

Commonwealth of Pennsylvania requires that PADEP perform a Regulatory Analysis as part of its rule adoption process. The Regulatory Analysis is to be submitted to the General Counsel, Secretary of Budget and the Governor's Policy Director. That regulatory analysis is to include a cost/benefit analysis. Executive Order 1996-1 does not require PADEP to publish the Regulatory Analysis for comment by the public. However, the August 28, 1999 *Pennsylvania Bulletin* proposed rulemaking states that a cost/benefit analysis was done for the proposed making and states that the Regulatory Analysis form is available to the public upon request (29 Pa. B. 4662). Moreover, as part of its SIP revision submittal, PADEP included a document entitled, "Solvent Cleaning Operations Comment and Response Document," dated May 1, 2001. That document includes Carpenter's comments on the cost/benefit analysis of the proposed rulemaking and provides PADEP's response.

The final rulemaking published in the *Pennsylvania Bulletin* on December 22, 2001 (31 Pa. B. 6921), announcing the adoption of the final version of the Solvent Cleaning Operations rule includes the following finding by the Environmental Quality Board of the Commonwealth of Pennsylvania at J. Findings (2): "A public comment period was provided as required by law and all comments were considered." (31 Pa. B. 6926, December 22, 2001).

*Comment:* Carpenter comments that no data analysis was presented to support the projected VOC emission reductions in the final rule.

*Response:* EPA is not approving a quantified amount of emission reductions from Pennsylvania's solvent cleaning rule. Nor does Pennsylvania's SIP revision submittal include a request that any amount of emission reductions be approved by EPA. Emission reductions achieved by this rule and any other rules credited by PADEP in SIP revisions submitted to satisfy any rate of progress plan or attainment demonstration plan requirements would be the subject of separate rulemakings on those plans.

*Comment:* Carpenter comments that the freeboard requirements for closed-top immersion cold cleaning machines will actually increase emissions, and has provided specific information as to the emission increases that would occur at its Reading, Pennsylvania facility. In its comment letter, Carpenter also provides information regarding modifications to its Reading facility which have reduced VOC emissions from 14 tons per year (tpy) to 2.5 tpy.

*Response:* EPA disagrees that a freeboard requirement for closed-top immersion cold cleaning machines will increase emissions. For purposes of clarification, in Pennsylvania's regulation, an immersion cold cleaning machine refers to a cold cleaning machine with an opening at the top (as opposed to the side or bottom) of the machine through which the parts to be immersed must pass in order to reach the solvent. An immersion cold cleaning machine may or may not be equipped with a cover or lid that would have to be raised or removed in order to pass the parts that are to be immersed through the top opening. Pennsylvania's regulation requires that all immersion cold cleaning machines, as defined above, that use two gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts, be equipped with a cover that shall be closed at all times except during the cleaning of parts or the addition or removal of solvent. The Pennsylvania rulemaking allows operators of affected cold cleaning machines the option of using low volatility solvents (1 mm Hg) in a machine with a freeboard ratio of 0.5 or greater. A freeboard ratio of 0.75 or greater is required only if the solvent volatility is greater than 1 mm Hg. Carpenter is correct in pointing out that an increase in freeboard ratio results in more space (volume) in which the solvent may evaporate.

However, because the solvent vapors are denser than the air in the cold cleaning machine, the solvent vapor concentration is greatest near the liquid solvent than near the opening of the cold cleaning machine. A higher freeboard ratio means that the more concentrated solvent vapor interface area will be less disturbed by air draft or air currents when the cleaner is opened or when it remains open during cleaning. When opening the cover on a cold cleaning machine, Carpenter states that solvent vapor will escape from the machine. This is true, but in machines with a higher freeboard ratio, the less concentrated solvent vapors nearest the opening are more likely to be affected by the opening and closing of the cover, than are the more concentrated solvent vapors near the liquid solvent.

In its emissions analysis, Carpenter is assuming that solvent evaporation is reaching equilibrium within the volume of the cold cleaning machine, and that this entire volume of solvent will be emitted when opening the cover on the cold cleaning machine. In actual practice, in properly operated cold cleaning machines, not all of the volume of solvent that has evaporated into the

freeboard area will be emitted. An increased freeboard ratio also reduces working emission losses to the extent that it provides additional dwell space in order for the liquid solvent to drain back into the cold cleaning machine when parts are removed after having been cleaned. Therefore, EPA expects that PADEP's freeboard requirements for open-top immersion cold cleaning machines will reduce VOC emissions in the Commonwealth.

However, given the specific circumstances of Carpenter's Reading facility as described in its June 10, 2002 letter of comment to EPA, including the information regarding the switch to aqueous-based cleaning solutions, the replacement of equipment, and the costs associated with these changes which resulted in a reduction in VOC emissions from 14 tons per year (TPY) to 2.5 TPY (an 82 percent reduction), Carpenter may wish to apply to PADEP for a source-specific variance to the revised regulations. If Carpenter can provide documentation to PADEP of the information provided in its June 10, 2002 letter to EPA, and demonstrate to the Commonwealth's satisfaction that compliance with the revised regulations would indeed increase VOC emissions at its Reading facility, PADEP could issue a source-specific alternative to Carpenter and submit it to EPA for approval as a SIP revision.

### III. Final Action

EPA is approving the revisions to the Pennsylvania SIP submitted by PADEP regarding VOC control requirements for solvent cleaning operations applicable throughout the Commonwealth.

### IV. Regulatory Assessment Requirements

#### A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements