

CHAPTER 7

ASSESSMENT OF CEQA ALTERNATIVES

Introduction

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INTRODUCTION

The California Environmental Quality Act (CEQA) requires that the District propose alternatives to the 2007 AQMP. These alternatives should include realistic measures to attain the basic objectives of the proposed project and provide the means for evaluating the comparative merits of each alternative. The range of alternatives must be sufficient to permit a reasonable choice but need not include every conceivable project alternative. The CEQA Alternatives to the 2007 AQMP are CEQA Alternative 1 (No Project Alternative, which is the 2003 AQMP) and CEQA Alternative 2 (VOC/NO_x Combined Alternative or Least Toxic Alternative). The Socioeconomic Report herein evaluates those alternatives that meet attainment of the air quality standards. CEQA Alternative 1 falls short of attaining the standards; therefore, it is not analyzed herein.

CEQA ALTERNATIVE 2—VOC/NO_x COMBINED ALTERNATIVE

CEQA Alternative 2 recreates the traditional AQMP reductions strategy for attainment where VOC and NO_x emissions are reduced in approximately equal combinations to ensure both ozone and particulate matter concentrations are lowered. This alternative contains all of the same short- and long-term control measures as the Plan, but differs in the composition of the black box long-term control measure. Compared to the NO_x black box for mobile sources in the Plan, CEQA Alternative 2 has more VOC and less NO_x reductions from stationary and mobile sources.

COMPARISON OF SOCIOECONOMIC IMPACTS

Table 7-1 compares the direct costs, direct air quality benefits, and job impacts of the VOC/NO_x Combined Alternative to the 2007 AQMP. The monetary cost and benefit analysis includes both quantified and unquantified measures and quantified benefits. Since the Socioeconomic Report is performed on an annual basis, no job analysis can be performed for the unquantified control measures. The quantified measures represent only 47 percent of the intended emission reductions for clean air. Therefore, the job analysis for the cost of control measures in Table 7-1 represents the job impacts from implementing only 47 percent of the emission reductions. The clean air benefit in Table 7-1, on the other hand, depicts the air quality benefit of all the intended emission reductions for attainment. Therefore, its associated job impact includes the air quality benefit of all the emission reductions.

TABLE 7-1
Average Annual Impacts of AQMP and CEQA Alternatives

Alternatives	Costs		Quantified Benefits	
	Millions of 2000 Dollars	Jobs*	Millions of 2000 Dollars	Jobs
2007 AQMP	\$2,294	-28,279	\$14,592	61,409
VOC/NOx Combined Alternative	\$2,494	-28,279	\$14,533	61,268

*Reflect only the impacts of quantifiable measures.

The higher cost under the VOC/NOx Combined Alternative reflects different distribution of emission reductions in the black boxes under this alternative and the Plan.

The VOC/NOx Combined Alternative is projected to have lower air quality benefits than the 2007 AQMP. The VOC/NOx Combined Alternative has the same PM_{2.5} attainment benefit as the Plan. Thus, only benefit categories associated with ozone concentrations would show differences between the VOC/NOx Combined Alternative and the Plan. For example, the ozone health benefit under the Plan is larger than that of the VOC/NOx Combined Alternative. Table 7-2 shows the distribution of quantified benefits for these two alternatives among different benefit categories.

TABLE 7-2
Average Annual Quantified Benefits by Category by Alternative
(millions of 2000 dollars)

CEQA Alternatives	Total	Health	Visibility	Congestion Relief	Material	Crop Yield
2007 AQMP	\$14,592	\$9,772	\$3,631	\$966	\$204.2	\$18.4
VOC/NOx Combined Alternative	\$14,533	\$9,714	\$3,631	\$966	\$204.0	\$18.0

Both the AQMP and the VOC/NOx Combined Alternative are demonstrated to meet the federal air quality standards for ozone and PM_{2.5}. The VOC/NOx Combined Alternative has lower air quality benefits, but higher implementation cost than the Plan.

SUMMARY

The Socioeconomic Report can affect the selection of alternatives to the proposed Plan as identified in the Environmental Assessment for the 2007 AQMP. In considering whether to adopt the Plan or one of the alternatives, the District Governing Board will select the alternative that presents the best balance of greatest socioeconomic and environmental benefits and least adverse environmental and socioeconomic impacts.

The No Project Alternative, which is the 2003 AQMP, would not reach attainment of air quality standards. Both the 2007 AQMP and CEQA Alternative 2—VOC/NO_x Combined Alternative—are demonstrated to meet the federal air quality standards for ozone and PM_{2.5}.¹ The VOC/NO_x Combined Alternative has higher cost and lower air quality benefit than the Plan.

Significant NO_x reductions are necessary and they are more effective than VOC reductions to attain the PM_{2.5} standard in 2014. Built upon the PM_{2.5} strategy, further NO_x reductions are still needed even with substantial VOC reductions in order to attain the ozone standard. The NO_x-heavy strategy in this Plan was chosen to meet both standards and provide greater certainty to reach attainment due to less total reductions (VOC and NO_x) required. Downwind areas also benefit more from this strategy. Moreover, VOC controls at this time are less advanced than NO_x controls.

Quantified air quality benefits of the 2007 AQMP and the VOC/NO_x Combined Alternative are projected to foster continued growth of the local economy. Overall, the Plan results in a lower implementation cost and a higher number of jobs gained from clean air.

¹The VOC/NO_x Combined Alternative has the same short-term measures as the 2007 AQMP but has more VOC and less NO_x reductions for the "black-box" commitment; it also attains the 8-hour ozone standard by 2023. Since Alternative 2 has more VOC reductions, it is assumed that more concurrent toxic reductions would occur than the 2007 AQMP.