

requirements (including RACT as specified in sections 182(b)(2) and 182(f)) apply throughout the OTR. Therefore, RACT is applicable statewide in Pennsylvania.

### Summary of Regulations

The SIP submittal under review consists of Pennsylvania regulations codified at 25 Pa. Code Chapters 129.91 through 129.95, and the associated definitions in Chapter 121.

#### I. Chapter 121 (Definitions)

The Pennsylvania submittal includes the following new definitions in Chapter 121: Lowest Achievable Emission Rate (LAER), low NO<sub>x</sub> burner with separated overfire air, major NO<sub>x</sub> emitting facility, major VOC emitting facility, marginal ozone nonattainment area, moderate ozone nonattainment area, National Ambient Air Quality Standard (NAAQS), Oxides of Nitrogen (NO<sub>x</sub>), serious ozone nonattainment area, and severe ozone nonattainment area.

#### II. Chapter 129.91

Chapter 129.91 contains the applicability section, and requires owners and operators of covered sources (i.e. all major NO<sub>x</sub> sources and major VOC sources not covered by the source-specific and mobile source RACT requirements of 25 Pa. Code §§ 129.51–129.72, 129.81 and 129.82) to provide PA DER with identification and emission information by May 16, 1994. Covered sources must submit a written RACT proposal to PA DER by July 15, 1994. PA DER is to approve, deny or modify each RACT proposal. Upon notification of approval, covered sources must implement RACT “as expeditiously as practicable” but no later than May 31, 1995.

Following implementation of RACT, certain large combustion units are required to determine emission rates through continuous emissions monitoring or a PA DER approved source testing or modeling program. 25 Pa. Code 129.91(d) provides for the case-by-case RACT determinations to be approved through the SIP revision process.

#### III. Chapter 129.92

Chapter 129.92 details the information required in RACT proposals submitted by these major VOC and NO<sub>x</sub> sources. Except for sources that opt for the presumptive RACT emission limitations, the proposal must include a RACT analysis. The RACT analysis must rank the available control options in descending order of control effectiveness, provide information on

baseline emissions and emission reduction, and evaluate the cost effectiveness of each control option. Cost effectiveness of each control option is required to be calculated using the “OAQPS Control Cost Manual” (Fourth Edition), EPA 450/3–90–006 January 1990 and subsequent revisions. This provision clearly requires sources to provide relevant information in their RACT proposal, including cost factors, but does not limit the consideration of factors which determine what control option is chosen as RACT to cost factors alone. The Pennsylvania regulation also properly does not specify a dollar per ton figure as a threshold over which control options are ineligible for consideration from RACT.

#### IV. Chapter 129.93 (Presumptive NO<sub>x</sub> RACT Requirements)

Chapter 129.93 provides certain major NO<sub>x</sub> sources with an alternative to case-by-case RACT determinations. Chapter 129.93(b)(1) specifies that presumptive RACT for coal-fired combustion units with a rated heat input equal to or greater than 100 million British thermal units per hour (mmBtu/hr) is the installation of low NO<sub>x</sub> burners with separated overfire air. Chapter 129.93(b)(2) provides that presumptive RACT for combustion units with a rated heat input between 20 mmBtu/hr and 50 mmBtu/hr is an annual adjustment or tuneup of the combustion process. Chapter 129.93(b)(4) and (5) provides that owners and operators of oil, gas and combination oil/gas-fired units are required to keep records of fuel certification and to perform annual adjustment in accordance with the EPA document “Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers”, September 1983, EPA–340/1–83–023, or equivalent PA DER procedures.

For the following groups of sources, Pennsylvania proposes that RACT is the installation, maintenance and operation of the sources in accordance with manufacturers specifications. These groups as listed in Chapter 129.93(c)(1) through (7), are as follows: (1) boilers and combustion sources with individual rated gross heat inputs of less than 20 mmBtu/hr; (2) combustion turbines with individual heat input rates of less than 25 mmBtu/hr which are used for natural gas distribution; (3) internal combustion engines rated at less than 500 brake horsepower (bhp) which are set and maintaining 4° retarded relative to standard timing; (4) incinerators or thermal/catalytic oxidizers used primarily for air pollution control; (5) any fuel burning equipment, gas turbine or internal combustion engine with an

annual capacity factor of less than 5%, or an emergency standby engine operating less than 500 hours in a consecutive 12-month period; (6) sources that have been approved as meeting LAER for NO<sub>x</sub> emissions since November 15, 1990 with federally enforceable emission limitations; and (7) sources which have been approved as meeting BACT for NO<sub>x</sub> emissions since November 15, 1990 with federally enforceable emission limitations. The last group of sources are required, however, to meet any more stringent category-wide RACT emission limitation promulgated by EPA or Pennsylvania.

#### V. Chapter 129.94 (NO<sub>x</sub> Averaging Provisions)

Chapter 129.94 permits major NO<sub>x</sub> sources to submit a RACT proposal which includes the averaging of emissions at two or more facilities provided several conditions are met and the proposal is approved by EPA as a revision to the Pennsylvania SIP. Among other conditions, the averaging scheme must require emission caps and enforceable emission rates at each participating source, telemetry links between the participating sources, and an agreement that a violation at one of the participating sources is considered a violation at all of the participating sources.

#### VI. Chapter 129.95

Chapter 129.95 is the recordkeeping provision which is applicable to all VOC and NO<sub>x</sub> sources in the Commonwealth. This section clearly requires that records be kept for a period of at least 2 years and that such records must provide sufficient data and calculations so that compliance with the applicable RACT requirements can be demonstrated. This section also requires that sources of VOC and NO<sub>x</sub> which claim exemptions from the RACT requirement maintain records clearly demonstrating their exempt status.

### EPA Analysis

#### I. Definitions

The definitions associated with the Pennsylvania VOC and NO<sub>x</sub> RACT regulation and contained in Chapter 121, with the exception of the definition of low NO<sub>x</sub> burner with separated overfire air, conform to the definitions in the Act and to EPA’s existing requirements located in 40 CFR Part 52. Pennsylvania’s proposed definition of low NO<sub>x</sub> burner with separated overfire air makes the applicability of this technology to the group of sources specified in the regulation as “coal-fired