



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

Office of Air and Waste Management  
Washington, D.C. 20460

December 9, 1976

**MEMORANDUM**

**SUBJECT:** Guidance for determining Acceptability of  
SIP Regulations in Non-attainment Areas

**FROM:** Roger Strelow, Assistant Administrator  
for Air and Waste Management

**MEMO TO:** Regional Administrators, Regions I-X

The basis for fully approving state-submitted SIP regulations continues to be demonstrated attainment and maintenance of all national ambient air quality standards as expeditiously as practicable. If the plan demonstrates attainment and maintenance, EPA is required to approve the state regulations. EPA cannot disapprove them because they are too stringent or because EPA considers them not stringent enough (for example, because they are less stringent than a comparable Federal regulation or because they control fewer sources than controlled by Federal regulations), providing the overall SIP shows attainment and maintenance as quickly or quicker than any other available control strategy. If the state plan shows attainment and maintenance, Federal regulations may be revoked at the time of approval.

Especially for oxidant, carbon monoxide, and particulate matter (in areas dominated by urban fugitive dust), control measures required to attain the standards may be technically impossible or socially or economically unacceptable within a short time frame. In this situation, EPA still cannot disapprove state regulations because they are "too stringent," and industry cannot successfully challenge an approval on the ground that the requirements are technologically or economically infeasible. On the other hand, EPA must disapprove the state regulations if they are not stringent enough. The test for approvability of individual regulations is whether they require, at a minimum, all reasonably available controls on a source as expeditiously as practicable. This memorandum seeks to provide guidance as to how to ascertain if state regulations meet these minimum requirements. The use of any given level of control which fails to assure attainment should only be considered to be an interim measure. As control technology improves and as new control measures become

feasible for an area, it will be necessary for the SIP to be periodically revised to include these measures until attainment and maintenance can be demonstrated.

## **1. Reasonably Available Control Measures**

### ***a. Stationary Sources***

With respect to individual point sources and area sources with defined emission points (i.e., those amenable to the application of "classical" control equipment), reasonably available control technology (RACT) defines the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. Thus, RACT encompasses stringent, or even "technology forcing," requirement that goes beyond simple "off-the-shelf" technology. As noted, RACT is the minimum EPA can accept in non-attainment state plans.

The determination of RACT and the corresponding emission rate, ensuring the proper application and operation of RACT, may vary from source to source due to source configuration, retrofit feasibility, operation procedures, raw materials, and other technical or economic characteristics of an individual source or group of sources. In order to assist the Regions in determining the impact of these variables on RACT, OAAQS is continuing to develop RACT guidance materials (see attached status report). This material describes what can be accomplished with good technology and defines things that should be considered in establishing an emission limit for a specific source of that type. In determining RACT for an individual source or group of sources, the control agency, using the available guidance, should select the best available controls, deviating from those controls only where local conditions are such that they cannot be applied there and imposing even tougher controls where conditions allow. For example, the best available control for a boiler burning coal and bark at a pulp mill is multiclone followed by an electrostatic precipitator (ESP), the two control devices having an overall collection efficiency of 99.5%. However, in areas where the bark or similar fuel has a high salt content as a result of the logs being floated in the estuary portion of the river, it may be that the technological and economic

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\* As stated at the outset of this memorandum, the test for approving the entire control strategy – and for EPA thus not having to promulgate any measures – continues to be demonstrated attainment and maintenance of the NAAQS.

problems of installing and operating a large, corrosion resistant ESP may prove unreasonable. More technological and economically feasible controls consisting of a multiclone and ,wet collector designed to withstand the corrosive conditions, and perhaps functioning more effectively on a salt fume than an ESP, depending on the pressure drop employed, may constitute RACT under the conditions cited. In every case RACT should represent the toughest controls considering technological and economic feasibility that can be applied to a specific situation. Anything less than this is by definition less than RACT and not acceptable for areas where it is not possible to demonstrate attainment

As a further assistance to the Regions in defining RACT for the more difficult or the far from textbook situations, OAQPS's Emission Standards and Engineering Division (ESED) will establish a consulting group to support the Regions. This group will include ESED staff but will also include technical expertise from OE and the Regional Offices. In specific instances, the National Air Pollution Control Techniques Advisory Committee (NAPCTAC) may be asked to assist in a RACT determination. The consulting group is being established as a service to the Regions and it should not be looked at as a clearinghouse for regional RACT determinations. These decisions are yours to make. The group is designed to help you as needed on the most difficult cases.

#### ***b. Mobile and Area Sources***

As with point sources, measures which constitute reasonably available controls for mobile sources and area sources with undefined emission points may represent relatively stringent requirements which in many situations forces the application of measures not previously adopted or implemented in a given area. These measures include vehicle inspection and maintenance, transportation control and land use measures, certain controls on fugitive and reentrained dust, and other measures which may influence customary life styles. They do not include clearly un- reasonable measures such as substantial gasoline rationing. Moreover, what may be reasonable in one area may be un- reasonable in another. For example, while it may be reasonable as a transportation control measure to quickly reduce the number of cars permitted to enter the central business district in a city with a good mass transit system, it would not be reasonable to do this on the same timetable in a city with a poor mass transit system.

## **2. Documentation**

In those situations where the State's control strategy can- not demonstrate attainment it will be necessary for the State to document that their control strategy represents the application of reasonably available control measures to all available source categories. The Region should not approve a control strategy that does not contain sufficient documentation to show that the required control measures are the toughest that are reasonably available for the sources in the area covered by the control strategy.

## **3. Replacement of Federal Regulation**

In some areas the SIPS already contain EPA regulations representing reasonably available controls that generally reflect a national definition of reasonably available controls for that source category and that were arrived at by EPA after proposal and public hearing, (e.g., Stage I and I1 gasoline marketing regulations in 16 AQCRs; transportation control measures in 28 AQCRs).

In these situations there is inherently less flexibility in the definition by the state of reasonably available controls and specific justification will be needed before EPA could approve a regulation which exempts significantly more sources, or which imposes controls significantly less stringent, than the Federal regulations. This justification should document the specific case-by-case economic, technical or other factors which cause the state's regulations, although significantly different from the Federal regulation, to include all that is reasonable for a specific area. (The state regulation would still have to conform to the criteria outlined for defining reasonable control measures.) Such justification must be provided not only as a basis for approval of the state regulations, but also to protect the enforceability of comparable Federal and state regulations in other areas. In the absence of acceptable justification, the state regulation exempting some sources can be approved as far as it goes and the Federal regulation should remain in effect to cover sources for which the state's regulation does not apply. Of course, nothing should preclude a state from adopting and this Agency approving a regulation which requires more control than the Federally promulgated regulation.

Since it is the Agency's objective to encourage the states to develop and implement regulations to replace EPA regulations, the Agency may approve state regulations that are only marginally different from the Federal regulations without

the detailed justification noted above if, in the Regional Administrator's judgment, the impact on emissions differs imperceptibly (less than 5% in cases where it is possible to quantify the difference) from that of the Federal regulations and there is no significant threat of undermining EPA activities elsewhere in the nation. When determining if a state regulation is environmentally equivalent to the Federal regulation, EPA can only look at the particular measure being implemented. In other words, it would be unacceptable to approve a measure requiring significantly less control than the corresponding Federal measure on the basis that other control measures implemented in the same area are significantly more stringent than the comparable Federal measures. In areas where attainment cannot be demonstrated, all reasonable measures on all source categories are needed.

To further encourage states to replace EPA regulations, reasonable additional time generally may be granted to comply with replacement regulations providing the new compliance dates (effective dates) are not clearly excessive. We cannot expect a state to adopt regulations which depend upon the prior Federal regulations to alert sources to the steps needed for control, except in those cases where the state regulation is substantially identical to the Federal regulation which it replaces. On the other hand, granting of additional time must be done with care so as not to undermine the action-forcing role of firm deadlines in EPA efforts elsewhere. The use of a "good faith efforts" test will be appropriate in some circumstances

#### **4. Conclusion**

In concluding, I would like to reiterate the fact that the air quality standards are not being attained in many of these RACT areas. Therefore, we cannot relax the intensity of the air pollution control effort. We should ensure that all sources contributing to the nonattainment situation are required to implement restrictive available control measures even if it requires significant sacrifices.

cc: Mr. Tuerk, Mr. Barber, Mr. Legro, Mr. Bonine, Mr. Hidingen.