

January 15, 2008

Mr. Keith Barnett
US EPA
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Dear Keith,

Please find attached our point-by-point review and response to the comments EPA received regarding your August 2007 draft Information on Intent document concerning enforcement of the MACT requirements for non-atomized application of resin and gelcoat. The attached document is in supplement to our October 8 comments submitted in response to your draft. We provide a brief summary of our position regarding your draft and the comments below.

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- **Sources should not be required to perform stack tests to demonstrate compliance with Subpart WWWW.**

As it developed the composites NESHAP, EPA identified the floor-setting open molding sources largely according to their use of pollution prevention measures such as low-HAP resin and non-atomized spray application. EPA could have simply required that all major sources use these same P2 technologies. However, in recognition of the need to allow operational flexibility and averaging over 12 months of production, EPA used the industry emission factors to estimate the emissions from the floor setting sources, which became the Subpart WWWW Table 3 emission limits, and to establish formulas for sources to use in calculating their emissions, which are provided in Subpart WWWW Table 1.

EPA did not have any direct information regarding the emission rates at the floor-setting plants. The Subpart WWWW Table 3 emission limits are provided in the rule only to allow averaging across accepted P2 methods and across 12 months of production. They are not strict emission limits. Any source using the same P2 measures employed by the floor-setting plants, or other measures that are reasonably shown to provide an equivalent emission reduction for the operations at the source, is in compliance with the rule.

Further, compliance with EPA Method 204, which is required for valid stack testing, is beyond the technical and economic means of the large majority of smaller companies subject to Subpart WWWW.

- **Source testing conducted for other purposes should have no impact on Subpart WWWW compliance.**

As discussed above, the Table 3 emission limits are not strict emission limits. Accordingly, stack tests conducted for purposes such as establishing an emission rate for NSR applicability should have no impact on Subpart WWWW compliance.

For example, a source producing tub/shower units using non-atomized resin application and low-HAP resin is complying with the NESHAP, even if changes to the emission factors or state-ordered stack test show that the emissions from this operation exceed the Subpart WWWW Table 3 emission limit.

- **Testing to qualify new P2 technology for MACT should use standardized conditions.**

The proper way to qualify a technology for inclusion in Subpart WWWW Table 1 is to use the same standardized conditions used to establish the current Table 1 emission factors, and to show that, under these conditions, the technology provides an acceptable level of emission reduction compared to uncontrolled operations. ACMA can document in detail the standardized conditions used to develop the Table 1 emission factors.

The Subpart WWWW Table 1 emission factors represent average emissions for typical operations. A source that makes proper use of non-atomized application, or other P2 measures provided in Table 1, will achieve a significant emission reduction compared to uncontrolled operations at that source. However, variation in operating parameters not regulated by the NESHAP may result in variation in emission rate. There are a very large number of operational variables in open molding sources that can affect emission rate. EPA cannot have intended that non-atomized technologies and other P2 measures must be tested using each combination of variables. The only approach that makes sense is to rely on standardized test conditions.

To ensure proper non-atomized performance, a gun supplier may determine that spray pressures for his equipment need to be limited, typically through the use of a calibration process similar to ACMA's Controlled Spray calibration program. Pressure limits or calibration procedures necessary for proper non-atomized performance should be part of the operating instructions provided to sources, and upon inspections enforcement personnel should check to make sure that the instructions are followed. But other than this, EPA should have no interest in spray pressures employed by sources.

- **A phase-in period is needed for any change in enforcement practice.**

Most sources subject to the Subpart WWWW NESHAP are smaller businesses. Sudden changes in how state agencies enforce the rule would be unfair and, in practice, unmanageable for these smaller companies.

* * *

Thank you for the opportunity to provide the attached discussion.

Sincerely,



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attachment

January 15, 2008

**Summary and Discussion of Comments Submitted to EPA
In reply to EPA's Aug. 2007 draft "Information on Intent" document
Regarding enforcement of the MACT requirements for non-atomized application of resin and gelcoat**

(Submitted to EPA as a supplement to ACMA's Oct. 8, 2007 comments to EPA on the "Information on Intent" document - www.acmanet.org/ga/ACMA_comments_non-atom_guidance_8oct2007.pdf)

Summary of comments to EPA	ACMA discussion
<p><i>Not including introductory material or background discussion.</i></p> <p><i>Comment identifiers - L1a, etc. - provided by ACMA as a convenience.</i></p> <p><i>Text in [square brackets] inserted by ACMA.</i></p> <p><i>L1 = Lasco, Sept. 4</i></p> <p><i>L2 = Lasco, Nov. 15 (in response to AMCA's Oct. 8 comments)</i></p> <p><i>X = Xerxes, Oct. 1</i></p>	<p><i>See also our Oct. 8 comments.</i></p>
<p>L1a - [I]t was our understanding that EPA's objective was to clarify how a composite manufacturer must demonstrate that it meets the rule's definition for <i>nonatomized mechanical application</i> by providing valid test documentation that verifies compliance under their specific operating conditions. We also understood from our discussions that EPA would make clear within this document that if a source did not have spray gun manufacturer HAP emissions testing and test documentation demonstrating the effectiveness of their equipment under representative conditions, the source would have to conduct their own HAP emissions testing in order to use the MACT Subpart WWWW Table 1 nonatomized mechanical application equations. [EPA's draft Information on Intent document] does not clearly state this requirement.</p>	<p>ACMA's review of the available source test data supports our conclusion that non-atomized resin application dependably provides low-emission performance across a wide range of operating conditions. EPA and Lasco need not be concerned about the emission reductions achieved in practice by plants using non-atomized resin application, even if many plants do yet not have operating instructions or test results that strictly comply with the rule.</p> <p>Even if they are unable to obtain satisfactory operating instructions from their gun suppliers, it is not practical to require smaller companies to conduct HAP emission testing.</p> <p>The pollution prevention technologies listed in Subpart WWWW Table 1 will reliably provide emission reductions for each source relative to uncontrolled operations. However, the actual resulting emission rates of the MACT-compliant sources will depend on many site-specific circumstances. This does not call into question the validity or effectiveness of the rule, since under Subpart WWWW MACT is the P2 control used by floor-setting plants, not an emission rate or limit.</p>

Summary of comments to EPA	ACMA discussion
<p>L1b - Enforcement officials are insisting that clarification be provided by USEPA through a guidance document supporting their efforts to enforce the current rule as written. We believe this document should be clear, concise and easy to understand. Lasco recommends the creation of an "Enforcement Checklist" to be utilized by enforcement officials to determine if a composites manufacturer complies with the nonatomized mechanical application requirements and has the necessary test documentation to fully meet EPA's intent under the definition. In support of this recommendation, we have developed the attached checklist as an example of the type of document that could be provided to an enforcement officer to aid in verifying proper classification/compliance of a nonatomized mechanical application. We are hopeful EPA can provide enforcement officials with a usable guidance document/checklist enforcing the pollution prevention aspect of this rule. However, allowing current composites facilities the option of using these pollution prevention techniques without the mandated enforcement oversight places an undue burden upon facilities that have met and complied with the existing NESHAP, while permitting noncompliant facilities to continue unabated operations. This is clearly contrary to the intent of Clean Air Act section 112.</p>	<p>We agree that a compliance checklist is a good idea, if it helps sources and permitting agencies achieve a mutual understanding of the rule's requirements.</p> <p>We agree that the rule should be enforced by regulatory agencies. However, Lasco has its own business reasons for its approach to MACT compliance, and we don't understand why a lack of "enforcement oversight" at other companies places an "undue burden" on Lasco.</p>

Summary of comments to EPA	ACMA discussion
<p>L1c - [I]n its current form, the background section of [EPA's] document appears to introduce a variance to the nonatomized application equations that is not part of the existing rule. Essentially, this variance would allow measured emissions to be considered compliant even if they were as much as 25% greater than those stated within the rule. This variance is outside the scope of the existing rule and appears to conflict with Section 112 of the Clean Air Act, which requires that a MACT standard be at least as stringent as the best performing 12 percent of existing sources. Lasco believes this variance is beyond the scope of interpretative guidance and could only be adopted by amending the existing rule.</p>	<p>The Subpart WWWW MACT requirements for existing sources are based on the control used by the floor setting plants. For mechanical resin application, the control used by the floor-setting plants was non-atomized application in combination with certain lower-HAP resins. EPA did not set MACT as these controls, since that would have limited operational flexibility. Instead, EPA estimated the emission rate of the floor-setting plants using the industry emission factors, and required sources to use these same factors to achieve the emission rates as an average across open molding operations and 12 months of production. The emission factors represent an average of a range of test results. EPA does not know what the actual emission rate was at the floor setting plants.</p> <p>It is likely that the emissions at the floor-setting plants, if it had been accurately and directly measured, would have shown the same degree of variance as the data used to establish the emission factors. Allowing compliance within the range of emission data used to establish the Subpart WWWW Table 1 emission factors would not represent a relaxing or modifying of the rule beyond what EPA intended and the industry reasonably anticipated as the rule was promulgated.</p> <p>In any case, there should be no MACT-related reason for requiring HAP emission testing at sources. Any source tests conducted for other regulatory purposes, for example to clarify a source's status under NSR or PSD rules, should have no bearing the MACT compliance. Testing to qualify new pollution prevention technologies, as provided under Subpart WWWW Section 63.5798(b), should be conducted using the same standardized test conditions used to establish the Subpart WWWW Table 1 emission factors, and not using site-specific conditions.</p>

Summary of comments to EPA	ACMA discussion
<p>L1d - [Suggested checklist items:]</p> <p>A. Is the facility claiming the use of nonatomized mechanical application of resin and/or gelcoat? (if no you may skip this guidance)</p> <p>B. Does the facility have testing documentation as required by the definition of nonatomized mechanical application of resin?</p> <p>C. Does the facility have instructions from the manufacturer to prevent the operation of the device(s) at excessive spray pressures?</p> <p>D. Are the test results no greater than the organic HAP emissions predicted by the applicable nonatomized application equation(s) in Table 1 of Subpart WWWW?</p> <p>E. Document the following parameters in the source test are consistent with current spray gun operations at the composite manufacturer:</p> <ol style="list-style-type: none"> 1. The EPA test method was either 18, 25 or 25a. 2. The test report has documentation that all the emissions from the tested system were captured in a temporary or permanent total enclosure that meets the specifications of EPA Method 204, or that the capture efficiency was determined using EPA Methods 204B through E. 3. Verify that current fluid pressure (based on pump size/ratio, pump air inlet pressure in PSI, fluid hose diameter, etc., or equipment manufacturers specifications) at the fabricators facility is consistent with the fluid pressures used during the source test. 4. Gun tip geometry (orifice size, tip/fan angle) used at the fabricators facility is comparable to those used during the source test. 5. The type of resin/gelcoat (same resin/gelcoat type, same process viscosities, same thixotrophy index) used by the fabricator is comparable to the resin/gelcoat used during the source test? 6. If the fabricator uses a filled resin did the source test use a filled resin? 7. If the fabricator applies resin at an elevated temperature (above 77°F) was the source test performed at the elevated temperature? 8. If the fabricator uses a vapor suppressant, was the source test performed with a vapor suppressant? <p>If the answer to any of these questions is No, nonatomized equations in Table 1 should not be used and source testing may be required.</p>	<p>We agree with Lasco's suggested checklist items A, B, D, E1, and E2.</p> <p>Checklist item C assumes that spray pressures are necessarily predictive of non-atomized operation. ACMA's Resin Screen Test suggest that this may not always be the case (see the discussion in Section 6 of the report available at www.acmanet.org/ga/Resin_Screening_Test_Report-Final.pdf). Gun suppliers should provide whatever instructions are needed to ensure non-atomized operation, including limits on spray pressure if appropriate. The NEHSAP provides flexibility for gun suppliers to provide the information and instructions needed by their customers to ensure that guns are properly operated in a non-atomized condition.</p> <p>Items E3-8 should not be part of a checklist. The process parameters described in these items may influence emission rates. However, measuring the absolute emission rate in a given specific production scenario is not the purpose of the Subpart WWWW non-atomized test requirement. The purpose of the non-atomized test requirement is to ensure that the equipment claimed as non-atomized does provide, when using the standard test scenarios used to develop the Subpart WWWW Table 1 emission factors, a level of emission reduction (relative to atomized application under the same conditions) comparable to the non-atomized equipment tested to develop the factors.</p> <p>Lasco seems to mistakenly believe that the purpose of the non-atomized test requirement is to measure or indicate the actual emissions to be achieved in the actual sources covered by the rule. This cannot have been EPA's intent, since it would be impossible to test anywhere near the full range of operating scenarios likely to be encountered in actual sources. Further, MACT for open molding is based on the P2 technology used by floor setting sources, not the emission rate achieved at those sources.</p> <p>The Subpart WWWW Table 1 emission factors represent, for a necessarily small set of standard conditions, emission reductions relative to uncontrolled (atomized, high HAP) application. Their purpose is to allow operational flexibility and averaging. MACT for open molding is not an emission rate, but rather the pollution prevention technology used by the floor setting sources. The Subpart WWWW Table 1 emission factors and Table 3 emission limits were provided by EPA only so sources could use a variety of P2 options, and average over a year's production, to achieve a relative rate of emission reduction which would be reasonably comparable to that achieved by the floor setting source.</p>

Summary of comments to EPA	ACMA discussion
<p>L2a1 - ACMA claims that there are four types of non-atomized spray tip designs. However, [EPA] should be aware that the spray tip and/or gun design is only a portion of the entire application tool, and neither the spray tip nor gun design on its own can be considered compliant with the non-atomized definition. Non-atomized application by definition is 1. use of a specific design of an application tool, 2. operated according to the manufacturer's directions and, 3. HAP emissions tested with results below those predicted by the equations of Table 1. If an application tool (tip, gun, hose, pump), properly operated, can demonstrate through testing that it performs below the equations predicted in Table 1 it is considered by definition to be non-atomized. By way of an example, spray tip/gun designs considered to be non-atomized for the application of gelcoats were tested by the South Coast Air Quality Management District and were found under "typical" application pressure ranges to perform with emission results equal to those of atomized spray tip/gun design technology.</p>	<p>In comments submitted to SCAQMD, ACMA identified several serious operational and analytical problems with the SCAQMD gelcoat test, which seriously complicate drawing any definitive conclusions from the District's test results.</p>

Summary of comments to EPA	ACMA discussion
<p>L2a2 - Based on these results and its own knowledge, Lasco finds it a critical element of the non-atomizing definition that <u>any application tool</u> (spray tip/gun design, hose, pump), must also <u>include EPA emissions testing to verify that its operation (material properties, fluid pressures, temperature, tip geometry) performs at a level no greater than the performance specifications predicted by the equations of Table 1.</u></p> <p>We strongly encourage that EPA not make any statement on what is considered a non-atomized application tool outside the existing definition. Only an application tool design, operated according to the manufacturer's directions with proper testing documentation can meet the definition.</p> <p><i>ACMA Statement [Oct. 8 comments] - "suggest that you mention in the implementation guidance, after the summary of flowcoaters and impingement designs, that other designs are acceptable as long as they satisfy the performance criteria specified in the NESHAP. "</i></p> <p>ACMA claims there are four (4) generic types of non-atomized spray tip designs in use; flowcoater, mono-orifice, and two-and three-orifice impingement. However, spray tip design alone, without inclusion of material properties, fluid pressures or temperature, does not meet the rule's stated requirement of being operated according to the manufacturer's directions, or being HAP emissions tested.</p> <p>A spray tip design that meets the performance specifications under Table 1 cannot simply be grouped into some sort of "generic" classification of "non-atomized", where by default it would presumed, albeit erroneously, to meet all the requirements included in the definition of "non-atomized mechanical application". In the simplest terms, no matter what tip design is being utilized in any spray-up application, having the material properties and temperature held in a constant state, any increase or decrease in fluid pressure at the tip will vary the degree of spray atomization and influence the emissions rate.</p> <p>Interpretation of the rule must encompass the entire application tool design and not just the non-atomized spray tip design. ACMA's categorization attempts to simplify a complex issue and sidestep the definition requirements for properly identifying pollution prevention technologies.</p>	<p>Lasco seems to mistakenly believe that the purpose of the non-atomized test requirement is to measure or indicate the actual emissions to be achieved in the actual sources covered by the rule. This cannot have been EPA's intent, since it would be impossible to test anywhere near the full range of operating scenarios likely to be encountered in actual sources.</p> <p>The Subpart WWWW Table 1 emission factors represent, for a necessarily small set of standard conditions, emission reductions relative to uncontrolled (atomized) application. Their purpose is to allow operational flexibility and averaging. MACT for open molding is not an emission rate, but rather the pollution prevention technology used by the floor setting sources. The Subpart WWWW Table 1 emission factors and Table 3 emission limits were provided by EPA only so sources could use a variety of P2 options, and average over a year's production, to achieve a relative rate of emission reduction which would be reasonably comparable to that achieved by the floor setting source.</p>

Summary of comments to EPA	ACMA discussion
<p>L2b - <u>ACMA Statement [Oct. 8 comments]</u> - <i>"suggest that the implementation guidance not require or suggest that test reports or gun supplier instructions contain information on spray pressures, unless a gun supplier believes that such information is needed for the proper operation of specific equipment. "</i></p> <p>As previously stated in Section 1 above, spray pressures are one of several key factors which effect emission rates. ACMA argues that a facility may be required to make changes to their materials and spray tips which would result in changes in spray pressures. Additionally, they claim that such changes should only be considered if the gun manufacturer states, in their operating instructions, that these changes would effect emissions. Current guidance provided by gun manufacturers serve to instruct user's on how to adjust spray pressures at the tip with the goal of achieving an optimized spray pattern. However, guidance for optimizing the spray patterns should not be considered as guidance on reducing or minimizing actual emission levels.</p> <p>Spray gun manufacturers have shown no interest in performing emissions and performance testing of their equipment to the degree that is required within the rules definition. This would require that manufacturers cover an entire range of potential application processes, coupled with an entire range of typical operating conditions for each of them. Without such testing, gun manufacturers cannot provide any valid instruction as to the effect a change to spray pressure might have upon emissions. It might be more reasonable to expect that a gun supplier could provide evidence that pressure or any other changes, compared to testing that was performed on the application tool at baseline conditions, would not increase emissions for their application tool, rather than not requiring evidence as ACMA would suggest, based on the assumption that pressure will not effect emissions.</p>	<p>See our discussion in response to L2a2.</p> <p>Non-atomized resin application technology has proven to be robust, and the emission rate not very sensitive to source-to-source operational variation (in, for example, spray pressure or resin temperature). This is proven by comparing the available source test data, and in ACMA's recent Resin Screen Test. EPA (and Lasco) need not be concerned about variation in resin application process parameters resulting in a significant variation in emission rates.</p>
<p>L2c - <u>ACMA Statement [Oct. 8 comments]</u> - <i>"suggest that EPA's implementation guidance allow sources to rely on generic tests of application equipment classes, for those classes for which ACMA or other entities demonstrate equivalent emission characteristics across suppliers."</i></p> <p>As we continue to stress, the application tip is only one factor which effects emissions. Any sort of generic testing would also need to specify what conditions the testing was performed under which also impact emissions (material properties, fluid pressure, temperature, in addition to tip geometry).</p>	<p>See our discussion in response to L2b.</p>

Summary of comments to EPA	ACMA discussion
<p>L2d - <u>ACMA Statement</u> - <i>"suggest that the final implementation guidance maintain the provisions of the draft that allow compliance with non-atomized requirements as long as test data for the application device, developed using standard test procedures, do not exceed the upper end of the range of data used to establish the emission factors in Table 1."</i></p> <p>The definition of non-atomized within the rule sets the upper limit to be the equations of Table 1. Any changes aimed at relaxing these limits will significantly reduce the benefits achieved by enforcing the rule as currently written. While the test data and data points collected to establish the equations in Table 1 was very limited, ACMA and the composites industry accepted the equations of Table 1 as the upper end limit bounds of the range.</p> <p>To challenge the upper end limit at this time is inappropriate. As a result of EPA's Draft Guidance Document, ACMA is now suggesting that the equations of Table 1 do not set the upper end limits and are asking to redefine the upper limits based on both limited test data and limited data points. In review of the testing, upper limit anomalies exist within the available test data. It is clearly evident, based on results of industry testing performed since the Table 1 equations were established, that these more recent test results do not support a change to include the upper limit outlier seen in EPA's Draft Guidance Document or a change in the rules upper end of the range. We strongly discourage EPA from relaxing or modifying the existing rule's upper limit based upon the inclusion of limited data that is not supported by current testing.</p>	<p>The Subpart WWWW requirements for existing sources are based on the control used by the floor setting plants. For mechanical resin application, the control used by the floor-setting plants was non-atomized application in combination with certain lower-HAP resins. EPA did not set MACT as these controls, since that would have limited operational flexibility. Instead, EPA estimated the emission rate of the floor-setting plants using the industry emission factors, and required sources to use these same factors to demonstrate that achieved this emission rate as an average across open molding operations and 12 months of production. The emission factors represent an average of a range of test results. EPA does not know what the actual emission rate was at the floor setting plants. It is likely that the emissions at the floor-setting plants, if it had been accurately and directly measured, would have shown the same degree of variance as the data used to establish the emission factors.</p> <p>Allowing compliance within the range of emission data used to establish the Subpart WWWW Table 1 emission factors would not represent a relaxing or modifying of the rule beyond what EPA intended and the industry reasonably anticipated as the rule was promulgated. However, there should be no MACT-related reason for requiring HAP emission testing at sources, and any source tests conducted for other regulatory purposes, for example to clarify a source's status under NSR or PSD rules, should have no bearing the MACT compliance. Testing to qualify new pollution prevention technologies, as provided under Subpart WWWW Section 63.5798(b), should be conducted using the same standardized test conditions used to establish the Subpart WWWW Table 1 emission factors, and not using site-specific conditions. If needed, ACMA can document in detail the standardized conditions used to develop the Table 1 emission factors.</p>

Summary of comments to EPA	ACMA discussion
<p>L2e - <u>ACMA Statement</u> - <i>"The formulas in Table 1 were developed using certain typical materials and manufacturing processes. To qualify as non-atomized, equipment designs should be tested under similar circumstances, to avoid an inappropriate apples-to-oranges comparison."</i></p> <p>We agree that the formulas in Table 1 were developed using certain "typical" materials and certain "typical" manufacturing processes, however each formula in Table 1 was predicated on the use of a certain and specific application tool. To allow a facility to change the application tool, material and process but only test the tool under one set of operating conditions does not meet the requirements of the rule. If testing is performed on an application tool which is different than the tool used to develop formulas for Table 1, then the source must consider the other changes, besides the tool alone, when performing the testing.</p>	<p>It would be impossible to test every non-atomized device in every common production scenario. It must have been EPA's intent to require testing only in the standard test circumstances used to develop the Subpart WWWW Table 1 emission factors. Since the purpose of the Table 1 factors is not to predict emission rate but to allow averaging across approved P2 options and over 12 months of production, and since the emission reductions achieved by a non-atomized device relative to atomized will be comparable across the many different production scenarios, an approach that relies on a small set of standardized test scenarios is necessary and appropriate.</p>
<p>L2f - <u>ACMA Statement</u> - <i>"EPA agreed that even though guns spraying filled resins, where sources relied on gun supplier test data and operating instructions developed during prior testing of unfilled resins, were revealed by ACMA to emit about 1.3 times the HAP predicted by the non-atomized emission factors, those guns would still be considered non-atomizing under the NESHAP."</i></p> <p>We don't believe EPA can be supportive of this interpretation, as it would entirely defeat the purpose of Subpart WWWW. With the knowledge that these guns are emitting at a much higher rate than expected, EPA must take action to ensure the integrity of the rule.</p>	<p>The purpose of Subpart WWWW is to require an existing source to use the same P2 controls as the floor-setting plants or other approved technologies that provide, for the source's operations, a equivalent level of emission reduction relative to uncontrolled operations. Lasco seems to mistakenly believe that the Subpart WWWW rule requires sources to achieve certain emission rates.</p> <p>A given P2 technology represented in Subpart WWWW Table 1, or approved under Section 63.5798(b), will provide emission reductions across different types of operations. For example, non-atomized resin application provides emission reductions for both filled and unfilled resin application. But the exact amount of emission reduction, and the result emission rates, will vary according to each source's operating conditions.</p>

Summary of comments to EPA	ACMA discussion
<p>L2g - ACMA Statement - <i>"suggest that the final implementation guidance allow sources some reasonable time to come into compliance with the clarified requirements, which may require additional testing by gun suppliers, ACMA or other entities. "</i></p> <p><u>ACMA Statement</u> - <i>"also request that EPA clarify in the guidance that sources that have made a good faith effort to comply with the NESHAP, and that may have relied on generic guidance from ACMA or others in lieu of data from their gun suppliers, should not be subject to enforcement as long as they are able to provide the required documentation after a reasonable phase-in period."</i></p> <p>Lasco does not believe a "phase-in period" is needed or justified. EPA must begin immediate enforcement of the rule. To do less encourages continued recalcitrance and disregard of the NESHAP program and the intent of Congress. The rule was promulgated on April 21, 2003. Companies have had over 4 years to develop a clear understanding of the rules compliance requirements and to institute measures to come into compliance.</p> <p>When Lasco undertook an evaluation of the compliance requirements necessary to meet the definition of non-atomized, we understood that it would require a significant investment in pollution control equipment. A majority of ACMA's members and many of Lasco's competitors were aware of the testing Lasco performed and why it believed controls would be needed to meet the requirements of the rule. Source's which chose to take the credit for use of non-atomized, while not meeting the definition, have had a clear business advantage over those who have been in compliance since the rule went into effect.</p> <p>EPA must not allow these sources to continue avoiding compliance with the rule. It is wholly inappropriate and provides a disservice to those sources that clearly comply with the rule as written. A rewrite of the rule is not needed; enforcement of the rule is.</p>	<p>Unlike Lasco, most of the sources covered by the Subpart WWW rule are smaller businesses. Sudden changes in how state agencies enforce the rule would be unfair and, in practice, unmanageable for these small companies.</p>

Summary of comments to EPA	ACMA discussion
<p>L2h - In this section ACMA <i>"ask[ed] EPA to highlight in the final implementation guidance that sources are not expected to conduct emission tests in order to comply with the NESHAP."</i></p> <p>To suggest this is to make a mockery of the NESHAP program. Facilities must be required to document compliance, even it is requires source testing. If a facility has opted to use the non-atomized mechanical application emissions credit and does not possess the documentation provided by its manufacturer or user that this design of the application tool has been organic HAP emissions tested, and the test results showed that use of this application tool results in organic HAP emissions that are no greater than the organic HAP emissions predicted by the applicable non-atomized application equation(s) in Table 1 to this subpart and is operating outside the range of factors, which impact emissions, (Tip geometry, material, fluid pressure, temperature), there is no choice but to perform individual testing.</p>	<p>MACT for existing open molding sources is a technology requirement, not an emission limit. Sources subject to the rule should use P2 technologies that provide a level of emission reduction, compared to uncontrolled operation, equivalent to the level of emission reduction achieved by the floor setting sources.</p> <p>A given P2 technology represented in Subpart WWWW Table 1, or approved under Section 63.5798(b), will provide emission reductions across different types of operations. For example, non-atomized resin application provides emission reductions for both filled and unfilled resin application. But the exact amount of emission reduction, and the result emission rates, will vary according to each source's operating conditions.</p> <p>Gaining EPA acceptance of new P2 technologies will often require emission testing under controlled standardized conditions, but there is no reason to require widespread stack testing by sources to demonstrate compliance with the Subpart WWWW rule.</p> <p>There should be no MACT-related reason for requiring HAP emission testing at sources, and any source tests conducted for other regulatory purposes, for example to clarify a source's status under NSR or PSD rules, should have no bearing MACT compliance.</p>

Summary of comments to EPA	ACMA discussion
<p>L2i - The MACT floor for non CR/HS resins was established to include all facilities even those facilities that utilized filled resin systems, including DCPD filled resin systems. DCPD resin systems, unlike the typical CR/HS (orthophthalic and isophthalic based) resin systems, have been specifically designed to allow for the inclusion of fillers and glass wetting capabilities. In addition, where these DCPD resin systems (filled and potentially unfilled) are applied, they have been proven to emit differently than resins used in many other sectors of the industry.</p> <p>Based on performance differences, and emissions differences, one could argue that DCPD resin systems were improperly grouped within the non CR/HS categorization. Further, based on this premise, the "initial" MACT floor for DCPD resin systems would have required the use of partial control technology and would have resulted in emission limits far lower than those currently identified in Table 3. However, EPA chose to group DCPD resin systems within the non-CR/HS resin category effectively increasing the allowable emission limit. EPA cannot now choose to lower the emission standard for those applying filled DCPD resins by yielding to the re-posturing of ACMA on the issues detailed above. Companies opting to utilize the non-atomized application emission credit often tend to be large emitters of air pollution and allowing any relaxation or non-enforcement of the rule would only serve to increase the emissions of hazardous air pollutants.</p>	<p>ACMA's Resin Screen Test (Oct. 30, 2007 report available at www.acmanet.org/ga/reg-emissions.cfm) showed that the Subpart WWWW Table 1 emission factors do reliably predict emissions from unfilled DCPD resin systems.</p> <p>Lasco argues that "DCPD resin systems were improperly grouped" with other resins systems when EPA established the MACT floors. This is correct only if non-atomized application, at whatever actual emission rate, was not the floor setting technology. In fact, EPA identified the floor-setting sources as those that employed non-atomized application, since this was correctly identified as the maximum achievable control. EPA did not have any direct information on the emission rates from the floor-setting plants, and used the industry emission factors to set the Subpart WWWW emission limits. The emission factors have, in the case of highly filled DCPD resin, proven to need adjustment, but this has nothing to do with the setting by EPA of non-atomized application as MACT for this process group.</p> <p>Lasco also incorrectly argues that the MACT floor for DCPD resin "would have required the use of partial control technology." In fact, EPA had no data on the feasibility or effectiveness of these systems that would have allowed them to be set as the floor.</p>
<p>Xa - Documentation Requirements for NARA Equipment - It is reasonable to expect gun suppliers to provide adequate documentation for NARA equipment operation. We believe our suppliers have done so. However, based on our experience, the nonatomized equipment documentation and operating instructions as currently provided will not be adequate when measured against your proposed guidelines. The operating procedures that Xerxes has seen are general, and not specific to a fabricator's equipment operation.</p>	<p>ACMA has not reviewed in detail the documentation provided by gun suppliers. Such documentation should be found by EPA and state agencies to satisfy the rule as long as test reports are provided, showing the the devices can be operated to emit no more than allowed by the Subpart WWWW Table 3 emission limits, and operating instructions are provided to ensure that the guns are operated in a non-atomized condition.</p>

Summary of comments to EPA	ACMA discussion
<p>Xb - Testing Requirement - [EPA] suggested that source tests include two different HAP content resins. This only makes sense if the equipment supplier is confirming the equipment is non-atomizing for a wide range of styrene contents. However, a source like Xerxes may use a standard material with a specified HAP content. At Xerxes, for example, all four plants use the same specification for its resin materials. All resins have a similar HAP content within the narrow latitude of the specification. Under these circumstances, source tests should not be required at each plant. A representative source test for all plants with similar operations should suffice. Additionally, individual site of business specific source tests should not be required to test two different HAP content resins.</p>	<p>ACMA believes that emission testing by sources should not be a general practice, and that EPA does not need to specify testing conditions. MACT is the pollution prevention technology used by the floor setting source, not an emission limit, and sources should never be required to conduct stack tests to confirm that they do not exceed their "MACT emission limit."</p> <p>If the Xerxes comment addresses testing of new pollution prevention technologies, to support a petition under Subpart WWWW Section 63.5798(b), then we disagree with the suggestion that such testing should be limited to the same resin and conditions as found in a plant. The Subpart WWWW Table 3 emission limits (to allow averaging) and Table 1 emission factors were developed using a set of standardized laboratory conditions. In the context of MACT promulgation and enforcement, the Table 1 emission factors are most accurately regarded as measures of the emission reductions achieved by the listed technologies, relative to the other technologies and to uncontrolled operations.</p> <p>A given P2 technology represented in Subpart WWWW Table 1, or approved under Section 63.5798(b), will provide emission reductions across different types of operations. For example, non-atomized resin application provides emission reductions for both filled and unfilled resin application. But the exact amount of emission reduction, and the result emission rates, will vary according to each source's operating conditions.</p> <p>In this context, it would make no sense to require or allow the limitation of testing to actual plant conditions.</p>

Summary of comments to EPA	ACMA discussion
<p>Xc - "Representative Pressures" - [EPA's] guidance document identifies "representative pressures" as a key indicator of non-atomized application. Our experience is that required pump pressures will vary based on material properties and the size of the gun tip utilized. Additionally, pump pressure measurements may not directly correlate to tip pressure. Different powerhead ratios (3 : 1,6: 1, 1 1 : 1,20: 1) are available and each powerhead will require a different pump pressure even though factors remain constant. Operating pressure for a fabricator will change throughout a given day based upon equipment setup, the operating environment and material properties. Consequently, proper non-atomized application at a given production facility may not be subject to a "representative pressure" recorded in an equipment supplier's test report. Therefore, it is not realistic or workable for regulators to apply a "representative pressure" as a limit or to confirm correct NARA equipment operation. In Xerxes' experience, the proper pressure for NARA will depend on the various impingement tips used and specific material properties as described below.</p>	<p>ACMA agrees that EPA has no valid reason to be interested in the spray pressures used during testing, since they are not usefully predictive of non-atomized operations in actual manufacturing conditions. Sources need to follow the operating instructions provided by equipment manufacturers, which should specify the practices that are needed in a production environment to ensure non-atomized operation. At least for resin operations, ACMA does not believe that proper non-atomized operation is highly dependent on spray pressure (see the discussion in Sect. 6 in the report of the Resin Screen Test); but in any case gun suppliers must be relied on to provide, and sources to follow, the operating instructions appropriate for each gun design.</p>
<p>Xd - Various Impingement Tips - The various models of NARA equipment are all delivery devices that supply resin to an impingement tip. Xerxes uses three models of equipment from one supplier that use the same family of impingement tips. These tips are available in various orifice sizes. A tip size is chosen to deliver resin at a specific rate based on the type and size of a part and process requirements. The tips are also available with different angle designations chosen to create a desired fan pattern based on the type of resin and its specific material properties. Our testing and experience with corrosion parts suggest that the impingement tips work well over a broad range of orifice sizes and angle designations selected for application requirements and material properties. Accordingly, manufacturers need sufficient latitude in tip size and angle to build product while staying in compliance.</p>	<p>Under the MACT rule, "non-atomized" is a performance standard. The operation of any resin or gel coat delivery device meeting the requirements of the rule should be considered non-atomized. EPA should have no interest in whether such devices are considered "impingement" or in other details regarding their design.</p>

Summary of comments to EPA	ACMA discussion
<p>Xe - Material Properties - The MACT standard correctly identifies HAP monomer content as having a significant impact on emission rates. However, other material properties like viscosity and surface tension impact the development of a non-atomized spray pattern and may require changing pump pressures to maintain a proper spray pattern. While material properties are usually measured in lab settings for comparison against specifications, the changing temperatures on a production floor will affect the material properties and require adjustment of the pump pressure during the day. In addition to periodic changes of pump pressure throughout the day, Xerxes' has found that higher pressures are required during winter operations than for summer operations. Higher pressures are required to develop a workable fan pattern when applying low HAP materials at cooler temperatures. The temperature impact on resin pump operating pressure is so great that Xerxes has installed heating units at its Anaheim, California plant to maintain material properties during the cooler winter months.</p>	<p>Like spray pressures, EPA should have no interest in temperature. The resin temperature employed during equipment testing is not usefully predictive of non-atomized operation in actual manufacturing conditions. Sources need to follow the operating instructions provided by equipment manufacturers, which should specify the practices that are needed in a production environment to ensure non-atomized operation.</p> <p>It is likely that higher material temperatures result in increased emissions, all other factors held constant. However, MACT is the pollution prevention measures employed by the floor setting plants, and not an emission rate or limit. It is likely that floor-setting plants used a variety of resin and gel coat temperatures, and consequently may have had some variation in actual emission rates, but EPA had no information on temperatures at floor-setting plants, nor the basis for their use in emission estimation, and so could not have intended their use in MACT compliance.</p>
<p>Xf - Summary Comments - In light of Xerxes' successful experience with NARA equipment as described above, we would offer the following specific comments on [EPA's] proposed guidance document: Documentation requirements for a site specific source test should not be required to include two different HAP contents as many sites will use a single standard resin. "Representative Pressures" should not be proposed as an enforcement tool. Proper NARA pump pressures will depend on the specific size and types of tips used, material properties and other location specific variables. The documentation requirements proposed in the draft guidance document are more detailed and specific than current MACT requirements. How the industry transitions from our current state to your proposed system should be done in a way that does not penalize fabricators who have acted in good faith to meet the MACT standards.</p>	<p>There should be no need for a "site specific source test," since MACT is the pollution prevention equipment used by the floor setting source and not an emission limit. To qualify new P2 technologies as MACT compliance options, as provided under Subpart WWWW Sect. 63.5798(b), the same standardized test conditions should be employed as used to develop the original Subpart WWWW Table 1 emission factors.</p> <p>In the context of MACT, EPA should have no interest in spray pressures or resin temperatures, since MACT is the control technology used by the floor-setting source and not an emission limit. Operating instructions provided by equipment suppliers should specify how the guns can be reliably set up and operated in a non-atomized state in production environments.</p>

Summary of comments to EPA	ACMA discussion
<p>Xg - Factors Correctly Considered - [EPA] already astutely recognized other important points that should be included in your guidance document. Xerxes concurs and believes the factors set forth below should be maintained in your guidance document: The UEF equation is an average, not a specific limit. This reflects the fact that variation exists in all processes and recognizes how the UEF equation was developed. If the UEF non-atomizing equation is taken as a limit, then half of the tests used to develop the curve would be inappropriately classified as atomizing; and ". . .each individual facility would not have to perform an emission test unless ..." Our experience in different facilities with different models of non-atomized equipment indicates that NA resin application works well and reduces styrene emissions.</p>	<p>ACMA does not disagree with these concluding comments.</p>
end	