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

June 19, 1985

MEMORANDUM

SUBJECT: Criteria for Determining RACT in Region IV

FROM: *John Calcagni*, Chief
Economic Analysis Branch, SASD (MD-12)

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

As you requested we have reviewed the document from EPA Region IV presenting a methodology for judging the technological and economic feasibility of emission controls to be designated as RACT for a particular industrial installation.

My concerns are: 1) the document establishes decision rules for RACT, 2) the economic feasibility test combines affordability with cost effectiveness and, 3) the economic feasibility tests are not very robust.

Establishing Decision Rules

The Agency grappled with decision rules in 1977 in its attempt to establish criteria for RACT. It decided at that time that there were too many confounding factors to establish firm decision rules for technological or economic feasibility which would apply in every case. Instead, EPA concluded that RACT has to be a case by case determination. This policy is clearly articulated in the supplement to the general preamble on RACT (44FR 53761, 9/17/79). We cannot find any basis to support the decision rules established by the text of the Region IV document. Rather RACT must be a case by case determination which should rely on the entire record as discussed in the general preamble cited above.

Intermingling of Cost Effectiveness and Affordability

The two criteria of cost effectiveness and affordability are different and should be presented separately.

Cost Effectiveness

In evaluating economic feasibility for RACT, the agency gives significant weight to economic efficiency and the "fairness test" of cost-effectiveness. The reason for this is that Agency policy historically has been to seek attainment through the most cost-effective mix of strategies available. The CTG's, although primarily technology based, are applied to ozone SIP's in a manner to provide a rough first order approximation

of the most economically efficient plan. To maintain consistency, evaluation of the economic feasibility of a source's control requirements should be in the context of the CTG requirements rather than an absolute cost-effectiveness criteria.

We would envision a source presenting the uniqueness of its operations compared to other sources addressed by the CTG. The demonstration would then show that these unique attributes result in the recommended level of control being significantly less cost-effective for this source than for other sources in this category. The use of \$2,000 per ton as a hurdle which triggers a decision cannot be supported. Rather, it is more appropriate as a "rule of thumb" based on empirical evidence of what past experience has indicated that the higher end of RACT costs has been for typical sources. There are sources and source categories for which costs in excess of \$2,000/ton have been determined to be reasonable.

Affordability

We would advise avoiding any decision criteria or tests for "affordability". There is no basis in economic theory to support rewarding an inefficient firm to the detriment of the efficient solely because the inefficient firm cannot "afford" its fair degree of control which is being implemented by other companies. However, we recognize that due to the disruption and dislocation a closure may cause a community, the Agency is occasionally placed in a position of negotiating a suitable alternative to closure. In lieu of an exemption, the alternative which we would recommend is extending the compliance schedule to allow the company to place itself into a position to either afford the controls or to develop and implement more affordable alternatives. However, a company which states that it must close the plant if it is required to comply with the RACT requirements must support the allegation if the Agency is to provide relief to mitigate the potential adverse impacts of plant closure.

There are certain analyses that can be performed to evaluate the Company's contention that closure would result from compliance. Several examples are included in the attachment.

Where a source cannot demonstrate a problem, the Agency should avoid granting any relief based on affordability. Where relief is deemed appropriate, an economically feasible alternative will need to be negotiated on a case by case basis.

Because of these concerns, I recommend you advise Region IV not to proceed to distribute the document in its present form.

Attachment

cc: Al Wehe
Dick Jenkins

ATTACHMENT 1

EXAMPLES OF ANALYSES FOR EVALUATING A CONTENTION OF CLOSURE

Need for Cost Absorption - The company should show with data the extent it expects to be forced to absorb the costs of control. In many instances, most of the costs will be passed on in the form of higher prices. Empirical data on supply and demand elasticities as well as per unit cost impacts, expected costs incurred by competitors, and available industry production capacity need to be presented. This analysis shows only one facet of a problem and must be used with other analyses to be meaningful.

Impact on Closure - In assessing closure of an ongoing operation the company needs to present data regarding its fixed and variable costs in producing the product affected. If projected revenues do not exceed the sum of expected variable costs and annualized costs of the proposed control equipment, then closure could be a consideration. Otherwise, the source is still making a positive contribution to covering fixed charges. Hence, the firm is better off operating with the investment in a control device than not operating at all and closure would not normally be indicated.

Capital Formation - A useful indicator of the ability to raise capital would be the level of capital investment necessary for the control equipment compared to typical recent historical annual investments made by the firm. If the capital investment for the control equipment is lower than other recent annual capital investments made by the firm, then an argument that "funds are not available" is not credible. Even if the capital requirements are large by historic standards this does not necessarily make it unreasonable. For instance, funds are sometimes available from industrial municipal bond issues floated for the express purpose of providing low cost funds for pollution control.