# DENIAL OF THE SHERWIN -WILLIAMS COMPANY'S REQUEST FOR VARIANCE FROM VOLATILE ORGANIC COMPOUND CONTENT LIMITS FOR ARCHITECTURAL AND INDUSTRIAL MAINTENANCE COATINGS – INTERIOR WIPING STAINS

On January 20, 2004, The Sherwin-Williams Company (Sherwin-Williams) submitted to the Pennsylvania Department of Environmental Protection (Department) a request for a variance from the volatile organic compound (VOC) content limits for interior wiping stains specified in 25 Pa. Code §130.603. On March 16, 2004, Sherwin-Williams submitted a revised request for a variance to replace the January 20, 2004 submission. Subsequently, the request was supplemented on November 22, 2004 and April 20, 2005 and modified on December 28, 2004 and April 26, 2005. Sherwin-Williams submitted responses to comments on August 19, 2004. The Sherwin-Williams variance request was submitted under 25 Pa. Code §130.606. Section 130.606 provides that a person who cannot comply with the VOC content limits in 25 Pa. Code §130.603(a) may apply in writing to the Department for a variance.

Section 130.606 (c) states that the Department will not grant a variance unless the applicant demonstrates in writing to the Department's satisfaction that:

- (1) It is technologically infeasible for the applicant to comply with the requirements of §130.603(a).
- (2) The public interest in issuing the variance would outweigh the public interest in avoiding increased emissions of air contaminants that would result from issuing the variance.
- (3) The compliance program proposed by the applicant can reasonably be implemented and will achieve compliance as expeditiously as possible.

The Department has reviewed information provided by Sherwin-Williams and by the public related to Sherwin-Williams' request for a variance from the VOC content limits for interior wiping stains specified in 25 Pa. Code §130.603(a). For the reasons discussed below, the Department has determined that the request for a variance from the VOC content limits for interior wiping stains does not meet the requirements of 25 Pa. Code §130.606 (c). Sherwin-Williams has not demonstrated to the Department's satisfaction that:

- (1) It is technologically infeasible for the applicant to comply with the requirements of §130.603(a);
- (2) The public interest in issuing the variance would outweigh the public interest in avoiding increased emissions of air contaminants that would result from issuing the variance; or

(3) The compliance program proposed by the applicant could reasonably be implemented and would achieve compliance as expeditiously as possible.

The Department, therefore, denies Sherwin-Williams' request for a variance for interior wiping stains.

# **Technological Infeasibility**

Sherwin-Williams has not demonstrated to the Department's satisfaction that it is technologically infeasible for Sherwin-Williams to comply with the requirements of 25 Pa. Code § 130.603(a).

Sherwin-Williams indicated that it is technologically infeasible to formulate certain interior wiping stains to comply with the VOC content limits of 25 Pa. Code § 130.603(a) "...without substantially increasing toxicity or fire hazard, or jeopardizing the performance criteria which make these products feasible for application to large surfaces (e.g., floors, paneling, etc.) or fine wood surfaces that will not be subsequently top coated with a clear finish." These are the principal factors upon which Sherwin-Williams relies in claiming technological infeasibility.

Sherwin-Williams has not demonstrated to the Department's satisfaction that reformulation of interior wiping stains to compliance levels will result in products with increased toxicity or fire hazard.

Sherwin-Williams cites "lapping" and "grain raising" as the adverse performance impacts that would result in large area wiping stain applications from Sherwin-Williams' reformulation of interior wiping stains to water-based formulations. Sherwin-Williams cites rapid drying of complying stains as a factor that results in lap marks, or "lapping," when stains are applied on large areas, such as floors. Sherwin-Williams further indicates that "grain raising" is an unacceptable effect of the use of complying interior wiping stain formulations.

Sherwin-Williams has not demonstrated to the Department's satisfaction that reformulating stains to compliance levels is technologically infeasible due to "lapping". While Sherwin-Williams questions whether "lapping" can be avoided even by having multiple applicators working in close harmony, another manufacturer's instructions quoted by Sherwin-Williams describe how this can be done. Sherwin-Williams indicates that contractors should not be required to hire additional staff based on the nature of the coating being applied on a given job. The real issue appears to be not one of technological feasibility of formulating complying interior wiping stains, but the possible increased effort and cost to apply complying formulations to large areas.

Sherwin-Williams has not demonstrated to the Department's satisfaction that reformulating stains to compliance levels is technologically infeasible due to "grain-raising." Various sources acknowledge that "grain raising" can occur with water-based stain formulations, but that there are techniques to mitigate the effect if it does occur. Sherwin-Williams indicates, in product information available on the Minwax website, with respect to its water-based Minwax Accents © water-based stain: "To remove any grain raising, after staining apply a clear finish, let dry, then lightly sand with fine sandpaper before applying a final clear coat." (A copy of the Minwax Accents © web page is attached.) Although "grain raising" may occur with the use of water-based stains, Sherwin-Williams provides recommendations for addressing the concern.

### **Public Interest**

Sherwin-Williams has not demonstrated to the Department's satisfaction that the public interest in issuing the variance would outweigh the public interest in avoiding increased emissions of air contaminants that would result from issuing the variance.

Sherwin-Williams cited aesthetic and economic interests of appearance, ease of use, increased labor time and increased labor costs, as well as potential increased use of clear topcoat, as the principal "public interest" issues related to the request for a variance. Sherwin-Williams indicated that custom wood flooring contractors demand quality wiping stains so as not to jeopardize jobs by a switch to pre-finished flooring. Sherwin-Williams indicated that the concerns about the use of complying water-based formulations relate primarily to large area interior wiping stains used on floors, as well as to stains used on items that are not finished with a topcoat. This is only a segment of interior wiping stain usage.

Sherwin-Williams indicated that the public interest would be better served by allowing noncomplying stains to be sold at the expense of increased levels of VOC emissions during the requested variance period extending until December 31, 2007.

Sherwin-Williams indicated that the use of noncomplying interior wiping stains may, in some cases, eliminate the need for clear coating of finished woodwork, providing some level of avoided emissions. Sherwin-Williams has not demonstrated to the Department's satisfaction that use of complying interior wiping stain formulations will result in increased use of clear finishes, nor in an increase in emissions. Sherwin-Williams has not demonstrated to the Department's satisfaction that the public interest in issuing the variance would

outweigh the health-based public interest in avoiding increased emissions of air contaminants that would result from issuing the variance.

## **Compliance Program**

Sherwin-Williams indicated in its original variance request that it was not known when a suitable interior wiping stain formulation would be identified. Sherwin-Williams requested that a variance initially be granted for five years. The March 16, 2004 revised variance request indicated that research and development efforts "are directed towards a targeted January 1, 2010 compliance goal." In correspondence dated April 26, 2005, Sherwin-Williams requested a compliance date of December 31, 2007.

Sherwin-Williams provided only limited information regarding the scope of their efforts. Sherwin-Williams indicated that the company's research program is focused on alternative formulations, including use of exempt solvents and high solids formulations. Sherwin-Williams submitted additional information, which Sherwin-Williams requested that the Department treat as confidential business information. However, the information provided was insufficient for the Department to evaluate whether or not the compliance program could reasonably be implemented or would achieve compliance as expeditiously as possible.

### **Denial**

The information provided to the Department by Sherwin-Williams fails to demonstrate to the Department's satisfaction that it is technologically infeasible for Sherwin-Williams to comply with the requirements of §130.603(a), fails to demonstrate to the Department's satisfaction that the public interest in issuing the variance would outweigh the public interest in avoiding increased emissions of air contaminants that would result from issuing the variance, and fails to demonstrate to the Department's satisfaction that the compliance program proposed by the applicant could reasonably be implemented and would achieve compliance as expeditiously as possible.

The Department, therefore, denies Sherwin-Williams' request for a variance for interior wiping stains.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel

Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form, and the Board's Rules of Practice and Procedure, may be obtained from the Board. The appeal form and the Board's Rules and Practice and Procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

Dated: June 2, 2005

Joyce E. Epps

Director

Bureau of Air Quality

Pennsylvania Department of Environmental Protection

Attachment