

AIR QUALITY

The Affected Environment report includes adequate information for the EIR/EIS but needs to be pared down substantially. Material in the EIR/EIS should be limited to that which is directly supportive of the impact assessment. Given the absence of quantitative evaluations in the impact analysis, there is no need for extended discussions in the affected environment section of the EIS/EIR. The definition of PM10 particles referred to throughout the document is in error. Recent changes to federal ozone and particulate standards and regional compliance with federal standards should be summarized. The Impacts section should be revised to focus on identification of air quality issues associated with the CALFED program. It should indicate up front which issues are too speculative for substantial evaluation in the programmatic analysis. Consequences of changes in agricultural practices are too speculative. Supporting data for the possible changes needs to be provided. The report needs to describe how the type, scale, and setting of construction projects vary amongst the alternatives. Mitigation measures need to be better keyed to the specific types and settings of projects that could result from the various program alternatives. Significance criteria should be revised to provide at least a qualitative basis for determining significance and comparing the alternatives. Some discussion of Clean Air Act conformity issues should be added to the report. Mitigation measures should be clearly described in the mitigation sections, not just in the executive summary.

Conformance to Outline

Air Quality

Affected Environment

- Page numbering missing.
- 3.0 sources of information included in report but not in TOC
- 4.2 and 4.3 order should be switched.
- 4.4 Existing resources and conditions includes material of outline sections 4.4 through 4.8. Organized differently from the outline, by air basin. The air basins are listed twice (once for climate and again for meteorological conditions). This could have been remedied by combining climate and meteorology.

Environmental Consequences

- The impacts report follows the 6/25/97 outline, with 5.1 as the "Impacts Analysis" heading.
- Section 5.0 is organized by Calfed Region (Delta, Bay, etc.). This makes comparison between affected environment and impacts reports somewhat tedious.
- Section 5.0 is organized according to a hybrid of outline of 4/22/97 and the outline of 6/25/97.

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AFFECTED ENVIRONMENT

No.	Page/Para	Comment
1	General	This document is suitable for an appendix report, but needs to be pared down considerably for the EIS/EIR text. The EIS/EIR text should focus on regulatory issues and procedures. Material included in the EIS/EIR text should be directly supportive of the impact assessment. Given the absence of quantitative evaluations for the impact analyses, there is no need for extended discussions in the affected environment section of the EIS/EIR.
1a	general	Page numbering left out
1c	Summary	Summary is too brief for inclusion in PEIS
2	2.0, Intro	The listing of air basins for different geographic subareas would be more appropriately placed in Section 4.0, rather than in Section 2.0.
3	2.0, Intro	What is the purpose of the "*" items in the lists of air basins? All air basins in the lists are separate and discrete air basins, not subareas of the Sacramento or San Joaquin Valley Air Basins. Is the "*" intended as a bullet designation? If so, it needs to be used for each air basin in the list.
4	2.0, Intro	The foldout Figure 1 is presumably the "Figure 1-6" referenced in the text of Section 2.0; text references and figure designations should be consistent.
5	2.0, Intro	Throughout the text, refer to PM10 as respirable (or inhalable) particulate matter, but delete all reference to "particles smaller than 10 micrometers." <i>Explanatory note: In adopting the PM10 standard in 1987, EPA expressly rejected a proposal that the standard should exclude all particles larger than 10 microns in diameter (see 52 FR 24639, July 1, 1987). The simple fact is that the "10" in PM10 is not a size limit; it is a 50% collection efficiency size used for certifying PM10 sampling equipment. There is no precise size limit to PM10, but most collected particles will have aerodynamic equivalent diameters (an artificial mathematical concept, not a physical dimension) of less than 50 microns. See 40 CFR 53.40-53.43 for the true explanation of what PM10 really is. There is no rational explanation for why EPA continues to refer to PM10 as "particulate matter smaller than 10 microns in diameter" when the adopted standard totally and completely contradicts that statement.</i>
6	3.0, Sources of Info	This is appropriate for an appendix document, but not necessary for the EIS/EIR text. Instead, cite references as necessary throughout the EIS/EIR text.
7	4.1, Study Area	Delete the parenthetical phrase after "Sacramento Valley Air Basin"; similarly, delete the parenthetical phrase after "San Joaquin Valley Air Basin. The parenthetical phrases do not add clarity; Figure 1 should be sufficient to identify boundaries.
8	4.1, Study Area	Figure 1 needs to be corrected to remove the Sacramento Metropolitan Air Quality Management District. The figure is an air basin map, not an APCD/AQMD jurisdiction map. The SMAQMD is within the Sacramento Valley Air Basin.
9	4.2, Air Quality	Change the title of this section to Ambient Air Quality Standards. Existing air quality conditions are discussed in Section 4.4.

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	Problems	
10	4.2, Air Quality Problems	Move the table of state and federal ambient air quality standards to this section.
11	4.2, Air Quality Problems	Include a brief discussion of recent changes to the federal ozone and particulate matter standards. The federal ozone standard has been changed to an 8-hour average of 0.8 ppm, but regulatory aspects of the standard will not be implemented until areas achieve the previous 1-hour standard. New federal PM2.5 standards supplement the PM10 standards. The new PM2.5 standards (fine particles) are 15 micrograms per cubic meter as an annual average and 65 micrograms per cubic meter as a 24-hour average. The PM2.5 standards will not be implemented until 2005, and nonattainment designations will not be made until 2008. (As with PM10, the "2.5" in PM2.5 is not a size limit; it is a 50% collection efficiency benchmark used for certification of sampling equipment).
12	4.2, Air Quality Problems	The discussion of individual pollutants is fine for an appendix document, but is not necessary for the EIS/EIR text, particularly in view of the limited analysis provided for impact assessment.
13	4.3 Agency Responsib.	Expand the discussion to provide a brief overview of the air quality permit process administered by APCDs. Note the types of sources associated with the CALFED program that might require air permits.
14	4.3, Mgmt. Programs	There is no need to reference Table 1 here; it should be referenced in the revised Section 4.2.
15	4.3, Mgmt. Programs	Reference Table 2 in the Conformity discussion. Clean Air Act conformity analyses apply only to nonattainment/maintenance pollutants.
16	4.3, Mgmt. Programs	Suggestion for Table 2: Use N, rather than NA, for nonattainment designations; NA is too easily presumed to mean "not applicable".
17	4.3, Mgmt. Programs	Correct/Update status designations in Table 2 (take another look at CARB 1997, Maps and Tables of the Area Designations for State and National Ambient Air Quality Standards for correct designations). Subdivide air basin entries as necessary to avoid using footnotes for "exceptions".
	4.3, Mgmt. Programs	Examples of corrections for Table 2: Urbanized portions of the San Francisco Bay Area are still designated nonattainment for the federal CO standard. EPA has started the process for redesignating the San Francisco Bay Area as nonattainment for the 1-hour ozone standard. Federal ozone designations are not uniform throughout the Sacramento Valley Air Basin: Colusa, Glenn, Shasta, and Tehama Counties are attainment, all other counties are nonattainment.
	4.3, Mgmt. Programs	Delete the federal PM10 discussion from the last footnote to Table 2; 1987 no longer qualifies as "recent", and PM10 monitoring has been in place since ARB adopted a PM10 standard in 1982.
	4.4, Existing Resources	Change the title of this section to Existing Air Quality Conditions.
	4.4, Existing	The Climate and Meteorological Conditions discussion is fine for an appendix

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	Resources	document, but is not needed in the EIS/EIR text. This information is not used in any way for the air quality impact assessment. If any discussion of climatic data is necessary in the EIS/EIR, it should probably be included in the Hydrology discussion.
	4.4, Existing Resources	Provide a very brief narrative summary of nonattainment pollutants by air basin. Identify pollutants of concern and severity of nonattainment designations. Monitoring data summaries and graphs are not necessary for the EIS/EIR text.
	4.4, Existing Resources	Add a new table showing severity designations and de minimis levels for nonattainment/maintenance pollutants by air basin and airbasin subarea. This would also be a place to list appropriate local/regional APCD/AQMD agencies. Table column headers could include: location; APCD/AQMD; federal nonattainment/maintenance pollutant; severity designation; conformity process de minimis level. For the Sacramento Valley Air Basin, the APCD/AQMD identification may have to be somewhat generic ("county APCDs"; or "SMAQMD, Yolo-Solano APCD, and county APCDs").
18	4.4, Existing Resources	In the appendix material, fix the text references to the air basin for the ozone trends figures (SJVAB is referenced for San Diego, Mojave Desert, and Salton Sea).

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ENVIRONMENTAL IMPACTS/ CONSEQUENCES

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1	1.0, Intro	The present discussion is largely a duplication of the introduction to the Affected Environment report. That duplication is not a problem for a stand-alone appendix document, but it should be avoided for the EIS/EIR text.
2	1.0, Intro	Focus the introduction on an identification of air quality issues associated with the CALFED program, and the manner in which they are evaluated by the impact analysis. Indicate up front which issues are too speculative for substantive evaluation in a programmatic document. Use the introduction to dispense with issues that cannot be evaluated. The consequences of changes in agricultural practices or crop patterns are too speculative to evaluate unless someone has done a specific projection of these changes.
3	1.0, Intro	The key issues appear to be: emissions associated with construction activity; emissions from stationary sources used to operate program facilities; and regulatory consistency issues (air permit requirements; Clean Air Act conformity requirements).
4	2.0, ES	Why isn't the Executive Summary the first section for the technical report?
5	2.1, Summ. of Potential	For the EIS/EIR document, focus the discussion on key air quality issues that can be discussed in a meaningful way. Eliminate discussion of speculative issues or reduce the discussion to one or two sentences. The current section emphasizes speculative issues that have not been addressed in any substantive way.
6	2.1, Summ. of Potential	How will the type, scale, and physical setting of construction projects vary among alternatives? What types of operational facilities (pump stations, emergency generators, etc.) will need air permits from the local APCD/AQMD? Which federal agencies will need to provide Clean Air Act conformity evaluations for their actions? What approaches or considerations are expected to allow these federal agencies to reach a finding of SIP conformity?
7	2.2, Summ. of Mitigation	The fugitive dust controls listed in Table 2.2-2 are applicable to urban development projects. They are generally irrelevant or infeasible for large-scale construction projects in rural areas. Mitigation measures need to be keyed to the type, scale, and physical setting of anticipated construction projects. Nobody is going to water the construction site for a reservoir, nor will there be any wheel washers at rural construction sites.
8	3.0, Assess. Methods	Since no quantitative evaluations have been performed, this section is irrelevant to the EIS/EIR.
9	4.0, Signif. Criteria	While the listed significance criteria are appropriate at a generic level, they cannot be applied to the impact analyses presented in this document. There are no predictions of the potential for violations of federal or state ambient air quality standards. There are no quantitative emissions analyses to relate to net emissions increase criteria. There are no health risk assessments to consider. And there are no odor, dust deposition, or visibility analyses to evaluate. The list of impact significance criteria needs to be simplified or rephrased in a

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		manner that can be applied in at least a qualitative manner to the impact evaluations presented in this document.
10	5.0, Environ. Impacts	This is supposed to be an impact assessment, not a description of the affected environment. Delete "Description of" and "Resource Conditions" from the headers for sections 5.1 and 5.2.
10a	5.0	The impacts discussion is organized by region, while the affected environment section is organized by air basins. This introduces a certain level of complexity, but it works fairly well. Calfed should consider the tradeoffs of retaining this organizational format. In any case, it is important to evaluate air impacts by air basin, and this discussion should be retained.
10b	5.1, No Action	No Action Conditions should be compared to existing conditions. Instead of saying that (future) problems and future air quality trends are the same as those discussed in the Affected Environment (which is a future condition), the report should say that No Action conditions would be same as existing conditions (if true), or that no change would occur relative to existing conditions. But is it accurate to conclude that air quality would remain the same during the next 25 years? A constant trend does not signify no change.
11	5.2	Discussions in this section state that construction activity will "vary considerably" among alternatives for the Delta region, but there is very little information presented to indicate this variability. Most of the impact matrices make no distinction whatsoever among alternatives.
12	5.2	The generalized discussions need to be replaced by discussions that make a distinction among alternatives. Instead of discussion "construction activity" in the abstract, the discussion needs to focus on the types and scale of facilities, the duration of construction periods, and the urban versus rural setting of construction projects. Since the impacts are identified as "significant", there needs to be something that can be used in at least a qualitative way to indicate why the impact is considered significant.
13	5.2	Since there are no emission estimates for construction activities, it makes no sense to distinguish among pollutants or even between equipment exhaust and fugitive dust in the impact matrices. A single "construction activity and equipment" line will cover everything.
14	5.2	What are "long term construction activities" as listed in the impact matrices? How do they differ from "temporary construction activities"? Why is the long term construction activity a beneficial impact? The text simply talks about "construction activity" without any modifiers.
15	5.2	Are the "long term construction activities" entries in the impact matrices supposed to be "agricultural land retirement"? As with the short term construction activity/equipment entries, it makes no sense to have separate listings by pollutant when there are no emission estimates for any pollutants.
16	5.2	The impact assessments need to include a discussion of regulatory issues. What types of project facilities are likely to need air quality permits? Will any of these facilities be in a size range that is likely to trigger emission offset requirements?
17	5.2	The impact discussions also need to include some discussion of Clean Air Act

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		conformity issues, at least in a generalized way. Will EPA's general conformity rule apply to any aspects of the CALFED program? If so, which federal agencies will have to address this issue, and for what particular actions? In a qualitative sense, how difficult will it be for these agencies to make the required findings? Is it likely that SIP revisions will be required to allow a positive finding of conformity?
18	5.2	The mitigation measures discussion needs to be presented here. The primary discussion of mitigation measures should not be in the executive summary. As noted previously, the mitigation measures need to be reasonable in the context of the type, scale, and physical setting of the major construction activities.
19	Mitigation Measures	Mitigation measures should be identified directly following the impacts statements.