

SUPPLEMENTARY INFORMATION:

I. Background/History

In a final rule published on November 6, 1991, USEPA announced that a portion of Marion County, Indiana was being designated nonattainment for lead under section 107(d)(5) of the Clean Air Act (the Act), based on violations of the lead NAAQS monitored in 1990 in the vicinity of the Refined Metals facility in Marion County [See, 56 FR 56694 (codified at 40 CFR 81.315)]. The lead nonattainment designation for this area became effective on January 6, 1992.

Section 191(a) of the Act requires that States containing areas designated nonattainment for lead submit a SIP meeting the requirements of part D, title I of the Act within 18 months of the nonattainment designation. On February 4, 1992, Indiana submitted to the USEPA a site-specific revision request to the lead implementation plan addressing the 1990 lead NAAQS violations. Because the revision request did not satisfy all part D, title I, requirements, on July 12, 1993, USEPA proposed a limited approval/limited disapproval (58 FR 37450). On September 23, 1993, Indiana officially withdrew the SIP submittal. On March 23, 1994, the State submitted a revised rule which forms the basis for this rulemaking. The State supplemented the submittal on September 21, 1994, and USEPA deemed the submittal complete on September 23, 1994. Finally, on January 24, 1995, Indiana submitted contingency measures in an operating permit which underwent a public hearing.

Section 192(a) further provides that each lead SIP must provide for attainment of the lead NAAQS as expeditiously as practicable, but no later than 5 years from the date of the nonattainment designation. Among other things, the part D, title I requirements include: implementation of all reasonably available control measures (RACM), including reasonably available control technology (RACT); demonstration of reasonable further progress (RFP); a comprehensive, accurate and current inventory of all sources of lead in the nonattainment area; a new source review (NSR) program meeting the requirements of section 173 of the Act (i.e., require permits for construction and operation permits for new or modified major stationary sources of lead in the nonattainment area); enforceable emission limits, timetables and schedules for compliance; the applicable requirements of section 110(a)(2); and provisions for the implementation of specific measures

(contingency measures) upon a determination by USEPA that the nonattainment area fails to make RFP or meet the NAAQS by the applicable date (See, sections 172(c), 173 and 171 of the Act). USEPA provided the States with guidance on SIP requirements for lead nonattainment areas in the April 16, 1992, General Preamble for the Implementation of Title I of the Act of 1990 (See, 57 FR 13498; See also, 57 FR 18070, April 28, 1992), and in a December 22, 1993, Addendum to the General Preamble (See, 58 FR 67748). The State's February 4, 1992, submittal, as well as the final submittal, are available for inspection at the USEPA Region 5 Office.¹

II. Identification of Review Criteria

USEPA has evaluated the revisions to Indiana's lead SIP for consistency with the requirements of sections 191(a) and 192(a) of the Act, and other applicable federal requirements. Additional guidance documents containing USEPA policy include: the April 23 and June 24, 1992, Questions and Answers for Lead, prepared by the Office of Air Quality Planning and Standards (OAQPS); the April 16, 1992, General Preamble (See, 57 FR 13498; See also, 57 FR 18070, April 28, 1992); and the December 22, 1993, Addendum to the General Preamble (See, 58 FR 67748).

III. USEPA Review and Findings

A. Review of Submittal Applicable to Portion of Marion County Designated Nonattainment for Lead

This revision request provides for the control of both stack and fugitive emissions by requiring revised emission limitations, a new baghouse and stack, and a total enclosure of the buildings housing the sources considered to be responsible for the monitored violations (i.e., blast furnace, dust furnaces, material storage building). The emission limits for the new and existing baghouse stacks are summarized below:

BAGHOUSE STACK LIMITS

| Baghouse stack | Old limit (lb/hr) | New limit (lb/hr) |
|----------------|-------------------|-------------------|
| M-1 | 1.132 | 0.91 |
| M-2 | .015 | .15 |
| M-3 | .005 | .15 |
| M-4 | | .30 |

In addition to the above limitations, and a fugitive lead dust control plan, the

¹USEPA approved the Indiana lead SIP called for in response to the issuance of lead NAAQS and subject to the requirements of then section 110 of the Act [see Title IAC 326 15-1 on April 10, 1988 (53 FR 12896) and October 3, 1988 (53 FR 38719)].

site-specific lead rule (Title 326 IAC 15-1-2, sections 2(1)(A) to 2(1)(I)) contains the following provisions to mitigate the release of lead fugitive emissions to the atmosphere: (1) the installation and operation of several hooding systems in several areas of the facility; (2) enclosure of the screw conveyors used to transport lead dust; (3) a three (3) percent opacity limit for all building openings; (4) a five (5) percent opacity limit for each stack; (5) a continuous monitoring system to ensure negative pressure inside the affected buildings, use of continuous opacity monitors (COMs) for stacks M-1 and M-4; (6) initial certification of COMs; (7) quarterly excess emission reporting of COM data and quality assurance reports; (8) stack testing of all stacks; and authority by the State to require the cessation in production, if necessary, to ensure attainment of the lead NAAQS (See January 12, 1995, operating permit provisions). Compliance with these provisions is to be achieved no later than March 1, 1994, with the exception of the operating permit provisions, which are effective from January 12, 1995 through January 31, 1998.

B. Review of SIP Submittal

The following summary describes how Indiana addresses the part D, title I requirements of the Act:

Section 172(c)(1) calls for the implementation of RACM and RACT. Indiana has satisfied the requirement for RACM and RACT through emission limitations on the baghouse stacks, the maintenance of the buildings under negative pressure, and monitoring requirements. An amended fugitive lead dust plan, which mirrors an Agreed Order between the State and the source, further reduces lead emissions through operation and maintenance practices. A sampling survey of lead dust conducted on facility grounds also provided the State with new information needed for accurate inputs to air quality modeling.

In modeling the ambient air quality at Refined Metals, IDEM first evaluated the performance of the Industrial Source Complex Long Term model (ISCLT2) against the performance of the Fugitive Dust Model (FGM), to determine which model would best characterize the air quality in the area. ISCLT2 predicted lead concentrations which more closely matched the monitored lead concentrations for the area. Therefore, ISCLT2 was used in the attainment demonstration for this SIP revision.

The Refined Metals facility's lead emission points include point, area, and volume sources. Building downwash effects were considered for the elevated point sources. Roadway dust, which has