

CHAPTER 12

REQUEST TO REDESIGNATE THE SOUTH COAST AIR BASIN AS EXTREME NONATTAINMENT AND THE COACHELLA VALLEY PORTION OF THE SALTON SEA AIR BASIN AS SEVERE-15

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INTRODUCTION

The 1990 Amendments to the Clean Air Act created a classification scheme for ozone nonattainment areas based on the degree to which their pollution exceeded the national ambient air quality standard for ozone, which was 0.12 parts per million on an hourly basis. The classification was based on the area's "design value," or highest one-hour level of ozone experienced in the design year. Areas with a design value of 0.280 parts per million and above were classified as "extreme" nonattainment areas and the South Coast Air Basin was the only area in the country classified as "extreme." Section 182(e)(5) of the CAA provides areas designated as "extreme" to rely on emission reductions from measures that anticipate the development of new technologies or improving of existing control technologies. These long-term measures are often referred to as "black box" measures and go beyond the short-term measures that are based on known and demonstrated technologies. The severity of the Basin ozone problem and the needed reductions in precursor emissions has required the AQMP and its revisions to rely on the use of long-term "black-box" measures to demonstrate attainment of the federal standard.

Concurrently, the classification scheme for ozone nonattainment specified in the CAA, designated the Coachella Valley portion of the Salton Sea Air Basin as "severe-17" setting an attainment date of 2007, three years sooner than the Basin. The Coachella Valley has limited local emissions and is located directly downwind from the Basin. The area is impacted by overwhelming pollutant transport from the Basin. While local emissions controls benefit Coachella Valley air quality, the area must rely on emissions controls being implemented upwind to demonstrate improved air quality and attainment of the federal standard.

Through the 2004 revisions to the federal ozone standard, EPA, promulgated the current standard for ozone at 0.08 parts per million measured over an eight-hour period. Using a revised classifications scheme, the South Coast Air Basin was classified as "severe-17" for the eight-hour ozone standard, the second highest classification possible. EPA also revoked the one-hour ozone standard, effective June 2005. Since that time, the South Coast Air Basin has been classified as "severe-17" for the eight hour ozone standard, and the "extreme" classification for the one-hour standard is no longer in effect. Under the "severe-17" classification, the area has seventeen years to reach attainment. Thus the Basin's current attainment year for the eight-hour ozone standard is 2021. However, under its current non-attainment classification, the District is prohibited from relying on "black-box" measures to demonstrate attainment.

Similarly, the Coachella Valley was designated as serious nonattainment for the eight-hour ozone with an attainment date set at 2013, eight years sooner than the Basin. The earlier attainment date created an inconsistency in the timing of attainment between Basin attainment and the Coachella Valley which is directly reliant upon the Basin

control strategy being implemented. CAMx ozone model simulations conducted as part of the attainment demonstration for the Coachella Valley show that even with implementation of the aggressive control strategy proposed for the upwind Basin to attain the federal PM2.5 standard by 2015, including all feasible emissions reductions that can be implemented by 2012, that ozone air quality in the downwind area will not sufficiently improve to meet the federal standard by 2013.

REQUEST TO REDESIGNATE THE SOUTH COAST AIR BASIN AS EXTREME NONATTAINMENT

Section 181(b)(3) of the CAA, “voluntary reclassification,” provides that “the EPA Administrator shall grant the request of any State to reclassify a nonattainment area in that State in accordance with table 1 of subsection (a) to a higher classification.” The voluntarily request for reclassification to a more severe designation is commonly referred to as a “bump-up.”

Through the 2007 AQMP and accompanying Resolution of the Governing Board adopting the 2007 AQMP, the District is formally requesting CARB to submit a request to EPA for a voluntary reclassification of the South Coast Air Basin from “Severe-17” to “Extreme” nonattainment for ozone and that the EPA Administrator grant such request upon receipt.. Through this request, the District is also seeking an extension of the ozone attainment date from June 15, 2021 to June 15, 2024.

REQUEST TO REDESIGNATE THE COACHELLA VALLEY PORTION OF THE SALTON SEA AIR BASIN AS SEVERE-15 NONATTAINMENT

Through this document the Final 2007 AQMP and the Resolution of the Governing Board, the District is formally requesting CARB to submit a request to EPA for a voluntary reclassification of the Coachella Valley Portion of the Salton Sea Air Basin from “Serious” to “Severe-15” nonattainment for ozone and that the EPA Administrator grant such request upon receipt. Through this request, the District is also seeking an extension of the ozone attainment date from June 15, 2012 to June 15, 2019.

ARE THE BUMP-UPS NECESSARY FOR ATTAINMENT?

Under its current non-attainment classification, the District is prohibited from relying on “black-box” measures to demonstrate attainment. The regional ozone modeling analyses presented in Chapter V, demonstrate that without the use of the “black-box” measures, the 2024 maximum projected ozone design for the Basin would be, approximately 100 ppb, or 120 percent of the standard. Additional emissions reductions through 2023 are required to demonstrate ozone attainment.

Table 12-1 illustrates the issue further. Despite the very aggressive ozone attainment strategy defined in Chapter 4, emissions reductions identified that come from

enforceable commitments to develop, adopt, and implement new control measures account for approximately 57 percent of the reductions needed (NO_x and VOC reductions combined) to meet the Basin’s carrying capacity. Therefore, for the remaining 43 percent of the reductions needed, the ozone attainment strategy must rely on the not fully defined/or “black-box” measures.

TABLE 12-1

Emission Reductions Needed for Ozone Attainment

Reductions	(Tons Per Day)		
	VOC	NO _x	% Total
Overall	116	383	100
Short-Term	89	193	57
Black Box	27	190	43

Converting these “black-box” reductions to short-term measures represents unique and complex challenges to this region and warrants additional time for development and implementation of defined strategies with adequate and sustainable funding.

Through the comprehensive attainment strategy outlined in Chapter 4, the District has attempted to limit the size of the “black box” to the extent feasible and is committed through the successive revision to the AQMP to further minimize the size of the “black box” and ultimately completely eliminate it.

As previously stated, with an aggressive strategy proposed for the South Coast Air Basin it is still not soon enough for the Coachella Valley to meet the ozone standard by 2013, where the ozone problem is predominately a transport issue from the upwind South Coast Air Basin. Consequently, Ozone air quality will not meet the federal standard in the Coachella Valley until 2018, (one year prior to the newly requested attainment date), through the implementation of the Basin plan.

IMPLICATIONS OF FAILURE TO DEMONSTRATE ATTAINMENT

If the region is unable to submit a SIP revision demonstrating attainment by the “severe-17” deadline without using “black box” measures, EPA must impose sanctions on the region. The first sanction, imposed after 18 months, is an offset ratio of 2 to 1 for major

stationary sources (25 TPD or more). The second sanction (after 24 months) is withholding of all federal transportation funding for the region, except funding for transportation control measures and safety projects. This amounts to billions of dollars. Finally, if the region cannot submit an approvable attainment demonstration, EPA must within 24 months adopt a “federal implementation plan” (FIP) demonstrating attainment by the severe-17 deadline. The FIP likewise could not rely on “black box” measures, and thus would likely impose draconian measures on mobile and stationary sources in the region.

District staff recommends a voluntary bump-up to “extreme” status as part of the 2007 AQMP submittal to the U.S.EPA. The bump-up would provide the basis for an approved plan for this region and implementation of short-term measures while providing an opportunity for a close collaboration among all agencies, industry, environmental organizations, and the public to define and implement these long-term measures as expeditiously as possible.

The implications to the Coachella Valley of submitting a SIP that does not demonstrate attainment are similar: sanctions may be imposed. While the “bump-up” does not provide the use of long term control measures, it does provide the needed extension of the attainment date to make attainment feasible.

IMPLICATIONS TO STATIONARY SOURCES

Concerns were raised regarding the potential adverse effects on stationary sources from such a “bump-up.” The primary impacts to stationary sources would be on the threshold definition of a major source in New Source Review (NSR) and Title V where the definition would be lowered from 25 tons per year (VOC and NO_x) to 10 tons per year. Until July of 2005, the Basin was classified as “extreme” and the corresponding definition of major source for NSR and Title V was set at 10 tons per year. Staff concludes that New Source Review requirements would not be affected, based on both state and federal law provisions requiring AQMD to keep in place its existing NSR program, which uses “extreme” area thresholds. However, Title V permit programs could be affected.

Title V does not impose any new emission reduction requirements on the facility, but merely incorporates all existing requirements into the facility permit. However, the Title V permit includes certain additional monitoring, recording and recordkeeping requirements that may not have been included in the facility’s pre-existing permits. Absent a bump-up, the AQMD could amend its Title V permit program to include only sources meeting the “severe” area threshold (25 tpy VOC and NO_x). The program currently applies to all sources meeting the “extreme” threshold (10 tpy). Such a change could save considerable staff resources in the permitting program, as well as unknown amounts of facility resources.

The ramifications of not being able to demonstrate attainment are severe. If AQMD does not submit an approvable ozone attainment demonstration by June of this year, EPA is required to implement sanctions and a federal implementation plan, beginning 18 months after disapproving the AQMD's plan. Staff believes that Section 182(e)(5) "black box" measures are needed to demonstrate attainment, such that the benefits of the bump-up in avoiding sanctions outweigh the detriments in the way of staff resources and effects on facilities.

The impact to sources in the Coachella Valley from a "bump-up" would not significantly affect Title V facilities because the existing threshold under the 1-hour ozone standard had a threshold of 25 tons per year, while any "bump-up" from "serious" to "severe-17" would keep the threshold at 25 tons per year. In addition, the New Source Review offset ratio would similarly stay constant at 1.2 to 1.

SUMMARY

The District is requesting that CARB formally submit a request to EPA for voluntary redesignation (bump-up) of the South Coast Air Basin from a designation of "severe-17" to "extreme" for 8-hour average ozone and modify the attainment date to June 15, 2024.

The District is also requesting that CARB formally submit a request to EPA for voluntary redesignation of the Coachella Valley Portion of the Air Basin from a designation of "serious" to "severe-15" for 8-hour average ozone and modify the attainment date to June 15, 2019.

The reclassifications will

- enable the use of long-term "black-box" control measures for the South Coast Air Basin;
- ensure that the ozone attainment demonstration meets the federal standard; and
- alleviate the risk of potential federal sanctions be imposed.

While the reclassifications may eliminate some potential savings in reporting requirements, the benefits of the bump-up in avoiding sanctions outweigh the detriments in the way of staff resources and effects on facilities.