

MEMORANDUM

SUBJECT: Reasonably Available Control Technology (RACT) and
Innovative Control Technology Projects

FROM: Mary D. Nichols,
Assistant Administrator
for Air and Radiation

TO: Directors, Air and Waste Management Divisions,
Regions I - X

The Environmental Protection Agency (EPA) has been asked to consider whether a State may define RACT for nitrogen oxides (NO_x) as a phased program extending beyond May 31, 1995 for sources that are actively developing innovative control technology. Because of the important environmental benefits associated with encouraging innovative technology, EPA has determined that States may, in certain cases involving innovative technology, define NO_x RACT as a stage-by-stage program of measures in order to accommodate the source's development and installation of the innovative controls.

Section 182(b)(2)(C) of the Clean Air Act, as amended in 1990, requires implementation of RACT as expeditiously as practicable but no later than May 31, 1995. Sources that are pursuing innovative control approaches that may not be available for installation and commercial operation by this date have sought to define NO_x RACT as a phased program extending beyond May 31, 1995. The EPA's general guidance concerning the phase-in

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of controls beyond May 31, 1995 is stated in the NOx Supplement to the General Preamble at 57 FR 55623. The guidance provided in this memorandum is limited to those situations where the source is currently pursuing an innovative control technology strategy which promises to gain reductions beyond existing NOx RACT measures and for which the application of all or some of the controls by May 31, 1995 is impracticable. In such cases, States can incorporate a phased NOx RACT program into their State implementation plans (SIP's) by adopting a SIP rule that allows for alternative compliance plans and which meets the requirements contained in the NOx Supplement to the General Preamble and this memorandum.

For purposes of this guidance, innovative control technology means any system of air pollution control that has not been adequately demonstrated but which would have a substantial likelihood of achieving greater continuous emissions reductions than existing RACT. For instance, owners of internal combustion engines have sought additional time to finalize NOx control technologies that are currently under development and which should achieve greater and less costly reductions than the technology presently considered to be RACT. However, this new technology would not be economically feasible if these sources are also required to immediately install existing NOx RACT measures.

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In 1980, during implementation of the Clean Air Act Amendments of 1977, EPA faced a similar issue for printers and similar sources. At the time, several companies were developing low solvent inks and coatings as a means of meeting a RACT standard. While this pollution prevention approach promised to provide greater environmental benefits than add-on controls, it was not reasonably available by the applicable deadline. EPA resolved the issue by allowing States to enter into alternative compliance schedules with these sources, subject to a number of safeguards and limitations. See Memorandum, from Richard G. Rhoads, Director, Control Programs Development Division, to Directors, Air and Hazardous Materials Division, Regions I - X, dated April 25, 1980.

Similar to the printers' case noted above, EPA believes it is appropriate to allow sources developing innovative control technologies that promise greater emission reductions to phase-in those controls over a period extending beyond May 31, 1995. Under a phased-in approach, NOx RACT would be defined as a stage-by-stage schedule of compliance steps including implementation of all measures which can practicably be implemented by May 31, 1995, and subsequent implementation of other measures leading to full implementation of the innovative technologies. The EPA would regard all measures which are practicable for the affected source (or set of sources) to implement by May 31, 1995 as RACT

as of that date. As other control measures become practicable to implement at later times, EPA would regard such measures as RACT as of those later dates. Thus, the portion of the schedule that can practicably be implemented by May 31, 1995 must be implemented by that date, and the other portions of the schedule leading toward (and including) final installation of controls must be implemented as soon as those steps become practicable. The following lists the criteria States must use in administering a phased RACT program.

1. Phased compliance is only available to a source (or set of sources subject to single ownership) that is actively pursuing innovative control technologies that would not be available by May 31, 1995. The innovative technology must promise lower emissions levels than the existing NO_x RACT measures and can consist of either innovative add-on controls, innovative process changes or innovative pollution prevention strategies. The State must determine that the innovative technology under development by a source is technically sound and sufficiently developed to warrant a phased RACT approach. The EPA encourages States to consult with the EPA Regional Office in making this determination.
2. The source and the State must agree to a specific phased RACT compliance plan which includes an enforceable schedule consisting of actions that can practicably be

implemented by May 31, 1995 and other actions culminating in final installation and operation of the innovative technology by a specified date. The schedule respecting the innovative technology must include clearly specified milestones which provide for development and installation of the technology as expeditiously as practicable. There must be a sufficient number of milestones to ensure that work on the development of innovative technology is being performed diligently, and to enable the State and EPA to monitor the progress of the development effort.

3. The compliance plan must require the source to make any initial reductions that are compatible with the overall innovative strategy as expeditiously as practicable and require that implementation of the final reductions also be done as expeditiously as practicable.

4. The compliance plan must contain an enforceable schedule which requires the installation of existing NOx RACT measures by a specified date if the source fails to diligently meet the milestones contained in the phased RACT compliance plan or if the innovative technology program fails to achieve the required reduction levels.

5. The State must adopt and submit the compliance plan to the EPA as a source-specific SIP revision. A SIP revision is needed to make the requirements federally enforceable.

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As an alternative to a source-specific SIP revision, States may make the above phased RACT requirements for innovative technologies enforceable by including them directly in the NOx RACT rule, applicable on a case-by-case basis.

All inquiries regarding this policy should be addressed to Tom Helms at (919) 541-5527.