

March 9, 2006

Keith Barnett
Emissions Standards Division
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Delivered electronically: barnett.keith@epa.gov

Re: Need for Immediate Revisions to the Filled Resins Portion of the Composites MACT Rule, 40 CFR Part 63 Subpart WWWW

Dear Mr. Barnett,

As you know, EPA promulgated its final composites MACT rule on April 21, 2003, 68 Fed. Reg. 19375. Accordingly, the three year compliance deadline that the statute provides will expire in six weeks. See CAA §112(i)(3)(A).

Recent test data, however, indicates that one segment of our industry – sources employing mechanical application of filled resin – will not be able to comply with the rule’s numerical limits even if they do everything that the rule expects they will do. This test data represents new information that was not available during the rulemaking. As we explain below, during the rulemaking all parties, including ACMA and EPA, assumed that emission rates for non-atomized resin application would be the same for filled resins (for which no test data existed), as for unfilled resins for which we did have test data. The new test data show that our common assumption was not true. Our petition recommends new emission limits for filled resin manufacture based on this new test data.

The imminent compliance deadline makes regulatory acknowledgement of these new facts a matter of some urgency. We look forward to working with you on a Notice of Proposed Rulemaking that would make the necessary changes to the filled resin portions of the MACT rule on a permanent basis.

We also see a need for short-term relief from the compliance deadline. We believe that relief could take one of two forms:

- A. Most straightforwardly, EPA could simply stay the current rule pending reconsideration, see CAA §307(d)(7)(B). Under this approach EPA also could and should advise State permitting authorities that a one-year extension of the compliance deadline for sources using mechanical application for filled resin under CAA §112(i)(3)(B) would be warranted because of the new facts.

- B. Alternatively, EPA could take direct final action to amend the current rule to reflect the new emission limits we suggest below, pending final agency action to be taken after notice and comment. As you know, such direct final rules are authorized for “good cause,” which certainly appears to exist here.

We look forward to discussing with you these potential avenues to relief. Of course, we do not expect EPA to take these actions without factual support. We set out that support in detail below.

1. The actual emission rate for mechanical application of filled resin is significantly higher than the MACT emission factors for this process, and significantly exceeds the applicable MACT emission limit.

When EPA was developing the MACT rule (NESHAP) for composites manufacturing (40 CFR 63 Subpart WWWW), the American Composites Manufacturers Association provided test data supporting the promulgation of HAP emission factors (emission rate estimates) for several processes, including factors for non-atomized mechanical resin application. To allow facilities required to comply with the MACT rule to estimate their emission rates and determine if they satisfy the MACT emission limits, EPA adopted ACMA’s emission factors, which are provided in Subpart WWWW Table 1.

EPA also used these emission factors to set the MACT emission limits. EPA identified the manufacturing processes, materials, pollution prevention technologies, and add-on controls used by the best-controlled industry plants, and used the emission factors to calculate the emission rates achieved by these facilities. The resulting “floors” were used to establish the MACT emission limits, which are provided in Subpart WWWW Table 3.

The best-controlled plants in the mechanical resin application subcategory reported that they used non-atomized application. Therefore, EPA used the emission factor equation for this process, along with the resin-HAP-contents reported by these facilities, to establish a MACT emission limit for mechanical resin application of 88 pounds of HAP emitted per ton of resin processed (for non-corrosion resistant and non-high strength resins).

When it submitted its proposed emission factors to EPA, ACMA believed that the emission rates would be the same for filled resin as for unfilled resin. Accordingly, the emission limits in Subpart WWWW Table 3, and the emission factors in Table 1, do not differentiate between filled and unfilled resin.

Recent stack tests performed on facilities using non-atomized equipment to apply filled resin, however, demonstrates that ACMA was mistaken in believing that the emission rates for filled and unfilled resin are be the same. In fact, these tests show that processing of filled resin by non-atomized

application results in an emission rate that is 30% higher than that resulting from the application of non-filled resin.

A summary of the recent stack test data from facilities using non-atomized equipment to apply filled resin is attached (EECS Summary Table March 2, 2006). ACMA believes that these facilities are correctly using the non-atomized technology, and are achieving the lowest emission rates achievable for this process. We also believe that these plants are typical and representative of facilities that use filled resin.

These new data demonstrate that application of filled resin using non-atomized equipment results in an emission rate that is consistently 30% greater than the emission rate predicted by the emission factor for this process provided in Subpart WWWW Table 3, and 30% greater than that allowed under the MACT rule.

2. The several plants with stack test data for filled resin application will not be able to satisfy the applicable MACT requirements.

Sources required to comply with MACT must achieve the emission rates limits shown in Subpart WWWW Table 3. Most plants will use the emission factors in Table 1 of the rule to estimate their actual emissions and demonstrate compliance with the emission limits. Many plants, however, have performed stack tests, usually at the request of state or local permitting agencies. Stack test data are generally considered to be more accurate in estimating emissions at a given facility than emission factors, and permitting agencies are unlikely to allow these plants to use emission factors for MACT compliance, since they have better data available for their operations.

Since the MACT emission limits for these plants was mistakenly based on an assumption that these plants would emit at a much lower rate, the use of their stack test data will mean that these plants will be unable to comply with the MACT emission limits.

3. EPA should revised the MACT rule to provide emission limits and factors based on the recent stack test data for operations applying filled resin.

Based on the above analysis, ACMA is petitioning EPA to modify the MACT rule to establish an emission limit and an emission factor for mechanical filled resin application that are based on an accurate assessment of the emission rate achieve in practice by the best-controlled plants employing this process. This new emission factor and new emission limit should be based on the stack test data described in the attached EECS Summary Table.

Specifically, we hereby petition the agency to modify Subpart WWWW Tables 1 and 3 as shown (modified or added text shown in underline):

Table 1 to Subpart WWWW of Part 63—Equations to Calculate Organic HAP Emissions Factors

If your operation type is***	And you use...	With...	Use this***Emission Factor***for materials with less than 33 percent organic HAP***	Use this***Emission Factor***for materials with 33 percent or more organic HAP***
1. open molding	***			
	c. non atomized mechanical <u>non-filled</u> resin application	i. non-vapor suppressed	$EF = 0.107 \times \%HAP \times 2000$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000$
		ii. vapor suppressed resin	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. closed mold curing with roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		iv. vacuum bagging/closed mold curing without roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$

	i. <u>nonatomized mechanical filled resin application</u>	<u>i. non-vapor suppressed</u>	$EF = 0.107 \times \%HAP \times 2000 \times 1.3$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 1.3$
		<u>ii. vapor suppressed resin</u>	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor})) \times 1.3$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor})) \times 1.3$
<u>iii. closed mold curing with roll-out</u>		$EF = 0.107 \times \%HAP \times 2000 \times 0.85 \times 1.3$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85 \times 1.3$	
<u>iv. vacuum bagging/closed mold curing without roll-out</u>		$EF = 0.107 \times \%HAP \times 2000 \times 0.55 \times 1.3$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55 \times 1.3$	

Table 3 to Subpart WWWW of Part 63—Organic HAP Emissions Limits

If your operation type is . . .	And you use . . .	Your organic HAP emissions limit is . . .

2. open molding—non-CR/HS	a. mechanical <u>non-filled</u> resin application	88 lb/ton.

	<u>d. mechanical filled resin application</u>	<u>114 lb/ton</u>

Our requested new emission factors and emission limit for non-atomized mechanical filled resin application are simply corrections to the existing factors and limit based on the recent stack test data; i.e., a 30% increase in the factors and limit.

4. EPA should take this action in time to allow plants to comply by the April 21, 2006 MACT deadline.

Existing major sources must comply with the emission limits and other MACT requirements by April 21, 2006. As explained above, permitting agencies are unlikely to allow sources to use the emission factors in Subpart WWWW Table 1 to estimate emissions for MACT compliance if stack test data demonstrates a significantly higher emission rate. In several cases, permitting agencies are now aware of stack test data

for non-atomized application of filled resin and have told sources that their emission rates must be reduced to meet the MACT limits.

Until EPA establishes MACT emission limits for the non-atomized application of filled resin based on the control achieved by the best performing plants, and emission factors that accurately predict emissions from this process type, these companies will not be able to meet the MACT requirements. To forestall a situation where facilities are penalized for failure to comply with incorrectly-derived emission limits – perhaps even being prevented from operating – , EPA must act expeditiously.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Schweitzer".

John Schweitzer
Senior Director of Government Affairs

(734) 622-0162
jschweitzer@acmanet.org
1010 N. Glebe Rd., Suite 450, Arlington VA 22201

NAFRA Source Test Summary Table, March 2, 2006

Source Test Results for Non-Atomized Application of Heavily-Filled Resin			
Site (Agency)	Test Date	Styrene Content in Neat Resin (% by wt)	Actual Measured Percentage of UEF factor
MAAX Marion, IA (Linn Co)	4/28/04	33.1%	139%
	4/29/04	33.1%	144%
MAAX Martinsburg, WV (WV DEP)	4/7/05	32.8%	123%
	12/14/05	33.5%	132%
	12/15/05	33.5%	140%
Plant A	12/15/04	42.0%	116%
	12/16/04	42.0%	124%
	6/14/05	42.2%	132%
	6/15/05	42.2%	128%
Plant B	1/11/00	35.0%	124%
	1/12/00	35.0%	130%
Average Percentage = 130%			
non-atomized resin application; heavily filled = >50% by wt			