

TABLE 15 TO SUBPART WWWW OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS (SUBPART A) TO SUBPART WWWW OF PART 63—Continued

[As specified in § 63.5925, the parts of the General Provisions which apply to you are shown in the following table:]

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63 . . .	Subject to the following additional information . . .
§ 63.10(c)(2) through (4)	Reserved	No.	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§ 63.10(c)(5) through (8)	CMS records	Yes	
§ 63.10(c)(9)	Reserved	No.	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§ 63.10(c)(10) through (15)	CMS records	Yes	
§ 63.10(d)(1)	General reporting requirements	Yes.	Subpart WWWW of Part 63 does not contain opacity or visible emission standards.
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting results of opacity or visible emission observations.	No	
§ 63.10(d)(4)	Progress reports as part of extension of compliance.	Yes.	Only applies if you use an add-on control device.
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports.	Yes	
§ 63.10(e)(1) through (3)	Additional reporting requirements for CMS.	Yes	
§ 63.10(e)(4)	Reporting COMS data	No	Subpart WWWW of Part 63 does not contain opacity standards.
§ 63.10(f)	Waiver for recordkeeping or reporting	Yes.	
§ 63.11	Control device requirements	Yes	Only applies if you elect to use a flare as a control device.
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses of State air pollution control agencies and EPA Regional Offices.	Yes.	
§ 63.14	Incorporations by reference	Yes.	
§ 63.15	Availability of information and confidentiality.	Yes.	

Appendix A to Subpart WWWW—Test Method for Determining Vapor Suppressant Effectiveness

1. Scope and Application

1.1 *Applicability.* If a facility is using vapor suppressants to reduce hazardous air pollutant (HAP) emissions, the organic HAP emission factor equations in Table 1 to this subpart require that the vapor suppressant effectiveness factor be determined. The vapor suppressant effectiveness factor is then used as one of the inputs into the appropriate organic HAP emission factor equation. The vapor suppressant effectiveness factor test is not intended to quantify overall volatile emissions from a resin, nor to be used as a stand-alone test for emissions determination. This test is designed to evaluate the performance of film forming vapor suppressant resin additives. The results of this test are used only in combination with the organic HAP emissions factor equations in Table 1 to this subpart to generate emission factors.

1.1.1 The open molding process consists of application of resin and reinforcements to the mold surface, followed by a manual rollout process to consolidate the laminate, and the curing stage where the laminate surface is not disturbed. Emission studies have shown that approximately 50 percent to 55 percent of the emissions occur while the resin is being applied to the mold. Vapor

suppressants have little effect during this portion of the lamination process, but can have a significant effect during the curing stage. Therefore, if a suppressant is 100 percent effective, the overall emissions from the process would be reduced by 45 percent to 50 percent, representing the emissions generated during the curing stage. In actual practice, vapor suppressant effectiveness will be less than 100 percent and the test results determine the specific effectiveness in terms of the vapor suppressant effectiveness factor. This factor represents the effectiveness of a specific combination of suppressant additive and resin formulation.

1.1.2 A resin manufacturer may supply a molder with a vapor-suppressed resin, and employ this test to provide the molder with the vapor suppressant effectiveness factor for that combination of resin and vapor suppressant. The factor qualifies the effectiveness of the vapor suppressant when the resin is tested in the specific formulation supplied to the molder. The addition of fillers or other diluents by the molder may impact the effectiveness of the vapor suppressant. The formulation, including resin/glass ratio and filler content, used in the test should be similar to the formulation to be used in production. The premise of this method is to compare laminate samples made with vapor suppressant additive and made without the additive. The difference in

emissions between the two yields the vapor suppressant effectiveness factor.

1.1.3 The method uses a mass balance determination to establish the relative loss of the volatile component from unsaturated polyester or vinyl ester resins, with and without vapor suppressant additives. The effectiveness of a specific vapor suppressant and resin mixture is determined by comparing the relative volatile weight losses from vapor suppressed and non-suppressed resins. The volatile species are not separately analyzed. While the species contained in the volatile component are not determined, an extended listing of potential monomer that may be contained in unsaturated polyester or vinyl ester resins is provided in Table 1.1. However, most polyester and vinyl ester resin formulations presently used by the composites industry only contain styrene monomer.

TABLE 1.1.—LIST OF MONOMERS POTENTIALLY PRESENT IN UNSATURATED POLYESTER/VINYL ESTER RESINS

Monomer	CAS No.
Styrene	100–42–5.
Vinyl toluene	25013–15–4.
Methyl methacrylate	80–62–6.
Alpha methyl styrene	98–83–9.