

October 8, 2007

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Dear Keith,

Thank you for the opportunity to comment on the draft "Information on EPA's intent in developing rule language that defines a non-atomized spray gun for the Reinforced Plastic Composites NESHAP," which you sent to us by email on August 27, 2007.

Despite the many changes in application technologies and resins since the Subpart WWWW Table 1 formulas were developed, with the exception of tub/shower operations the overall accuracy of the non-atomized resin application factors have been repeatedly confirmed by source tests and the recent the ACMA Resin Screen Test. That the factors are predictive shows that the equipment is being properly operated by sources. EPA should not be concerned that possible compliance problems with NESHAP paperwork requirements may indicate that actual emission rates exceed the emission rates of the floor-setting sources.

While we support EPA's effort to clarify the testing requirements for determining when a spray gun is "non-atomized", the agency's proposed clarification would require a level of testing detail that goes well beyond what could be understood from the rule itself. EPA will have to design both the new program and the way it is introduced with some care to avoid disrupting on-going compliance efforts and to avoid unfair treatment of sources. We believe it is also important to avoid any unwarranted impediment to the use of non-atomized spray guns, given their environmental advantages in reducing worker exposure, waste generation, and emissions of VOC and greenhouse gases, as well as meeting MACT requirements.

We will discuss the following issues in turn: (A) the ambiguity in the current rule, (B) technical and organizational issues in designing a testing program, (C) the need for a reasonable transition, and (D) the need to avoid imposing source-by-source emissions testing requirements.

A. The Ambiguities in the Current Rule

When EPA proposed the Composites NESHAP, it did not provide for any testing of non-atomized application methods. The proposal said:

The proposed NESHAP for production resin and tooling resin requires most manufacturers to use non-atomized resin application methods to comply. These methods include flowcoaters and pressure-fed resin rollers, among others. We could identify no parameters to monitor whether these methods are being used. Rather, compliance through the use of these methods would be determined during enforcement inspections. As long as flowcoaters, pressure-fed resin rollers, or other similar devices are installed and operated according to the manufacturers specifications, they will comply with the requirements to use non-atomized resin application methods.

66 Fed. Reg. 40337 (August 2, 2001).

In the final rule, EPA added a requirement that the non-atomized application tool be accompanied by

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. In addition, the device must be operated according to the manufacturers instructions, including instructions to prevent the operation of the device at excessive spray pressure. Examples of non-atomized application include flowcoaters, pressure fed rollers, and fluid impingement spray guns.

68 Fed. Reg. 19416.

This provision clearly does not require testing of each specific application tool, but rather of the “design” that includes it. However, the rule does not describe the limits of the term “design” or specify exactly what kind of emissions testing is required or how to conduct it.

The rule requires operation in accordance with manufacturer instructions, including instructions on avoiding excess pressure. However, it does not appear to *require* manufacturers to provide excess pressure instructions, but rather emphasizes that users must comply with such instructions when the manufacturer has provided them. In fact, as we describe below, direct limits on operating pressure may be technically inappropriate in many cases.

B. The Complexities of a Testing Program

As noted above, we support EPA’s effort to set more precise testing requirements. However, we have the following comments regarding it:

1. Since non-atomized is a performance specification, the chance to qualify as non-atomized should be open to all technologies

The draft implementation guidance mentions flowcoaters and impingement tips. However, there are currently four generic types of non-atomized spray tip designs in use: flowcoater, mono-orifice, and two- and three-orifice impingement. (While not spray technologies, pressure-fed roller and resin impregnation are also types of mechanical non-atomized application.)

The NESHAP definition of “non-atomized mechanical application” refers to specific qualifying technologies, but only as examples of what the definition includes. Under the NESHAP, any mechanical resin or gel coat application device, of whatever design, that achieves an emission rate no greater than the applicable formula in Table 1 of Subpart WWWW (or, as discussed below, the upper end of the range of experimental data use to establish the Table 1 formula), is a non-atomized device.

Accordingly, EPA's implementation guidance should not directly or by implication restrict the application technologies that may be accepted as non-atomized devices to just flowcoaters and impingement tips.

We 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.

2. Pressure may not be a practical enforcement criterion

The draft implementation guidance would require a test report to specify that a gun was "operated at the representative pressures that will be used in the field...". In reality, it may not be practical to specify representative pressures that can be reliably used in the field to deliver both non-atomized performance and acceptable product quality.

Sources typically adjust pump pressures according to resin or gel coat viscosity, filler loading, temperature, hose length, and possibly other factors. The operating instructions provided by gun suppliers should specify how to make these pressure adjustments while still achieving non-atomized performance.

If test reports contain the information on spray pressures, as suggested by the draft implementation guidance, enforcement personnel may expect sources to use the same pressures. This would not be practical for sources or useful

for enforcement. Currently sources are providing documentation on proper gun set-up which should continue to serve for compliance demonstration during inspections.

We 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.

3. Emissions may not vary significantly across gun supplier designs

We mentioned above that there are four commonly used generic designs for non-atomized spray tips. At least for resin application, laboratory test data and information from source tests show that all designs within a certain generic class provide similar emission performance. For example, we believe that non-atomized resin application equipment from Supplier A and Supplier B will likely have similar emission characteristics. This may also be true for gel coat application, although we currently have less data for this process.

We 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.

4. Test results should not exceed the upper limit of the data range

EPA's draft implementation guidance properly allows sources to demonstrate compliance with non-atomized requirements as long as the test data for their application equipment, developed using the standard experimental procedures, are no higher than the upper limit of the experimental data used to establish the non-atomized equations in Table 1 of Subpart WWWW.

As noted in the draft guidance, non-atomized really represents a range of experimental data, and the Table 1 equations were established using the means of the data. However, again as noted in EPA's draft, any application device for which test data shows emissions within the range of the original experimental data, and not just at or below the mean of the data, should qualify as non-atomized.

This policy is also consistent with the intent of CAA Section 112, which is that sources comply with the level of control achieved by the floor-setting sources. For mechanical resin application, EPA knew that the floor setting sources used non-atomized, but the agency did not have direct reports of emission rates from these sources. Rather, the formulas in Table 1 were used to estimate the emissions from the floor-setting sources. It is reasonable to assume that the emissions from the floor-setting sources are represented throughout the total range of the experimental data used to establish the Table 1 formulas.

We 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.

5. Equipment should be qualified using a standardized procedure

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. As EPA has confirmed, for resin application it is the use of non-atomized equipment and not a specific emission rate that satisfies the MACT floor requirements. EPA provided the Table 1 formulas so that sources could average across resin streams using different pollution prevention technologies, based on the relative efficacy of those technologies, and not for deriving accurate emission rate estimates.

"Non-atomized" was and should continue to be defined as emission rate using the test procedure used to develop the Table 1 formulas. The UEF technical reports available on ACMA's website provide details on the materials used in testing and other test procedures. We suggest that the relevant section of EPA's implementation guidance should read (our suggested additional text shown in underline), "...The test should include at least two different resin HAP contents to demonstrate the emissions fit the non-atomized equation, similar to the resins or gel coats used in testing to develop the Table 1 formulas, or alternately tests at least two facilities using different resin HAP content should be

provided...".

Note that the underlined language is consistent with recent EPA guidance on non-atomized application of filled tub/shower resins. 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. (See the discussion on filled DCPD resins in Section C, below.)

C. The Need for a Phase-In Period

Non-atomized spray has been recognized and proven to be a viable emission reduction technology for our industry. Equipment manufacturers have incorporated this technology into various equipment designs to meet the growing acceptance and demand by sources. Although the full extent of all site specific variables may not have been tested, laboratory and source test data show that the technology is effective.

The draft implementation guidance moves to establish new and greatly expanded compliance requirements for sources subject to the Subpart WWWW NESHAP. While EPA may intend the guidance as clarification of existing requirements, in reality it is not consistent with what has been approved by many state agencies and what was generally understood by the regulated community. Further, while generic data are available, data may not be fully available on all equipment models. Although ACMA is not disputing that this technology may require more specific performance data, it is outside the original understanding by many sources and state agencies, and will take time to develop.

When EPA promulgated the composites NESHAP, the agency and ACMA both believed that gun suppliers would test their equipment and provide the required emission reports to their customers. However, nothing in the NESHAP requires the gun supplier to be the only tester. In fact, ACMA has found that many sources were not able to obtain the needed test reports from their equipment suppliers. These small companies are not able to conduct their own testing, yet they need to use the non-atomized equipment to comply with the NESHAP.

These companies relied on ACMA's testing and review of source test data to confirm that the non-atomized resin application equipment complied, at least on a generic basis, with EPA's emission limits. We believe the proposed guidance should recognize and formalize this practice.

An example of ACMA's stewardship of this issue is provided by the case of highly-filled DCPD resin. As we have informed the agency, in mid-2006 we became aware of source test reports indicating that emissions from tub/shower operations, which typically use non-atomized equipment to apply highly-filled DCPD resins, were 30% higher than predicted using the equations in Table 1 of the NESHAP. In August 2006, we worked with EPA to prepare and issue an advisory, which alerted the industry of the source test data and suggested use of a 1.3 correction factor for estimating emissions from tub/shower operations for purposes such as compiling TRI reports. EPA confirmed that such sources would still be in compliance with the NESHAP, since it was the use of non-atomized equipment and not a specific emission rate that was identified as the MACT floor. ACMA subsequently conducted laboratory tests of a wide range of resin types (our Resin Screen Test), and confirmed that it was only the non-atomized application of highly-filled DCPD resin that resulted in emissions outside of the range predicted by the Table 1 formula for non-atomized resin application.

As shown by this example, emission from spray application processes can be more complicated than revealed during the initial studies supporting the NESHAP Table 1 formulas. It may not be realistic to expect that gun suppliers will be able to anticipate and test for all the significant variables, meaning that sources and EPA may instead need to rely on ACMA to conduct much of the testing. As we have also informed EPA, ACMA is currently testing the current generation of gel coat application equipment, to confirm the emission rates for these devices.

We appreciate and support EPA's efforts to clarify the requirements of the NESHAP. However, when such clarification results in different requirements than have been previously enforced or permitted by state agencies, which we believe is true in this case, sources must be allowed a reasonable time to comply with the clarified requirements.

We 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.

We 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.

D. Sources Should Not be Required to Perform Emission Tests

As EPA notes in the draft implementation guidance, "[EPA's] intent in developing the rule was that each individual facility would not have to perform an emission test...". The large majority of sources subject to the open molding requirements of the Subpart WWWW NESHAP could not feasibly conduct emission tests. Even if they were technically able to satisfy total capture requirements, the cost of so doing would be prohibitive. Further, there is no indication that testing conducted by equipment suppliers, ACMA, or other organizations will not fully satisfy the letter and intent of the regulation.

We ask EPA to highlight in the final implementation guidance that sources are not expected to conduct emission tests in order to comply with the NESHAP.

E. Summary

We have no reason to believe that sources subject to the Subpart WWWW NESHAP are not using mechanical non-atomized resin application technology in a manner consistent with the use of this technology at the floors-setting sources. However, we support EPA's efforts to clarify the paperwork requirements related to the use of this technology.

We suggest that EPA's new guidance document should allow generic approval of all non-atomized mechanical application technologies that meet the performance requirements of the NESHAP, when ACMA can demonstrate that the technologies within a generic class have similar operating and emission characteristics. Whether such approval may be on a generic or equipment-design-specific basis, the test reports and operating instructions should be required to include information on only those equipment and operating parameters that the gun supplier or testing organization determine are important to proper non-atomized performance. Qualification testing should replicate, to the degree practical, the resin specifications and other conditions used in developing the Subpart WWWW Table 1 formulas, and guns should qualify as non-atomized provided their emissions fall within the range, and not just below the mean, of the original test data. The industry should be provided a reasonable phase-in period before sources are required to comply with the new guidance. Finally, EPA should clarify that sources are not expected to conduct testing.

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Thank you for considering our comments,



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