NESHAP - 40 CFR 63 Subpart WWWW--National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production

Table 1 to Subpart WWWW of Part 63 - Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams[1]

As required in § 63.5810, used the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	**And you use**	**With**	**Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat)** [2,3,4]	**Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat)** [2,3,4]
1. Open Molding Operation	a. manual resin application	i. nonvapor-suppressed resin	EF = 0.126 x % HAP x 2000	EF = ((0.286 x %HAP)-0.0529) x 2000
		ii. vapor suppressed resin	EF = 0.126 x % HAP x 2000 x (1-(0.5 x VSE factor))	EF = ((0.286 x %HAP)-0.0529) x 2000 x (1-(0.5 x VSE factor))
		iii. vacuum bagging/closed mold curing with roll out	EF = 0.126 x % HAP x 2000 x 0.8	EF = ((0.286 x %HAP)-0.0529) x 2000 x 0.8
		iv. vacuum bagging/`closed mold curing without roll-out	EF = (0.126 x % HAP x 2000 x 0.5	EF = ((0.286 x %HAP)-0.0529) x 2000 x 0.5
	b. atomized mechanical resin application	i. nonvapor-suppressed resin	EF = 0.169 x %HAP x 2000	EF = ((0.714 x %HAP)-0.18) x 2000
		ii. vapor-suppressed resin	EF = 0.169 x %HAP x 2000 x (1-(0.45 x VSE factor))	EF = ((0.714 x %HAP)-0.18) x 2000 x (1-(0.45 x VSE factor))
		iii. vacuum bagging/closed mold curing with roll out	EF = 0.169 x %HAP x 2000 x 0.85	EF = ((0.714 x %HAP)-0.18) x 2000 x 0.85
		iv. vacuum bagging/`closed mold curing without roll-out	EF = 0.169 x %HAP x 2000 x 0.55	EF = ((0.714 x %HAP)-0.18) x 2000 x 0.55
	c. nonatomized mechanical resin application	i. nonvapor-suppressed resin	EF = 0.107 x %HAP x 2000	EF = ((0.157 x %HAP)-0.0165) x 2000
		ii. vapor-suppressed resin	EF = 0.107 x %HAP x 2000 x (1-(0.45 x VSE factor))	EF = ((0.157 x %HAP)-0.0165) x 2000 x (1-(0.45 x VSE factor))
		iii. closed-mold curing with roll out	EF = 0.107 x %HAP x 2000 x 0.85	EF = ((0.157 x %HAP)-0.0165) x 2000x 0.85
		iv. vacuum bagging/`closed mold curing without roll-out	EF = 0.107 x %HAP x 2000 x 0.55	EF = ((0.157 x %HAP)-0.0165) x 2000 x 0.55
	d. atomized mechanical resin application with robotic or automated spray control [5]	nonvapor-suppressed resin	EF = 0.169 x %HAP x 2000 x 0.77	EF = 0.77 x ((0.714 x %HAP)-0.18) x 2000
	e. filament application [6]	i. nonvapor-suppressed resin	EF = 0.184 x %HAP x 2000	EF = ((0.2746 x %HAP)-0.0298) x 2000

Table 1 to Subpart WWWW of Part 63 - Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams[1]

As required in § 63.5810, used the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	And you use	With	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) [2,3,4]	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) [2,3,4]
		ii. vapor-suppressed resin	EF = 0.12 x %HAP x 2000	EF = ((0.2746 x %HAP)-0.0298) x 2000 x 0.65
	f. atomized spray gel coat application	nonvapor-suppressed gel coat	EF = 0.445 x %HAP x 2000	EF = ((1.03646 x %HAP)-0.195) x 2000
	g. nonatomized spray gel coat application	nonvapor-suppressed gel coat	EF = 0.185 x %HAP x 2000	EF = ((0.4506 x %HAP)-0.0505) x 2000
	h. manual gel coat application f	nonvapor-suppressed gel coat	EF = 0.126 x % HAP x 2000 (for emissions estimation only, see footnote f)	EF = ((0.286 x %HAP)-0.0529) x 2000 (for emissions estimation only, see footnote f)
2. centrifugal casting operations [7,8]	heated air blown through molds	novapor-suppressed resin	EF = 0.558 x (%HAP) x 2000	EF = 0.558 x (%HAP) x 2000
	vented molds, but air vented through the molds is not heated	nonvapor-suppressed resin	EF = 0.026 x (%HAP) x 2000	EF = 0.026 x (%HAP) x 2000

Footnotes to Table 1

1-The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in subpart WWWW. These equations may not be the most appropriate methods to calculate emission estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other tan rule compliance if these equations are the most accurate available.

2 -To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of §63.5810. The organic HAP emissions factors have units of lbs of organic HAP per ton of resin or gel coat applied.

3- Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e. 33 percent HAP should be input as 0.33, not 33.

4- The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.

5- This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.

6- Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.

f Do not use this equation for determining compliance with emission limits in Tables 3 or 5 to this subpart. To determine compliance with emission limits you must treat all gel coat as if were applied as part of your gel coat spray application operations. If you apply gel coat by manual techniques only, you must treat the gel coat as if it were applied with atomized spray and use Equation 1.f. to determine compliance with the appropriate emission limits in Tables 3 or 5 to this subpart. To estimate emissions from manually applied gel coat, you may either include the gel coat quantities you apply manually with the quantities applied using spray, or use this equation to estimate emissions from the manually applied portion of your gel coat.

7- These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.

8- If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

Table 2 to Subpart WWWW of Part 63 - Compliance Dates for New and Existing Reinforced Plastic Composites Facilities

As required in §§63.5800 and 63.5840 you must demonstrate compliance with the standards by the dates in the following table:

If your Facility is	and	**then you must comply by this date:**
1. an existing source	a. is a major source on or before the publication date of this subpart	i. [April 21, 2006 or ii. you must accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006
2. an existing source that is an area source	becomes a major source after the publication date of this subpart	3 years after becoming a major source or April 21, 2006 whichever is later.
3. an existing source, and emits less than 100 tpy of organic HAP from the combination of all centrifugal casting and continuous lamination/casting operations at the time of initial compliance with this subpart	Subsequently increases its actual organic HAP emissions to 100 tpy or more from these operations, which requires that the facility must now comply with the standards in §63.5805(b)	3 years of the date your semi-annual compliance report indicates your facility meets or exceeds the 100 tpy threshold.
4. a new source	is a major source at startup	upon startup or April 21, 2003, whichever is later.
5. a new source	is an area source at startup and becomes a major source	immediately upon becoming a major source.
6. a new source, and emits less than 100 tpy of organic HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC and BMC manufacturing, and mixing operations at the time of initial compliance with this subpart	Subsequently increases its actual organic HAP emissions to 100 tpy or more from the combination of these operations, which requires that the facility must now meet the standards in §63.5805(d)	3 years from the date that your semi-annual compliance report indicates your facility meets or exceeds the 100 tpy threshold.

Table 3 to Subpart WWWW of Part 63 - Organic HAP Emissions Limits for Specific Open Molding, Centrifugal Casting. Pultrusion and Continuous Lamination/Casting Sources

If your operation type is...	**And you use...**	**Your organic HAP emissions limit is a...[1]**
1. open molding - corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application	113 lb/ton
	b. filament application	171 lb/ton
	c. manual resin application	123 lb/ton
2. open molding - non-CR/HS	a. mechanical resin application	88 lb/ton
	b. filament application	188 lb/ton
	c. manual resin application	87 lb/ton
3. open molding - tooling	a. mechanical resin application	254 lb/ton
	b. manual resin application	157 lb/ton
4. open molding – lowflame spread/low-smoke products	a. mechanical resin application	497 lb/ton
	b. filament application	270 lb/ton
	c. manual resin application	238 lb/ton
5. open molding - shrinkage controlled resins[2]	a. mechanical resin application	354 lb/ton
	b. filament application	215 lb/ton
	c. manual resin application	180 lb/ton
6. open molding - gel coat [3]	a. tooling gel coating	440 lb/ton
	b. white/off white pigmented gel coating	267 lb/ton
	c. all other pigmented gel coating	377 lb/ton
	d. CR/HS or high performance gel coat	605 lb/ton
	e. fire retardant gel coat	854 lb/ton
	f. clear production gel coat	522 lb/ton
7. centrifugal casting - CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure, b. resin application with the mold closed, and the mold is not vented during spinning and cure, c. resin application with the mold open, and the mold is vented during spinning and cure, d. resin application with the mold open and the mold is not vented during spinning and cure	25 lb/ton [4] NA- this is considered to be a closed molding operation 25 lb/ton[4] Use the appropriate open molding emission limit[5]
8. centrifugal casting - non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure, b. resin application with the mold closed, and the mold is not vented during spinning and cure, c. resin application with the mold open, and the mold is vented during spinning and cure, d. resin application with the mold open and the mold is not vented during spinning and cure	20 lb/ton [4] NA- this is considered to be a closed molding operation 20 lb/ton[4] Use the appropriate open molding emission limit[5]
9. Pultrusion [6]	N/A	reduce total organic HAP emissions by at least 60 weight percent
10. continuous lamination/ casting	N/A	reduce total organic HAP emissions by at least 58.5 weight percent or not exceed a organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus

Table 3 to Subpart WWWW of Part 63 - Organic HAP Emissions Limits for Specific Open Molding, Centrifugal Casting. Pultrusion and Continuous Lamination/Casting Sources

Footnotes to Table 3

1 Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. You must be at or below these values based on a 12-month rolling average.

2 This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

3 If you only apply gel coat with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors. If you use multiple application methods and any portion of a specific gel coat is applied using nonatomized spray, you may use the nonatomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

4 For compliance purposes, calculate your emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to this subpart, or a site specific emission factor for after the mold is closed as discussed in Sec. 63.5796.

5 Calculate your emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to this subpart, or a site specific emission factor as discussed in Sec. 63.5796.

6 Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to this subpart.

Table 4 to Subpart WWWW of Part 63 - Work Practice Standards

For…	You Must
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
2. a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAPcontaining materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.
6. all mixing or BMC manufacturing operations1	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.
7. all mixing or BMC manufacturing operations1	close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.
8. all mixing or BMC manufacturing operations1	keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement.	i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wetout area(s), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), iv. direct any compressed air exhausts away from resin and wet-out area(s), v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air, vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s)from reservoirs, tanks, or sumps where practical.

a Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

Table 5 to Subpart WWW of Part 63.—Alternative Organic HAP Emissions Limits for Open Molding, Centrifugal Casting, and SMC Manufacturing Operations Where the Standards are Based on a 95 Percent Reduction Requirement

As specified in § 63.5805, as an alternative to the 95 percent organic HAP emissions reductions requirement, you may meet the appropriate organic HAP emissions limits in the following table:

If your operation type is...	And you use...	Your organic HAP emissions limit is a...
1. open molding – corrosionresistant and/or high strength(CR/HS)	a. mechanical resin application	6 lb/ton
	b. filament application	9 lb/ton
	c. manual resin application	7 lb/ton
2. open molding - non-CR/HS	a. mechanical resin application	13 lb/ton
	b. filament application	10 lb/ton
	c. manual resin application	5 lb/ton
3. open molding - tooling	a. mechanical resin application	13 lb/ton
	b. manual resin application	8 lb/ton
4. open molding - low flame spread/low smoke products	a. mechanical resin application	25 lb/ton
	b. filament application	14 lb/ton
	c. manual resin application	12 lb/ton
5. open molding – shrinkage controlled resins	a. mechanical resin application	18 lb/ton
	b. filament application	11 lb/ton
	c. manual resin application	9 lb/ton
6. open molding - gel coat b	a. tooling gel coating	22 lb/ton
	b. white/off white pigmented gel coating	22 lb/ton
	c. all other pigmented gel coating	19 lb/ton
	d. CR/HS or high performance gel coat	31 lb/ton
	e. fire retardant gel coat	43 lb/ton
	f. clear production gel coat	27 lb/ton
7. centrifugal casting - CR/HS c, d	a vent system that	27 lb/ton
8. centrifugal casting - non- CR/HS c, d	moves heated air	21 lb/ton
7. centrifugal casting - CR/HS c, d	a vent system that moves ambient air through the mold	2 lb/ton
8. centrifugal casting - non- CR/HS c, d	a vent system that moves ambient air through the mold	1 lb/ton
9. SMC Manufacturing	N/A	2.4 lb/ton

a Organic HAP emissions limits for open molding and centrifugal casting expressed as lb/ton are calculated using the equations shown in Table 1 to this subpart. You must be at or below these values based on a 12-month rolling average.

b These limits are for spray application of gel coat. Manual gel coat application must be included as part of spray gel coat application for compliance purposes using the same organic HAP emissions factor equation and organic HAP emissions limit. If you only apply gel coat with manual application, treat the manually applied gel coat as if it were applied with atomized spray for compliance determinations.

C Centrifugal casting operations where the mold is not vented during spinning and cure are considered to be closed molding and are not subject to any emissions limit. Centrifugal casting operations where the mold is not vented during spinning and cure, and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques are considered to be open molding operations and the appropriate open molding emission limits apply.

d Centrifugal casting operations where the mold is vented during spinning and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques, use the appropriate centrifugal casting emission limit to determine compliance. Calculate your emission factor using the appropriate centrifugal casting emission factor in Table 1 to this subpart, or a site specific emission factor as discussed in §63.5796.

Table 6 to Subpart WWWW of Part 63 - Basic Requirements for Performance Tests, Performance Evaluations, and Design Evaluations for New and Existing Sources Using Add-On Control Devices

As required in §63.5850 you must conduct performance tests, performance evaluations, and design evaluation according to the requirements in the following table:

For	You Must	Using	According to the following requirements
1. each enclosure used to collect and route organic HAP emissions to an add-on control device that is a PTE	meet the requirements for a PTE	EPA method 204 of appendix M of 40 CFR part 51	Enclosures that meet the requirements of EPA Method 204 of appendix M of 40 CFR part 51 for a PTE are assumed to have a capture efficiency of 100%. Note that the criteria that all access doors and windows that are not treated as natural draft openings shall be closed during routine operation of the process is not intended to require that these doors and windows be closed at all times. It means that doors and windows must be closed any time that you are not actually moving parts or equipment through them. Also, any styrene retained in hollow parts and liberated outside the PTE is not considered to be a violation of the EPA Method 204 criteria.
2. each enclosure used to collect and route organic HAP emissions to an add-on control device that is not a PTE	a. determine the capture efficiency of each enclosure used to capture organic HAP emissions sent to an add-on control device	i. EPA methods 204B through E of appendix M of 40 CFR part 51, or	(1) Enclosures that do not meet the requirements for a PTE must determine the capture efficiency by constructing a temporary total enclosure according to the requirements of EPA Method 204 of appendix M of 40 CFR part 51 and measuring the mass flow rates of the organic HAP in the exhaust streams going to the atmosphere and to the control device. Test runs for EPA Methods 204B through E of appendix M of 40 CFR part 51 must be at least 3 hours.
		ii. an alternative test method that meets the requirements in 40 CFR part 51, appendix M.	(1) The alternative test method must the data quality objectives and lower confidence limit approaches for alternative capture efficiency protocols requirements contained in 40 CFR part 63 subpart KK, appendix A.
3. each control device used to comply with a percent reduction requirement, or a organic HAP emissions limit	determine the control efficiency of each control device used to control organic HAP emissions	the test methods specified in §63.5850 to this subpart.	Testing and evaluation requirements are contained in 40 CFR part 63, subpart SS, and §63.5850 to this subpart.
4. Determining organic HAP emission factors for any operation	determine the mass organic HAP emissions rate	the test methods specified in §63.5850 to this subpart.	Testing and evaluation requirements are contained in 40 CFR part 63, subpart SS, and 63.5850 to this subpart.

Table 7 to Subpart WWWW of Part 63 - Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

As specified in § 63.5810(d), when electing to use the same resin(s) for multiple resin application methods, you may use any resin(s) with an organic HAP content less than or equal to the values shown in the following table, or any combination of resins whose weighted average organic HAP content based on a 12-month rolling average is less than or equal to the values shown the following table:

If your facility has the following resin type and application method...	**The highest resin weight percent organic HAP content, or weighted average weight percent organic HAP content, you can use for...**	**is...**
1. CR/HS resins, centrifugal casting [1,2]	a. CR/HS mechanical	48.0 [3]
	b. CR/HS filament application	48.0
	c. CR/HS manual	48.0
2. CR/HS resins, nonatomized mechanical	a. CR/HS filament application	46.4
	b. CR/HS manual	46.4
3. CR/HS resins, filament application	CR/HS manual	42.0
4. non-CR/HS resins, filament application	a. non-CR/HS mechanical	45.0 [3]
	b. non-CR/HS manual	45.0
	c. non-CR/HS centrifugal casting [1,2]	45.0
5. non-CR/HS resins, nonatomized mechanical	a. non-CR/HS manual	38.5
	b. non-CR/HS centrifugal casting	38.5
6. non-CR/HS resins, centrifugal casting	non-CR/HS manual	37.5
7. tooling resins, nonatomized mechanical	tooling manual	91.4
8. tooling resins, manual	tooling atomized mechanical	45.9

1 If the centrifugal casting operation blows heated air through the molds, then 95 percent capture and control must be used if the facility wishes to use this compliance option.
2 If the centrifugal casting molds are not vented, the facility may treat the centrifugal casting operations as if they were vented if they wish to use this compliance option.
3 Nonatomized mechanical application must be used.

Table 8 to Subpart WWWW of Part 63 - Initial Compliance With organic HAP Emissions Limits

As specified in § 63.5860(a), you must demonstrate initial compliance with organic HAP emissions limits as specified in the following table:

For	That must meet the following organic HAP emissions limit...	You have demonstrated initial compliance if...
1. open molding and centrifugal casting operations	a. a organic HAP emissions limit shown in Tables 3 or 5 to this subpart, or an organic HAP content limit shown in Table 7 to this subpart	i. you have met the appropriate organic HAP emissions limits for these operations as calculated using the procedures in § 63.5810 on a 12-month rolling average 1 year after the appropriate compliance date, and/or ii. you demonstrate that any individual resins or gel coats not included in (i) above, as applied, meet their applicable emission limits, or iii. you demonstrate using the appropriate values in Table 7 to this subpart that the weighted average of all resins and gel coats for each resin type and application method meet the appropriate organic HAP contents.
2. open molding, centrifugal casting, continuous lamination/ casting, SMC and BMC manufacturing, and mixing operations	a. reduce total organic HAP emissions by at least 95 percent by weight	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 95 percent by weight.
3.continuous lamination/ casting operations	a. reduce total organic HAP emissions by at least 58.5 weight percent, or	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, are reduced by at least 58.5 percent by weight.
	b. not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, do not exceed 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.
4.continuous lamination/ casting operations	a. reduce total organic HAP emissions by at least 95 weight percent or	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, are reduced by at least 95 percent by weight.
	b. not exceed an organic HAP emissions limit of 1.47 lbs of organic HAP per ton of neat resin plus and neat gel coat plus	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 and the calculation procedures specified in §§63.5865 through 63.5890, do not exceed 1.47 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.
5.pultrusion operations	a. reduce total organic HAP emissions by at least 60 percent by weight	i. total organic HAP emissions, based on the results of the capture efficiency and add-on control device destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 60 percent by weight, and ii. as part of the notification of initial compliance status, the owner/operator submits a certified statement that all pultrusion lines not controlled with an add-on control device are using direct die injection, perform injection, and/or wet-area enclosures that meet the criteria of §63.5830.
6.pultrusion operations	a. reduce total organic HAP emissions by at least 95 percent by weight	i. total organic HAP emissions, based on the results of the capture efficiency and add-on control device destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 95 percent by weight.

Table 9 to Subpart WWWW of Part 63. Initial Compliance With Work Practice Standards

As required in §63.5860(a), you must demonstrate initial compliance with work practice standards as specified in the following table:

For	That must meet the following standard...	You have demonstrated initial compliance if...
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.	the owner or operator submits a certified statement in the notice of compliance status that only one charge is uncovered, unwrapped or exposed per mold cycle per compression/injection molding machine, or prior to the loader, hoppers are closed except when adding materials, and materials are recovered after slitting.
2. a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used in closed systems, and organic HAP containing materials may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin between storage and applying resin to the mold or reinforcement.	the owner or operator submits a certified statement in the notice of compliance status that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment contain no HAP.
3. a new or existing materials HAP containing materials storage operation	keep containers that store HAP containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.	the owner or operator submits a certified statement in the notice of compliance status that all HAP-containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.	the owner or operator submits a certified statement in the notice if compliance status that he resin delivery system is closed or covered.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.	the owner or operator submits a certified statement in the notice of compliance status that nylon-containing film is used to enclose SMC.
6. an existing or new mixing or BMC manufacturing operation	use mixer covers with no visible gaps present in the mixer covers, except that gaps up to 1 inch are permissible around mixer shafts and any required instrumentation.	the owner or operator submits a certified statement in the notice of compliance status that mixer covers are closed during mixing except when adding materials to the mixers, and that gaps around mixer shafts and required instrumentation are less than 1 inch.
7. an existing mixing or BMC manufacturing operation	not actively vent mixers to the atmosphere while the mixing agitator is turning, except that venting is allowed during addition of materials, or as necessary prior to adding materials for safety.	the owner or operator submits a certified statement in the notice compliance status that mixers are not actively vented to the atmosphere when the agitator is turning except when adding materials or as necessary for safety.
8. a new or existing mixing or BMC manufacturing operation	keep the mixer covers closed during mixing except when adding materials to the mixing vessels.	the owner or operator submits a certified statement in the notice of compliance status that mixers closed except when adding materials to the mixing vessels

Table 9 to Subpart WWWW of Part 63. Initial Compliance With Work Practice Standards

As required in §63.5860(a), you must demonstrate initial compliance with work practice standards as specified in the following table:

For	That must meet the following standard...	You have demonstrated initial compliance if...
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement.	i. Not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), iv. direct any compressed air exhausts away from resin and wet-out area(s), v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air, vi. clover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.	the owner or operator submits a certified statement in the notice of compliance status that they have complied with all the requirements listed in 9.i through 9.vii.

Table 10 to Subpart WWWW of Part 63 - Data Requirements for New and Existing Continuous Lamination Lines and Continuous Casting Lines Complying with a Percent Reduction Limit on a Per Line Basis

As required in §63.5865(a), in order to comply with a percent reduction limit for continuous lamination lines and continuous casting lines you must determine the data in the following table:

For each line where the wetout area...	And the oven...	You must determine...
1. has an enclosure that is not a permanent total enclosure (PTE) and the captured organic HAP emissions are controlled by an add-on control device	a. is uncontrolled	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv the capture efficiency of the wet-out area enclosure, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
2. has an enclosure that is a PTE and the captured organic HAP emissions are controlled by an add-on control device	a. is uncontrolled	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv. that the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
3. is uncontrolled	a. is controlled by an add-on control device	i. annual uncontrolled wetout area organic HAP emissions, ii. annual uncontrolled oven organic HAP emissions, iii. annual controlled oven organic HAP emissions, iv. the capture efficiency of the oven, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
4. has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device	a. is controlled by an add-on control device	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv. annual controlled oven organic HAP emissions; v. the capture efficiency of the wet-out area enclosure, vi. inlet organic HAP emissions to the add-on control device, vii. outlet organic HAP emissions from the add-on control device, and viii. the amount of neat resin plus and neat gel coat plus applied.
5. has an enclosure that is a PTE and the captured organic HAP emissions are controlled by an add-on control device	a. is controlled by an add-on control device	i. that the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE, ii. the capture efficiency of the oven, and iii. the destruction efficiency of the add-on control device.

Table 11 to Subpart WWWW of Part 63 - Data Requirements for New and Existing Continuous Lamination and Continuous Casting Lines Complying with a Percent Reduction Limit or a Lbs/Ton Limit on an Averaging Basis

As required in §63.5865, in order to comply with a percent reduction limit or a lbs/ton limit on an averaging basis for continuous lamination lines and continuous casting lines you must determine the data in the following table:

For Each	That	You Must Determine
1. wet-out area	is uncontrolled	annual uncontrolled wetout area organic HAP emissions.
2. wet-out area	a. has an enclosure that is not a PTE	i. the capture efficiency of the enclosure, and ii. annual organic HAP emissions that escape the enclosure.
3. wet-out area	has an enclosure that is a PTE	that the enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE.
4. oven	is uncontrolled	annual uncontrolled oven organic HAP emissions.
5. line	a. is controlled or uncontrolled	i. the amount of neat resin plus applied, and ii. the amount of neat gel coat plus applied.
6. add-on control device		i. total annual inlet organic HAP emissions, and total annual outlet organic HAP emissions.

Table 12 to Subpart WWWW of Part 63. Data Requirements for New and Existing Continuous Lamination Lines and Continuous Casting Lines Complying with a Lbs/Ton Organic HAP Emissions Limit on a Per Line Basis

As required in §63.5865(b), in order to comply with a lbs/ton organic HAP emissions limit for continuous lamination lines and continuous casting lines you must determine the data in the following table:

For each line where the wetout area ...	And the oven...	You must determine ...
1. is uncontrolled	a. is uncontrolled	i. annual uncontrolled wetout area organic HAP emissions, ii. annual uncontrolled oven organic HAP emissions, and iii. annual neat resin plus and neat gel coat plus applied.
2. has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device	a. is uncontrolled	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv. the capture efficiency of the wet-out area enclosure, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
3. has an enclosure that is a PTE, and the captured organic HAP emissions are controlled by an add-on control device	a. is uncontrolled	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv. that the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
4. is uncontrolled	a. is controlled by an add-on control device	i. annual uncontrolled wetout area organic HAP emissions, ii. annual uncontrolled oven organic HAP emissions, iii. annual controlled oven organic HAP emissions, iv. the capture efficiency of the oven, v. the destruction efficiency of the add-on control device, and vi. the amount of neat resin plus and neat gel coat plus applied.
5. has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device	a. is controlled by an add-on control device	i. annual uncontrolled wetout area organic HAP emissions, ii. annual controlled wetout area organic HAP emissions, iii. annual uncontrolled oven organic HAP emissions, iv. annual controlled oven organic HAP emissions, v. the capture efficiency of the wet-out area enclosure, vi. the capture efficiency of the oven, vii. the destruction efficiency of the add-on control device, and viii. the amount of neat resin plus and neat gel coat plus applied.
6. has an enclosure that is a PTE, and the captured organic HAP emissions are controlled by an add-on control device	a. is controlled by an add-on control device	i. that the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE, ii. the capture efficiency of the oven, iii. inlet organic HAP emissions to the add-on control device, and iv. outlet organic HAP emissions from the add-on control device.

Table 13 to Subpart WWWW of Part 63. Applicability and Timing of Notifications

As required in §63.5905(a), you must determine the applicable notifications and submit them by the dates shown in the following table:

If your facility...	You must submit...	By this date.
1. is an existing source subject to this subpart	an Initial Notification containing the information specified in §63.9(b)(2)	no later than the dates specified in §63.9(b)(2).
2. is a new source subject to this subpart	the notifications specified in §63.9(b)(4) and (5)	no later than the dates specified §63.9(b)(4) and (5).
3. qualifies for a compliance extension as specified in §63.9(c)	a request for a compliance extension as specified in §63.9(c)	no later than the dates specified in §63.6(i).
4. is complying with organic HAP emissions limit averaging provisions	a Notification of Compliance Status as specified in §63.9(h)	no later than 1 year plus 30 days after your facility's compliance date.
5. is complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limit other than organic HAP emissions limit averaging	a Notification of Compliance Status as specified in §63.9(h)	no later than 30 calendar days after your facility's compliance date.
6. is complying by using an add-on control device	a. a notification of intent to conduct a performance test as specified in §63.9(e)	no later than the date specified in §63.9(e).
	b. a notification of the date for the CMS performance evaluation as specified in §63.9(g)	the date of submission of notification of intent to conduct a performance test.
	c. a Notification of Compliance Status as specified in §63.9(h)	no later than 60 calendar days after the completion of the add-on control device performance test and CMS performance evaluation.

Table 14 to Subpart WWWW of Part 63 - Requirements for Reports

As required in §63.5910(a), (b), (g), and (h), you must submit reports on the schedule shown in the following table:

You must submit a(n)	The report must contain...	You must submit the report...
1. compliance report	a. a statement that there were no deviations during that reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply to you. If there were no periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control as specified in §63.8(c)(7), the report must also contain a statement that there were no periods during which the CMS was out of control during the reporting period.	Semiannually according to the requirements in §63.5910(b).
	b. the information in §63.5910(d) if you have a deviation from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If there were periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control, as specified in §63.8(c)(7), the report must contain the information in §63.5910(e).	Semiannually according to the requirements in §63.5910(b).
	c. the information in §63.10(d)(5)(i) if you had a startup, shutdown or malfunction during the reporting period, and you took actions consistent with your startup, shutdown, and malfunction plan.	Semiannually according to the requirements in §63.5910(b).
2. an immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan	a. actions taken for the event.	by fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. the information in §63.10(d)(5)(ii).	by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. (§63.10(d)(5)(ii)).