

February 1, 2001, since these are the effective dates for the NO_x RACT requirements for those sources in the State approved NO_x Control Plan. Final EPA approval will make them federally enforceable.

4. Homasote Company

Homasote owns and operates a fibre board manufacturing operation located at West Trenton, Mercer County. The facility includes a custom designed eight tier conveyor type natural gas dryer that replaced two oil or gas fired dryers that were dismantled.

Replacement of the two dryers with the natural gas dryer is expected to reduce NO_x emissions by nearly 67 tons annually. The facility's RACT analysis concluded, and New Jersey agreed, that the custom design of the natural gas dryer equipment makes the addition of the generally required control technologies infeasible. The facility-specific NO_x emission limit is 0.10 lb/mmBTU, as verified by compliance stack tests. Additionally, the State's Conditions of Approval include: (1) Annual adjustment of the combustion process pursuant to Subchapter 19; (2) limitation of the amount of wet boards passing through the dryer to not more than 17,000 lb/hr; (3) limitation of the amount of natural gas used in the dryer to not more than 284 million cubic feet per year; and (4) limitation of the amount of propane used as secondary fuel in the dryer to not more than 310,000 gallons per year. Compliance with these additional conditions of approval in the State's SIP revision are to be documented by record keeping.

B. Alternative NO_x Emission Limits

5. Milford Power Limited Partnership

Milford Power operates a combined cycle cogeneration plant at the Crown Vantage Milford Mill in Milford Township, Hunterdon County. Steam and dry low NO_x combustors are used to comply with Subchapter 19's NO_x RACT emission limit during periods of normal operation, however steam is not available or cannot otherwise be used during start-up, shutdown and fuel transfer. The facility's RACT analysis concluded, and New Jersey agreed, that dry low NO_x combustors without steam addition had been demonstrated to be RACT for the cogeneration plant during start-up, shutdown and fuel transfer periods. The alternative NO_x emission limits are 0.34 lb/mmBTU during periods of start-up and shutdown and 0.73 lb/mmBTU during fuel transfer periods. Additionally, the State's Conditions of Approval include: (1) Maximum number of start-ups and

shutdowns shall not exceed 75 events of each type per calendar year; (2) maximum number of fuel transfers shall not exceed 10 events per calendar year; and (3) the facility shall maintain records of all start-up, shutdown and fuel transfer events.

6. University of Medicine and Dentistry

NO_x emissions at the University of Medicine and Dentistry, located at Newark, Essex County, are from three cogeneration units and three non-utility boilers. The facility operates three identical cogeneration units that include Solar Centaur combustion turbines each with a supplementary fired duct burner to provide electricity and steam to its campus. The plant uses natural gas as the primary fuel and number 2 fuel oil as backup. The facility's RACT analysis determined, and New Jersey agreed, that increased water injection to the turbine has been determined to be RACT for the cogeneration units. The alternative NO_x emission limit is 0.167 lb/mmBTU, averaged over any calendar day using Continuous Emission Monitoring System (CEMs), when combusting natural gas. For combustion of number 2 fuel oil, New Jersey lowered the permitted NO_x emission limit from 0.40 lb/mmBTU to 0.35 lb/mmBTU which is the presumptive limit established in Subchapter 19.

The facility also operates three Cleaver Brooks non-utility boilers to provide steam to its Newark campus. The boilers only operate during periods of high demand (peaking units) or during periods of interruption of the three cogeneration units, which are the primary source of steam. The facility's RACT analysis concluded, and New Jersey agreed, that due to the low capacity factor and remaining useful life of only seven years, there are no technologies that are economically feasible to control NO_x emissions from the three boilers. The alternative NO_x emission limit is 0.55 lb/mmBTU when combusting either natural gas or number 6 fuel oil for each boiler. Additionally, the State's Conditions of Approval include: (1) Annually adjusting the combustion process pursuant to Subchapter 19; (2) stack testing in accordance with Subchapter 19 for determining compliance; (3) operating each boiler no more than 2920 hours in any calendar year; and (4) complying with Subchapter 19's NO_x emission limit of 0.28 lb/mmBTU by June 1, 2002 and thereafter, should the three non-utility boilers continue to operate beyond May 31, 2002.

C. Phased Compliance Through Repowering

7. Roche Vitamins, Inc.

Roche Vitamins, Inc. operates a powerhouse facility in Belvidere, Warren County, which includes the following: a packaged water tube steam boiler with a rated heat input of 84.4 mmBTU/hr (Boiler No. 1), and a cogeneration system consisting of one 21.5 Megawatt diesel reciprocating engine and a heat recovery steam generator (HRSG) equipped with a 179 mmBTU/hr duct burner (Boiler No. 6). Roche Vitamins, Inc. proposed a repowering plan in which it committed to replace Boiler No.1 and the cogeneration unit with a new cogeneration unit consisting of a new gas turbine and a new HRSG. New Jersey estimates that after repowering, NO_x emissions from the facility will be reduced by nearly 2023 tons annually. The repowering plan as approved by the State requires the following: (1) The new cogeneration unit to comply with state of the art requirements; (2) the new cogeneration unit be installed in accordance with the milestones specified in a federally enforceable agreement; (3) the repowering be completed by May 1, 1999; (4) fuel restrictions apply to Boiler Nos. 1 and 6 and to the diesel engine; (5) after May 1, 1999, Boiler No. 1 be used as an emergency unit, not to exceed 500 hours per calendar year; and (6) after May 1, 1999, the original cogeneration unit will no longer be operated.

The repowering plan further requires that, during the interim period of May 1, 1995 and May 1, 1999, the NO_x emission limits and other requirements for the boilers and cogeneration units are as follows: (1) For Boiler No. 1, 0.40 lb/mmBTU when firing natural gas, and 0.30 lb/mmBTU when firing a mixture of number 6 oil and lasalocid oil; (2) for the cogeneration facility (engine and HRSG), 582 lb/hr when firing number 6 oil in the engine and natural gas in the duct burner; (3) for the engine only, 8.0 grams NO_x per horsepower-hour; (4) for Boiler No. 6 (duct burner) only, 0.20 lb/mmBTU; and (5) annual adjustment of the combustion process on Boilers No. 1 and 6.

D. Revised Permit for Facility-Specific NO_x Emission Limits

8. Township of Wayne, Mountain View Water Pollution Control Facility

The Township of Wayne, Mountain View Water Pollution Control Facility owns and operates two multiple hearth type sewage sludge incinerators which burn sewage sludge from its wastewater