

direct result of the shortage of key input data pending completion of the new model. The 2001 Plan employs several different methods, including precursor emission and concentration trends, rollback, and isopleth analyses, to calculate the emissions reductions necessary for attainment. The attainment target is conservatively based on the 2000 ozone isopleth analysis, which generates the largest amount of emissions reductions required for attainment of the various methods employed, and thereby reduces the potential for underestimation of reduction requirements (2001 Plan, p. 22). Given the limitations in the data and considering the conservative approach taken in setting the attainment target, EPA believes that the modeling approach employed in the 2001 Plan reasonably approximates the attainment target.

According to the 2001 Plan's modeling analysis, reductions from the previously adopted and new measures are still not sufficient to attain the 1-hour ozone standard. The estimated shortfall is approximately 26 tons per day (tpd) of VOC reductions. The co-lead agencies indicated that adopting measures to fill the 26 tpd shortfall would require further study. Thus, the co-lead agencies and CARB made an enforceable commitment as part of their 2001 Plan to adopt and submit measures to fill this shortfall (2001 Plan, pages 22, 24, and 34). The State has also made enforceable commitments to submit a SIP revision by April 15, 2004 using the CCOS to reassess attainment needs, and to adopt any additional measures needed to provide for attainment by the 2006 deadline. The CCOS currently under way will provide the data necessary for a more detailed modeling analysis and is expected to be available for the co-lead agencies to use in their mid-course review.

EPA believes—consistent with past practice—that the CAA allows approval of enforceable commitments that are limited in scope where circumstances exist that warrant the use of such commitments in place of adopted

measures.^{14 15} once EPA determines that circumstances warrant consideration of an enforceable commitment, EPA believes that three factors should be considered in determining whether to approve the enforceable commitment: (1) Whether the commitment addresses a limited portion of the statutorily-required program; (2) whether the state is capable of fulfilling its commitment; and (3) whether the commitment is for a reasonable and appropriate period of time.

As an initial matter, EPA believes that circumstances in the San Francisco Bay Area warrant the consideration of enforceable commitments. With respect to the commitment to adopt additional measures to ensure attainment by 2006, we have concluded that, at the time of plan adoption, the State and co-lead agencies had adopted, or had committed to adopt, all reasonably available VOC control measures and that no additional measures could be identified. As discussed in more detail below, the great bulk of emission reductions needed for attainment comes from stringent regulations already fully adopted by the co-lead agencies, the State, or the federal government. These previously adopted measures include CARB regulations governing area and mobile sources, BAAQMD regulations governing stationary sources, and

federal regulations such as standards that apply to diesel engines and locomotives.

Moreover, after reviewing measures included in other SIPs as well as measures recommended by the public, the co-lead agencies concluded that they had already adopted, or were committing in the 2001 Plan to adopt, essentially all VOC measures that were currently in place in other areas of the country (2001 Plan, page 49). Furthermore, the BAAQMD concluded that they have established or committed to establish emissions limits on VOC sources that are equivalent to those in place in the one extreme area in the country—the South Coast. See 2001 Plan, page 49.

In July 2001, the co-lead agencies and CARB notified EPA that they were unable at the time to identify and therefore adopt any additional programs that would reduce VOC emissions sufficient to fill the shortfall. Because the State and co-lead agencies need additional time to consider technologies still in the developmental stages, EPA determined that it is appropriate to consider enforceable commitments for the remaining necessary reductions.

EPA has also concluded that it was not practicable for the co-lead agencies to complete the rule development and adoption processes prior to plan submittal for the 13 new, identified control measures to which the plan commits and therefore consideration of enforceable commitments is warranted. Because the vast majority of VOC sources are already subject to stringent, adopted rules, it is increasingly difficult to develop regulations for the remaining universe of uncontrolled sources. For example, BAAQMD has committed to adopt an improved architectural coatings rule (see table 2 above). This effort requires an assessment of the emissions reduction potential of establishing coatings restrictions for very small sources, including time-consuming industry surveys and the refinement of emissions factors and emissions inventories. Adoption of stringent new coatings limits also involves collection or development of information to resolve coating performance issues for a large variety of different coatings and applications. Other rules require similar complex research and development work, analysis of compliance options and necessary exemptions, examination of test methodologies (an especially important concern where the VOC emissions standards, as in the Bay Area, approach the monitoring detection limits), and development of provisions to prevent increased reliance on toxic

¹⁴ Commitment approved by EPA under section 110(k)(3) of the CAA are enforceable by the EPA and citizens under, respectively, sections 113 and 304 of the CAA. In the past, EPA has approved enforceable commitments and courts have enforced these actions against states that failed to comply with those commitments: See, e.g., *American Lung Ass'n of N.J. v. Kean*, 670 F. Supp. 1285 (D.N.J. 1987), *aff'd*, 871 F.2d 319 (3rd Cir. 1989); *NRDC, Inc. v. N.Y. State Dept. of Env. Cons.*, 668 F. Supp. 848 (S.D.N.Y. 1987); *Citizens for a Better Env't v. Deukmejian*, 731 F. Supp. 1448, *recon. granted in part*, 746 F. Supp. 976 (N.D. Cal. 1990); *Coalition for Clean Air v. South Coast Air Quality Mgt. Dist.*, No. CV 97-6916-HLH, (C.D. Cal. Aug. 27, 1999). Further, if a state fails to meet its commitments, EPA could make a finding of failure to implement the SIP under CAA Section 179(a), which starts an 18-month period for the State to correct the nonimplementation before mandatory sanctions are imposed.

¹⁵ CAA section 110(a)(2)(A) provides that each SIP "shall include enforceable emission limitations and other control measures, means or techniques" * * * as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirement of the Act." Section 172(c)(6) of the Act, which applies to nonattainment SIPs, is virtually identical to section 110(a)(2)(A). The language in these sections of the CAA is quite broad, allowing a SIP to contain any "means or techniques" that EPA determines are "necessary or appropriate" to meet CAA requirements, such that the area will attain as expeditiously as practicable but no later than the designated date. Furthermore, the express allowance for "schedules and timetables" demonstrates that Congress understood that all required controls might not have to be in place before a SIP could be fully approved.