

## Indiana Department of Environmental Management

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Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

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Dr. Ewald Schmon R & D Manager SATA GmbH & Co. KG Domertalstrasse 20 70806 Kornwestheim Germany

October 16, 2006

Re: Approval Request for SATA Spray Guns

Dear Mr. Schmon:

The Indiana Department of Environmental Management has reviewed your request for approval of the SATAjet RP and SATAjet RP Digital 2 spray guns for the application of coatings in Indiana. These guns would be allowed for use at any source in Indiana provided an applicable rule did not prohibit using air atomization spray guns (also known as conventional spray guns).

The following rules have requirements that may prohibit or limit the use of your spray guns. Applicability of these rules is dependent on several factors including date of construction, location, and emission levels. Additionally there may be other state or federal rules, which could limit the use of air atomization spray guns.

Rule 326 IAC 8-2, Section 12: This rule applies to wood furniture or cabinet coating operations. Subsection (b) states, "wood furniture or cabinet coating operations subject to this section shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc application system, heated airless spray application system, roller coat, brush or wipe application system or dip-and-drain application system."

Without a rule change, the use of your SATAjet guns would be limited as described above.

Rule 326 IAC 8-1, Section 6 (BACT): This rule requires, "New facilities (as of January 1, 1980), which have potential emissions of 22.7 megagrams (25 tons) or more per year, located anywhere in the state, which are not otherwise regulated by other provisions of this article (326 IAC 8), shall reduce VOC emissions using best available control technology (BACT).

BACT determinations are case-by-case specific, are incorporated into a source's operating permit and may or may not include restrictions on types of spray guns used at the source. Limitations such as those described in your South Coast Air Quality Management District

(SCAQMD) Approval (dated November 25, 2003) could be determined as BACT. There are two cases to consider:

- 1. For a BACT determination at a new source, the guns could be evaluated on a case-bycase basis to determine if they should be considered as part of the BACT determination.
- 2. Modification of an existing BACT determination would require submittal of a source specific request to use the SATAjet guns as part of a revised BACT determination.

Rule 326 IAC 8-10 applies to Automobile Refinishing in Clark, Floyd, Lake, or Porter Counties with some exemptions. Section 5 (b)(3) of the rule states, "Any other coating application equipment that has been demonstrated, by the owner or operator, to the satisfaction of the department to be capable of achieving at least sixty-five percent (65%) transfer efficiency. The owner or operator must submit sufficient data for the department to be able to determine the accuracy of the transfer efficiency claims.

Upon reviewing the approval of the SATAjet RP nondigital and SATAjet RP Digital 2 guns by the South Coast Air Quality Management District and the test data, these guns are approved under 326 IAC 8-1-5(b)(3) for affected sources in Indiana. However, such approval is subject to the following conditions:

- 1. This approval is granted only for these guns when operated at 36 psi inlet pressure or less.
- 2. Because the transfer efficiency is dependant on the design configuration of the air passage housing, the air cap and the air inlet, the guns must be maintained with original SATAjet RP parts specific to each Part Number.
- 3. Each gun must be equipped with an original SATAjet RP pressure gauge that is maintained in proper working condition.
- 4. The air inlet pressure to the SATAjet RP Compliant Spray Gun must not exceed 36 psi.
- 5. The operator of a SATAjet RP Compliant Spray Gun System subject to 326 IAC 8-10 shall be provided a copy of this approval letter and shall retain a copy of this approval on-site. Additionally, the operator shall maintain on-site, a copy of the original manufacturer's manual, equipment part list, and setup instructions.
- 6. Each SATAjet RP Spray Gun System must also use a compatible SATAjet RP Air Pressure Regulator.
- 7. Each operator shall insure that the Air Pressure Regulator meets all of the following requirements:
  - A. Is correctly attached to the spray gun and is in proper working condition.
  - B. The Air Pressure Regulator gauge is easily readable at all times.

- C. The regulator shall not be immersed, soaked or rinsed in any type of liquid especially, strong solvents of any kind. The regulator shall not be placed in a spray gun cleaning machine of any type.
- D. The Air Pressure Regulator must be replaced and the Compliant Spray Guns shall not be operated if for any reason it appears that the regulator is **not** in proper working condition.
- 8. Each operator shall follow the manufacturer's setup and operation procedures for each Compliant Spray Gun System.
- 9. Any modification of the SATAjet RP Compliant Spray Gun design shall invalidate this approval unless the modification has been approved by the Indiana Department of Environmental Management, Office of Air Quality.
- 10. If required to obtain a permit under the Permit Review Rules in 326 IAC 2, the operator shall obtain any necessary permit approvals prior to installing or operating the equipment and must submit a copy of this approval letter with each permit application.

This approval is specific to Volatile Organic Compound Rule for Automobile Refinishing in 326 IAC 8-10. Other state or federal rules may limit the use these spray guns and would require submittal of a separate approval request.

Rule 326 IAC 8-11 applies to Wood Furniture Coating in Clark, Floyd, Lake, or Porter Counties with some exemptions. Section 4(c) contains limitations on the use of conventional air spray guns. Section 2 (11) states, "Conventional air spray" means a spray coating method that atomizes the coating by mixing it with compressed air at an air pressure greater than ten (10) pounds per square inch (psi) (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air.

Approval of the SATAjet guns under this rule would require submission of additional information, including but not limited to, the actual test that was used to obtain the SCAQMD approval.

Rule 326 IAC 20-14 applies to Wood Furniture Manufacturing and is an incorporation of federal rule 40 CFR 63, Subpart JJ. Subpart JJ 63803(h) contains restrictions on the use of conventional air spray guns.

It is not possible for Indiana to grant approvals contrary to federal regulations. The U.S. EPA would have to approve the use of SATAjet guns at sources subject to Subpart JJ or any other applicable federal rule prior to a request for Indiana approval.

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Please direct any response to this letter or any questions to Greg Wingstrom at the above address, or via phone at 574-245-4870 or (800-753-5519 in Indiana), or via e-mail at gwingstr@dem.state.in.us.

Sincerely,

Phil Perry, Chief

Air Compliance Branch Office of Air Quality

PRP/gw

cc: Greg Wingstrom Susanne Walters, SATA Christian Bunk, SATA