

SUPPLEMENTAL BASIS STATEMENT
CHAPTER 159
CONTROL OF VOLATILE ORGANIC COMPOUNDS FROM ADHESIVES AND
SEALANTS

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COMMENTS

General Support and Consistency

1. Comment: The commenter found the rule to be consistent with the OTC Model Rule. (2)

Response: The Department acknowledges the commenter's support and affirmation of consistency with the OTC Model Rule.

Phase-in of Requirements for Single-Ply Roof Membrane

2. Comment: Several commenters expressed general support for the proposed rule, but recommended that the Department adopt a phase-in or transitional period for the requirements as they apply to the installation and repair of single-ply roof membrane. The commenters suggest that the proposed VOC limit be required only during the ozone season in 2011, and not year-round until 2012. The commenters contend that currently-compliant (water-based) products do not work well during the winter months, and that while compliant products that do work during winter are under development, they will not be commercially available until 2012. The commenters suggested that enforcing the tighter limits in 2011 would have a cascading negative effect on the economy and the livelihoods of those in the roofing business. (1, 4, 5, 7, 9, 10)

Response: The Department considers the commenters' concerns to be reasonable and has added the following language to Section 3 of the rule:

- F. The requirements of this rule shall apply to the use of single-ply roof membrane installation or repair adhesive, single-ply roof membrane sealant and single-ply roof membrane adhesive primer on the following schedule:
- (1) For the year 2011, from May 1 through September 30; and
 - (2) On and after January 1, 2012.
- G. The requirements of this rule shall not apply to any manufacturer or distributor who sells, supplies or offers for sale any single-ply roof membrane installation or repair adhesive, single-ply roof membrane sealant or single-ply roof membrane adhesive primer prior to January 1, 2012.

Section 1. General Provisions

3. Comment: The commenter recommended that the Department amend Section 1(A) Applicability, so that facilities that use compliant coatings in minimal quantities would not have to comply with all of the reporting and recordkeeping requirements. The commenter recommends referencing the exemptions to limit the applicable facilities to only those of concern with the addition of the following language in 1(A)(1) and (2), "...except as provided in Section 2 or Section 3." (6)

Response: The Department understands the commenter's concern regarding recordkeeping requirements for facilities that use compliant coatings. This provision has been amended to reduce this burden, but facilities will still be required to maintain records sufficient to demonstrate compliance with the rule. The Department has revised Sections 3(C) and 3(D) as follows:

- C. The provisions of this rule, except subsection 2(A) of this rule, shall not apply if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the source are less than 200 pounds per calendar year, or an equivalent volume. Any person claiming exemption pursuant to this subparagraph shall record and maintain monthly operational records sufficient to demonstrate compliance ~~and in accordance with section 4 of this rule.~~

- D. The provisions of this rule shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents provided the total volume of noncomplying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per calendar year. Any person claiming exemption pursuant to this subparagraph shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption ~~and in accordance with section 4 of this rule.~~
4. Comment: The commenter suggested that the rule should be limited to use and sale of adhesives and should not include the manufacture of these materials (Sections 1(A)(1) and 2(A)) because the rule allows for the use of noncompliant compounds in the exemptions for the small scale use of some of these materials and prohibiting the manufacture within Maine could create a competitive disadvantage for Maine companies. (6)

Response: The Department agrees with the commenter's concern and has revised Section 1(A)(1) as follows:

- (1) Sells, supplies, offers for sale or manufactures for sale in Maine any adhesive, sealant, adhesive primer or sealant primer in Maine.

Additionally, the Department has revised Section 2(A) and (B) as follows:

~~A. Except as provided in subsection 2(E) and Section 3 of this rule, on and after January 1, 2011, no person shall manufacture in Maine any adhesive, sealant, adhesive primer or sealant primer in excess of the applicable VOC content limits specified in Table 1.~~

~~B.A.~~ Except as provided in subsection 2(E) and Section 3 of this rule, on and after January 1, 2011, no person shall sell, supply, ~~or~~ offer for sale in Maine or manufacture for sale in Maine any adhesive, sealant, adhesive primer or sealant primer in excess of the applicable VOC content limits specified in Table 1.

Section 2. Requirements

5. Comment: The commenter suggests that Section 2(E)(4) may conflict with the Maine DEP Chapter 130 Solvent Cleaner regulations. (6)

Response: The Department agrees with the commenter and has revised Section 2(D)(4) (formerly Section 2(E)(4)) as follows:

(4) Removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment shall be performed ~~as follows:~~

- (a) ~~In an enclosed cleaning system, or equivalent cleaning system as determined by the test method identified in subsection 5(H) of this rule,~~
- (b) ~~Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material, or~~
- (c) ~~Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 mm Hg at 20 degrees Celsius and the parts and solvent are in a closed container that remains closed~~

~~except when adding parts to or removing parts from the container.~~ in accordance with 06-096 CMR Chapter 130 Solvent Cleaners.

6. Comment: The commenter urges the Department to revise the proposed rule to provide the DEP with the authority to waive the requirement in Section 2(F) that requires any source that uses a thermal incinerator to control VOCs to continuously monitor combustion temperature if a source is able to demonstrate that VOCs are subject to adequate temperature and retention times in the thermal incinerator to ensure adequate destruction. The commenter recommends the following language in Section 2(F)(2):

“The combustion temperature is monitored continuously if a thermal incinerator is operated, or the source demonstrates to the satisfaction of the Department that, based on the design of the incineration unit, VOC emissions are subjected to a minimum temperature of 1200 degrees F for at least 0.5 seconds; (8)

Response: The Department disagrees with the commenter because, while a thermal incineration unit may be designed to operate so that temperatures and retention times are consistent, these parameters must continue to be monitored to ensure that the unit is operating effectively. No change.

Section 3. Exemptions and Exceptions

7. Comment: The commenter recommends that adhesives and sealants used for facility maintenance be considered for inclusion among the Section 3 exemptions because the quantities of adhesive and sealant materials used in connection with facility maintenance throughout a calendar year is commonly small compared to the amount of adhesives or sealants used in manufacturing a product. The commenter points out that the Department has already implicitly recognized that the emissions from maintenance activities is insignificant, as repair and maintenance activities are listed as “insignificant activities” in Chapter 115, Appendix B, Section A.15, and recommends the following language be added to Section 3: “Adhesives, sealants, adhesive primers and sealant primers used for facility maintenance purposes.” (3)

Response: While certain activities may be considered “insignificant” in terms of licensing, they may still be regulated outside of licensing due to emissions of VOCs or other pollutants. For example, paints that are used in facility maintenance and not part of the air emission license are still regulated under Chapter 151 Architectural and Industrial Maintenance Coatings. If these activities are minimal, they will fall under the less than 55 gallons facility-wide compliance minimum, and therefore only need to meet the recordkeeping requirements, not the VOC limits. See the response to comment #3 for revised recordkeeping requirements.

8. Comment: The commenter recommends clarifying Section 3(A), which provides that Chapter 159 does not apply to the “use or sale of the following compound,” including adhesives, sealants, adhesive primers and sealant primers that “are subject” to Chapter 152 (Subsection 3(A)(2)). The commenter points out that Chapter 152 applies to “any person in the State of Maine who sells, supplies for use in Maine, offers for sale or manufactures consumer products.” Since Chapter 152 applies only to manufacturers of the regulated materials, it is unclear whether the cross reference to Chapter 152 that is set forth in Section

3(A)(2) would exempt users of the materials addressed by Chapter 152. The commenter recommends the following clarification be made to Section 3(A)(2) to ensure that consumer products that are already regulated by Chapter 152 are not also subject to Chapter 159: “Adhesives, sealants, adhesive primers and sealant primers that are subject regulated as consumer products under 06-096 C.M.R. Chapter 152 Control of Volatile Organic Compounds from Consumer Products.” (3)

Response: The Department agrees and has made the change as suggested by the commenter.

9. Comment: The commenter recommends that the Department add an exemption for “powder adhesives and polymeric adhesives” to Section 3(A), because these adhesives create bonding through the chemical reaction or polymerization process, and not through a solvent-based process, thus generating minimal VOC emissions. (8)

Response: The Department agrees and has added the following language to Section 3: “Adhesives and sealants that are applied in a dry, powdered form and activated without the use of solvent.”

10. Comment: The commenter suggests that in addition to exempting the use and sale of certain products for certain purposes in Section 3(B), the manufacture of these products in should also be included in the exemption. (6)

Response: The Department concurs and has made the suggested change to 3(A) and 3(B).

11. Comment: The commenter recommends that facilities subject to MACT (maximum achievable control technology) standards and/or a BACT (Best Available Control Technology) determination by the DEP that is at least as stringent as the requirements of Chapter 159 be exempt from this rule. (8)

Response: MACT standards and BACT determinations apply to specific processes or applications within a facility, while the proposed rule applies to adhesives used on a facility-wide basis. If the MACT or BACT is more stringent than Chapter 159, then the VOC limits are being met and the only requirement the facility will have to concern itself with is the recordkeeping requirements. No change.

12. Comment: The commenter recommends that an exemption should be included for operations subject to other Department VOC Rules such as Chapter 129, 123 or 151, or subject to EPA MACT requirements under Maine DEP Chapter 144. (6)

Response: The Department adopts multiple rules to address a wide range of sources of air pollutants. These rules are meant to work in concert with each other, applying to various products, processes and industries in an attempt to minimize emissions of air pollutants that are harmful to the health of Maine citizens. While the Department understands that multiple standards and requirements can seem onerous to affected sources, it is necessary to address different source categories separately. The rules cited by the commenter do not specifically address the products regulated in the proposed rule and therefore cannot serve the same purpose as the proposed rule, even if there is some degree of overlap. The goal is to reduce VOC emissions from all possible source categories. See also the response to comment #11. No change.

13. Comment: The commenter points out that the 55 gallon exemption in Section 3(D) is unclear. Section 3(D) of Chapter 159 provides that Sections 2(A) and 2(D) of the rule will not apply to the use of any of the regulated materials provided the total volume of noncompliant materials applied facility-wide does not exceed 55 gallons per calendar year. Section 2(A) addresses the manufacture of regulated materials and Section 2(D) clarifies the applicability of Table 1 requirements when multiple regulated materials are used. Thus, the reference to Section 2(A) in Section 3(D) appears contradictory because it cross references the standards for manufacturing in an exemption that appears intended for users. The commenter recommends that Section 3(D) be revised as follows to more clearly state that a facility is exempt from Chapter 159 provided it uses less than 55 gallons per year of noncompliant materials:

“The provisions of ~~Subsection 2(A) and 2(D)~~ of this rule shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents provided the total volume of non-complying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per calendar year. Any person claiming exemption pursuant to this Subparagraph shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with Section 4 of this rule.” (3)

Response: The Department agrees and has made the change as suggested.

Section 4. Administrative Requirements

14. Comment: The commenter recommends that Section 4(A)(6) be revised to provide an additional option for facilities to track VOCs based on purchase records as follows: “The monthly volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup or surface preparation solvent used or purchased.” The reason for this recommendation is that the commenter calculates VOC emissions from adhesives and sealants based on the information on MSDSs regarding percent VOCs (or volatiles) and purchase records. Given the nature of the commenter’s process, which involves the use of relatively small amounts of many materials at numerous locations and operations around the facility, it would be extremely onerous to maintain records of the amounts of adhesives and sealants actually used as opposed to purchased. Further, the commenter contends that recordkeeping and tracking of VOCs based on the amount of materials purchased, as opposed to use, is arguably a more conservative approach. (3)

Response: The Department concurs and has made the change as suggested. See also the response to comment #15.

15. Comment: The commenter suggests changing Section 4(A)(6) from a monthly requirement to an annual one. (6)

Response: The Department has made the change. See also the response to comment #14.

16. Comment: The commenter suggests that Section 4 should include a statement that materials subject to the exemption in Section 3 are not subject to the Requirements in Section 4. (6)

Response: As indicated in the response to Comments #3 and #7, the Department has concluded these requirements are necessary to track the adhesives used to demonstrate that they fall under the exempt categories. See the response to comment #3 for revised recordkeeping requirements.

17. Comment: The commenter recommends clarifying Section 4(B)(2) as follows: “On a daily basis, ~~the combustion temperature, inlet and exhaust gas temperatures and control device efficiency as appropriate, pursuant to subsection 2(E)~~ the control equipment operating parameters required to be monitored pursuant to subsection 2(F) of this rule.” (6)

Response: The Department agrees and has made the change as suggested.

Section 5. Compliance Procedures and Test Methods

18. Comment: The commenters point out that it is unclear whether a facility must conduct testing on every compound or if that facility can rely upon information set forth in Material Safety Data Sheet (MSDS), Technical Data sheet or Certificate of Analysis from the supplier or use a mass balance procedure if the ingredients of a particular adhesive or sealant are known. (3, 8)

Response: The Department agrees that this section is unclear and has added the following language to Section 5: “Any person who sells, supplies, offers for sale or manufactures an adhesive, sealant, adhesive primer or sealant primer subject to this rule on or after January 1, 2011 for sale in Maine shall possess documentation that such adhesive, sealant, adhesive primer or sealant primer complies with the VOC limits in Table 1 of this rule, where the VOC content is determined according to the requirements of this section.”

19. Comment: Section 5(F)(5) should be modified to allow for additional sources approved by the Maine DEP, rather than “additional sources approved by the SCAQMD or other California air districts.” (6)

Response: The Department agrees and has made the suggested change.

Cross-References

20. Comment: The commenter points out that the cross-reference in Sections 2(A), (B) and (C) to Section 2(E) in should actually be to Section 2(F). (8)

Response: While this comment was correct in the proposed draft, Section 2(A) has been deleted from the revised draft (see response to comment #4) and now due to renumbering, the reference is correct.

21. Comment: The commenter points out that the reference in Section 2(E)(3) to Section 2(D)(4) should actually reference Section 2(E)(4). (8)

Response: While this comment was correct in the proposed draft, Section 2(A) has been deleted from the revised draft (see response to comment #4) and now due to renumbering, the reference is correct.

22. Comment: The commenter points out that the reference in Section 2(F) to Sections 2(B) and (D) should actually reference Sections 2(B) and (C). (8)

B. *Response: The Department has changed this section to read: “A person using an adhesive, sealant, adhesive primer or sealant primer subject to this rule may comply with ~~subsections 2(B) and (D)~~ the VOC limits in Table 1 of this section rule using add-on air pollution control equipment if such equipment meets the following requirements:...”*

23. Comment: The commenter points out that the reference in Section 3(D) to Section 2(A) and 2(D) should actually reference Section 2(C). (8)

Response: See response to Comment #13.

24. Comment: The commenter points out that the reference in Section 3(E) to Section 2(E) should actually reference Section 2(F). (8)

Response: While this comment was correct in the proposed draft, Section 2(A) has been deleted from the revised draft (see response to comment #4) and now due to renumbering, the reference is correct.

25. Comment: The commenter points out that the reference in Section 3(E) to Section 2(A) may be incorrect because Section 2(A) is specific to manufacture, but 3(E) is an exemption for the sale of materials. (6)

Response: While this comment was correct in the proposed draft, Section 2(A) has been deleted from the revised draft (see response to comment #4) and now due to renumbering, the reference is correct.

26. Commenter: The commenter suggests that the reference in Section 4(B) to Section 2(A) may be incorrect since Section 2(A) is specific to manufacture, but 4(B) deals with the use of the materials. (6)

Response: While this comment was correct in the proposed draft, Section 2(A) has been deleted from the revised draft (see response to comment #4) and now due to renumbering, the reference is correct.