chlorinated carburetor cleaner, engine degreaser, and general purpose degreaser;
* Most manufacturers market both chlorinated and non-chlorinated aerosol and bulk liquid products and claim that both are suitable and effective;
* 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;
* A study for the USEPA demonstrated that aqueous-based portable brake cleaning units are effective and less costly than chlorinated products;
* Based on the Facility Survey, brake jobs performed with alternative compounds used less product than brake jobs performed with Perc, MeCl, or TCE; and
* Discussions with a variety of facility operators and mechanics indicate that alternative products, including non-chlorinated aerosols and bulk liquids, are suitable and effective cleaning products.

Using CARB economic estimates for New Jersey represents a conservative approach, because the cost estimates include initial reformulation costs that do not have to be repeated in order to sell the products in states other than California. Also, since the CARB rule has been in

place since 2001, the availability and use of non-chlorinated, low VOC products in New Jersey has greatly increased; therefore, the impacts should be less than CARB estimated. By establishing rules consistent with California's, uniformity among the states is promoted, rather than a patchwork of regulations that would increase compliance costs and complexity.

Flammability concerns are discussed in the Response to Comment 15. Health concerns with alternative chemicals are discussed in the Response to Comment 16.

19. COMMENT: The Director of the Department's Division of Air Quality Management, indicated in the public hearing for the automotive maintenance and repair rules that the reason for the rules include water and land contamination. This is an air rule. It is important to be clear on that. (9, 10)

RESPONSE: The Department's authority to promulgate rules comes not only from the Air Pollution Control Act, N.J.S.A. 26:2C-1, et seq., but also from its general powers at N.J.S.A. 13:1B-3 and 13:1D-9. N.J.S.A. 13:1D-9 provides, "the Department shall formulate comprehensive policies for the conservation of natural resources of the State, the promotion of environmental protection and the prevention of pollution of the environment of the State." The restriction on the use of Perc, TCE and MeCl in automotive consumer products will reduce the exposure of residents and automotive maintenance and repair workers in New Jersey to these air toxics. As discussed in more detail in the Response to Comment 6, the Department anticipates that the restriction on the use of Perc, TCE and MeCl will also have a positive impact on soil and groundwater contamination in New Jersey. As discussed in the Response to Comment 6, the rules limit the use of Perc, TCE and MeCl because they are closely linked to health hazards, cancer risk and contamination of groundwater and soil.

20. COMMENT: The rules that ban Perc, TCE and MeCl in automotive maintenance and repair consumer products at N.J.A.C. 7:27-24 inappropriately seek to control product use at stationary sources as part of a consumer product rule. (9, 10)

RESPONSE: The restriction on the use of Perc, TCE and MeCl is primarily a consumer product rule, requiring manufacturers to reformulate their products for sale in New Jersey. Automotive maintenance and repair facilities do use the majority of the Perc, TCE and MeCl containing automotive maintenance and repair products; however, homeowners and other consumers also use them. The automotive maintenance and repair consumer products are generally used at facilities that are not likely to be controlling the off-gas emissions from the use of the product. Accordingly, it is appropriate for the Department to regulate the formulation of these products in order to reduce the toxic emissions that these products cause. It is more cost effective and practical to reduce toxics by reformulating the products, than to require each person who uses the products to make use of air pollution control equipment.

21. COMMENT: The Department does not have the statutory authority to start banning the use of Perc, TCE and MeCl through regulation, as in N.J.A.C. 7:27-24. If that is a direction that the State of New Jersey wants to go in, then that decision should be made in the Legislature and not by an agency. (10)

RESPONSE: The Air Pollution Control Act, specifically N.J.S.A. 26:2C-8, does grant the Department the "power to formulate and promulgate, amend and repeal codes and rules and regulations preventing, controlling and prohibiting air pollution throughout the State," which includes the authority to limit the emission of certain hazardous chemicals in specific situations. As discussed in the Response to Comment 19, the Department's authority to promulgate rules comes not only from the Air Pollution Control Act, but also from its general powers at N.J.S.A. 13:1B-3 and 13:1D-9. N.J.S.A. 13:1D-9 provides, "the Department shall formulate comprehensive policies for the conservation of natural resources of the State, the promotion of environmental protection and the prevention of pollution of the environment of the State." The Department has adopted several similar rules, which regulate the formulation of consumer products, the use of the consumer products (architectural coatings) and the use of certain hazardous air pollutants (HAPs). For example, in 2004, the Department restricted the use of Perc, TCE and MeCl in aerosol adhesives. (35 N.J.R. 2983(a), 4241(a) and 36 N.J.R. 3078(a))

N.J.A.C. 7:27-26 Adhesives and Sealants

22. COMMENT: In the adhesives and sealants rules at N.J.A.C. 7:27-26, the commenters support the Department's exception of containers 16 ounces or less and the inclusion of an indefinite sell through date for products manufactured before January 1, 2009 that have a date or date code on the product. (1, 2, 8, 11)

RESPONSE: The Department acknowledges the commenters' support.

23. COMMENT: In the adhesives and sealants rules at N.J.A.C. 7:27-26, the commenters support the Department's VOC limit of 300 grams per liter (g/l) for "nonmembrane roof installation repair adhesives and in general, also support the definition of "nonmembrane roof installation/repair adhesives." However, the definition of "nonmembrane roof installation/repair adhesive" in the adhesives and sealants rules at N.J.A.C. 7:27-26.1 is confusing, since neither "nonmembrane" nor "membrane" is ever defined within the regulation. In order to create a better understanding of the product category, the definition should be replaced with an alternate definition for "roofing and waterproofing installation/repair adhesive," and should include "plastic or bituminous roof cement, bituminous flashing cement, bituminous roof adhesive, and bituminous cold application cement, that is intended by the manufacturer for use in the installation or repair of roofing systems or waterproofing systems, and that is not intended for use in the installation or repair of pre-fabricated single-ply flexible rubber roofing membranes."

In addition, the Department should add a definition for "roofing and waterproofing installation/repair sealant" as "any sealant labeled for application to or repair of roofing or waterproofing systems." and establish a VOC limit of 300 g/l for the category. The new definition should replace the "nonmembrane roof installation/repair sealant" category, in order to be consistent with the suggested definition of "roofing and waterproofing installation/repair adhesive."

"Bituminous," should be defined as "made from materials obtained from natural deposits of asphalt or residues from the distillation of crude oil petroleum or coal which consists mainly of hydrocarbons, and include, but are not limited to, asphalt, tar, pitch, and asphaltites that are soluble in carbon disulfide."

In order to promote further clarity in the adhesives and sealants rules at N.J.A.C. 7:27-26, the Department should include a definition for "roofing and waterproofing installation/repair primer" with the VOC limit established at 350 g/l to be consistent with the architectural coating rule and to be consistent with the suggested "roofing and waterproofing installation/repair adhesive" category. (1, 2, 8, 11)

RESPONSE: Although the rules do not separately define "nonmembrane" or "membrane," these terms are defined within the definitions of "single-ply roof membrane" and "nonmembrane roof installation/repair adhesive." The definition of "nonmembrane roof installation/repair adhesive" states that it 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." "Single-ply roof membrane" is defined as "a prefabricated single sheet of rubber, normally including, but not limited to ethylene propylenediene monomer (EPDM)."

The Department has not made the suggested modification on adoption to the definition of "nonmembrane roof installation/repair adhesive" because the suggested definition is not consistent with how adhesives are regulated elsewhere in the rules. However, to clarify the existing definition of "nonmembrane roof installation/repair adhesive," at N.J.A.C. 7:27-26.1, and to be consistent with the CARB and the Department's architectural coating rules, on adoption, the Department is changing the term "asphalt" to "bituminous" and adding a definition for "bituminous" that is the same as that in the Department's architectural coating rules, N.J.A.C. 7:27-23. The Department is also removing the reference to "asphalt roof coating" in the definition of "nonmembrane roof installation/repair adhesive," at N.J.A.C. 7:27-26.1. Asphalt roof coatings are regulated in the Department's architectural coating rules at N.J.A.C. 7:27-23 as "bituminous roof coating" with a VOC limit of 300 g/l, the same VOC limit as in the adhesive rules at N.J.A.C. 7:27-26. The modification will eliminate any conflict between N.J.A.C. 7:27-23 and 26.

Since the Department has not added a definition for "roofing and waterproofing installation/repair adhesive," there is no need for a parallel definition of "roofing and waterproofing installation/repair sealant." However, since there is no specific definition of "nonmembrane roof installation/repair sealant," the Department is modifying the defined term "nonmembrane roof installation/repair adhesive," at N.J.A.C. 7:27-26.1 to include "or sealant."

Regarding primers, there is no definition of "nonmembrane roof installation/repair primer" in the Department's adhesives and sealants rules. The Department does not see the need to add a definition of primers because they are already regulated in the Department's architectural coating rules (N.J.A.C. 7:27-23) as "bituminous roof primers." The Department's regulation of "bituminous roof primers" at N.J.A.C. 7:27-23 is consistent with CARB's Reasonably Available Control Technology (RACT) and Best Available Retrofit Control Technology (BARCT) Determination, developed in 1998 (CARB adhesives and sealants RACT).

24. COMMENT: If the Department adds the definitions of "roofing and waterproofing installation/repair adhesive" and "roofing and waterproofing installation/repair sealant" (see

Comment 23 above), the Department should amend the definition of "architectural sealant or primer" to prevent an ambiguity. (1)

RESPONSE: The Department has not replaced the "nonmembrane roof installation/repair adhesive and sealant" categories with the new categories suggested by the commenter, as discussed in the Response to Comment 23. The Department has also not added a new category for "roofing and waterproofing installation/repair primer," as discussed in the Response to Comment 23. Therefore, ambiguity between the suggested modifications and the proposed rules is not an issue.

There is overlap between the definition of "architectural sealant and primer" and the definitions of other roof sealants. There is also overlap between the definition of "architectural sealant and primer" and the definitions of other stationary structure sealants and sealant primers. Some products will meet the definition of "architectural sealant and primer" in addition to a more specialized category. This could lead to confusion as to what VOC limit applies if a product fits within more than one category, to which different VOC limits apply.

On adoption the Department is adding, at N.J.A.C. 7:27-26.3(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." This modification makes it clear that if a product fits the definition of an architectural sealant or sealant primer, as well as the definition of one of the other sealant or sealant primers, the highest VOC limit applies, unless the manufacturer markets the product for more than one use, in which case the lowest VOC limit applies.

The modification is consistent with the treatment of products that fall within more than one product category in the Department's consumer products rules at N.J.A.C. 7:27-24.4(g) and architectural coating rules at N.J.A.C. 7:27-23.3(b). Under those rules, if a product is marketed as suitable for use as a product that falls within more than one product category, then the lower VOC content limit applies.

25. COMMENT: In relation to the adhesives and sealants rules at N.J.A.C. 7:27-26, the Department should base its decisions and rule development within its own climatic region. Climate differences have the ability to impact the application, performance and storage of water-based products because of low to freezing temperatures, high relative humidity and frequency of rain, dew and /or snowfall. Water-based, low VOC products that perform well in California may not perform as well in New Jersey. The average precipitation in New Jersey is significantly higher than in California. The Air Districts in California which experience snow in the winter and/or have cool damp springs and falls, do not generally regulate adhesives and sealants at all. (1, 2, 8, 11)

RESPONSE: The commenters' discussions regarding climate differences and application and performance issues with adhesives did not specifically state that any of the VOC limits established for adhesives and sealants in the rules would not be feasible due to climate issues.

The Department's evaluation of the VOC limits indicates that the limits are feasible in New Jersey.

Similar climate conditions, such as humidity, extreme high and low temperatures, cold climates, and freeze-thaw cycles, can be found in both California and the Northeast, including New Jersey. California has numerous air districts that have adopted adhesives and sealants rules similar to New Jersey with extreme hot and cold temperatures, temperatures below freezing and freeze-thaw cycles. Thirteen California air districts have adopted adhesives and sealants rules similar to the New Jersey rule. Seven of the districts are located in the northern part of the state. Three of the districts, Placer, Shasta and Tehama, are north of San Francisco. Information obtained from the Western Regional Climate Center, shows 34 monitoring stations within California air districts that have adopted adhesives and sealants rules (32 stations in districts with a single-ply roofing adhesive VOC limit of 250 g/l), where the minimum temperature was below 32 degrees Fahrenheit, ranging from one to 222 days annually, for the period from 1971 to 2000. Eleven monitoring stations within California air districts that have adopted adhesives and sealants rules show that the minimum temperature was below 32 degrees Fahrenheit, ranging from 55 to 222 days annually, for the period from 1971 to 2000. The Department reviewed climate data for the cities of Auburn (Placer), Burney and Redding (Shasta), and Red Bluff (Tehama) located in these districts. While average monthly temperatures for New Jersey are somewhat lower than in these districts, the average monthly low temperatures in the California districts for the months of November through March also fall below 40 degrees Fahrenheit. The Sacramento Air Quality Management District has a history of low temperatures below 40 degrees Fahrenheit during eight months of the year and experiences an average low of 40 degrees Fahrenheit during December and 41 degrees Fahrenheit during January. (http://www.weather.com/weather/wxclimatology/monthly/graph/USCA0968?from=search).

The average annual rainfall for Trenton and Newark, New Jersey, is higher than California; however, the monthly average rainfall experienced in California for the months of November through March is significantly higher than that of New Jersey. Thus, if the rainfall in California in the months of November to March does not make a product unusable, the product should not be unusable in the lower average rainfall in New Jersey.

In addition, manufacturers of many solvent-based products recommend that the products be used when the temperature is above 40 degrees Fahrenheit, similar to their water-based counterparts. Therefore, the recommended usage for existing non-complying products is similar to that of complying products.

26. COMMENT: In relation to the adhesives and sealants rules at N.J.A.C. 7:27-26, CARB has acknowledged in its 2007 Suggested Control Measures (SCM) for Architectural Coatings, Section 3, Subsection 3, that climate differences have the ability to impact the application of water-based products because of low to freezing temperatures, high relative humidity and frequency of rain, dew and/or snowfall. (2, 11)

RESPONSE: The portion of the CARB Architectural Coating SCM staff report quoted by the commenter is related to the use of water-based "emulsion" bituminous roof coatings. The discussion is based on CARB's proposal to lower the VOC limit for "bituminous roof coatings" from 300 g/l to 50 g/l. VOC limits for such coatings are beyond the scope of this rulemaking.

In addition, CARB also states in the same section of the staff report that both solvent-based and water-based bituminous products are usually sensitive to ambient temperatures outside the range of 50 to 120 degrees Fahrenheit, and should never be subjected to freezing temperatures. Numerous air districts in California have adopted adhesives and sealants rules and architectural coating rules similar to the rules the Department is adopting. The California districts experience extreme hot and cold temperatures, temperatures below freezing and freeze-thaw cycles. Additional discussion regarding climatic conditions in California and New Jersey can be found in the Response to Comment 25.

27. COMMENT: In relation to the adhesives and sealants rules at N.J.A.C. 7:27-26, the Department is following the lead of CARB without developing New Jersey specific scientific and/or economic data to measure the success of the program. (1, 2, 8, 11)

RESPONSE: The adhesives and sealants rules are based on the CARB's adhesives and sealants RACT, which was developed after years of extensive research by the SCAQMD and the CARB that would not be practical to duplicate. The technological feasibility, benefit calculations and economic calculations are based on the best available data, which are the CARB data. It is appropriate for states to work together to conserve resources, to avoid duplication of effort and to encourage uniformity. For the same reasons, it is appropriate to rely on data from the USEPA, the CARB or a state that undertakes research on a subject. The ozone pollution problems in California are more severe than those of New Jersey. This results in California's promulgating rules to reduce ozone air concentrations. New Jersey and other states benefit from the studies and research done by CARB in developing these rules.

Since the rules are implemented in California first, portions of the regulation that might be problematic or unachievable have already been identified and updated. Therefore, New Jersey and other states look to established California regulations as models for implementation to reduce pollution.

The Department believes that the California data and rules are appropriate for New Jersey. The adhesives and sealants markets are similar, but do not have to be identical for the rules to be appropriate. Using CARB's economic estimates as a basis for the New Jersey economic analysis represents a conservative approach, because CARB's estimates include initial reformulation costs that do not have to be repeated to sell products in states other than California. Actual costs in New Jersey are likely to be lower than CARB estimated. (See Economic Impact, 39 N.J.R. at 4505.) By establishing rules consistent with California's, uniformity among the states is promoted, rather than a patchwork of regulations that would increase compliance costs and complexity.

28. COMMENT: Regarding single-ply roofing adhesives, regulated in the adhesives and sealants rules at N.J.A.C. 7:27-26, although the rubber roofing industry has developed low-VOC adhesives and sealants that are suitable for effective installation during the late spring, summer and early fall in New Jersey, there is no currently available technology that can supplement the need for high-VOC adhesives to bond the rubber membrane to roof substrates during the colder months of the year. The CARB rule was developed in a region in the United States with climatic

and economic factors that differ significantly from the Northeast. The average minimum daily temperatures in California usually exceed 40 degrees Fahrenheit, the minimum temperature for use of compliant products. The average minimum temperatures in New Jersey from October through April are either well below or barely in the minimum operating temperatures required for current VOC compliant roofing membrane adhesives. Wind zones in California rarely exceed 70 miles per hour; however, New Jersey routinely experiences winds as high as 90 to 100 miles per hour. Roof systems are expected to perform to a much higher level.

The Department should have a seasonal approach to the regulation, requiring low-VOC adhesives during the warmer ozone season months, while continuing to allow high-VOC adhesives during the colder months outside of the ozone season. Without this approach, the rules may significantly impede the roofing industry's effectiveness in keeping buildings dry and allowing commercial construction to proceed on a year-round basis. The two season approach has already been proposed for the asphalt paving industry in Connecticut, and this should be used as a model.

In addition, there should be a transitional period from 2009 to 2011 for the months during which a 250 g/l VOC limit applies, in order to allow commercial roofing contractors to train their crews during the optimal months of the ozone season, and extend this experience into the less optimal months. (4, 5, 12)

29. COMMENT: Regarding single-ply roofing adhesives, regulated in the adhesives and sealants rules at N.J.A.C. 7:27-26, we are pleased to share with you the fact that the Connecticut Department of Environmental Protection has made public their agency's decision to postpone the complete phase-out of non-compliant adhesives and sealants until 2012. They are limiting the ban to the five ozone months of May through September. We urge you to consider this transitional period in your regulation as well. (4)

RESPONSE TO COMMENTS 28 AND 29: In recognition of the industry's need to train personnel, and the need to develop additional complying products, the Department is modifying the rule on adoption to add N.J.A.C. 7:27-26.4(h) through (k), to allow additional time for compliance with the single-ply roofing adhesive category during the non-ozone season. The Department will phase in the 250 g/l VOC requirement over three years. For this product category only, in 2009 the rules will require the use of compliant product during the months of June, July and August. In 2010 and 2011, the rules will require the use of compliant product during the months of May through September. In 2012 and thereafter, compliant product will be required year-round. This addresses the industry concern about training installers. It also gives time for introduction of new products to increase the selection of available complying products. As modified, the rules are consistent with Connecticut's "Post Hearing Final Draft of Regulation" dated June 25, 2008. The rules are also consistent with discussions that took place with the industry regarding this issue during the OTC model rule process.

The anticipated environmental benefits of reducing VOCs during the ozone season from adhesives and sealants would still be achieved. The adopted rules require the use of compliant product during the ozone season.

N.J.A.C. 7:27-26.1 is also modified on adoption to add definitions for distributor, retailer and retail outlet, which are the same as the definitions in the existing consumer products rules at N.J.A.C. 7:27-24.1. These terms are used in N.J.A.C. 7:27-26.4(h) through (k), as added on adoption.

A permanent seasonal approach is not appropriate. Such an approach would create an unreasonable burden on suppliers, retailers and Department enforcement. Further, complying products and different types of roofing are currently available. The Department reviewed product application/ specification literature for both water-based and low VOC EPDM bonding adhesives (John Manville, Versico, Carlisle Syntec). The Department found no significant difference in the product application/specification sheets with regard to minimum temperatures recommended for use of either solvent-based (non-compliant) or water-based (compliant) bonding adhesives. Both products recommended use at temperatures of 40 degrees Fahrenheit or greater, making them both appropriate for use in New Jersey under similar climate conditions.

The seasonal approach of the asphalt paving rules does not provide an appropriate permanent model for regulation of adhesives and sealants. In New Jersey, the asphalt paving rules regulate the user of the product only, not the manufacturer or seller. The adhesives and sealants rules regulate the manufacturer, seller and user of the product.

Additional discussion regarding climatic conditions in California and New Jersey can be found in the Response to Comment 25.

30. COMMENT: The adhesives and sealants rules at N.J.A.C. 7:27-26 regulate the supplier of a product, but it is unclear if the term "supplies" and "supply" would apply to HAZMAT pharmacy-type operations at military installations. HAZMAT pharmacies on military installations order, purchase, receive, approve and process all requests for hazardous materials by the various organizations on an installation. The HAZMAT pharmacy then "supplies" the various organizations on an installation with requested specific amounts of a particular hazardous material for use. It is recommended, therefore, that the Department include a definition for "supplies" or "supply" or provide written response clarifying whether the terms would apply to hazardous material (HAZMAT) pharmacies and similar type operations at military installations. (13)

RESPONSE: These HAZMAT pharmacies are not "selling" products for use in New Jersey; accordingly, they are not considered "suppliers." The rules regulate persons who "supply... for sale in New Jersey." The distance between the terms "supply" and "for sale" may create confusion to the public. The Department is modifying the rules on adoption for clarification, in response to this comment.

As proposed in Subchapter 26, the rules applied to a person who "supplies, offers for sale or manufactures for sale in New Jersey." The Department is modifying both Subchapter 24 and Subchapter 26 on adoption to make it clear that the rules regulate a person who supplies the products for sale in New Jersey. The modifications are at N.J.A.C. 7:27-24.4(a), (n), (p), (s), (t), 24.8(a), 26.2(a) and 26.3(b). The definitions for distributor, retailer and retail outlet, added on adoption to N.J.A.C. 7:27-26.1, will also help clarify the role of a distributor.

The Department's intention in promulgating the rules is to ensure that compliant products are used in New Jersey. The manufacturer is responsible for selling complying products for intended use in New Jersey to the purchaser.

31. COMMENT: In the adhesives and sealants rules at N.J.A.C. 7:27-26, manufacturers should be required to include both the maximum "allowable" VOC content and the "actual" VOC content on the label, to enhance the ability to determine compliance of adhesives, sealants, adhesive primers, or sealant primers. If manufacturers are allowed to include only the maximum "allowable" VOC content of a particular product, then how would a person know if the product is compliant? (13)

RESPONSE: The maximum VOC content label on the product can be used to determine compliance. These adhesives and sealants rules, as well as the existing architectural coating rules at N.J.A.C 7:27-23, require the label to state the "maximum or actual VOC content of the product," not the maximum "allowable" VOC content. Manufacturers usually label their product as less than or equal to the maximum VOC limit to show compliance with the rules. Many manufacturers do not want to label a product with an actual VOC content, because there is small variability in VOC content from product to product that cannot be avoided. They cannot guarantee that each product will have the same VOC content. If the product's VOC content does not match the label, the labels would be inaccurate, which could place the manufacturer in violation of the rules if actual VOC content labeling were required.

32. COMMENT: In order to qualify for one of the adhesives and sealants rules de minimis exemptions at N.J.A.C. 7:27-26.4 (c) and (d), a facility has to maintain monthly records, although the requirement for the exemptions is based on the use of the regulated products for a calendar year. It seems more appropriate to either demonstrate compliance based on calendar year records, or change the exemptions at N.J.A.C. 7:27-26.4 (c) and (d) to be based on 12 month rolling thresholds. (13)

RESPONSE: Maintaining records on a calendar year basis, rather than on a monthly basis, would provide some relief in administrative record keeping. However, using a calendar year (once annually) recordkeeping approach does not allow the users to determine if the exemption quantities for non-compliant materials have been exceeded until after a violation occurs. Monthly recordkeeping, as required at N.J.A.C. 7:27-26.4 (c) and (d), benefits the users by providing meaningful usage information to the users for planning and scheduling purposes, and alerts them in advance to the potential of exceeding the exemption amounts. In addition, this same monthly information would be available for inspectors to make compliance evaluations. The Department does not see the necessity for a 12 month rolling average threshold, as this makes the exemption harder to comply with and expands the recordkeeping requirements. Also, it is beneficial to be consistent with CARB and other states. The requirements at N.J.A.C. 7:27-26.4 (c) and (d) are consistent with the CARB's Reasonably Available Control Technology (RACT) and Best Available Retrofit Control Technology (BARCT) Determination, developed in 1998. By establishing rules consistent with California's, uniformity among the states is promoted, rather than a patchwork of rules that would increase compliance costs and complexity.

33. COMMENT: The sell-through provision in the adhesives and sealants rules at N.J.A.C. 7:27-26.3(i), which allows non-complying products manufactured prior to January 1, 2009 to be sold after January 1, 2009 if they display a manufacture date or date-code, should be changed to allow sell through of the products even if they do not display a date or date-code. If not, this could create stockpile of products that need to be disposed of as potentially hazardous waste. (13)

RESPONSE: It is not the intent of the Department to create stockpiles of product that need to be disposed of. That is why the Department has provided, in its adhesives and sealants, consumer products and architectural coating rules, more flexible sell-through provisions than in the California models. The California rules and models require that non-complying products be sold within three years for consumer products and architectural coatings, one year for the prohibition of Perc, TCE and MeCl in automotive maintenance and repair products and one year for the prohibition of paradichlorobenzene in solid air freshener and toilet/urinal care products. The CARB adhesives and sealants RACT provided no sell-through provision. The Department has provided an unlimited timeframe sell-through provision for the VOC regulations for consumer products, architectural coatings and adhesives and sealants. Regarding the restriction of Perc, TCE and MeCl in automotive maintenance and repair products and of paradichlorobenzene in solid air freshener and toilet/urinal care products, the Department allows non-complying products to be sold for three years after January 1, 2009. (See N.J.A.C. 7:27-24(o) and (s).) There are no restrictions on use of the products manufactured prior to January 1, 2009.

It is not practical for the Department to change the sell-through provision to allow sell-through of products without a date or date-code on the product, because then the Department would not be able to determine if new non-complying products were being manufactured and sold after January 1, 2009, without dates or date-codes. Based on previous conversations with manufacturers and trade organizations, the Department believes most of the regulated consumer products have a date or date-code on the product. The date-code is usually incorporated into a batch code that has other information associated with it, such as batch number and place of manufacture.

Neither the OTC nor the Department received comments from manufacturers or trade organizations that they anticipated the sell-through provision would be a problem due to date-coding. On the contrary, the Department received positive feedback from trade organizations on the inclusion of sell-through provisions in the consumer products rules.

Date-codes are not as easily interpreted as dates. Based on requests from consumer product manufacturers, the date-codes are allowed in lieu of the date in California's, and the Department's consumer product rules. Retailers, suppliers and users for compensation need to communicate with the manufacturers, either verbally or in writing, to ensure they are being supplied and are selling appropriate compliant products.

34. COMMENT: State rules regulating industrial adhesives are unnecessary because some stationary source companies that use industrial adhesives are already regulated through facility operating permits. Regulation under another rule, such as N.J.A.C. 7:27-26, is unnecessary and makes regulation more complicated. Some companies also face compliance with the Federal

miscellaneous metal surface coating MACT. Compliance with the MACT is based on a 12-month rolling average. At times the plant can use adhesives that may exceed the regulatory limit, as long as they compensate for these overages by using materials for other applications that are significantly below the limit. If restricted to the new adhesive limits, facilities complying with a 12-month rolling average, may not be able to comply and may have to install a control device. Costly controls may force companies to move to another state or cease operations. The only real solution is increased use of aqueous or non-VOC containing adhesives, but after a user has installed control devices, there is little incentive for them to evaluate and substitute these type of adhesives into their processes. Better to regulate at the facility level, than at the adhesive category level. Also, the use of control devices will increase CO2 emissions and consumption of natural resources, creating a shift in environmental problems. (3)

RESPONSE: The new adhesives and sealants rules at N.J.A.C. 7:27-26 are more specific to adhesives and sealants products than are the Department's surface coating rules at N.J.A.C. 7:27-16.7, which include adhesives in a limited manner and also have usage exemptions. The new adhesives and sealants rules are intended to be more restrictive than existing Department rules, in order to further the Department's goal of reducing VOC emissions. The Federal MACTs regulate HAPs, not total VOCs.

A product rule, as opposed to a facility level rule, is necessary because it regulates the use of products that cannot be regulated at the facility level. The adhesives and sealants rules regulate not only products that can be used at stationary facilities, but also products used in the field, where controls cannot be installed. Reformulation of the products is the best way to reduce VOCs from products where controls cannot be installed.

It is estimated that 95 percent of the emissions being regulated in the New Jersey adhesives and sealants rules are from non-stationary "area" sources. These are sources that are not subject to permit, such as roofing, wood floor and carpet installations. Stationary facilities have the option to either use reformulated products or install controls.

The best solution is the use of water-based, low VOC products. If a facility has an existing control device, this does not eliminate the incentive to use these products. If a user can save money by shutting off a control device and using a water-based adhesive, the cost savings is the incentive.

Facilities that use regulated adhesives and sealants and are already significant sources of VOCs are likely to have existing control devices required under New Source Review and "State of the Art" provisions of existing New Jersey VOC rules. Facilities that do not have control devices and use regulated adhesives and sealants will most likely comply by purchasing reformulated products that comply with the new rule VOC limits, rather than install new controls. If new controls need to be installed in order for a facility to comply with N.J.A.C. 7:27-26, the reduction of VOCs is a positive environmental benefit, even taking into account energy consumption and associated emissions from control devices.

35. COMMENT: Consistent definitions are needed in state rules regulating industrial adhesives. For example, the Federal miscellaneous metal surface coating MACT at 40 CFR

63.3981 defines certain adhesive products as "rubber to metal coatings," rather than "metal to urethane/rubber molding or casting adhesives" as used in N.J.A.C. 7:27-26. Since many of our customers are already familiar with the Federal miscellaneous metal surface coating definition, it would provide unambiguous applicability. (3)

RESPONSE: Consistency and uniformity are important. The Department is adopting the OTC model rule language for adhesives and sealants with as little change as practical to be consistent with the rules implemented by other states in the region and the air districts in California. When adopting a consumer product rule, uniformity is important to the manufacturers of the products, to reduce complications and confusion regarding producing different products for different states. New Jersey has been an active participant in the OTC model rule process for consumer products, architectural coatings and adhesives and sealants. However, states have the authority to adopt their own rulemakings and differences will be encountered from state to state and with the Federal rules. Unlike the OTC and Department rules, the Federal MACT regulates HAPs, not total VOCs. Also note, the existing definition of "coating of miscellaneous metal parts and products" in the Department's rules at N.J.A.C. 7:27-16 excludes adhesives.

36. COMMENT: In order to comply with the new adhesives and sealants rules at N.J.A.C. 7:27-26, our customers (stationary facilities) would need at least 18 months from the time a new regulation is promulgated until the date of compliance. This is the minimum period needed for either material substitution or installing controls. (3)

RESPONSE: As discussed above in the Response to Comment 34, the Department believes that facilities that do not have existing controls and are using regulated adhesives and sealants will most likely comply by purchasing reformulated products that comply with the new VOC limits, rather than installing new expensive controls. However, the Department is adding N.J.A.C. 7:27-26.4(*l*) on adoption to allow an additional 18 months from the operative date of the rules for those facilities that need to add new controls to comply with the rules. A facility may determine that it needs to install new controls to comply with the regulation, rather than use material substitution. Installation of new controls is an option under the rule as proposed. If new controls are required, the facility will not have enough time to install the controls before the operative date of the rules.

The Department is not extending the compliance date for facilities that do not find it necessary to install new controls. An additional 18 months is not necessary for material substitution. There are complying products available and industry has had adequate notice of these requirements, based on promulgation in California of similar requirements, outreach during the OTC process and rulemaking by other states who have undertaken rulemaking consistent with the OTC model rule.

37. COMMENT: "Reactive adhesive" is defined in the consumer products rules at N.J.A.C. 7:27-24.1, but not in the adhesives and sealants rules at N.J.A.C. 7:27-26.1. These types of adhesives are frequently used in industrial settings. Several large adhesive suppliers obtained approval from USEPA for a special VOC test method for two-component reactive adhesives. The method, set forth at Appendix A of the Plastic Surface Coating NESHAP (Subpart PPPP),

should be in the New Jersey adhesives and sealants rules in order to demonstrate compliance to the very low substrate specific limits called out in N.J.A.C. 7:27-26.3(i). (3)

RESPONSE: The Department is adding N.J.A.C. 7:27-26.6(a)3 on adoption to include 40 CFR Part 63 Subpart PPPP, Appendix A, 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 (MACT) as an allowable test method option to determine VOC for reactive adhesives. This method has been accepted by the USEPA as a test method to determine VOC for reactive adhesives in its Plastic Parts and Products MACT. The proposed rule identified USEPA test method 24 be used to determine VOC and solids content of adhesives. The rule, as adopted, allows either of the USEPA-recognized test methods for the determination of VOC and solids content of adhesives.

As discussed in Section 1.0 of the reactive adhesives test method recommended by the commenter, USEPA test method 24 allows multi-part reactive materials to cure before heating, but they are uncovered. In the test method the commenter recommends, the sample is covered, which is more representative of real life conditions in which reactive adhesives are applied to a single surface, but are usually then quickly covered with another mating surface to achieve a bonded assembly. Some of the VOCs react to form solids and are not emitted to the atmosphere. If left uncovered, the reaction is inhibited by the presence of oxygen and volatile loss of the reactive components competes more heavily with the cure reaction.

The Department is also modifying N.J.A.C. 7:27-26.1 on adoption to add a definition of reactive adhesives. The definition is the same as the definition of the term at N.J.A.C. 7:27-24.1.

38. COMMENT: Regarding the adhesives and sealants rules at N.J.A.C. 7:27-26, the tighter VOC rules will force most of the use of products to be moved into the ozone season. Although the products would have a lower VOC content, they would be applied only over the three month ozone season, rather than over a 12 month period.

Lower VOC restrictions would, in effect, create a ban on products that provide performance, such as fire ratings. Building codes require roofing systems to be fire rated. The VOC restrictions would require a reformulation and a lot of burden on industry, which would need to reformulate and re-test and re-certify a lot of products to comply with those rules. The industry is working towards producing VOC friendly alternatives that can work during the colder months; however, the technology is not here yet.

The concern is not that the Department is adopting a rule similar to the CARB rule, but that the Department might in the future adopt a rule similar to the South Coast Air Quality Management District (SCAQMD) rule, which is extreme and does not reflect New Jersey's climatic conditions. (11)

RESPONSE: The adopted rules are based on the CARB adhesives and sealants RACT, not the SCAQMD rule. The commenter did not specifically state which adhesives or types of adhesives would be affected by the seasons. Manufacturers of many solvent-based products recommend that the products be used when the temperature is above 40 degrees Fahrenheit, similar to their

water-based counterparts. Therefore, the seasons during which complying and non-complying products can be used is similar. Examples of existing products that are recommended by their manufacturers to be used when the temperature is above 40 degrees Fahrenheit are Karnak #81AF Modified Bitumen Adhesive and Karnak #66AF Modified Bitumen Adhesive.

Products are given a fire rating on a national basis, not state by state. Accordingly, those fire rated products that have been formulated to comply with the California rules are already certified for use in New Jersey.

39. COMMENT: The Department should not extend the ban of chlorinated solvents in consumer products at N.J.A.C. 7:27-24 to industrial adhesives. The use of these materials in chemical processes is unavoidable. Even if these chemicals are removed from the products before the products are placed on the market, it is often impossible to completely eliminate them. There should be a de minimis level allowed that is both feasible and safe, such as Occupational Safety and Health Association (OSHA) levels, instead of a complete ban. (3)

RESPONSE: The Department is not restricting the use of Perc, TCE and MeCl in industrial adhesives in this rulemaking. In the consumer products rules, automotive maintenance and repair products containing less than one percent of Perc, TCE or MeCl are exempted. (See N.J.A.C. 7:27-24.4(r).) Also exempted is any contact adhesive, electronic cleaner, footwear or leather care product, general purpose degreaser, adhesive remover, electrical cleaner or graffiti remover that contains 0.01 percent or less of Perc, TCE and MeCl, combined. (See N.J.A.C. 7:27-24.4(q))

Summary of Agency-Initiated Changes

At N.J.A.C. 7:27-24.1, Definitions, the Department has deleted the second "adhesive remover" in the definition title of "adhesive remover-floor and wall covering adhesive remover," as it is redundant. As modified, the definition is consistent with the definitions of other adhesive removers. The Department has made a grammatical correction in the definition of "fragrance." The Department has deleted the definition of "automotive maintenance facility" or "automotive repair facility" because neither is used in the rules.

At N.J.A.C. 7:27-24.1, the definition of "device" has been changed to "pesticide device" and relocated alphabetically. The term "device" was defined in the rules because the term is used in the definition of "pesticide;" however, the term "device" is also used in several other portions of the rules relating to the portable fuel container portions of the rules. The proposed definition is not appropriate in the portable fuel container context. The modified definition limits the definition to the pesticide context.

At N.J.A.C. 7:27-24.1, in the definition of "innovative product exemption," the Department has corrected cross references.

The Department has updated the ASTM methods to the latest version, for clarification, which is consistent with the existing rules and the Department's notice of proposal, as all of the methods include subsequent amendments. The modifications have been made at N.J.A.C. 7:27-24.1, definitions of liquid, plasticizer and solid, 24.7(d), (f) and (g) and 26.6(b) and (e)1 and 2.

The Department has also added "as supplemented or amended" to the ASTM test methods at 26.6(e)2 in the equations, which is consistent with the language regarding the same test methods at N.J.A.C. 7:27-26.6(e)1 and 2 in the narrative above the equations. The Department has also added clarification language "as supplemented or amended" to the definition of plasticizer at 24.1, which is consistent with the language regarding the same test method at N.J.A.C. 7:27-24.7(g). In addition, the Department has added the same test method, E-260-96(2006), as supplemented and amended to the definition of plasticizer at N.J.A.C. 7:27-26.1, which is consistent with the definition at N.J.A.C. 7:27-24.1 and the language at N.J.A.C. 7:27-24.7(g).

In Table 1 at N.J.A.C. 7:27-24.4(a), the Department has added a footnote for contact adhesives, to clarify that the category of contact adhesives is being replaced on January 1, 2009 with two new categories, "Contact general purpose" and "Contact special purpose." In addition, the Department has corrected the spelling of "aerosol" in the adhesives category and has made bug and tar removers plural to be consistent with the other categories.

At N.J.A.C. 7:27-24.4 (a), and at N.J.A.C. 7:27-24.4 (n), the Department has corrected cross references.

At N.J.A.C. 7:27-24.5 (a)2i and ii, the Department has updated and clarified the registration deadline requirements, which were applicable to the consumer products categories adopted in 2004, to be relevant to the new rules and amendments. The schedule adopted in 2004 is not appropriate for the new categories of consumer products. The guidance for new categories was vague and could be interpreted as either register before January 1, 2005, which is prior to the operative date of the amended rules, or for new products after January 1, 2005, prior to selling the product in New Jersey. Since "prior to selling the product in New Jersey" is not reasonable for the new categories of products, which are already being sold in New Jersey, the Department is modifying the registration requirements to be consistent with N.J.A.C. 7:27-24.5(a)3, within 90 days after the operative date of the rule, or within 90 days of selling the product in New Jersey. The Department has made the same modification to N.J.A.C. 7:27-24.10(c).

At N.J.A.C. 7:27-24.8(a), portable fuel containers requirements, the Department has added a reference to the exemptions in N.J.A.C. 7:27-24.8(c) and (d), for clarification. Also, the Department has changed the requirement to be exempted by CARB "and" EPA, in order to be exempted from the requirements of the section, to a requirement to be exempted by CARB "or" EPA. It was not the intention of the Department to require both CARB "and" EPA simultaneous exemptions, as indicated by the "or" at N.J.A.C. 7:27-24.8(a)6i and the "or" at N.J.A.C. 7:27-24.8(d)1. In the Summary, 39 N.J.R. at 4500, the Department indicated that CARB exemption and exemption by EPA are alternatives.

The Department has recodified N.J.A.C. 7:27-24.8(a)i and ii as (a)1 and 2.

At N.J.A.C. 7:27-24.12(c), paragraphs 2 and 3 have been deleted on adoption, as they are no longer relevant to the new portable fuel container rules and conflict with amended subsection (c).

At N.J.A.C. 7:27-26.3(a) and (b), the Department has added references to new subsections N.J.A.C. 7:27-26.4(i) and (*l*), as they are exemptions to the subsections. At N.J.A.C.

7:27-26.3(c), the Department has added references to new subsections N.J.A.C. 7:27-26.4(h) and (*l*), as they are also exemptions.

In Table 1 at N.J.A.C. 7:27-26.3(i), the Department has changed "VOC content limit (grams VOC per liter)" to "Maximum VOC content limit (grams VOC per liter) Operative Date 1/1/2009," to make the table more clear. The modification does not change the regulatory meaning, as it is consistent with N.J.A.C. 7:27-26.3(a), (b) and (c).

At N.J.A.C. 7:27-26.5(a), the Department has changed the reference to N.J.A.C. 7:27-26.2(b) to the correct reference of N.J.A.C. 7:27-26.2(a). There is no N.J.A.C. 7:27-26.2(b).

The Department has revised reference to Table 1 at N.J.A.C. 7:27-26.5(b) to show that the table is located at N.J.A.C. 7:27-26.3.

At N.J.A.C. 7:27-26.6(g), the Department has deleted "January 9, 1995," as it is redundant and misplaced.

At N.J.A.C. 7:27-26.6(k), the Department has added "For low-solids adhesives, sealants, or primers, or solvents" for clarity, because the link between the formula in this section and when the formula should be used was not clear. The units in the formula match the definition of "low-solids adhesives, sealants, or primers." In addition, at N.J.A.C. 7:27-26.6(i), the Department has added "sealants and primers, with the exception of low solids adhesives, sealants and primers" to make it more clear what the formula in this subsection is used for. At N.J.A.C. 7:27-26.6(j), the Department has added "sealants and primers," to make it more clear what the formula in this subsection is used for.

At N.J.A.C. 7:27-26.8(a)3, the Department has changed the registration schedule from "on or after June 6, 2008" to "on or after the operative date of the rule," because the rule was not operative on June 6, 2008.

At N.J.A.C. 7:27-34.3(a)10, the Department has added reference to N.J.A.C. 7:27-16. N.J.A.C. 7:27-34.3(a) makes 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 subject to TBAC reporting. N.J.A.C. 7:27-34.3(a)10 requires manufacturers that make, sell, or use TBAC-containing products that are categorized in N.J.A.C. 7:27-23, 24, or 26 to include in their TBAC reporting the category in which the product belongs. Under N.J.A.C. 7:27-34.3(a)11, if a product containing TBAC is not subject to N.J.A.C. 7:27-23, 24 or 26, the manufacturer must provide in the TBAC reporting a description of the use for which the product is intended.

The rules at N.J.A.C. 7:27-23, 24 and 26 identify various categories of products that are manufactured, sold or used in the State. For example, N.J.A.C. 7:27-23.3, Table 1, identifies numerous categories of architectural coatings; N.J.A.C. 7:27-4.4, Table 1, identifies categories of chemically formulated consumer products; and N.J.A.C. 7:27-26.3, Table 1, identifies categories of adhesives, sealants, adhesive primers, sealant primers and adhesives applied to particular substrates. The regulated entity knows into which category the product falls, in order to produce

and sell a product that is in compliance with the rules. The manufacturer identifies the category on the TBAC form, based on the category in the rules.

Similarly, N.J.A.C. 7:27-16 identifies processes that use TBAC-containing products. For example, N.J.A.C. 7:27-16.7, Surface coating and graphic arts operations, contains several tables of products in numerous categories. As proposed, these products would fall within N.J.A.C. 7:34.3(a)11 (because they are not subject to Subchapters 23, 24 or 26), and the manufacturer would provide in its TBAC reporting a description of the use for which the product is intended.

The manufacturer of the TBAC-containing product produced the product with the intent that it be in compliance with one or more of the categories in the subchapter. Likewise, a manufacturer who uses a TBAC containing product in a manufacturing process also knows the appropriate category. Accordingly, the category is readily identifiable and should be included in the TBAC reporting.

At N.J.A.C. 7:27A-3.10(m)26 the Department has added "allowable" in two of the citation and rule summaries, to be consistent with the other citation and rule summaries, and has capitalized the first words in the citation and rule summaries to be consistent with the other citation and rule summaries.

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 adopting 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 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 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 new TBAC reporting requirements are consistent with the USEPA's rules. However, the 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, adoption 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 adhesives and sealants 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.

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

CHAPTER 27
AIR POLLUTION CONTROL
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 - 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.

. . .

["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.]

. . .

"*[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 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.]*

…

"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 millimeter*s* of mercury (mm Hg) at 20 degrees Celsius (^{o}C), the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

. . .

"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)**]* *i** and ***[**(j)**]* *k*** 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. – 2. (No change from proposal)

. . .

"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]**(**2006**)*, as supplemented or amended. This term does not include powders or other materials that are composed entirely of solid particles.

…

"***Pesticide device" means an instrument or contrivance, other than a firearm, designed for trapping, destroying, repelling, or mitigating any pest or any form of plant or animal life (other than 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.***

. . .

"Plasticizer" means a material, such as a high boiling point organic solvent, that is incorporated into a plastic to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E260-*[91]****96(2006), as supplemented or amended,*** or from product formulation data.

. . .

"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]**(**2006**)*, 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).

…

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) *,**(d)**and *[(i)]****(j)*** below, no person shall sell, offer for sale, hold for sale, distribute* **for sale***, supply* **for sale***, 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

Chemically Formulated Consumer Product Category	**Form**	**Maximum Allowable VOC Content (percent by weight,[1] unless otherwise indicated)[2]**		
		State Standard Operative Date 4/30/96-12/31/04[3]	**State Standard Operative Date 1/1/05**	**State Standard Operative Date 1/1/09**
Adhesive Removers	Floor or wall covering			5
	Gasket or thread locking			50
	General purpose			20
	Specialty			70
Adhesives	*[Aerosal]****Aerosol***:	75		
	Mist spray		65	
	Web spray		55	
	Special purpose spray adhesives:			
	Mounting, automotive engine compartment, and flexible vinyl		70	
	Polystyrene foam and automotive headliner		65	
	Polylolefin and laminate repair/edgebanding		60	
	Contact:	80	80	N/A***[5]***
	Contact general purpose			55
	Contact special purpose			80
	Construction, panel, and floor covering	40	15	
	General purpose	10	10	
	Structural waterproof	(Reserved)	15	
Air fresheners	Single-phase aerosols	70	30	
	Double-phase aerosols	30	25	
	Liquids/pump sprays	18	18	
	Solids/semisolids	3	3	

Antiperspirants	Aerosols	60 HVOC	40 HVOC 10 MVOC	
	Non-aerosols	0 HVOC	0 HVOC 0 MVOC	
Anti-static products, non-aerosol				11
. . .				
Bug and Tar Remover*s*			40	
. . .				
Dusting aids	Aerosols	35	25	
	All other forms	7	7	
Electrical cleaners				45
Electronic cleaners				75
Engine degreasers	Aerosols	75	35	
	Non-aerosols	75	5	
Fabric protectants		75	60	
Fabric polishes/waxes	Products for flexible flooring materials	7	7	
	Products for nonresilient flooring	10	10	
	Wood floor wax	90	90	
Fabric refreshers	Aerosol			15
	Non-aerosol			6
Floor wax strippers	Non-aerosol:			
	For light or medium build-up		3	
	For heavy build-up		12	
Footwear or leather care products	Aerosol			75
	Solid			55
	Other forms			15
. . .				
Glass cleaners	Aerosols	12	12	
	All other forms	8		
	Non-aerosols		4	
Graffiti removers	Aerosol			50
	Non-aerosol			30
Hair mousses		16	6	
Hair shines			55	
Hair sprays		80	55	

Hair styling gels		6	6	
Hair styling products	Aerosol and pump sprays			6
	All other forms			2
Heavy-duty hand cleaner or soaps			8	
. . .				
Shaving creams		5	5	
Shaving gels				7
. . .				
Tire sealants and inflators			20	
Toilet/urinal care products	Aerosol			10
	Non-aerosol			3
Undercoatings	Aerosols		40	
Wood cleaners	Aerosol			17
	Non-aerosol			4
Footnotes to Table:				
[1-2] (No change.)				
[3] As of January 1, 2005, the State limits operative as of April 30, 1996 are no longer applicable.				
[4] See N.J.A.C. 7:27-24.4(i) for additional State requirements pertaining to charcoal lighter material.				
[*5] On and after January 1, 2009, the contact adhesive category shall not be applicable and is replaced with two new categories, Contact general purpose and Contact special purpose.*				

(b) -(m) (No change from proposal.)

(n) Except as provided at N.J.A.C. 7:27-24.2(f), and at (o) *[and (p) below, and subject to (r)]****,(q) and (r),*** below, on and after January 1, 2009, no person shall sell, offer for sale, hold for sale, distribute* **for sale***, supply* **for sale***, 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) (No change from proposal.)

(p) On or after June 30, 2011, any person who sells or supplies ***for sale*** 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) - (r) (No change from proposal.)

(s) On and after January 1, 2009, no person shall sell, supply* **for sale*** , 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***for sale*** 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) The manufacturer of a chemically formulated consumer product that is subject to this subchapter pursuant to N.J.A.C. 7:27-24.2(b)1 shall register or re-register (for manufacturers who have submitted registration prior to June 6, 2004) with the Department as follows:

1. (No change from proposal.)

2. The registration or re-registration shall be submitted in accordance with the following schedule:

i. For a chemically formulated consumer product sold in New Jersey *[prior to January 1, 2005, the registration or re-registration shall be submitted on or after June 6, 2004 and prior to January 1, 2005; and]* ***and not previously registered, the registration shall be submitted no later than the later of March 29, 2009, or within 90 days of selling the product in New Jersey.***

[ii. For a chemically formulated consumer product sold in New Jersey on or after January 1, 2005, that was not sold in New Jersey prior to January 1, 2005, if the product belongs to a category that the manufacturer has not previously registered with the Department, the registration shall be submitted prior to selling the product in New Jersey;]

3. (No change from proposal.)

(b) – (i) (No change from proposal.)

7:27-24.7 Chemically formulated consumer products: testing

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

(d) Testing to determine whether a product is a liquid or a solid shall be performed using ASTM D4359-90*[(2000)e1]**(**2006**)*, "Standard Test Method for Determining Whether a Material is a Liquid or a Solid," as supplemented or amended, which is incorporated by reference herein.

(e) (No change from proposal.)

(f) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-*[04]**07b*, as supplemented or amended, which is incorporated by reference herein.

(g) Testing to determine whether a material is a "plasticizer" may be determined using ASTM Method E260-*[91, including subsequent revisions]****96(2006), as supplemented or amended*,** which is incorporated by reference herein.

*[(g)]****(h)*** -(i) (No change from proposal.)

7:27-24.8 Portable fuel containers and spill-proof spouts: certification requirements

(a) Except as provided at N.J.A.C. 7:27-24.2(e) ***and (c) and (d) below***, no person shall sell, offer for sale, hold for sale, advertise ***for sale***, distribute ***for sale***, supply ***for sale***, or manufacture for sale in New Jersey on or after *[(30 days after the operative date of these amendments)]* ***January 28, 2009***, any portable fuel container, spout, or any portable fuel container and spout that has not been exempted from CARB *[and]* ***or*** 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.**]* *1. For CARB certification, the product must be covered by a CARB Executive Order issued pursuant to 13 CCR 2467 through 2467.9; or

[**ii.**]* *2. 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) - (g) (No change from proposal.)

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

(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 re-register 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 (b) through (e) below.

Recodify existing (d)*[– (g)]* as (b)*[– (e)]* (No change in text)

*[(e)]**(c)* The registration shall be submitted in accordance with the following schedule:

1. For a spout, portable fuel container, or portable fuel container and spout sold in New Jersey *[prior to January 1, 2005, the registration shall be submitted on or

after June 6, 2004 and prior to January 1, 2005; and]* ***and not previously registered, the registration shall be submitted no later than the later of March 29, 2009, or within 90 days of selling the product in New Jersey.***

[2. For a spout, portable fuel container, or portable fuel container and spout sold in New Jersey on or after January 1, 2005, that was not sold in New Jersey prior to January 1, 2005, the registration shall be submitted prior to selling the product in New Jersey.]

Recodify existing *[(d) – (g)]***(f) and (g)*** as *[(b) – (e)]***(d) and (e)*** (No change in text)

7:27-24.12 Penalties and other requirements imposed for failure to comply
(a)-(b) (No change from proposal.)

(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 requiring the product's manufacturer to demonstrate to the satisfaction of the Department that the product in fact complies with the applicable requirements at N.J.A.C. 7:27-24.8 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. Requiring any distributor or supplier of the product to assist in a recall taking back any of the product it has distributed or supplied to a retail outlet; and/or

3. Prohibiting the sale of the product in New Jersey until the manufacturer demonstrates to the satisfaction of the Department that the product to be sold will meet the applicable requirements at N.J.A.C. 7:27-24.8.]*

SUBCHAPTER 26. 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.

…

"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.

…

"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.

…

"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 *[asphalt]****bituminous*** roof cement, *[asphalt roof coating]*and cold application cement.

…

"Plasticizer" means a material, such as a high boiling point organic solvent, that is incorporated into a plastic to increase its flexibility, workability, or distensibility*, **as determined by ASTM Method E-260-96(2006), including subsequent revisions****.

"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***.

…

"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.

…

"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.*

…

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. (No change from proposal.)

7:27-26.3 Requirements

(a) Except as provided in N.J.A.C. 7:27-26.4(e)***[**and**]*****,*** (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) ***[**and**]*****,*** (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) - (h) (No change from proposal.)

(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) - (g) (No change from proposal.)

***(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*[(b)]***(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. - 6. (No change from proposal.)

(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. - 4. (No change from proposal.)

(c) - (d) (No change from proposal.)

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 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, as supplemented or amended, and incorporated herein by reference. *

(b) The organic content of exempt compounds shall be determined using ASTM D4457-*[85]***02(2008)***, *[(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) -(d) (No change from proposal.)

(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 D 3792-*[79]***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:

$$Pp_c = \frac{\sum_{i-1}^{n} (W_i)\,(VP_i)/\,Mw_i}{\quad\quad}$$

$$W_w / Mw_w + \sum_{i-1}^{n} (W_e / Mw_e + \sum_{i-1}^{n} W_i / Mw_i$$

Where:

Ppc = 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 E 260-*[91]****96(2006), as supplemented or amended*****

Ww = Weight of water, in grams as determined by ASTM D 3792-*[86]****05, as supplemented or amended*****

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

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

Mwe = 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, PA 19428–2959, or from its website at www.astm.org.

(f) (No change from proposal.)

(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. (No change from proposal.)

(h) (No change from proposal.)

(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:

Grams of VOC per liter of adhesive = $\frac{Ws - Ww - We}{}$

$$Vm - Vw - Ve$$

Where

Ws = weight of volatile compounds, in grams
Ww = weight of water, in grams
We = weight of exempt compounds, in grams
Vm = volume of material, in liters
Vw = volume of water, in liters
Ve = volume of exempt compounds, in liters

(j) For adhesives**<u>*, sealants and primers,*</u>** 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:

$$\text{Grams of VOC per liter of adhesive} = \frac{Wrs - Wrw - Wre}{Vrm - Vrw - Vre}$$

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
Vrm = 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) ***<u>For low-solids adhesives, sealants or primers,*</u>** ***[**Grams**]*** ***<u>grams*</u>** of VOC per liter of material shall be calculated according to the following equation:

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

Where

Ws = weight of volatile compounds, in grams
Ww = weight of water, in grams
We = weight of exempt compounds, in grams
Vm = volume of material, in liters

(*l*) (No change from proposal.)

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. -2. (No change from proposal.)

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]* ***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. (No change from proposal.)

(b) -(c) (No change from proposal.)

SUBCHAPTER 34. TBAC EMISSIONS REPORTING

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.- 9. (No change from proposal.)

10. If the product containing TBAC is subject to the provisions of N.J.A.C. 7:27-***16,***23, 24 or 26, the category to which the product belongs; and

11. (No change from proposal.)

(b)-(d) (No change from proposal.)

CHAPTER 27A
AIR ADMINISTRATIVE PROCEDURES AND PENALTIES
SUBCHAPTER 3 CIVIL ADMINISTRATIVE PENALTIES AND REQUESTS FOR ADJUDICATORY HEARINGS

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

(a)-(*l*) (No change from proposal)

(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. - 25. (No change from proposal)

26. 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:

Citation and Rule Summary	**Class**	**Type of Violation**	**First 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 ***allowable*** standard	Manufacturer 87	NM	$ 300	$ 600	$ 1,500	$ 4,500
N.J.A.C. 7:27-26.3(a) From 25 through 50 percent over the allowable standard	Manufacturer	NM	$ 600	$ 1,200	$ 3,000	$ 9,000
N.J.A.C. 7:27-26.3(a) Greater than 50 percent over the allowable standard	Manufacturer	NM	$ 1,000	$ 2,000	$ 5,000	$ 15,000
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 ***allowable***standard	Distributor, Seller	NM	$ 300	$ 600	$ 1,500	$ 4,500
N.J.A.C. 7:27-26.3(b)	Distributor, Seller	NM	$ 600	$ 1,200	$ 3,000	$ 9,000

Citation and Rule Summary	**Class**	**Type of Violation**	**First Offense**	**Second Offense**	**Third Offense**	**Fourth and Each Subsequent Offense**
From 25 through 50 percent over the allowable standard						
N.J.A.C. 7:27-26.3(b) Greater than 50 percent over the allowable standard	Distributor, Seller	NM	$ 1,000	$ 2,000	$ 5,000	$ 15,000
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***allowable*** standard	Applicator	NM	$ 300	$ 600	$ 1,500	$ 4,500
N.J.A.C. 7:27-26.3(c) From 25 through 50 percent over the allowable standard	Applicator	NM	$ 600	$ 1,200	$ 3,000	$ 9,000
N.J.A.C. 7:27-26.3(c) Greater than 50 percent over the allowable standard	Applicator	NM	$ 1,000	$ 2,000	$ 5,000	$ 15,000
N.J.A.C. 7:27-26.3(e) Preparation or cleanup solvent	Applicator	NM	$ 1,000	$ 2,000	$ 5,000	$ 15,000
N.J.A.C. 7:27-26.3(g) Store or dispose of absorbent materials		NM	$ 500	$ 1,000	$ 2,500	$ 7,500

Citation and Rule Summary	**Class**	**Type of Violation**	**First Offense**	**Second Offense**	**Third Offense**	**Fourth and Each Subsequent Offense**
N.J.A.C. 7:27-26.3(h) Solicit non-complying product		NM	$ 1,000	$ 2,000	$ 5,000	$ 15,000
N.J.A.C. 7:27-26.5(a) Maintain ***[**Records**]*** ***__records__***		M	$ 500	$ 1,000	$ 2,500	$ 7,500
N.J.A.C. 7:27-26.5(b) Record keeping		M	$ 1,000	$ 2,000	$ 5,000	$ 15,000
N.J.A.C. 7:27-26.5(c) Maintain ***[**Records**]*** ***__records__***		M	$ 500	$ 1,000	$ 2,500	$ 7,500
N.J.A.C. 7:27-26.5(d)		M	$ 500	$ 1,000	$ 2,500	$ 7,500
N.J.A.C. 7:27-26.5(e) Maintain ***[**Records**]*** ***__records__***		M	$ 500	$ 1,000	$ 2,500	$ 7,500
N.J.A.C. 7:27-26.7(a) Labeling ***[**Requirements**]*** ***__requirements__***	Manufacturer	M	$ 2,000	$ 4,000	$ 10,000	$ 30,000
N.J.A.C. 7:27-26.7(b) Date or date-code requirement	Manufacturer	M	$ 2,000	$ 4,000	$ 10,000	$ 30,000
N.J.A.C. 7:27-26.8(a) Product and ***[**Date-code**]*** ***__date-code__***	Manufacturer	M	$ 500	$ 1,000	$ 2,500	$ 7,500

Citation and Rule Summary	Class	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
registration						

27. - 34. (No change from proposal)

(n) – (t) (No change from proposal)