

STATE IMPLEMENTATION PLAN  
for the  
CONTROL OF LEAD AIR POLLUTION

*Dallas County*

Public Hearing  
January 10, 1984  
Dallas Public Library Auditorium  
6:00 p.m.

*1984*

## PREFACE

In response to the promulgation by the Environmental Protection Agency (EPA) of a new National Ambient Air Quality Standard for lead on October 5, 1978, the Texas Air Control Board adopted a proposed State Implementation Plan (SIP) for the Control of Lead Air Pollution on March 21, 1980. The plan was subsequently submitted by the Governor of Texas to EPA on June 12, 1980. On January 4, 1983, EPA proposed approval of the SIP for all areas of Texas except Dallas and El Paso.

Since 1980 the TACB has been involved with implementing the provisions of the plan, conducting special purpose monitoring and sponsoring air quality studies to identify areas and/or facilities where lead air pollution is a continuing problem. Within that timeframe, the facilities initially evaluated for inclusion in the plan have effected numerous changes, and the TACB has accumulated considerable additional air quality data.

This revision to the plan is proposed in order to incorporate the results of those changes and of the air quality analysis. This revision administratively updates the existing plan and adds substantive control requirements for certain facilities in Dallas and El Paso Counties.

### III. Implementation of the Control Strategy for Lead

#### A. Sources Determined in 1980 Control Strategy to be Significant Lead Point Sources

##### 1. General Activities

During the early stages of development of the 1980 Lead SIP, a survey of state lead sources was conducted. Source Emissions Inventories were updated and modeling was carried out for each source. Four lead point sources were determined by modeling to have potential for causing exceedances of the National Ambient Air Quality Standard (NAAQS) for lead. They were, Houston Lead Company, Gould, Inc., Dixie Metals Company and ESB Inc. The Texas Air Control Board adopted the Lead SIP on March 21, 1980 and copies were mailed to each of the four sources on June 23, 1980. On January 30, 1981, the sources were instructed to either develop a plan to monitor ambient air or develop a control plan to provide for emissions reductions sufficient to demonstrate attainment of the NAAQS for lead. If monitoring was chosen and exceedances of the NAAQS for lead recorded, then a control plan

would need to be submitted. Monitoring results are provided in Appendix J.

2. Source Specific Activities

a. Houston Lead Company

On June 8, 1981, Houston Lead submitted a point source control plan. Subsequently, in a telephone conversation of October 13, 1981, the company notified the TACB that the plant had been closed down and that there were no plans for re-start. The TACB notified the company on October 21, 1981, of deficiencies in their control plan and requested a formal notice concerning their plant closure. Additionally, the company was advised that should operation of the plant resume, the TACB would require compliance with all portions of the 1980 Lead SIP. An on-site investigation, made on December 8, 1981, confirmed the plant closure.

The 1980 Lead SIP provided for source compliance with the lead NAAQS by

November 5, 1982. Since that date has passed, this source must undergo a TACB review of its control equipment and operational conditions, prior to re-opening to assure that no exceedances of the standard will occur.

Referenced documents and related materials are provided in Appendix C.

b. Gould, Inc.

On March 18, 1980, prior to adoption of the 1980 Lead SIP, Gould, Inc. (Gould) submitted a point source control plan, along with emissions inventory information and modeling results. Negotiations on this plan with the company resulted in an acceptable plan that was submitted to public hearings on February 17, 1982. The plan was adopted by the Board on July 9, 1982, as an amendment to the Lead SIP, and was submitted to EPA on December 3, 1982.

The control plan consisted of the following elements:

- o Hard lead ventilation system which was operational by December 1, 1980.
- o Blast furnace enclosure which was operational by January 1, 1982.
- o Specialty alloy ventilation system which was operational by February 1, 1981.
- o Flue dust furnace system which was operational by August 1, 1981.

These controls, along with specific point source emission rate limitations, resulted in a revised emissions inventory of 7.3 tons per year and predicted maximum ambient lead contributions of 1.1 ug/m<sup>3</sup>. It was, therefore, determined that the control measures adopted by the Board were sufficient to demonstrate attainment with the NAAQS for lead by November 5, 1982.

Referenced documents and related materials are provided in Appendix D.

c. Dixie Metals Company

On March 9, 1981, Dixie Metals Company (Dixie) submitted a monitoring plan. The plan was evaluated and determined to be unacceptable as submitted. On October 20, 1981, a Notice of Violation was issued to Dixie for failure to submit an acceptable monitoring plan. Dixie responded with a revised plan on October 30, 1981. Negotiations on the monitoring plan concluded with a revised plan being approved on January 31, 1983. The plan provided for three monitors to be located in the vicinity of the plant, two of these to be operated by the company in accordance with TACB procedures and the third being an existing City of Dallas site. Data from all three monitors were to be reported to

TACB. The TACB also placed one special purpose monitoring site near this facility to enhance the monitoring effort with three new sites to be added on October 21, 1983.

Monitoring data collected from April 1, 1982, to September 30, 1983, at these sites has indicated that the lead NAAQS of  $1.5 \text{ ug/m}^3$  averaged over a calendar quarter has not been exceeded at Dixie. A value of  $1.52 \text{ ug/m}^3$ , however, was recorded for the fourth quarter of 1982 (see Appendix J). Values less than or equal to  $1.54 \text{ ug/m}^3$  are not considered an exceedance of the standard, however, since Dixie was not operating at 100 percent capacity, a borderline value indicates the potential for an exceedance. Based on this, the TACB conducted a modeling study (see Appendix E) which predicted an exceedance of the standard at maximum production levels. As a result, revisions to TACB

Regulation III, Subchapter B, have been proposed to limit lead emissions from lead smelters in Dallas County. These regulations will limit Dixie's fugitive lead emissions to an estimated 0.04 tons per year (and total lead emissions to 27.54 tons per year) by June 30, 1984, resulting in an estimated maximum ambient lead concentration of 0.57 ug/m<sup>3</sup>. Appendix E contains an attainment demonstration based on controls to be implemented as a result of the new regulations.

Special purpose lead monitoring will continue at Dixie to determine the effect of the new regulations. Should an exceedance of the lead NAAQS occur, appropriate action will be taken.

Referenced documents and related materials are contained in Appendix E.

d. ESB, Incorporated

On July 16, 1980, ESB, Incorporated (ESB) responded to the 1980 Lead SIP by stating that the plant was undergoing an indefinite termination of production. On April 22, 1981, the company formally notified the TACB that all manufacturing operations involving the processing of lead and/or lead oxide materials were terminated. Following this, on May 7, 1981, the company submitted an ambient air monitoring plan which was approved by letter dated August 24, 1981. Additionally, the company was advised that should production resume, the TACB would require compliance with all portions of the lead SIP.

The 1980 Lead SIP provided for source compliance with the lead NAAQS by November 5, 1982. Since that date has passed, this source must undergo a TACB review of its control equipment and operational conditions, prior to reopening to assure that no exceedances of the standard will occur.

Referenced documents and related materials are provided in Appendix F.

B. Sources Determined to be Significant Lead Point Sources by Analysis of Lead Monitoring Data

1. ASARCO, Incorporated

See Section III.D.

2. RSR Corporation

The TACB began a special purpose monitoring program at RSR Corporation (RSR) on April 5, 1982. Three monitoring sites, consisting of one monitor each, began data collection on that date. On January 1, 1983, a fourth site, consisting of two monitors, as well as an additional monitor for each of the first three sites, was added. During the period beginning April 1, 1982, and ending September 30, 1983, three exceedances of the NAAQS for lead were recorded, two occurring at one site (see Appendix J). Due to these exceedances, TACB issued a Notice of Violation to RSR on January 28, 1983, and on February 18, 1983, held an Administrative Enforcement Conference

with the company to determine appropriate action. Subsequently, on April 11, 1983, RSR's file was submitted to the Attorney General's office for litigation, and an agreed order was entered on October 17, 1983.

The controls mandated by the agreed order will limit RSR's fugitive lead emissions to an estimated 0.51 tons per year (and total lead emissions to 63.78 tons per year) by June, 1984, resulting in an estimated maximum ambient lead concentration of 1.27 ug/m<sup>3</sup>. Appendix G contains an attainment demonstration based on controls to be implemented as a result of the agreed order.

Ambient lead monitoring will continue at RSR to determine the effect of the controls implemented as a result of the agreed order. Should an exceedance of the lead NAAQS occur, appropriate action will be taken.

Referenced documents and related materials are contained in Appendix G.

C. Sources Originally Determined in 1980 Control Strategy as Those Which Do Not Cause the Standard to be Exceeded in Areas of Public Exposure

1. Ethyl Corporation

This company was not required by the 1980 Control Strategy to conduct monitoring or develop a control plan, since no exceedances of the standard were predicted in areas of public exposure. However, the TACB has continued surveillance of this source by way of annual inspections and routine surveillance checks.

An annual inspection on October 2, 1981, and a follow-up phone call of January 19, 1982, document that the lead emitting processes have been permanently shut-down and partially dismantled. (See Appendix H).

2. Lone Star Steel

This company was not required by the 1980 Control Strategy to conduct monitoring or develop a control plan, since modeling predicted no exceedances of the standard in

areas of public exposure. Investigations have shown that the company has been operating on a limited basis since plan development. (See Appendix I).

To determine background lead concentrations in this area, a special purpose monitor began operation on December 1, 1982, and continued until April 30, 1983, at which time the property owner requested the site be moved. A subsequent site, established July 1, 1983, is still in operation (see Appendix J) and will be maintained to establish the source lead contribution when normal production resumes.

D. Control Strategy for El Paso

(proposed El Paso SIP revisions to be inserted)