

Polk County and New Johnsonville, Tennessee Sulfur Oxide (SO₂) Attainment Plan
Effective Redesignation Date: 1/26/98 (62 FR 62695, 11/25/97)

Background of the Plan: In a Federal Register document published March 3, 1978, (43 FR 8962) the Polk County and New Johnsonville areas were designated nonattainment for SO₂. The New Johnsonville area consists of portions of Benton and Humphries Counties, Tennessee, surrounding the Tennessee Valley Authority's (TVA) Johnsonville plant. On July 12, 1990, the State of Tennessee, through the Tennessee Department of Environmental Control (TDEC), submitted a request for redesignation of the Polk County SO₂ nonattainment area to attainment. This request did not contain a maintenance plan, including contingency measures, as required in section 107 (d) (3) (E) of the Clean Air Act (CAA). Subsequently, on April 17, 1995, the State submitted a maintenance plan that completed the redesignation request and the State of Tennessee met all the CAA requirements for redesignation pursuant to Section 107 (d) (3) (E). On January 6, 1988, the State of Tennessee, through the TDEC, submitted a request for redesignation of the New Johnsonville nonattainment SO₂ area to attainment. The submittal was not approvable due to stack height issues that were affected by a January 22, 1988, court decision, which prohibited Environmental Protection Agency (EPA) from exempting stack height increases from demonstration requirements. This request also did not contain a maintenance plan, including contingency measures, as required in section 107 (d) (3) (E) of the Clean Air Act (CAA). Subsequently, on December 17, 1993, the State submitted a maintenance plan that completed the redesignation request and the State of Tennessee met all the CAA requirements for redesignation pursuant to Section 107 (d) (3) (E).

Summary of the Plan: Tennessee submitted air quality data demonstrating attainment with both the primary and secondary SO₂ national ambient air quality standards (NAAQS) for the years 1988 and 1989 in the Polk County area and 1981 through 1993 in the New Johnsonville area. As required by the EPA for SO₂ redesignations, a nonattainment area must demonstrate a attainment by showing no more than one exceedance annually for two complete, consecutive calendar years and must continue in attainment status until the final notice approving such redesignation is effective. During that period there were no exceedances in the Polk County area and one exceedance of each of the primary and secondary NAAQS during 1986 in the New Johnsonville area, and hence no violation of the SO₂ NAAQS. Both areas have continued to monitor attainment of the SO₂ NAAQS to date. The EPA approved the Polk County area SO₂ maintenance plan submitted on April 17, 1995, and the New Johnsonville area SO₂ maintenance plan submitted on December 17, 1993, because both met the requirements of section 175A. In addition, the Agency approved the request to redesignate the Polk County and New Johnsonville SO₂ areas to attainment, because the State has demonstrated compliance with requirements of section 107 (d) (3) (E) for redesignation.

Control Measures: A variety of control measures will be utilized and enforced such as:

- Reasonably Available Control Technology (RACT)
- Permitting new and modified sources
- Compiling periodic inventories

Contingency Measures: Any violation of the NAAQS for SO₂ will trigger initiation of TDEC's contingency plan for the Polk County and New Johnsonville areas. TDEC regulations contained in Chapter 20 require companies to maintain logs for malfunctions and upsets. This includes production of records and log notes regarding operation of processes or fuel burning, control room data, and pollution control equipment data. In the event of exceedances of the NAAQS, a field visit within 30 days will be conducted by the TDEC and a field report shall be completed within 45 days concerning the findings and conclusions. A detailed three-fold approach is described in the federal register notice.

Emissions Reductions: The BIT Manufacturing, Inc. facility is the only significant source of SO₂ emissions located in or impacting the Polk County area. The TDEC submitted that the present SIP is adequate and the RACT emission limitations contained in the TDEC Rule 1200-3-19-.19 have resulted in permanent and enforceable reductions in emissions. For the New Johnsonville area, the State has demonstrated that the present SIP is adequate and the RACT emission limitations contained in the TDEC Rule 1200-3-19-.14 have resulted in permanent and enforceable reductions in emissions.

In the Polk County area, attainment of both the primary and secondary NAAQS has been evident since 1988. The New Johnsonville area has attained the both the primary and secondary NAAQS since 1981. The RACT standards in place for both areas have achieved the desired effect of a maintenance plan. Therefore, the maintenance plan for the Polk County area includes continued implementation of the RACT standards specified in the TDEC Rule 1200-3-19-.19. The maintenance plan for the New Johnsonville County area includes continued implementation of the RACT standards specified in the TDEC Rule 1200-3-19-.14.

Federal Register Actions:

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