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VOC260701831

Category: 26 – Bubbling

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DATE: July 1, 1983

SUBJECT: VOC Bubble - Reynolds Metal Company - Virginia

FROM: Brock M. Nicholson, Chief
Technical Guidance Section, CPOB (MD-15)

TO: G. T. Helms, Chief
Control Programs Operations Branch (MD-15)

We have reviewed a proposed Federal Register package approving a VOC bubble for two Reynolds Metal Company facilities located in the Richmond, Virginia, area. A brief description of the proposed bubble and our comments are presented below for your consideration.

Reynolds operates two graphic arts plants (Bellwood and Richmond South). The Richmond area is currently designated nonattainment for ozone but is expected to be redesignated in the near future. EPA has approved the ozone plan for this area with attainment by December 1982. Through the implementation of low solvent technology, the Richmond South plant reportedly was brought into compliance by December 31, 1982. The Bellwood plant will be brought into compliance by June 30, 1986, primarily through the use of low solvent technology and application of the bubble concept; however, the company also intends to install one incinerator and replace two existing presses with one new press.

During 1979, the VOC emissions from the two plants (baseline emissions) were 9,473 tons. The VOC emissions from the two plants shall not exceed 3,101 tons/year after June 30, 1986. This emission rate represents a 67 percent reduction over the baseline emissions on an annual basis.

Prior to June 30, 1986, VOC emissions from the two plants shall not exceed the annual emission rate specified below:

Year	Limit
1982	7,580 tons/year
1983	6,074 tons/year
1984	5,103 tons/year
1985	4,271 tons/year
1986 (until June 30)	3,387 tons/year

After June 30, 1986, emissions from the two plants shall not be less than 63 percent on a monthly basis or 65 percent on a quarterly basis. The

efficiency of the press No. 1 incinerator shall not be less than 65 percent based on an approximate capture efficiency of 70 percent and an approximate destruction efficiency of 95 percent.

Comments

1. Only yearly averages of VOC emissions are required until June 30, 1986. After that monthly and quarterly averages are also required. No specific rationale was presented to justify such averaging times. See memo dated April 15, 1983, G. T. Helms to Jim Sydnor, "Reynolds Metal - VOC Bubble With Long- Term Averaging."

2. No mention is made of a daily cap. While not necessarily a requirement for compliance averaging greater than 24 hours, it might temper concerns about maintaining attainment in a major urban area. Of particular concern is that until 1986, there will only be an annual limit.

Recommendation

We should not recommend approval of this bubble unless the above concerns have been adequately resolved. Specifically, the following should be done:

1. Require specific justification of need for averaging times greater than daily. The justification must include, at a minimum, those items listed in the memorandum referenced in comment number one. Special attention should be given to complete descriptions of each process, the control to be applied to each process, the reasons why continuous compliance is not technically or economically feasible for each process, and any other facts to support the justification.

2. Required demonstration that compliance with the NAAQS for area will be maintained. (This "bubble" source is only required to demonstrate interim emission reduction based on annual average while SIP is based on Kg/day emissions reduction.) Perhaps, the State should establish necessary and meaningful interim limits to protect the NAAQS based on pounds of VOC/lb coating (daily average).

3. Explain why daily cap is not required or is not feasible.

Primary reviewer is Bill Polglase (629-5516).