

Williamson County, Tennessee Lead Attainment and Maintenance Plan

Effective Redesignation Date: 9/10/99 (64 FR 37406, 7/12/99)

Background of the Plan: On January 6, 1992, the Environmental Protection Agency (EPA) designated the portion of Williamson County around the General Smelting and Refining, (GSR) Inc. (Now Metalico-College Grove, Inc.) lead smelter as a nonattainment area for lead. This nonattainment designation was based on lead National Ambient Air Quality Standard (NAAQS) violations recorded by monitors located near the GSR facility during the fourth quarter of the 1990 and the second quarter of 1991. On July 2, 1993, the State of Tennessee through the Tennessee Department of Environment and Conservation (TDEC) submitted a State Implementation Plan(SIP) for attaining the Williamson County lead nonattainment area. EPA found the SIP inadequate because it did not meet all of the requirements of section 172(c) of the Clean Air Act (CAA) and requested that TDEC make the necessary corrections and submit supplemental information to address the deficiencies. In late 1997, the facility was sold and renamed Metalico-College Grove, (MCG) Inc. The new owner proposed changes to the facility's design and submitted a new permit application to TDEC on July 13, 1998, reflecting those changes.

Summary of the Plan: TDEC elected to submit a new lead SIP and redesignation request based on the GSR facility, while acknowledging that a new lead SIP would be necessary to accommodate the new MCG, Inc. smelter, as reflected by the July 13, 1998, permit application. On December 28, 1998, the old facility was completely shutdown, and the new smelter began operation. As a result, TDEC submitted a new lead SIP and redesignation request dated May 12, 1999, and TDEC withdrew both the 1993 and 1998 lead SIPs.

To demonstrate that the area will continue to be in attainment with the lead NAAQS, emission limits were set through the application of reasonable achievable control technologies (RACT) and workplace standards at the MCG facility. The emission limits were evaluated using air dispersion modeling. This modeling predicts the impact of emission on the environment surrounding the facility and whether or not the area will attain the lead NAAQS. The emission limits for the MCG facility were submitted as a part of the lead SIP and used in the modeling study. The facility-wide emissions of lead for MCG are limited to 0.863 pounds per hour (lbs/hr). Any relaxation of the emission limits which results in a computer modeling prediction of a maximum quarterly lead concentration off the MCG plant property exceeding $0.218 \mu\text{g}/\text{m}^3$ will require a revision of this lead SIP. EPA approved the lead SIP and redesignation of Williamson County to attainment because the submittal met the requirements of the CAA. The effective date was September 10, 1999.

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

- Reasonably Available Control Technology (RACT)
- Reasonably Available Control Measures (RACM)
- Workplace Standards

Contingency Measures: As provided in section 172 (c) (9) of the CAA, all nonattainment area SIPs that demonstrate attainment must include contingency measures. These measures should consist of other available measures that are not part of the area's control strategy. These

measures must take effect without further action by the state or EPA, upon a determination that the area has failed to meet Reasonable Further Progress (RFP) or retain the lead NAAQS by the applicable attainment date.

If a violation of the Lead NAAQS occurs in the Williamson County area, TDEC will proceed within 60 days to take appropriate enforcement action for that violation, and, if necessary incorporate a schedule of corrective action into any order issued as a result of that enforcement action. EPA has determined this requirement in the Tennessee SIP to meet the contingency measure provisions of the CAA.

Emission Reductions: The 1998 modeling demonstration submitted by TDEC for the MCG facility shows a predicted maximum quarterly ambient air lead concentration of 0.218 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) which is well below the NAAQS for lead of $1.5 \mu\text{g}/\text{m}^3$. It is predicted that the maximum quarterly lead concentration in the year 2011 shall be either at or below the 1998 value.

Federal Register Actions:

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