



EARTHJUSTICE

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INTERNATIONAL JUNEAU, ALASKA OAKLAND, CALIFORNIA
SEATTLE, WASHINGTON TALLAHASSEE, FLORIDA WASHINGTON, D.C.

March 21, 2007

VIA HAND DELIVERY AND ELECTRONIC MAIL

Mr. Wayne Nastri
Regional Administrator
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Re: Petition for Withdrawal of EPA's Determination of Attainment for the San Joaquin Valley (71 Fed. Reg. 63642 (Oct. 30, 2006)).

Dear Mr. Nastri:

On behalf of Latino Issues Forum, Medical Advocates for Healthy Air, and the Sierra Club, we respectfully request that you withdraw your determination that the San Joaquin Valley is attaining the national ambient air quality standards for PM-10. With this letter, we are submitting a petition formally requesting that you withdraw the October 30, 2006 final determination. That decision was made based on an inappropriate application of EPA guidance in order to ignore multiple PM-10 violations that occurred in the Valley over the past three years. EPA promised to withdraw its decision if the Valley experienced further exceedances of the PM-10 standard, and by this petition we are asking the agency to keep its word.

We look forward to your prompt action on this petition.

Sincerely,

Deborah S. Reames
Managing Attorney

enc./ Petition for Withdrawal
Declaration of Jan Null
Declaration of Sarah E. Jackson

cc: Deborah Jordan, Air Div. Dir., EPA (via Email)
Jan Taradash, ORC, EPA (via Email)
Catherine Witherspoon, Executive Officer, CARB (via Email)
Seyed Sadredin, APCO, SJVUAPCD (via Email)

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6 TO THE REGIONAL ADMINISTRATOR OF THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX

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9 LATINO ISSUES FORUM, MEDICAL
10 ADVOCATES FOR HEALTHY AIR, and
SIERRA CLUB,

11 Petitioners,

PETITION TO WITHDRAW PM-10
ATTAINMENT DETERMINATION
FOR THE SAN JOAQUIN VALLEY
AND TO REINSTATE CERTAIN
CLEAN AIR ACT REQUIREMENTS

12 Re: Final Rule, 71 Fed. Reg. 63642
13 (Oct. 30, 2006)
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TABLE OF CONTENTS

1

2 TABLE OF CONTENTS..... 1

3 INTRODUCTION 1

4 REGULATORY BACKGROUND 2

5 FACTUAL BACKGROUND 4

6 ARGUMENT..... 7

7 I. Because the Valley Has Recorded Multiple Unexcused Exceedances Demonstrating
8 Many Times Over that the Valley Has Failed to Attain the PM-10 Standard, EPA
9 Must Withdraw Its Attainment Finding.....8

10 A. Multiple Exceedances in September 2004 and September and October 2006
11 May Not Be Excused Under EPA’s Natural Events Policy.....8

12 B. There Has Been No Demonstration that Exceedances at Santa Rosa Rancheria
13 on September 14 and 20 and October 26, 2006 Were Caused by Exceptional
14 Events..... 14

15 C. EPA Has Abused Its Discretion in Applying the Natural Events and
16 Exceptional Events Policies..... 16

17 II. EPA Must Immediately Reinstate the Clean Air Act Requirements It Suspended
18 Through Its Erroneous Attainment Finding..... 17

19 CONCLUSION..... 18

20

21

22

23

24

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27

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INTRODUCTION

The public health impacts of coarse particulate matter (or “PM-10”) in the San Joaquin Valley, where more than 1800 residents die every year from exposure to this and other deadly air pollutants, are well-documented and unacceptable.¹ Equally well-documented and equally unacceptable is the recalcitrance of both the San Joaquin Valley Unified Air Pollution Control District (“Air District”) and the U.S. Environmental Protection Agency (“EPA”) in meeting the deadlines, developing the plans and regulations, and enforcing the measures necessary to reduce PM-10 to acceptable levels in the Valley, as mandated by the federal Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*² Valley residents have never enjoyed the protection of an adequate or even fully approved plan to reduce PM-10 levels in this seriously polluted region.

This is just the latest chapter in this chronicle of failure. Nearly three years ago, EPA approved portions of the Air District’s inadequate PM-10 attainment plan, at the same time explicitly declining to take any action – approval or disapproval – with respect to the blatantly defective contingency measures included in that plan. *See* 69 Fed. Reg. 30006, 30028-29 (May 26, 2004). Unable to approve the defective measures, EPA should have stepped in and promulgated the contingency measures itself, as required by the Clean Air Act, 42 § 7410(c)(1). Once again, EPA failed to do its job and citizen groups were forced to sue the agency to compel action. *Medical Advocates for Healthy Air v. Johnson*, No. C-06-00093-SBA (N.D. Cal. Filed Jan. 9, 2006). At a June 27, 2006 hearing, the Court made clear its intent to issue an order directing EPA to propose federal PM-10 contingency measures for the Valley by October 18, 2006. EPA could be relieved of this obligation only by approving measures submitted by the State or by formally determining that the Valley is in attainment with the national PM-10 standard.

Only three weeks after the hearing, EPA announced its proposal to find that the Valley is in

¹ *See* Letter from Earthjustice to Doris Lo of EPA (August 18, 2006) (comments on EPA’s proposal to find the Valley in attainment with the PM-10 standards), incorporated herein by this reference and submitted herewith as Exhibit A to the Declaration of Sarah E. Jackson (“Jackson Dec.”) at 2-3 (summarizing public health impacts of PM-10). *See also* California Air Resources Board Staff Report for Public Hearing to Consider Amendments to the Ambient Air quality Standards for Particulate Matter and Sulfates, “Chapter 9: Quantifying the Adverse Health Effects of Particulate Matter” (2002) at 9-26, Table 9.8.

² *See* Jackson Dec., Ex. A at 3-5.

1 attainment with the national PM-10 standard. 71 Fed. Reg. 40952 (Jul. 19, 2006). EPA received
2 more than 2,000 comments from the public objecting to this proposal. EPA also received
3 preliminary data indicating that the Valley had exceeded the PM-10 standard on September 22 and
4 October 25, 2006. Nevertheless, EPA signed its final finding that the Valley was in attainment
5 (“Attainment Finding” or “Finding”) on October 17, 2006 – just one day before the Court-ordered
6 deadline to propose federal or approve State-submitted contingency measures absent such a finding.
7 71 Fed. Reg. 63642 (Oct. 30, 2006). EPA also illegally applied its ozone Clean Data Policy to
8 determine that the Valley need no longer comply with several requirements of the Clean Air Act,
9 including, conveniently, the requirement for contingency measures. *Id.*³

10 In spite of EPA’s regulatory acrobatics, the fact is that the Valley was not in attainment as of
11 the date of the Finding. And it is certainly not in attainment today. Since EPA published its
12 proposed Attainment Finding in July 2006, Valley monitoring sites using methodology subject to all
13 quality assurance and quality control requirements have recorded 26 PM-10 exceedance days,
14 making fall of 2006 the worst PM-10 season in well over a decade.⁴ Indeed, in the *14 years* prior to
15 the fall of 2006, the Valley recorded exceedances in double digits only three times (11 in 1993, 12 in
16 1999 and 12 in 2001). *Id.* On one day last fall, PM-10 levels were more than double the national
17 standard. *Id.*

18 Accordingly, the Latino Issues Forum, Medical Advocates for Healthy Air, and the Sierra
19 Club (“Petitioners”) hereby request EPA to promptly withdraw its Attainment Finding, thereby
20 reinstating the contingency measures and other requirements the agency suspended when it made
21 that erroneous Finding.

22 REGULATORY BACKGROUND

23 The Clean Air Act directs EPA to prescribe national ambient air quality standards “the
24 attainment and maintenance of which . . . are requisite to protect the public health” with “an
25 adequate margin of safety.” 42 U.S.C. § 7409(a). In 1987, EPA promulgated national ambient air
26

27 ³ See also Jackson Dec., Ex. A at 6-8 (explanation of why Clean Data policy is inapplicable to PM-
10).

28 ⁴ See Jackson Dec., Ex. A at 20 and Table 1 below.

1 quality standards (“NAAQS” or “standards”) for particulate matter having a diameter of less than or
2 equal to ten microns – *i.e.*, PM-10. 52 Fed. Reg. 24634 (Jul. 1, 1987). It established limits for both
3 24-hour and annual concentrations of this pollutant in the ambient air, and in 2000 and again in
4 2006, it reaffirmed the 24-hour average standard at issue here. 65 Fed. Reg. 80776 (Dec. 22, 2000);
5 71 Fed. Reg. 61144 (Oct. 17, 2006).

6 As EPA explains in its proposed Attainment Finding: “The 24-hour standard is attained
7 when the expected number of days per year with [PM-10] levels above $150 \mu\text{g}/\text{m}^3$ (averaged over a
8 three-year period) is less than or equal to one.” 71 Fed. Reg. 40952, 40953 (Jul. 19, 2006). “[A]
9 daily value that is above the level of the 24-hour standard after rounding up to the nearest $10 \mu\text{g}/\text{m}^3$ ”
10 constitutes an “exceedance” of the standard. 40 C.F.R. Part 50, App. K § 1.0(b). If an area has
11 recorded an average of more than three exceedances at any given monitoring site over that three-year
12 period, it has “failed an attainment test and thus has recorded a violation of the particulate matter
13 standards.” 40 C.F.R. Part 50, App. K § 2.3(c); *see also id.* at § 3.1(f)(3)(b).

14 EPA has two policies under which exceedances caused by extraordinary circumstances may
15 be excluded from the data considered in determining whether a region is in attainment. One of these
16 is its Natural Events Policy. EPA Natural Event Policy Memorandum from Mary D. Nichols,
17 Assistant Administrator for Air and Radiation to Regional Air Directors, “Areas Affected by PM-10
18 Natural Events” (May 30, 1996) (Jackson Dec., Ex. B). This policy seeks to avoid penalizing areas
19 with unreasonable regulatory burdens where exceedances are due to uncontrollable events caused by
20 natural sources of particulate matter, such as volcanic and seismic activities, wildland fires, and high
21 winds. *Id.* at 2-3. The second is the Exceptional Events Policy, which allows the exclusion of data
22 that has been influenced by events that are exceptional because “they are not expected to recur
23 routinely at a given location, or they are possibly uncontrollable or unrealistic to control.” EPA,
24 Office of Air and Radiation, “Guideline on the Identification and Use of Air Quality Data Affected
25 by Exceptional Events” (July 1986) (Jackson Dec. Ex. C) at 1.

26 Should the State wish to invoke either policy, the State must “flag” the questionable data
27 when submitting it to EPA’s air quality data base. Natural Events Policy at 8-9; Exceptional Events
28 Policy at 25-26. The State is responsible for providing documentation clearly establishing that such

1 exceedances were caused by natural or exceptional events and subjecting that documentation to
2 public scrutiny. *Id.* After finalizing its documentation, the State must submit it to EPA, who may
3 concur with or reject the State's conclusion. *Id.*

4 Because both of these policies place the burden of demonstrating their applicability to a
5 given exceedance squarely on the State, an exceedance must be considered an exceedance for all
6 purposes – including attainment determinations – until the State meets that burden and EPA concurs
7 with the State's determination. The Exceptional Events Policy, which in this respect applies equally
8 to natural events, specifies:

9 The actual exclusion of the use of flagged data would only be allowed if, as a result of
10 a public review process, the responsible government agency, *e.g.*, the State Air
11 Agency during the State regulatory process, *and the U.S. EPA during the Federal*
12 *review/approval process, determines that the data are inappropriate for use in a*
13 *specific regulatory activity The criteria for identification of "exceptional events"*
14 *are designed to be expansive enough to encompass most good faith claims by State*
15 *and local agencies of when data should be considered for special treatment. It is not*
16 *intended to reflect EPA's views on the validity of those claims.*

17 Exceptional Events Policy at 3-4 (emphasis added); *see also* Natural Events Policy at 2 (adopting
18 "flagging" process guidance of 1986 Exceptional Events Policy); Exceptional Events Policy at 8
19 (there exists no presumption that data "flagged" by the State should not be used in EPA regulatory
20 actions) and 10 (data may be excluded only after and assuming EPA concurs with State's
21 documentation).

22 **FACTUAL BACKGROUND**

23 As summarized in Table 1 below, since 2003, the Valley has recorded PM-10 levels
24 exceeding the national standard of 150 $\mu\text{g}/\text{m}^3$ on nine separate dates, amounting to 31 "exceedance
25 days"⁵ and leading to violations of the national standard at no less than four monitor locations. *See*
26 Jackson Dec. at ¶ 5. Of those exceedance days, 25 occurred after the proposed and before the final
27 rulemaking was published, and one occurred after the final rule was published.⁶

28 ⁵ Based on 40 CFR part 50.6(a); 40 CFR part 50, Appendix K, sections 2.1(b) and 3.1(a) (formula
for calculating number of estimated "exceedance days").

⁶ While the Air District's documentation of weather conditions on December 8, 2006 is inadequate
to demonstrate the occurrence of a natural event, Petitioners' preliminary analysis of weather data
for that day indicate that this is the sole date on which exceedances might be excused under the
Natural Events Policy. Therefore, these exceedances are not addressed in this Petition.

Table 1. PM-10 Exceedances in San Joaquin Valley 2004-2006.

DATE	LOCATION	<u>FILTER</u> Reading	<u>BAM</u> Reading	<u>TEOM</u> Reading	<u>Approx.</u> <u>Number of</u> <u>Exceedances</u>
8-Dec-06	Bakersfield	n/a	n/a	213	1
	Corcoran	n/a	n/a	162	1
30-Oct-06 Final Attainment Finding					
26-Oct-06	Santa Rosa Rancheria	157	n/a	n/a	6
25-Oct-06	Bakersfield	n/a	n/a	193	1
	Corcoran	n/a	n/a	304	1
22-Sep-06	Bakersfield	157	n/a	170	6
	Corcoran	215	n/a	261	3.3
	Oildale	162	n/a	n/a	6
	Tracy	n/a	n/a	161	1
20-Sep-06	Santa Rosa Rancheria	158	n/a	n/a	6
14-Sep-06	Santa Rosa Rancheria	190	n/a	n/a	6
19-July-06 Proposed Attainment Finding					
23-Nov-05	Bakersfield	n/a	180	n/a	1
22-Nov-05	Bakersfield	n/a	156	n/a	1
3-Sep-04	Corcoran	217	217	n/a	3
	Stockton	n/a	n/a	176	1

As explained above, more than three exceedances at any one of these monitoring sites would prevent EPA from finding the Valley in attainment with the PM-10 standard.

1 Three of the dates on which exceedances occurred pre-dated the proposed Attainment
2 Finding, as Petitioners pointed out in their comments on that proposal. *See* Jackson Dec., Ex. A at
3 13-21. EPA discounted the 2005 exceedances at Bakersfield on the basis that including that data
4 would not have been meaningful, as another 1.1 exceedance at this monitor would be necessary to
5 constitute a PM-10 violation (which did in fact occur prior to the final Attainment Finding). 71 Fed.
6 Reg. at 63660. EPA invoked the Natural Events Policy to excuse the 2004 exceedances at the
7 Corcoran site. This is the only instance in which EPA has ever received and concurred with
8 documentation from the State that the policy was applicable in the Valley. 71 Fed. Reg. at 40954,
9 and Table 1. Nevertheless, EPA implicitly acknowledged that, as of the date of its proposed
10 rulemaking, the Valley was on the brink of non-attainment and even a single exceedance at Corcoran
11 would preclude an attainment finding. EPA assured the public that: “If the [Valley] experiences a
12 violation of the PM-10 NAAQS in the future . . . we would notify the state that we have determined
13 that the area is no longer attaining the PM-10 standards and provide notice to the public in the
14 Federal Register.” 71 Fed. Reg. 40952, 40955 (Jul. 19, 2006).⁷

15 In its Attainment Finding, EPA completely ignored the exceedances in September and
16 October 2006 at the Santa Rosa Rancheria monitor – despite the fact that, due to the monitoring
17 frequency at this site, exceedances on any *one* of these three dates compel a finding that the Valley
18 has failed to attain the PM-10 standard. Petitioners recently learned of these violations through
19 publicly available EPA data reports, which indicate that the exceedances have been flagged under
20 the Exceptional Events Policy. *See* Jackson Dec., Exhibit D.

21 With respect to the exceedances occurring on September 22, 2006, EPA again erroneously
22 applied its Natural Events Policy and improperly shifted the presumption established by that policy –
23

24 ⁷ EPA also attempts to discount the two Bakersfield exceedances on the basis that the Beta
25 Attenuation Mass monitor had only been installed since July 2005, suggesting that it must have three
26 years of data from a given monitor to consider the data in an attainment finding. 71 Fed. Reg. at
27 63659. But EPA knows better, as it acknowledges in a footnote to its Final Finding: “While it is
28 necessary to have three years of representative monitoring data to demonstrate that a monitor is
attaining the standard, 40 CFR Part 50, Appendix K, section 2.3(c) states that there are less stringent
data requirements for showing that a monitor has failed to attain.” *Id.* at n. 26. Concluding with the
admission that more than three exceedances recorded at Bakersfield would have precluded the
Attainment Finding, EPA acknowledges that excluding the Bakersfield data is inconsistent with
regulatory requirements. *Id.*

1 *i.e.*, to err on the side of protecting public health. Thus, instead of assuming those exceedances were
2 unexcused until such time as it had received and concurred with the State's documentation to the
3 contrary, EPA pronounced:

4 Because these data . . . are preliminary and have not been quality-assured, and
5 because EPA believes they may qualify as caused by natural events and thus be
6 excluded from consideration in an attainment determination, EPA is proceeding to
finalize its determination that the area is in attainment.

7 71 Fed. Reg. at 63642. The agency continued:

8 If, after the data is quality-assured, and after further evaluating [the State's] request
9 with respect to these data, EPA determines that the data does not qualify for
10 exclusion under EPA's natural events policy, . . . EPA will proceed with appropriate
rulemaking action to withdraw its determination of attainment.

11 *Id.* Additional exceedances occurred at Bakersfield, Corcoran, and Santa Rosa Rancheria after EPA
12 had signed the Attainment Finding but before it was published. *See* Table 1 above. In spite of these
13 many unexcused exceedances, EPA proceeded to publish its finding.

14 EPA suspended the contingency measures and other Clean Air Act Part D requirements – a
15 decision which Petitioners maintain was illegal. However, EPA explicitly stated that the suspension
16 applies only “for so long as the area continues to attain the NAAQS.” *Id.*

17 ARGUMENT

18 It is time for EPA to make good on its promises. EPA cannot maintain its Attainment
19 Finding by discounting the two November 2005 Bakersfield exceedance days and then
20 constructively concurring with the District's unsubstantiated claims that every one of the more than
21 two dozen exceedance days may be excused under EPA policies designed to exclude data for
22 exceedances caused by *extraordinary* events. The September 22, 2006 data have now been quality
23 assured, the Air District's now-published documentation is woefully inadequate, and, as
24 demonstrated below, Petitioners' expert forensic meteorologist has demonstrated that those
25 exceedances could not have been caused by high winds as the Air District claims. The September 22
26 exceedances alone put the Valley out of attainment – even without counting the multitude of other
27 recorded PM-10 exceedances. Therefore, EPA must withdraw its Attainment Finding and reinstate
28 the contingency measures and other Clean Air Act requirements.

1 **I. Because the Valley Has Recorded Multiple Unexcused Exceedances Demonstrating**
2 **Many Times Over that the Valley Has Failed to Attain the PM-10 Standard, EPA Must**
3 **Withdraw Its Attainment Finding.**

4 **A. Multiple Exceedances in September 2004 and September and October 2006 May**
5 **Not Be Excused Under EPA's Natural Events Policy.**

6 The Air District has sought to flag eleven exceedance days occurring on four different dates
7 under the Natural Events Policy. The Air District claims all of these exceedances were caused by
8 "high winds" and therefore should be discounted for purposes of the Valley's attainment
9 demonstration under the Natural Events Policy.

10 This is curious in light of the Air District's previous insistence that high winds are not a
11 causal factor in PM-10 exceedances in the Valley. In its 2003 PM-10 Attainment Plan, the Air
12 District stated that the Valley "experiences light, variable winds of less than 10 mph" during the
13 winter months and that those "low wind speeds, combined with low-lying inversion layers in the
14 winter, create a climate conducive to the formation of high PM-10 concentrations." 2003 PM-10
15 Attainment Plan at 2-4. The Air District not only concluded that wind erosion is not a significant
16 contributing factor in dust emissions, but went so far as to suggest that winds with enough velocity
17 to cause erosion are actually "effective in dispersing PM-10 concentrations and/or transporting PM-
18 10 out of the [Valley]." *Id.* at 2-5.

19 When this analysis was questioned during public comment on the Air District's Plan, EPA
20 requested further documentation from the Air District. Defending its conclusion that high winds do
21 not contribute to elevated levels of PM-10, the Air District undertook an extensive evaluation of all
22 PM-10 exceedance events and wind speed data to determine whether there was a correlation between
23 the two. *See* Jackson Dec., Exhibit E (April 15, 2004 letter from Air District to EPA evaluating link
24 between high winds and PM-10 exceedances). The Air District found that over the course of 13
25 years, only five PM-10 exceedances occurred on days with high winds. *Id.* at B-5. Of the five
26 exceedances, three took place during a severe drought, one was the result of intense local harvesting
27 activities, and the fifth was the result of a thunderstorm. *Id.* None of these exceedances has been
28 flagged under either the Natural or Exceptional Events policies. The Air District concluded that
there is "no evidence of any significant linkage between high winds and PM-10 federal exceedance

1 events in the [Valley].” *Id.*

2 Not surprisingly, neither the Air District nor the State has been able to document that the
3 exceedances they flagged as due to “high winds” were in fact caused by “high winds.” The Natural
4 Events Policy places a heavy burden on these agencies to provide such documentation. The policy
5 specifies that . . . “the State [or local air district] is responsible for establishing a clear causal
6 relationship between the measured exceedance and the natural event.” *Id.* at 8. The State must also
7 document that “absent the emissions from the natural event, concentrations of PM-10 at the
8 monitoring site under consideration would not cause a NAAQS exceedance.” *Id.* Further: “In the
9 case of high-wind events where the sources of dust are anthropogenic, the State must document that
10 BACM [*i.e.*, best available control measures] were required for those sources, and the sources were
11 in compliance at the time of the high-wind event.” *Id.* As demonstrated below, the Air District’s
12 documentation for each of the so-called events fails to meet any of these requirements.

13 **1. Exceedance at Corcoran on September 3, 2004.**

14 In their August 18, 2006 comment letter on EPA’s proposed finding of attainment,
15 Petitioners established that EPA’s decision to exclude the data from September 3, 2004 by
16 concurring with the State’s claim that these exceedances were caused by high winds was entirely
17 unfounded, both procedurally and substantively. *See* Jackson Dec., Ex. A at 14-17 and Ex. F. In its
18 final rulemaking, the agency fails to address Petitioners’ technical arguments as to why the
19 exceedances could not have been caused by high winds. Instead, EPA simply discounts them as
20 irrelevant because “even if EPA had not concurred with the exclusion of this data, the Corcoran site
21 would still attain the 24-hour NAAQS because the expected number of exceedances is less than or
22 equal to one per year, averaged over the three year period 2003-2005.” 71 Fed. Reg. at 63658.

23 However, now that additional exceedances have been recorded at Corcoran, EPA’s improper
24 decision to concur with the Air District’s request to flag the data from September 3, 2004 becomes
25 acutely relevant. Petitioners’ assertion that there is no technical basis for the Air District’s claim that
26 the exceedance was caused by high winds has now been verified by a forensic meteorology expert
27 and long time forecaster for the National Weather Service, Jan Null. Winds in Corcoran never
28 reached erosive velocities and conditions that would allow for long range transport of particulate

1 matter from the Sacramento Valley all the way down to Corcoran in the southern Valley did not
2 exist. *See* Declaration of Jan Null (“Null Dec.”) at ¶¶ 24, 25.

3 EPA should not have concurred in this case for two additional reasons. First, where an
4 exceedance is proven to be caused by high winds, the exceedance may still not be discounted under
5 the Natural Events Policy unless the State can “document that BACM were required for those
6 sources, and the sources were in compliance at the time of the high-wind event.” Natural Events
7 Policy at 8. EPA’s apparent acceptance of the Air District’s claims that BACM was indeed in place
8 at the time of the exceedance is contrary to EPA’s own prior determination. On February 26, 2003,
9 EPA issued a limited disapproval of the Air District’s Regulation VIII for failing to meet BACM. 68
10 Fed. Reg. 8330 (Feb. 26, 2003). Subsequent revisions to Regulation VIII were not effective until
11 October 1, 2004, after the date of the exceedance at the Corcoran monitor. 71 Fed. Reg. 8461 (Feb.
12 17, 2006). In other words, BACM was *not* in place as of September 3, 2004. In addition, the Air
13 District cannot demonstrate that agricultural operations were in compliance with the then-recently-
14 adopted Agricultural Conservation Management Practices Rule, as the Air District only began
15 compliance inspections in mid-2006. *See* Jackson Dec., Exhibit G (E-mail from Jon Adams to Sarah
16 Jackson re: Ag CMP compliance).

17 Lastly, EPA never should have accepted the Air District’s documentation for the exceedance
18 on September 3, 2004, because it was submitted well past the deadline for submittal of
19 documentation established by the Natural Events Policy. The policy states that supporting
20 documentation should be submitted to EPA “no later than 180 days from the time the exceedance
21 occurred.” Natural Events Policy at 12. The exceedance occurred on September 3, 2004, but the
22 documentation was not submitted to EPA until May 12, 2005, more than eight months after the
23 exceedance.

24 **2. Exceedances at Bakersfield, Corcoran, and Oildale on September 22,**
25 **2006.**

26 In its final Attainment Finding, EPA acknowledges preliminary data showing violations of
27 the PM-10 standard on September 22, 2006.⁸ Below is a table of the day’s PM-10 readings:

28 ⁸ *See* 71 Fed. Reg. 63642; *see also* Jackson Dec., Exhibit H (Air District’s Natural Event Documentation, September 22, 2006)

1 **Table 2. PM-10 Exceedances on September 22, 2006**

2

LOCATION	FILTER Reading	BAM Reading	TEOM Reading	Approx. Number of Exceedances
Bakersfield	157	n/a	170	6
Corcoran	215	n/a	261	3.3
Oildale	162	n/a	n/a	6
Tracy	n/a	n/a	161	1

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6 EPA chose to ignore these exceedances without any factual basis whatsoever – indeed, EPA had
7 received no documentation from the Air District, let alone documentation with which it could
8 concur. 71 Fed. Reg. at 63642.

9 Petitioners demonstrated in their December 29, 2006 Petition to EPA for Reconsideration of
10 its Attainment Finding⁹ that there was no “clear causal relationship” between supposed high winds
11 and the exceedances of the PM-10 standard that occurred on September 22, 2006.

12 This conclusion is now further supported by the extensive independent expert analysis of
13 forensic meteorologist Jan Null, who concludes that:

14 September 22, 2006 was *not* a windy day in the Southern San Joaquin Valley by any stretch
15 of the imagination. The wind speeds in the area encompassing Corcoran, Oildale, and
Bakersfield were quite low and never reached the level the District has determined is
necessary to begin to erode soils.

16 See Null Dec. at ¶ 18.

17
18 In addition, Mr. Null analyzed the Air District’s documentation for these exceedances, which
19 was finally made public on February 15, 2007 but has yet to be formally submitted to EPA. As he
20 points out, that documentation fails to meet the requirements of even the Air District’s own Natural
21 Event Action Plan (“NEAP”). See Jackson Dec., Exhibit J at 7. Acceptable documentation for
22 establishing an extraordinary natural event include, for the date in question: (1) the issuance by the
23 National Weather Service (“NWS”) of a high wind or blowing dust advisory; (2) the occurrence of
24 strong winds aloft; and (3) surface wind maps showing potential for high winds to occur at the site.
25 No adequate documentation of these factors has been offered. The Air District’s primary “evidence”
26 of an “extraordinary” wind event was a high wind advisory for San Joaquin Valley that was called
27 off the day *before* the event supposedly occurred. Null Dec. at ¶ 17(a). The Air District provided no

28
⁹ See Jackson Dec., Exhibit I (Petition for Reconsideration, December 29, 2006)

1 data indicating that winds aloft on September 22 were strong enough to transport PM-10 or that
2 “potential” high winds ever actually occurred. *Id.* at ¶¶17(b), (c), (e). Similarly, while the Air
3 District claimed that surface pressure gradients indicated a “potential” for high winds, the surface
4 pressure map submitted by the agency indicated no such winds occurred. *Id.* at ¶ 17(b). In short, the
5 Air District provided nothing to justify flagging the exceedance data.

6 Due to the monitoring schedules at these sites, the measured exceedances translate into six
7 exceedance days at the Bakersfield monitoring site, six exceedance days at the Oildale monitoring
8 site, and 3.3 exceedance days at the Corcoran monitoring site.¹⁰ Each of these measured
9 exceedances therefore constitutes a violation of the 24-hour PM-10 standard. *See 3-4 supra.*

10 3. Additional Exceedances at Bakersfield and Corcoran on October 25, 11 2006.

12 EPA’s Attainment Finding also completely ignored data from the Valley’s new real-time
13 tapered element oscillating microbalance (“TEOM”) monitors, which recorded exceedances of the
14 PM-10 standard on October 25, 2006.¹¹ These monitors recently replaced the old real-time Beta
15 Attenuation Mass (“BAM”) monitors, which had measured pollutant levels every hour on a daily
16 basis and registered many violations of the PM-10 standard. In accordance with new EPA
17 regulations, the TEOM monitors are required to be properly maintained and their data submitted to
18 EPA’s air quality database.¹² Preliminary data from these monitors is accessible immediately and,
19 therefore, was available to EPA at the time of its Finding.

20 The PM-10 concentrations recorded on October 25, 2006 at Bakersfield and Corcoran were
21 well above the federal standard of 150 $\mu\text{g}/\text{m}^3$. As indicated in the table below, there were especially
22 high concentrations on that date in Corcoran, with a daily average reading of 304 $\mu\text{g}/\text{m}^3$. Ambient
23 concentrations of this magnitude are considered extremely dangerous and may trigger serious health
24 effects even in healthy individuals. *See* EPA’s Guide to Air Quality and Your Health.¹³

25 ¹⁰ The normal assumption that an exceedance measured at the Corcoran monitor represents only
26 three exceedance days is not valid for September 2006 because the monitors at that site were unable
27 to collect valid readings on all of their scheduled days. *See* 40 CFR part 50.6(a); 40 CFR part 50,
28 Appendix K, sections 2.1(b) and 3.1(a).

¹¹ *See* Jackson Dec., Ex. D (monitoring data) and Ex. K (Air District’s Natural Event
Documentation, October 25, 2006)

¹² *See* 71 Fed. Reg. 61236, 61251-61253 (October 17, 2006).

¹³ Available at: <http://airnow.gov/index.cfm?action=static.aqi>

1 **Table 3. PM-10 Exceedances on October 25, 2006**

2

LOCATION	FILTER Reading	BAM Reading	TEOM Reading	Approx. Number of Exceedances
Bakersfield	n/a	n/a	193	1
Corcoran	n/a	n/a	304	1

3
4

5 The Air District yet again claims these exceedances were caused by “high winds” and yet
6 again provides woefully inadequate documentation to support this claim. *See* Jackson Dec. Ex. K.
7 While the Air District points to a blowing dust advisory for this day, it fails to mention that the
8 advisory applied primarily to the west side of the Valley, where the Air District has specifically
9 determined winds do not affect PM-10 levels. Null Dec. at ¶22. Similarly, though the Air District
10 cites data showing some strong winds in areas far from the locations of the PM-10 exceedances, the
11 agency omitted wind readings that confirm light winds in the areas closest to the exceedances sites.
12 *Id.* The Air District further failed to present any evidence of surface pressure gradients sufficient to
13 produce strong winds. *Id.* The Air District’s selective use of data and failure to provide relevant
14 information is deliberately misleading and does not begin to meet even the Air District’s own NEAP
15 criteria, much less that of EPA’s Natural Events Policy.

16 Mr. Null’s expert analysis establishes that, in fact, these exceedances cannot possibly be
17 attributed to high winds. Wind speeds throughout the Valley on October 25, 2006 were low and
18 were unable to erode and entrain soils according to the Air District’s own standard. *See* Null Dec. at
19 ¶¶20-22; 2003 PM-10 Plan at 2-5 and 2-6 (defining erosive winds as those with speeds over 18 miles
20 per hour at 10 meters above the ground). In addition, winds were not sustained at a velocity that
21 would be capable of transporting significant amounts of particulate matter from the Sacramento
22 Valley for hundreds of miles to Corcoran and Bakersfield where the exceedances occurred. *Id.*
23 Therefore, winds of this nature cannot be reasonably linked to exceedances of the federal PM-10
24 standard and these data cannot legitimately be flagged as caused by high winds. Thus, this data, too,
25 should have precluded EPA from making its final Attainment Finding for the Valley.

26 The end of October is generally the time when two of the Valley’s dustiest crop harvests,
27 cotton and almonds, are taking place, and the almond hullers and cotton gins are operating around
28 the clock. EPA must recognize that intense harvest activities, which have always contributed

1 significantly to PM-10 problems in the Valley, particularly in the Corcoran and Bakersfield areas,
2 remain the cause of these elevated PM-10 concentrations.

3 Because TEOM monitors take daily readings of PM-10 concentrations, each day with
4 readings at or above 155 $\mu\text{g}/\text{m}^3$ counts for approximately one exceedance day. When viewed
5 cumulatively, the data from October 25th leaves Corcoran with 7.3 exceedance days since 2004,
6 Bakersfield with nine exceedance days, and Oildale with six exceedance days – each, again,
7 violations of the national PM-10 standard precluding an attainment finding.

8 **B. There Has Been No Demonstration that Exceedances at Santa Rosa Rancheria**
9 **on September 14 and 20 and October 26, 2006 Were Caused by Exceptional**
10 **Events.**

11 Petitioners recently became aware of a third party filter-based particulate monitor being
12 operated by the Santa Rosa Rancheria Tribal EPA (“Santa Rosa Rancheria”) on the west side of the
13 Valley. This monitor is an official federal reference method PM-10 monitor established under a
14 Clean Air Act §105 grant from EPA. Jackson Dec., Ex. L (EPA data report for Santa Rosa
15 Rancheria). The data collected at this site is quality assured and submitted to EPA’s air quality
16 database. *Id.* The table below shows that this monitor has recorded PM-10 exceedances on three
17 different dates since it was put into operation in August of 2006. Due to the one-in-six day sampling
18 schedule for this monitor, each exceedance counts as approximately six exceedance days, for a total
19 of 18 exceedance days. *See* 40 CFR Part 50, Appendix K.

20 **Table 4. PM-10 Exceedances in September and October, 2006.**

DATE	LOCATION	FILTER Reading	<u>Approx. Number of Exceedances</u>
26-Oct-06	Santa Rosa Rancheria	157	6
20-Sep-06	Santa Rosa Rancheria	158	6
14-Sep-06	Santa Rosa Rancheria	190	6

21 Thus, the exceedances on any one of these dates would constitute a violation precluding an
22 attainment finding for the Valley. Yet EPA made no mention of these data in the Attainment
23 Finding.
24

25 EPA’s regulations demand that “*all* data produced by National Air Monitoring Stations
26
27
28

1 (NAMS), State and Local Air Monitoring Stations (SLAMS) and other sites submitted to EPA in
2 accordance with [40 C.F.R.] part 58 requirements *must be used. . .*” in making an attainment
3 finding. 40 C.F.R. Part 50, App. K § 2.3(a) (emphasis added). Accordingly, when commenting on
4 the proposed Attainment Finding, Petitioners specifically requested that EPA investigate whether
5 third party sources of data were available to inform the attainment determination. *See* Jackson Dec.,
6 Ex. A at 19. EPA’s response to that comment was to complain that Petitioners had failed to provide
7 third-party data for EPA to consider. *See* 71 Fed. Reg. at 63661. But the burden is on EPA, not the
8 public, to investigate the existence of these monitors. EPA was required to identify the monitor and
9 include an analysis of the data it recorded in its final Attainment Finding. EPA certainly should not
10 have finalized that Finding in the face of an estimated eighteen exceedance days at this new monitor.

11 While EPA has offered no explanation whatsoever for its action, the agency has apparently
12 chosen to discount these data because the relevant dates were flagged under the Exceptional Events
13 Policy. However, that policy applies only to data that have been significantly influenced by events
14 that are *exceptional* because “they are not expected to recur routinely at a given location, or they are
15 possibly uncontrollable or unrealistic to control through [regulation of sources].” Exceptional
16 Events Policy at 1. These may include such events as clean up activities after a major disaster,
17 infrequent large gatherings, and chemical spills and industrial accidents.

18 The exceedance days from the Santa Rosa Rancheria monitor were flagged due to alleged
19 “exceptional” construction activities. However, according to the Exceptional Events Policy, only
20 data influenced by construction that “lasts for only a short period of time and is reasonably
21 controlled” may be flagged. *Id.* at 19-20. Moreover, “all reasonable control measures must be in
22 use before the data from the site can be flagged.” *Id.* As with the Natural Events Policy, the burden
23 is on the State to demonstrate that the exceedance was in fact caused by an exceptional event. *See*
24 *id.* at 25 (State must “prepare adequate documentation to clearly demonstrate the causal relationship
25 between the exceptional event and the flagged data”); at 26 (“When such [existing] documentation is
26 not available, the State or local agency must prepare the necessary material sufficient . . . to support
27 its decision regarding the flagged data”); at 24 (describing necessary documentation). EPA is then to
28 review and either concur with or reject the State’s assessment. *Id.*

1 No sufficient documentation has been provided to either establish that specific, short-term
2 construction activities occurred or “to clearly demonstrate the causal relationship” between
3 construction activities and the exceedances recorded. Petitioners are aware that construction of a
4 hotel in the area around this monitor had been ongoing for sometime. However, Petitioners
5 understand that the only “evidence” of construction activity EPA has received consists of an e-mail
6 asserting that a parking lot had been constructed in the area during some unspecified time period.
7 Unless it can be demonstrated that extraordinary and uncontrolled PM-10-causing construction or
8 demolition events not only took place only on the days when the exceedances occurred, but were
9 clearly the cause of those exceedances, EPA cannot justify waiving this data.

10 Without that documentation, the agencies must assume that other area wide sources are to
11 blame for the high PM-10 concentrations. Construction activities are a constant throughout the
12 Valley, including areas like this one where residents are experiencing economic growth. Emissions
13 from these activities are, therefore, always present as part of an area’s background level of PM-10
14 pollution.

15 Lastly, because neither Santa Rosa Rancheria nor EPA has presented any evidence
16 whatsoever that “all reasonable control measures” were in place at the time of the exceedances, EPA
17 cannot exclude these data from consideration under the Exceptional Events Policy. Exceptional
18 Events Policy at 19-20.

19 **C. EPA Has Abused Its Discretion in Applying the Natural Events and Exceptional**
20 **Events Policies.**

21 As detailed above at 3-5, both the Natural and Exceptional Events Policies were intended to
22 “avoid imposing potentially unreasonable state implementation plan (SIP) requirements” on an area
23 where “natural sources strongly influence...air quality.” Natural Events Policy at 3; Exceptional
24 Events Policy at 1 (expressing similar intent). They were not written as a “get out of jail free card”
25 for agencies to use whenever an exceedance of the standard threatens their attainment hopes. In
26 order to prevent such abuse, the policies have clearly defined processes for handling the flagging of
27 data thought to be influenced by natural or exceptional events, as outlined above. They explicitly
28 provide that exceedance data may not be overlooked in an attainment demonstration unless and until

1 (1) the State provides clear and convincing documentation of a link between the extraordinary event
2 and the relevant exceedances; (2) the public has been provided an opportunity to review and
3 comment on that documentation; and (3) EPA has reviewed and formally concurred with that
4 documentation.

5 With the exception of the 2004 exceedances at Corcoran, EPA proceeded to find the Valley
6 in attainment without having received *any* documentation that the policies apply, without having
7 ensured that claims under these policies are subject to public review and comment, without having
8 vetted those claims within EPA, and without having concurred with such claims. By turning the
9 process established by these policies on its head, EPA has unlawfully shifted the burden of proof
10 from the State onto the public. The presumption, as applied in the Attainment Finding, is that the
11 Valley has attained unless and until the *public* proves a violation has occurred. This presumption is
12 a blatant abuse of discretion in applying these policies and, moreover, suggests an alarmingly
13 cavalier attitude toward the very serious health impacts particulate matter pollution imposes on the
14 public.

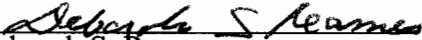
15 **II. EPA Must Immediately Reinstate the Clean Air Act Requirements It Suspended**
16 **Through Its Erroneous Attainment Finding.**

17 Because the Valley is in fact far from attaining the PM-10 standard, EPA must immediately
18 reinstate all requirements of Clean Air Act Part D, subparts 1 and 4, including implementation of
19 contingency measures and quantitative milestones to be achieved every three years that demonstrate
20 reasonable further progress toward attainment. 42 U.S.C. §§ 7502(c), 7513a. EPA admitted as
21 much in its final attainment finding, stating that Part D requirements may be suspended “for so long
22 as the area remains in attainment with the standard.” 71 Fed. Reg. at 63644. EPA cannot claim that
23 the Valley continues to attain the standard in the face of valid, quality-assured data showing at least
24 31 exceedances in the past three years. To the contrary, the Valley suffered more PM-10 exceedance
25 days in 2006 than it has in nearly fifteen years. The impending need for implementation of
26 contingency measures to protect the health of Valley residents could not be more clear. EPA’s only
27 option is to accept that its work on the Valley’s PM-10 problem is not over and to reinstate the
28 requirements of Part D immediately.

1 **CONCLUSION**

2 For the foregoing reasons, Petitioners request that EPA withdraw its October 30, 2006 PM-
3 10 Attainment Finding and reinstate the requirements of Clean Air Act Part D by April 20, 2007.

4 Respectfully submitted on March 21, 2007,

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