

Reasonably Available Control Technology (RACT)

- SIPs for nonattainment areas must provide for RACT
- EPA has defined RACT as:
 - “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility” (44 FR 53762; September 17, 1979).

Reasonably Available Control Technology (RACT) (cont'd)

- For ozone SIPs,
 - Presumptive RACT for many VOC sources are described in EPA's Control Techniques Guideline (CTGs) documents (available on web).
 - Presumptive RACT for NO_x was set only for utility boilers (1992 NO_x Supplement to General Preamble).
 - 1994 guidance indicates that cost effectiveness should be within \$160 to \$1300 per ton.

Reasonably Available Control Technology (RACT) (cont'd)

- Additional VOC and NOx technical information is contained in EPA's Alternative Control Techniques (ACTs) documents.
- SIPs for a number of nonattainment areas must also provide for RACT for major stationary sources (e.g. where EPA has not set a presumptive norm for RACT)
- Phase 2 rule for implementing 1997 8-hour ozone NAAQS provided that meeting NOx SIP call and CAIR would presumptively meet RACT for NOx for EGUs.

That provision was challenged in litigation and the court has remanded the provision regarding the NOx SIP call to EPA.

Reasonably Available Control Measures (RACM)

- RACM requirement set forth in section 172(c)(1) of the CAA applies to all nonattainment areas that are required to submit an attainment demonstration.
- EPA guidance interprets RACM provision to require a demonstration that
 - the state has adopted all reasonable measures to meet RFP requirements and to demonstrate attainment as expeditiously as practicable and
 - no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area.
- Section 51.912(d) specifies that as part of the attainment demonstration each state should include a SIP revision demonstrating that it has adopted all control measures necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements.

Reasonably Available Control Measures (RACM)

- Under this policy, there are no measures that are automatically deemed RACM.
- SIP attainment demonstration requires an area-specific analysis that there are no additional economically and technologically feasible control measures (alone or in conjunction with others) that will advance the attainment date.
- Areas should consider all candidate measures that are potentially available, including any that have been suggested (e.g., in public comment) for the particular nonattainment area.
- Such measures can be deemed as not being RACM if they will not advance attainment or provide for RFP or if they are not economically or technologically feasible.

RACM and RACT for Pb and other Pollutants

- EPA recently promulgated revised standards for Pb in October 2008.
- For Pb, RACM (which includes RACT) are those control measures that are technically feasible and cost effective to implement on sources within the nonattainment area.
- We suggest a threshold level for a Pb RACM/RACT analysis of 0.5 tpy.
- Currently, EPA is in the process of reviewing the standards for the remaining pollutants, until those reviews are completed, current guidance for RACM/RACT should continue to be followed.

For More Information

- Ozone

- CTG & ACT Documents

- http://www.epa.gov/ttn/naaqs/ozone/ctg_act/index.htm

- Technical resources

- <http://www.epa.gov/ttn/naaqs/ozone/ozonetech/#nox>

- PM2.5

- http://www.epa.gov/ttn/naaqs/pm/pm25_implementation_presentations.html